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Editor's Column

This latest issue of *Oral Tradition* arrives somewhat later than the editors had hoped. It took us some time to regroup after producing our last volume, a monumental special issue on the oral traditions of religious communities in the Iranian-speaking world. We hope, however, that the wait will prove to have been worth it, since the present issue, though more modest in size than Volume 35.2, easily makes up for its relative compactness by its breadth and diversity of approach. The reader who makes their way from beginning to end will traverse some three millennia of oral and performance traditions, beginning from the Vedic period in ancient India and concluding in poetry slams recorded a few years ago in Manchester, New Hampshire.

Emily Blanchard West opens the volume by tracing a recurring type-scene in the *Mahābhārata* back to the Vedic myth of Prajāpati. Her analysis reveals the deep cosmological and religious significance driving the repetition of scenes in which a person disguised as or mistaken for an animal is killed. Each of these scenes reenacts the primordial killing of Prajāpati, to which the epic narrative returns at crucial moments of transition.

David L. Cooper, Demetry Ogoltsev, and Michal Ondrejcek take up a challenge that goes back to the early days of the elaboration of the “oral-formulaic theory,” namely, the possibility of devising a quantitative method for distinguishing orally composed texts from those composed with the aid of writing. After reviewing the troubled history of attempts to measure “formulaic density,” the authors propose a new method, taking as their test corpus a set of nineteenth-century forgeries of supposedly oral poems in Old Czech, which they compare with other genuinely oral poems that circulated contemporaneously with the forgeries. This may be the first article in *Oral Tradition* to include mathematical formulae!

With their analysis of oral narratives from the Kadavu Islands (southern Fiji), Loredana Lancini, Patrick Nunn, Meli Nanuku, Kaliopate Tavola, Taniela Bolea, Paul Geraghty, and Rita Compatangelo-Soussignan venture into the realm of geomythology. Although the narratives they discuss derive from relatively recent ethnographic fieldwork, the tales of conflict between the gods Tanovo and Tautaumolau likely reflect cultural memories of the eruption of Nabukelevu Volcano some 2,500 years ago. This ethnographically rich study represents a fascinating synthesis of folklore and geology.

Paying particular attention to patterns of tense-switching in several corpora of narratives in Occitan, with a corpus of French narratives included for comparison, Janice Carruthers and Marianne Vergez-Couret provide an empirical basis for distinguishing between several “degrees of orality” conditioned by factors such as mode of transmission, performance context, and whether the narrative has an oral or written source. Their scalar approach offers a welcome escape from the simplistic oral/written binary, while simultaneously illustrating the riches of materials in minoritized languages like Occitan.

Cara Losier Chanoine concludes the volume by exploring the peculiar bimodality of contemporary slam poetry, which often exists both as written text and as performance. Offering her own multimodal archive as a proof of concept, she demonstrates the value of transcription methods adapted from ethnopoetics, coupled with archival materials, as tools to unlock the poets’ expressive strategies as well as the forms of multiformity and *mouvance* particular to this contemporary oral genre.

As these brief descriptions suggest, the five articles assembled here differ widely in their topics and approaches. In this way, they illustrate the capaciousness of the study of oral tradition, which remains a vitally important mode of engagement with cultures both past and present. I conclude this brief editorial note with my usual invitation to readers to submit their own work on the riches of the world's oral traditions.

David F. Elmer
Editor, *Oral Tradition*

“It Has Not Yet Become Pacified”: Kings, Hunting, and the Murder of the Father in Sanskrit Epic¹

Emily Blanchard West

The *Mahābhārata* and *Ramāyaṇa* present us with eight primary and embedded narratives in which an archer (usually a royal member of the *kṣatriya*, or warrior, class) causes the unintended death of a person in animal form while hunting, and for which the killer generally pays an offspring-related penalty with profound and far-reaching effects. Such duplication and adaptation of inherited thematic material is one of the hallmarks of oral composition and epic literature; when a complex theme is repeatedly used and expanded, the result is the propagation of type-scenes, multiple independent episodes adhering to the same internal structure, often provided with differentiating flourishes which provide a sense of novelty for the hearer. The function of oral-poetic processes to enable memorization and speed composition-in-performance has been exhaustively studied, but the duplication of these particular scenes in an oral but largely fixed-text composition presents us with several unique and interlinked phenomena. One is how strategically the modifications used in each occurrence of the motif exactly meet the needs of that section of narrative; a second is the way that the scenes bring together a collection of elements which combine to create a stunning depth of meaning within a Hindu worldview, culminating in a version which marks the end of the heroic age and the beginning of the “Age of Strife,” the last age of the eon.²

In Sanskrit literature, the impulse to add to or reshape parts of an existing story often seems more commonly to have found an outlet in the creation of new iterations of the same story in subsequent generations of texts,³ but the epics do contain a number of type-scenes, recurring themes, and repurposed narrative progressions.⁴ Far more than just a simple device to assist in

¹I am deeply grateful to *Oral Tradition*’s anonymous referees, whose generous and thorough comments were extremely useful and alerted me to valuable comparanda and scholarship of which I had been unaware. I also owe incalculable thanks to William Malandra and Jesse Knutson for their infinite patience with me in general, and for their help with the Sanskrit, the bibliography, and the refining of the argument of this paper in particular.

²By way of comparison, the Homeric epics offer two examples of type-scenes regularly deployed to mark the passage of time: one is the retiring scene, as described in E. West 2010, while another is its logical counterpart, the oft repeated motif of Eos arising from the bed of Tithonus to mark the onset of a new day (for example, *Iliad* 11.1, *Odyssey* 5.1, and so forth).

³ See, for example, E. West 2017.

⁴ As discussed, for example, in Brockington 1998:104-05 or E. West 2016.

the organization or expansion and contraction of a narrative, however (as repeated themes are often employed in oral literature; cf. Lord 1960:68-98), the eight variations of the “deer”-killing motif illustrate the enormous ingenuity and subtlety with which the repetition of inherited material can be employed in Sanskrit epic. The scenes provide pivotal elements within the storyline, they are frequently positioned so as to usher in a new phase of the plot, and their essential, seemingly simple, structure rests on profound cosmological underpinnings.

That a scene of accidental killing could serve as the basis of a highly productive epic motif is not surprising. From the Code of Hammurabi to modern debates on the death penalty, abortion, or animal rights, the endless drawing and redrawing of societal lines around licit and illicit killing has always taken up a large share of cultural introspection. Nowhere, however, does anxiety over killing so permeate a body of literature as it did in ancient India, where religious tenets on nonviolence and societal ideals valuing abstention from meat jostled for position with wider dietary practices, a political system that valued prowess in war, and religious requirements regarding often copious animal sacrifice. Killing is presented as an act which is necessary—even noble—in certain contexts, but also potentially fraught. In the epics, a foundational tale from the *brāhmaṇas* has been modified into a type-scene in which tensions around hunting manifest alongside anxieties about warrior-priest conflict, progeny, and the sacrifice, all of them bound up with the concept of cyclical time.

If we can accept the principle that motifs are not repurposed without at least some mild alteration, then it is clear that all the below are variations on a theme:

Citation	Killer	Victim	Circumstance
<i>Mbh.</i> 1.109	Pāṇḍu	Kimdama	While hunting, Pāṇḍu mistakenly kills a copulating brahmin who has assumed deer form.
<i>R.</i> 2.57	Daśaratha	Nameless ascetic ⁵	While hunting, Daśaratha accidentally kills a deerskin-clad ascetic he mistakes for an elephant.
<i>R.</i> 3.42 and <i>Mbh.</i> 3.262	Rāma	Mārīca	Rāma pursues and kills a golden deer which is actually an <i>asura</i> (demon) in an assumed form.
<i>Mbh.</i> 1.173	Kalmāṣapāda	Nameless brahmin	Hunting for food while cursed with madness, Kalmāṣapāda kills and eats a copulating brahmin.
<i>R.</i> 7.57	Saudāsa	Nameless <i>asura</i>	While hunting for deer, Saudāsa shoots an <i>asura</i> disguised as a tiger.
<i>Mbh.</i> 3.139	Parāvasu	Raivya	Parāvasu mistakes his deerskin-clad father for an animal in the dark and shoots him.
<i>Mbh.</i> 3.182	A Haihaya king	A son of Tārksya	A king shoots an ascetic wearing a black antelope skin after mistaking him for a deer.
<i>Mbh.</i> 16.5	Jarā	Kṛṣṇa	A hunter mistakes the meditating Kṛṣṇa for a deer and kills him with an arrow.

Table 1.

Below, each episode is treated individually, in the order shown in Table 1.

⁵ The later tradition assigns this young man the name Śravaṇa.

Pāṇḍu

The origination point of the main narrative arc of the *Mahābhārata* is King Pāṇḍu’s inadvertent killing of a powerful ascetic in the first book of the epic.⁶ While hunting in the forest, Pāṇḍu shoots what he believes to be a particularly magnificent stag engaged in the act of copulation, but his intended target turns out to be Kiṃdama, a brahmin ascetic who had assumed deer form in order to mate (*Mbh.* 1.109.5-9):

*rājā pāṇḍur mahāranye mṛgavyālaniṣevite
vane maithunakālasthaṃ dadarśa mṛgayūthapam 5
tatas tāṃ ca mṛgīm taṃ ca rukmapuṅkhaiḥ supatribhiḥ
nirbibheda śarais tīkṣṇaiḥ pāṇḍuḥ pañcabhir āśugaiḥ 6
sa ca rājan mahātejā ṛṣiputras tapodhanaḥ
bhāryayā saha tejasvī mṛgarūpeṇa saṃgataḥ 7
saṃsaktas tu tayā mṛgyā mānuṣīm īrayan giram
kṣaṇena patito bhūmau vilalāpākulendriyaḥ 8*

King Pāṇḍu, in the great wilderness inhabited by deer and wild beasts,
in the forest he saw the leader of a herd of deer at the time of mating. 5
Thereupon, Pāṇḍu shot him and the doe with gold-shafted,
well feathered arrows; sharp ones, five (of them), (and) swift. 6
But (the deer), O King, was a powerful ascetic, the son of a *ṛṣi*, rich in austerities.
With his wife, this powerful one in deer form was having intercourse. 7
Still conjoined with the doe, raising a human voice,
instantly, fallen to the ground, he lamented, his senses overwhelmed.⁷ 8

In a reprimand which largely centers around the immorality of interrupting the procreative act, the dying ascetic curses Pāṇḍu that he too will die the next time he has intercourse.⁸ Unable to sleep with his wives, Pāṇḍu cannot father heirs, so he resigns his kingship and retires to celibacy in the forest. While his wives are ultimately able to conceive five sons by summoning an assortment of gods, Kiṃdama’s revenge on the monarch nevertheless causes a disruption in the line of succession that serves as the fundamental motivator for the plot of the next ten books of the epic.

⁶ For additional analysis of this episode, see, for example, Doniger O’Flaherty 1981:186-87 and Doniger 2009:240-41, 294-95; Dhand 2004, especially 39-41, treats the dharmic repercussions for the wives of Pāṇḍu and Saudasa (discussed below).

⁷ Here and throughout the article, translations that are not otherwise attributed are my own.

⁸ The same curse, with the same rationale, is given by Vālmīki to the Niṣāda hunter who kills the male of a pair of mating *krauñca* birds at *R.* 2.13-14.

Daśaratha

The *Ramāyaṇa* contains three iterations of the motif. The first of these is presented at *sargas* 63-64 of the *Ayodhyā Kāṇḍa*, in which King Daśaratha relates the sad tale of his long-ago, accidental murder of a young ascetic.⁹ The boy is clad in deerskin (and bark; he is *valkalājīnavāsasaḥ*, *R.* 2.57.21), but in this text it is the sounds he makes fetching water that cause Daśaratha to mistake him for an elephant (*R.* 2.57.16-18):

athāndhakāre tv aśrauṣaṃ jale kumbhasya paryataḥ
acakṣur viṣaye ghoṣaṃ vāraṇasyeva nardataḥ 16
tato 'haṃ śaram uddhṛtya dīptam āśviṣopamam
amuñcaṃ niṣitaṃ bāṇam aham āśviṣopamam 17
tatra vāg uṣasi vyaktā prādurāsīd vanaukasaḥ
hā heti patatas toyē vāg abhūt tatra mānuṣī
katham asmadvidhe śastraṃ nīpatet tu tapasvini 18

In the darkness then I heard in the water (the sound) of a pot being filled,
 (but) not in range of the eyes—a sound like an elephant rumbling. 16
 Then I, having drawn up an arrow gleaming like a poisonous snake,
 I released the sharp dart, gleaming like a poisonous snake, 17
 there, a voice at dawn manifested audibly, of a forest dweller;
 there arose a human voice of one falling in that water (crying), “Alas, alas!”
 “How would (anyone) shoot a weapon at someone like me, an ascetic?” 18

There is no associated sexual activity or sexual component to the curse in this version, but the parallel construction with Pāṇḍu’s misadventure and punishment is clear: where Pāṇḍu killed a man engaged in the act of conception and lost the ability to safely perform that act himself, Daśaratha killed a young man and is cursed by the dead boy’s father to lose his own beloved son in young manhood, a prophecy which has just come true at the point in the epic when the tale is related. Here again the occurrence of the motif signals an end and a beginning: the imminent death of Daśaratha, the loss of Rāma’s succession to the kingship, and Rāma and Sītā’s removal to their eventful sojourn in the forest.¹⁰

Rāma

The second occurrence of the motif in the *Ramāyaṇa* comes at *sargas* 42-44 of the

⁹ This episode has been widely treated, most relevantly at Ramanujan 1972, Goldman 1978, and Doniger 2009:240-41. This scene is not included in the *Mahābhārata*’s retelling of the *Ramāyaṇa*.

¹⁰ Daśaratha only survives long enough to see Rāma depart, after which he promptly dies of grief. While the motif most commonly marks beginnings, as we will see below in the context of the death of Kṛṣṇa in *Mbh.* 16.5, in the context of Hindu conceptions of time, every beginning is also necessarily the end of the phase before it.

Āraṇya Kāṇḍa.¹¹ This iteration again departs slightly further from the template; in this instance the alteration is likely intended to protect Rāma’s image as the perfect prince and hero and prevent the ignominy of having him receive a curse. The deer that Rāma kills is actually a *rākṣasa* (demon), named Mārīca, who is disguised as a bejeweled and precious-stone-encrusted deer and specifically tasked with drawing Rāma away from his hermitage. When Rāma’s wife Sītā sees Mārīca’s lovely deer form, she begs her husband to catch the animal for her. Although Rāma suspects a trap, at the continued pleading of Sītā, he pursues the deer (R. 3.42.10-13):

dṛṣṭvā rāmo mahātejās taṃ hantum kṛtaniścayaḥ
saṃdhāya sudṛḍhe cāpe vikṛṣya balavad balī 10
taṃ eva mṛgam uddiśya jvalantam iva pannagam
mumoca jvalitaṃ dīptam astrabrahmavinirmitam 11
sa bhṛśaṃ mṛgarūpasya vinirbhidya śarottamaḥ
mārīcasyaiva hṛdayaṃ vibhedāśanisaṃnibhaḥ 12
tālamātram athotpatya nyapatat sa śarāturaḥ
vyanadad bhairavaṃ nādaṃ dharanyām alpajīvitaḥ
mriyamāṇas tu mārīco jahau tāṃ kṛtrimāṃ tanum 13

Having seen (the deer), the hero Rāma resolved to kill him.
 Having engaged the sturdy bow, and having drawn it back, that powerful mighty one, 10
 having aimed directly at the deer (an arrow) blazing like a snake,
 he released the blazing, flaming weapon created by Brahma. 11
 That best of arrows, violently split deer-formed
 Mārīca’s heart, like the splitting of a lightning bolt. 12
 Then, having leapt as high as a palm tree, he fell down, pained by the arrow.
 He screamed out a horrible cry, on the ground, barely living;
 now dying, Mārīca abandoned his simulated form. 13

As in the deaths of Kiṃdama and of Daśaratha’s young ascetic victim, the fatal shot produces a horrible cry and the utterance of fateful words that change the course of the hero’s life. The dying *rākṣasa*’s impersonation of Rāma calling for help leads to an argument between Rāma’s wife and brother as to whether they should wait for Rāma or go to help him. Ultimately, Sītā is left unguarded to be kidnapped by Rāvaṇa, king of the *rākṣasas*, Rāma’s true antagonist in the scene, who has disguised himself “in the garb of a brahmin” (*dvijātiveṣeṇa*, R. 3.44.31) in order to approach Sītā while the hero is distracted by the hunt for the deer.

The “typical” victim in this scene is a brahmin or a religious ascetic (such as those shot by Pāṇḍu, Daśaratha, Kalmāṣapāda, Parāvasu, and the Haihaya king), and the substitution of a *rākṣasa* in disguise is a substantial variation, but it is also an expedient way to allow Rāma to reenact this seminal motif without ever actually killing a brahmin, a serious crime in its own right, and fundamentally incompatible with his particular virtuous heroic persona. While there is

¹¹ An abbreviated version of this scene is also found within the *Mahābhārata*’s retelling of the *Ramāyaṇa*, but as it contains no noteworthy departures, it does not need to be addressed separately.

no curse, the consequence of the killing—the abduction it enables—is functionally the same as Pāṇḍu’s or Kalmāṣapāda’s: the loss of access to his wife, and the transition to a new phase of the hero’s life, as Rāma must now leave the forest and prepare for the war to free Sītā.

Kalmāṣapāda

Both epics employ embedded narratives¹² to present the story of King Kalmāṣapāda (referred to by his patronymic Saudāsa in the *Ramāyaṇa*).¹³ This unfortunate king was an ancestor of both sets of epic protagonists, and each of the epics includes the story of his commission of a hunting-associated murder. Though there are elements common to each version, in each text the details of his crime are individually tailored to reflect the differences in the killings perpetrated by Pāṇḍu and Rāma.

The version which is functionally a doublet of Pāṇḍu’s killing of Kiṇḍama is presented in the first book of the *Mahābhārata* during the Pāṇḍava brothers’ encounter with the Gandharva king Aṅgāravarṇa (*Mbh.* 1.158ff.), shortly before Draupadī’s *svayamvara*, the bridal contest in which Arjuna wins the wife he shares with his brothers. While discussing the family’s origins, Aṅgāravarṇa explains that the dynastic connection between the Pāṇḍavas and the seer Vasiṣṭha is the result of an ancestor of theirs with problems similar to Pāṇḍu’s (though a direct equation of Pāṇḍu and Kalmāṣapāda’s circumstances is never explicitly stated in the text). At *Mbh.* 1.166, Aṅgāravarṇa relates that King Kalmāṣapāda, an avid hunter, is cursed with cannibalistic madness through a complicated chain of events.¹⁴ At *Mbh.* 173, the deranged king leaves his city to run amok in the wilderness where, like Pāṇḍu, he kills a copulating ascetic while hunting for prey. Unlike Pāṇḍu though, he does so without the plausible deniability of the brahmin or his wife being in animal form, and to further compound the atrocity, he goes on to devour his victim as if the brahmin were a prey animal (*Mbh.* 1.173.8-9, 14):

*sa kadā cit kṣudhāviṣṭo mrgayan bhakṣam ātmanah
dadarśa suparikliṣṭaḥ kasmiṁś cid vananirjhare
brāhmaṇīm brāhmaṇaṁ caiva maithunāyopasaṁgatau* 8

¹² Embedded tales in the *Mahābhārata* are frequently presented by narrators attempting to reassure the protagonists regarding events in their own storylines, or as instructive examples around which they base advice. *Mbh.* 1.173 is actually the second time that part of Kalmāṣapāda’s story is presented within the text. His name is first invoked by Pāṇḍu at *Mbh.* 1.111-13, during a larger conversation with Kuntī about their fertility options, in the context of brahmins fathering *kṣatriya* children and stories of employing brahmins as surrogates for men unable to father children (such as that of Śāradaṇḍāyini, a female *kṣatriya* who stood at a crossroad in a state of ritual purity and chose a brahmin to father her children).

¹³ This episode is also discussed at Doniger O’Flaherty 1981:186-87.

¹⁴ Out hunting, Kalmāṣapāda bullies a brahmin ascetic who blocks his way on a narrow path in the woods, and the ascetic curses Kalmāṣapāda that he will become a cannibal. Another seer, seeing an opportunity to further an intra-brahmanic feud, then causes a *rākṣasa* to possess the king. In his cursed and possessed state, Kalmāṣapāda promises a meal to another brahmin, but having forgotten and postponed the obligation, instructs his cook to feed human flesh to the ascetic, which leads to a re-pronouncement of the original curse, which Kalmāṣapāda promptly consummates by seeking out and eating the brahmin who originally pronounced it.

tau samīkṣya tu vitrastāv akṛtārthau pradhāvitau
tayoś ca dravator vipraṃ jagṛhe nrpatir balāt 9
 . . .
evaṃ vikrośamānāyās tasyāḥ sa sunṛśaṃsakṛt
bhartāraṃ bhakṣayām āsa vyāghor mṛgam ivepsitam 14

One day, he, affected by hunger, hunting for his food,
 he, grievously afflicted, saw at a certain forest cataract
 a brahmin woman and man, come together for lovemaking. 8
 The two, having seen (him), and terrified, ran away, their objective incomplete,
 and as the two ran, the lord of men violently seized the brahmin. 9
 . . .
 Thus while she cried out in terror, he very cruelly
 ate the husband as a tiger eats yearned-for prey. 14

Kalmāṣapāda’s punishment, this time decreed by the murdered brahmin’s wife, is the same as Pāṇḍu’s, namely the loss of his ability to have sex or father children (*Mbh.* 1.173.16-18):

tataḥ sā śokasamtaptā bhartṛvyasanaduḥkhitā
kalmāṣapādaṃ rājarṣim aśapad brāhmaṇī ruṣā 16
yasmān mamākṛtārthāyās tvayā kṣudranṛśaṃsavat
prekṣantyā bhakṣito me 'dya prabhur bhartā mahāyaśāḥ 17
tasmāt tvam api durbuddhe mac chāpaparivikṣataḥ
patnīm ṛtāv anuprāpya sadyas tyakṣyasi jīvitam 18

Then, burning with grief over the calamity to her husband,
 the enraged brahmin woman cursed the royal *rṣi* Kalmāṣapāda. 16
 “Because, with my objective not having been accomplished, by you, O Vile Degenerate,
 even as I was watching, my powerful and glorious husband was eaten today, 17
 therefore, you also, O Ignorant One, shall be wounded by a curse from me:
 having come to your wife at the time of conception, at that very moment you will lose your life. 18

Kalmāṣapāda seeks help from the seer Vasiṣṭha (the father of the brahmin he had eaten first), and Vasiṣṭha agrees to father children on the queen and even frees the king after twelve years of suffering. The narrative has been altered sufficiently to give it a fresh and disturbing impact, yet its kinship with Pāṇḍu’s killing of deer-formed Kiṇḍama is unmistakable.

Saudāsa

In the *Ramāyaṇa*, a version of this tale occurs in the *Uttara Kāṇḍa* and contains several of the same elements as its counterpart in the *Mahābhārata* (delayed revenge, Vasiṣṭha, a curse lifted after twelve years, and a brahmin tricked into committing cannibalism), but their forms and

the order in which they transpire are different. The cannibalism of Saudāsa (Kalmāṣapāda) is absent in the *Ramāyaṇa* version, as are important elements shared with the cursing of Pāṇḍu (for example, the victim is not copulating, and the curse does not involve the denial of progeny). Rather, the tale shares features with the other hunting-murder scenes in the *Ramāyaṇa*: like Rāma, Saudāsa kills an *asura* (rather than a brahmin), this one in the form of a tiger, and as with Daśaratha's transgression, the event occurs in King Saudāsa's youth. While there is no progeny component to this version, the *asura*'s companion is heartbroken and vows an eventual revenge (R. 7.57.10-16):

*sa bāla eva saudāso mṛgayām upacakrame
cañcūryamāṇam dadṛśe sa śūro rākṣasadvayam 11
śārdūlarūpiṇau ghorau mṛgān bahusahasraśaḥ
bhakṣayānāv asaṃtuṣṭau paryāptim ca na jagmatuḥ 12
sa tu tau rākṣasau dṛṣṭvā nirmṛgaṃ ca vanam kṛtam
krodhena mahatāviṣṭo jaghānaikaṃ maheṣuṇā 13
vinipātya tam ekaṃ tu saudāsaḥ puruṣarśabhah
vijvaro vigatāmarṣo hataṃ rakṣo 'bhyavaikṣata 14
nirīkṣamāṇam taṃ dṛṣṭvā sahāyas tasya rakṣasaḥ
saṃtāpam akarod ghoram saudāsam cedam abravīt 15
yasmād anaparāddham tvaṃ sahāyam mama jaghnivān
tasmāt tavāpi pāpiṣṭha pradāsyāmi pratikriyām 16*

Once, when he was a mere child, Saudāsa set off on the hunt;
that valiant one saw two prowling *rākṣasas*. 10
In horrible tiger forms; many thousands of deer
they ate insatiably, and never reached satiety. 12
Indeed, he, having seen the two *rākṣasas*, and the forest made bereft of deer,
possessed by great anger, he killed one with a large arrow. 13
But having killed that one, the hero Saudāsa,
free from anxiety, his wrath departed, looked at the dead *rākṣasa*. 14
Having seen him looking at his friend, the *rākṣasa*,
experiencing terrible grief, said this to Saudāsa: 15
“Because you killed my friend who committed no wrong,
therefore, Most Sinful One, I will pay you back in kind!” 16

The *rakṣasa*'s eventual retaliation takes the form of impersonating Vasiṣṭha and demanding a meal of human flesh, which Saudāsa dutifully agrees to provide. When the real Vasiṣṭha is later presented with the cannibalistic meal, he flies into a rage and curses Saudāsa to become a cannibal himself. With the assistance of his wife, the king is able to explain the mix-up, and Vasiṣṭha reduces the duration of his curse to twelve years.

The Haihaya Prince

Returning to the *Mahābhārata*, only one version allows a hunting king to avoid serious consequences for the killing, and it does so by replacing the usual curse component with a seer’s enjoyment of the king’s bewilderment when his accidental victim is unexpectedly resurrected.

Another embedded narrative told by the seer Mārkaṇḍeya during the heroes’ Book 3 tour of various sacred bathing spots reworks the theme as an illustration of the awesome spiritual powers accessible to brahmins and the necessity of *kṣatriya* humility. The tale is solicited by the Pāṇḍavas through a request to regale them with a story about Brahmin superiority: “Then the sons of Pāṇḍu said / ‘We want to hear about the high-mindedness of the best of the twice-borns; let it be told!’” (*ūcuḥ pāṇḍusutās tadā / mātmyam dvijamukhyānām śrotum icchāma kathyatām*; *Mbh.* 3.182.1). In the ensuing tale, a nameless king of the Haihayas accidentally shoots a young antelope-skin-clad brahmin after mistaking him for a deer (*Mbh.* 3.182.3-4):

*haihayānām kulakaro rājā parapuramjayah
kumāro rūpasampanno mrgayām acarad balī 3
caramāṇas tu so 'raṇye tṛṇavīrut samāvṛte
kṛṣṇājīnottarāsaṅgam dadarśa munim antike
sa tena nihato 'raṇye manyamānena vai mṛgam 4*

An ancestor of the Haihayas, a king, conqueror of enemy cities,
a powerful young man endowed with beauty, went hunting. 3
While he was ranging in the grass- and vine-enveloped forest,
he saw an ascetic nearby whose upper cloak was the skin of a black antelope.
By that king, truly believing him to be a deer, the ascetic was shot in the forest. 4

Here ends the similarity to the other tales of brahmin-killing kings. Devastated, and certain that he has killed the boy, the king sorrowfully confesses the deed to his subjects. He and his retinue attempt to find the boy’s family in a search which leads them to the ascetic Tārksya. Tārksya demands to see the body, and to their chagrin the courtiers discover they cannot find it. With a magician’s flourish, Tārksya brings forth a living young man and asks if this might be the person they are looking for. Clearly gratified by their astonishment, Tārksya reveals that the boy is his son, and that he is still very much alive. This is followed by a brief teaching on the powers brahmins accrue through their ascetic practices, because of which, he smugly informs them, “Death does not hold sway over us, Kings” (*nāsmākaṁ mṛtyuḥ prabhavate nṛpāḥ*; *Mbh.* 3.182.16).

While the scene does not serve as the marker for a major transition point, it preserves the most salient feature (the murder of an ascetic mistaken for a deer) and showcases elements that support the reading that class-conflict and the father-son relationship are both integral to this theme.

Parāvasu

Another embedded variant in the *Mahābhārata*'s *Vanaparvan* adds a new dimension to the father-son aspect and further strengthens the evidence that warrior-priest conflict underpins part of the construction of the tale by altering the usual pattern of victim and killer. In *Mbh.* 3.139, the killer is a young ascetic named Parāvasu, the son of a powerful brahmin named Raivya. While Parāvasu is away presiding over a royal sacrifice, his wife is assaulted by the son of a rival seer. She tells her father-in-law about the attack, and Raivya sends avenging demons to kill the rapist. However, when the rival ascetic learns that his son has been killed, he in turn curses Raivya to die by his own son's hand. As a result, Parāvasu, returning home for a visit on a dark night, encounters his father walking on their hermitage grounds wrapped in a black antelope skin. Mistaking his father for a *mrga* (a deer or other animal),¹⁵ he kills him, presumably with an arrow, though the weapon is not specified (*Mbh.* 3.139.4-6):

athāvalokako 'gacchad grhān ekaḥ parāvasuḥ
kṛṣṇājīnena saṁvītaṁ dadarśa pitaraṁ vane 4
jaghanyarātre nidrāndhaḥ sāvaśeṣe tamasy api
carantaṁ gahane 'raṇye mene sa pitaraṁ mṛgam 5
mṛgaṁ tu manyamānena pitā vai tena hṁsitaḥ
akāmayānena tadā śarīratrāṇaṁ icchatā 6

Then, wishing to see (his wife), Parāvasu went home alone to visit.
 He saw his father in the forest wrapped in a black antelope skin: 4
 it was the end of the night (and) he was blinded by exhaustion, and in the remnant darkness
 he thought his father moving through the dense jungle was an animal. 5
 Alas! By him, thinking it was an animal, indeed his father was killed,
 not through wanting to at that time; from wanting physical protection. 6

Royal bowmen who inadvertently kill brahmins in deer guise can expect to pay a steep price; Parāvasu, however, even after killing his own father, escapes a curse and the sin of brahmin-murder through cooperation with his brother Arvāvasu—a twist which will carry some significance in the discussion below. The brothers make a plan that Parāvasu will go back to finish the sacrifice that they have been jointly officiating, while Arvāvasu will perform the rites of absolution. Arvāvasu is then able to employ a ritual to secure divine intervention for their cause by retiring to a forest and performing powerful austerities. He appeases the guilt incurred by his brother and brings everyone involved back to life.

This iteration thus exhibits a number of alterations to the pattern followed by the other

¹⁵ The word *mrga* primarily refers to deer, but often extends to wild animals in general; in many contexts no precise determination can be made. In the quoted passage, verse 6 implies a more dangerous animal, suggesting that *mrga* in verse 5 should not be rendered as “deer,” even though the victim was dressed in an antelope skin. It is possible that the passage utilizes the ambiguity of *mrga* to respect the story's basic template while avoiding even the slightest suggestion that Parāvasu was engaged in any form of sport-hunting. See below for further discussion of deer and antelope terminology in Sanskrit.

epic versions: it changes the killer to a member of the priestly, rather than the *kṣatriya* class; the victim is the killer’s own father; the killer and his brother cooperate to mitigate the fallout of the act; and the killer is able to receive expiation for his crime through performing ritual acts. All of these will have relevance to the discussion below.

Kṛṣṇa

A final version in the *Mahābhārata* further rearranges the standard class assignments of killer and victim and gives strong confirmation that the scenes’ deployment in the epics follows a pattern that marks important transitional moments. In Book 16, the Pāṇḍavas’ bosom friend, the god Kṛṣṇa, begins to usher in the end of the *Dvāpara Yuga* (the Third, or Heroic Age), by permitting/abetting the mass slaughter of his people and kinsmen, the Yādavas.¹⁶ After the carnage, Kṛṣṇa goes to the forest alone to engage in meditation, where a professional hunter mistakes him for a deer (*Mbh.* 16.5.19-20):

*sa samniruddhendriyavānmanās tu śiśye mahāyogam upetya Kṛṣṇaḥ
jarātha taṁ deśam upājagāma lubdhas tadānīm mṛgalipsur ugraḥ 19
sa keśavaṁ yogayuktaṁ śayānaṁ mṛgāśaṅkī lubdhakāḥ sāyakena
jarāvidhyat pādānta tvarāvāṁs taṁ cābhitā taj jighṛkṣur jagāma
athāpaśyat puruṣaṁ yogayuktaṁ pītāmbaram lubdhako 'nekabāhum 20*

Restrained in senses, speech, and mind, Kṛṣṇa lay down, having entered into great meditation.
Then Jarā came to that spot; a hunter, at that moment longing for deer, fierce. 19
Keśava, engaged in meditation, the hunter took to be a deer, (so) with an arrow,
hastily, Jarā shot him in the sole of his foot; he, desirous of retrieving (his quarry), drew near him.
Then, the hunter saw a man engaged in meditation, clad in yellow, and many-armed. 20

The hunter’s name is Jarā, “Old Age,” “Decay,” a superb identity for the figure who brings the cycle to a close. Rather than curse Jarā, Kṛṣṇa graciously forgives his killer and ascends to heaven.¹⁷ The departure of Kṛṣṇa from the world signals the close of the heroic age and the onset of the *Kali Yuga*, the “Age of Strife,” the last age of the eon. Whether viewed as the ending of

¹⁶ Kṛṣṇa is a complex figure, and his various contradictory roles in the *Mahābhārata* can be hard to reconcile. An excellent overview can be found in Brockington 1998:256-67.

¹⁷ This scene also shares elements with the embedded tale of Balāka the hunter, as told to Yudhiṣṭhira at *Mbh.* 8.49.34-40; Balāka is a hunter, but an otherwise virtuous man, who kills only to support his family and not from desire. From an ambush at a watering hole (much like Daśaratha’s), he kills a mysterious snuffling beast and is rewarded with showers of flowers and a swift *vimāna* (aerial chariot) ride to heaven; it is then revealed that his victim was some unspecified being (*bhūta*) who had performed enough *tapas* (ascetic practices designed to heighten spiritual powers) to cause the destruction of the entire world. Brahma had delayed the catastrophe by blinding the creature, but by killing it, Balāka preserved all creation.

one age or the beginning of another, this final and distinctly variant iteration marks a momentous transition point.

The following table summarizes the most important shared components of these episodes:

	Pāṇḍu	Kalmāṣapāda	Daśaratha	Rāma	Saudāsa	Parāvasu	Jarā
1. Class (<i>varṇa</i>) of victim	Brahmin	Brahmin	Ascetic	(Demon)	(Demon)	Brahmin	<i>Kṣatriya</i>
2. Class (<i>varṇa</i>) of killer	<i>Kṣatriya</i>	<i>Kṣatriya</i>	<i>Kṣatriya</i>	<i>Kṣatriya</i>	<i>Kṣatriya</i>	Brahmin	<i>Śūdra</i>
3. Hunting	Yes	Yes	Yes	Yes	Yes		Yes
4. Animal form or deerskin-clad victim	Yes (deer)	Victim eaten like prey	Yes (deerskin, with auditory illusion)	Yes (deer)	Yes (tiger)	Yes (deerskin)	Deer (illusion)
5. Offspring-related consequences	Yes	Yes	Yes	Indirectly			
6. Demarcates phases of the narrative	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 2.

With so many shared features, the “Killing of a Deer Who Is Actually a Person” motif assuredly can be considered a type-scene. But unlike the more generic forms of recurring type-scenes so common in Homer or other traditional oral literatures, this one is not merely part of the connective tissue of oral performance. Material from earlier Sanskrit literature suggests that its productivity and prominent positioning in the epics stem instead from its deep symbolic foundations. Each of the features listed in Table 2 is part of an interlocking web of signifiers, as is the very fact itself of the motif’s repeated recurrence. The first step towards understanding the strategic deployment of these scenes in the epics lies in examining their connection to the tale of the murder of Prajāpati, an ur-narrative which lays down the base pattern of motifs the epic variants revisit.¹⁸

The Killing of Prajāpati

The deity and demiurge Prajāpati, the “Lord of Offspring,” occupies a vast and enigmatic position in the brāhmaṇic stratum of Hindu literature on account of his intrinsic connection to the

¹⁸ Allen (2019:141) also notes the obvious relationship between Prajāpati and Pāṇḍu and expands the comparison to include Cronus.

act of creation and to the sacrifice.¹⁹ Prajāpati is, himself, the primordial sacrifice, and he is not a blameless victim. Though he is an enormously powerful figure, nearly anyone can be brought down by a sex scandal, and the Prajāpati administration had a big one on its hands: *Rg Veda* 10.61.5-8 gives us a hazy description of incestuous copulation between a father and daughter that is generally regarded as the earliest textual version of the episode.²⁰ This enigmatic and disturbing vignette was taken up and expanded upon in the *brāhmaṇas*,²¹ which supply further context for the sex act and explicate the connection between the tale and its enactment in ritual. The longest of these is found in the *Śatapatha Brāhmaṇa*, where we find some of the details of Prajāpati’s transgression and the other gods’ reaction to it. Specifically, the sons of the demiurge witness the sex act and react by calling upon one of their number to assassinate their father with a bow and arrow (*ŚBr.* 1.7.4.1-4):²²

prajāpatir ha vai svām duhitāram abhīdadhyau. dīvaṃ vośāsaṃ vā. mithuny ènayā syām iti. tām sāmabbhūva. 1

tad vai devānām āga āsa. yā itthaṃ svām duhitāram asmākaṃ svāsāraṃ karotīti. 2

té ha devā ūcuḥ. yò 'yām devaḥ paśūnām iṣṭe 'tisamdhāṃ vā ayām carati yā itthaṃ svām duhitāram asmākaṃ svāsāraṃ karōti vidhyemam iti tām rudrò 'bhyāyā tya vivyādha . . . 3

¹⁹ Lévi 1966 and Gonda 1982 are both excellent starting points on this complex deity. According to Gonda, “The Vedic Prajāpati is only or mainly a lord of offspring or creatures” (1982:143). Joshi’s observation that “it is significant that the cosmic significance of Prajāpati is set forth in noble terms, but in no passage of the RV is that god connected with the ethical. The developed cosmic significance of Prajāpati as against the waning ethical one of Varuna, in the later *Samhitās*, may be observed in the YV” (1972:103) is cogent and equally applicable to the deity’s presence in later texts. Collins (2014, especially 71ff.) offers a fascinating theoretical framework for understanding Prajāpati’s role as sacrificial victim and counterpart to Puruṣa. Ramanujan (1972) and Goldman (1978) both include the scene in their treatments of Oedipal conflict in Sanskrit literature. Abusch and West (2020) and West with Abusch (2020) examine textual connections between Prajāpati and Manu as creators of life. Others have proposed connections between Prajāpati and figures from Greek myth: M. West (1971:28-34) saw a possible connection between Prajāpati and the Prōtogenos (Πρωτογόνος) of the Greek Orphic tradition. Fowler (1943) argues that the story of Prajāpati and his daughter is cognate with that of Erichthonios in Athenian origin myths.

²⁰ The relevant portion of the hymn reads as follows (*Rg Veda* 10.61.5-7; translation from Jamison and Brereton 2014:III, 1476):

prāthiṣṭa yāsa vīrākarmam iṣṇād ānuṣṭhitam nū nāryo āpauhat / pūnas tād ā vrhati yāt kanāyā duhitūr ā ānubhṛtam anarvā / madhyā yāt kārtvam ābhavad abhīke kāmam kṛvānē pitāri yuvatyām / manānāg réto jahatur viyāntā śānau niṣikṭam sukṛtāsa yōnau / pitā yāt svām duhitāram adhiṣṭkān kṣmayā rétaḥ samjagmānō nī ṣiṇcat svādhyò 'janayan brāhma devā vāstoṣ pātīm vratapām nīr atakṣan / sā īm vīṣā nā phēnam asyad ājau smād ā páraid āpa dabhrācetāḥ / sārāt padā nā dākṣiṇā parāvīṇ nā tā nū me prśanyò jagrbhre.

He whose (penis,) which performs the virile work, stretched out, discharging (the semen)—(that one,) the manly one, then pulled away (his penis, which had been) “attending on” (her). / Again he tears out from the maiden, his daughter, what had been “brought to bear” on her—he the unassailable. / When what was to be done was at its middle, at the encounter when the father was making love to the young girl— / as they were going apart, the two left behind a little semen sprinkled down on the back and in the womb of the well-performed (sacrifice). / When the father “sprang on” his own daughter, he, uniting (with her), poured down his semen upon the earth. / The gods, very concerned, begat the sacred formulation, and they fashioned out (of it?) the Lord of the Dwelling Place, protector of commandments.

²¹ The *brāhmaṇas* are a slightly later class of texts which elaborate and comment on the hymns of the Vedas, usually in the context of relating them to the procedures of the various rituals.

²² Prajāpati’s execution for his sexual misconduct may be indirectly mirrored in the way Raivya sends avenging demons to kill his daughter-in-law’s rapist in *Mbh.* 3.138.

. . . *yadā devānāṃ kródho vyaid átha prajāpatiṃ abhiśajyaṃś tāsya tāṃ śalpaṃ nirakṛntant. sa vai yajñā eva prajāpatiḥ.* 4

Truly, Prajāpati desired his own daughter, (who was) either Sky or Dawn. (He thought) “May I couple with her!” He joined with her sexually. 1

This, truly, to the gods was a transgression. “He who acts in this manner towards his own daughter, our sister, (commits a transgression).” 2

Indeed, those gods said:

“This god, the one who rules over the beasts; a transgression, indeed, this one does, he who acts in this manner towards his own daughter, our sister.

Pierce him!” Him, Rudra,²³ drawing back (his bow), pierced . . . 3

. . . When the anger of those gods went away, they cured Prajāpati and cut out that arrow-point. Assuredly, the sacrifice is indeed Prajāpati. 4

Beyond the killing, however, this scene is also significant for its aftermath. The resurrection and curing of their sire are apparently not enough to expunge the sons’ lingering guilt. A portion of Prajāpati’s flesh was torn out by Rudra’s arrow, and in *ŚBr.* 1.7.4.5-8, the gods decide that this piece must be incorporated into the sacrificial offering so as to make the sacrifice “whole” again. Accordingly, they present the portion to several of their number for consumption. At each repetition of the offering, a price is paid. The first recipient is Bhaga (“Distributor,” “Portion-Giver”), but it burns out his eyes, indicating to the other gods that “It has not yet become pacified here” (*nò nvèvātrāsamat; ŚBr.* 1.7.4.7). They take it next to Pūṣan (a nurturing god associated with livestock and the sun), but he too is injured when the flesh knocks out his teeth, once more prompting the observation that “It has not yet become pacified here” (*nò nvèvātrāsamat; ŚBr.* 1.7.4.8). Finally, the piece of flesh is taken to Bṛhaspati, the preceptor of the gods, who enlists the help of Savitṛ for its “impulsion,” *prasava*—Savitṛ’s signal function—which accomplishes its placation: “then it was pacified” (*tato 'rvācīnaṃ śāntaṃ; ŚBr.* 1.7.4.8).

Prajāpati is the sacrifice, and his sacrifice is also a murder. However, a further dimension to the story is revealed when other *brāhmaṇas* introduce an additional element: the intercourse and the execution occur while Prajāpati and his daughter are in the form of deer.²⁴ Suddenly, the primal sacrifice begins to resemble the hunt. As the *Maitrāyaṇī Saṃhitā* tells us: “Prajāpati desired his own daughter Uṣas. She became a red deer, (he) having become an antelope, longed for her” (*prajāpatir vai svām duhitāram abhyakāmayat oṣāsam, śā rōhid abhavat tām řśyo bhūtvādhyait; MS* 4.2.12). An expanded version at *Aitareya Brāhmaṇa* 3.33-38 puts Prajāpati in the form of a black antelope (*rśya*), while his daughter again becomes a female deer, though of a different species (a *rohita*) (*AitBr.* 3.33.1-5):

²³ Rudra is a Vedic deity later conflated with and absorbed into the developing persona of Śiva. A passage at *ŚBr.* 6.1.3 presents the story of Rudra’s birth from the goddess Uṣas (“Dawn”). Uṣas is fertilized with Prajāpati’s semen and a boy is born a year later. The passage describes Prajāpati’s attempts to name him, assigning him first “Rudra,” and then a number of Rudra’s traditional epithets. Cf. *ŚBr.* 5.3.3.7 and 6.1.3.12; also see *AitBr.* 3.33.3 below.

²⁴ For elaboration on sexual aspects of the tale, see Doniger O’Flaherty 1969:8-10.

Prajāpatir vai svām duhitaram abhyadhyāyad Divam ity anya āhur Uṣasam ity anye. tām ṛśyo bhūtvā rohitam bhūtām abhyait. taṁ devā apaśyann. akṛtaṁ vai Prajāpatiḥ karotīti. te tam aichan ya enam āriṣyaty, etam anyonyasmin nāvindaṁs. teṣāṁ yā eva ghoratamās tanva āsaṁs, tā ekadhā samabharaṁs. tāḥ sambhṛtā eṣa devo 'bhavat, tad asyaitad bhūtavan nāma 1

...

taṁ devā abrūvann ayaṁ vai Prajāpatir akṛtaṁ akar imaṁ vidhyeti. sa tathety abravīt sa vai vo varam vṛṇā iti. vṛṇīṣveti. sa etam eva varam avṛṇīta paśūnām ādhipatyam. tad asyaitat paśuman nāma 3

...

tam abhyāyatyāvidhyat, sa viddha ūrdhva udaprapata tam etam Mṛga ity ācakṣate. ya u eva mṛgavyādhaḥ sa u eva sa, yā rohit sā Rohiṇī, yo eveṣus trikāṇḍā so eveṣus trikāṇḍā 5

Indeed, Prajāpati desired his own daughter, whom some call “Sky,” others “Dawn.” Having become an antelope, he approached her, (who had) become a deer. The gods saw him (and said), “Truly Prajāpati commits an act not done!” They asked, “Who will destroy this?” They did not find him [a destroyer] amongst one another. Those of them whose selves were the most dreadful, those they brought together. Those, having been brought together, became this god, that one of whom “Bhūtavan” is the name. 1

...

To him the gods said, “Truly this Prajāpati did a thing not done. Pierce him!” He (Bhūtavan) said, “So be it.” Verily, he said, “I choose a boon from you.” “Choose!” (they said). He then chose precisely this boon: dominion over cattle. That is the reason that his name is “Endowed with Cattle.” 3

...

(Bhūtavan) having attacked (Prajāpati), he pierced him. He (Prajāpati), pierced, sprang aloft. He (Prajāpati) is seen in that (constellation) called “The Deer.” Whereas, he who was the deer hunter, that (constellation) is him (Bhūtavan). She who (was) the red deer, she is “Rohiṇī.” That three-part arrow, truly, that indeed is the “Three-Part Arrow.” 5

It is this tableau—the archer dispatching the deer-form father figure with an arrow— which the epics have reshaped into their anchor points. Why should we read the epic scenes of deer-form murder as replications of the brāhmaṇic tale? In part at least, because the *Mahābhārata* suggests that we should: within the abbreviated retelling of the *Ramāyaṇa* at *Mbh.* 3.258-76, the passage which describes Rāma’s killing of deer-disguised Mārīca employs a direct comparison to Rudra’s slaying of Prajāpati at *AitBr.* 3.33.5: “Rāma pursued the deer [Mārīca] as Rudra pursued the constellation known as ‘The Deer,’” (*anvadhāvan mṛgaṁ rāmo rudras tārāmṛgaṁ yathā; Mbh.* 3.262.19).²⁵

Even without this explicit equivalency, however, the replication of an original pattern is unmistakable, most pronouncedly visible in King Pāṇḍu’s killing of the ṛṣi Kīṇḍama, the epic

²⁵ The relevance of the simile is further reinforced by the way the text informs us at the commencement of the tale that Rāvaṇa, Rama’s true antagonist (for whom Mārīca is merely a surrogate), is the grandson of Prajāpati (*Mbh.* 3.258.11).

“index case” which hews closely to Rudra’s execution of Prajāpati. The two stories share undeniable foundational similarities:

- The male partner of a copulating couple is killed with a bow and arrow, interrupting the copulation.
- The victim had assumed the deer form for the purposes of copulation.
- The victim is a sort of patriarch: Prajāpati is the “Lord of Offspring,” and the text informs us that Kiṃdama is the leader of his herd.
- The tale is part of a beginning, or an inception. Just as the murder of Prajāpati occurs at the beginning of a *kalpa* (an eon, or cycle of time), the killing of Kiṃdama is the start of the Pāṇḍavas’ problems.
- The aftereffects of the killing are just as important as the act itself; the murder initiates a new or larger cycle of events.

The potent mix of sex and patricide in Prajāpati’s tale, combined with its deep ritual associations, apparently catapulted the scene of the deer-disguised father being murdered during sexual intercourse into a second life as a staple of epic storytelling, where the scene was replicated again and again with just enough modification to give the story a fresh complexion in each iteration.²⁶ In general, Sanskrit epic shies away from reliance on type-scenes, and one would be hard pressed to identify another set of parallel incidents which share so many components. What is it about this brāhmaṇic motif complex that resonates so powerfully? Understanding this narrative’s utility to the epic compilers lies in understanding the significance of the tale’s components, which are discussed below in the order in which they appear above in Table 2 (which has been reproduced again here for convenience).

²⁶ The recurrence seems to be an excellent illustration of Lord’s observation (1960:121): “The fact that the same song occurs attached to different heroes would seem to indicate that the story is more important than the historical hero to which it is attached. There is a close relationship between hero and tale, but with some tales at least the type of hero is more significant than the specific hero.”

	Pāṇḍu	Kalmāṣapāda	Daśaratha	Rāma	Saudāsa	Parāvasu	Jarā
1. Class (<i>varṇa</i>) of victim	Brahmin	Brahmin	Ascetic	(Demon)	(Demon)	Brahmin	<i>Kṣatriya</i>
2. Class (<i>varṇa</i>) of killer	<i>Kṣatriya</i>	<i>Kṣatriya</i>	<i>Kṣatriya</i>	<i>Kṣatriya</i>	<i>Kṣatriya</i>	Brahmin	<i>Śūdra</i>
3. Hunting	Yes	Yes	Yes	Yes	Yes		Yes
4. Animal form or deerskin-clad victim	Yes (deer)	Victim eaten like prey	Yes (deerskin, with auditory illusion)	Yes (deer)	Yes (tiger)	Yes (deerskin)	Deer (illusion)
5. Offspring-related consequences	Yes	Yes	Yes	Indirectly			
6. Demarcates phases of the narrative	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 2 (repeated).

1. The Victim Is Usually a Brahmin

In the epic versions, Prajāpati's role as victim is customarily occupied by an assortment of forest-dwelling brahmins, or some mild variation (such as that Daśaratha's victim is merely a religious ascetic, or that while Rāma kills a *rākṣasa* disguised as a deer, his true antagonist is a *rākṣasa* disguised as a brahmin). That the default seems to be for the victim to be a brahmin certainly stems at least in part from the demiurge's strong connections to the sacrifice, which confer obvious ties to the priestly class. But equally central to Prajāpati's identity is the fact that he is the progenitor of most of the divine entities of Vedic religion, and attempting to produce offspring is his most characteristic activity. He is profoundly fixed in his position as ur-father, and it is in this aspect that the brahmins serve as his stand-ins in these tales.

In the epic variants, Prajāpati's treatment at the hands of his sons has been refracted through a lens of class conflict in the recurring epic subtext of brahmin-*kṣatriya* struggle. While the brahmin victims in the epics are not the *kṣatriya* killers' *actual* fathers, the *Mahābhārata* repeatedly gives prominence to a mythological event which establishes this prescriptive relationship between the *varṇas*. This brahmin-as-father / *kṣatriya*-as-son hierarchy is mythologically initiated in a tale recounted an astonishing thirteen times in the epic,²⁷ the story

²⁷ See Collins 2020:149-52 for a careful treatment of each of these scenes and their presence in the epic.

of the brahmin warrior nonpareil Rāma Jāmadagnya.²⁸ Told and retold in the service of establishing brahmin superiority, “It provided a fantasy of brahmin power with which the mythmakers could identify and a model of the Brahmin-Kṣatriya relationship that they hoped Kṣatriyas would emulate” (Collins 2020:5). Rāma Jāmadagnya is not only presented as an exemplar of the supreme combatant, but his mythology is used to advance an assertion that all living *kṣatriyas* are the descendants of brahmins, a proposition which would obligate warrior-class men to venerate the priestly class as they would their progenitors.

In this backstory to the heroic age, the brahmin Rāma Jāmadagnya slays the *kṣatriya* Kārtavīrya in a fit of rage, but fails to anticipate the revenge of Kārtavīrya’s sons, who rush to Rāma Jāmadagnya’s father’s hermitage and avenge their father by killing Rāma’s.²⁹ Jāmadagnya’s subsequent retaliation is two-fold: in a series of twenty-one massive purges between the second and third ages of the world, he kills every *kṣatriya* on earth, famously creating five lakes from their blood. But almost crueler, in a Hindu context, is what happens next: the widows of Rāma’s victims cry out for the children that the loss of their husbands has denied them, and in response, *brahmin* men conceive upon them the next generation of the warrior class (*Mbh.* 1.58.5-7):

tadā niḥkṣatriye loke bhārgaveṇa kṛte sati
brāhmaṇān kṣatriyā rājan garbhārthinyo 'bhicakramuḥ 5
tābhiḥ saha samāpetur brāhmaṇāḥ saṃśitavratāḥ
ṛtāv ṛtau naravyāghra na kāmān nānṛtau tathā 6
tebhyas tu lebhire garbhān kṣatriyās tāḥ sahasraśaḥ
tataḥ suśuvire rājan kṣatriyān vīryasaṃmatān
kumārāṃś ca kumārīś ca punaḥ kṣatrābhivṛddhaye 7

Then when the world was made *kṣatriya*-free by the descendant of Bhṛgu,
the female *kṣatriyās* (sexually) approached the brahmin men, O King, seeking pregnancy. 5
With them the brahmins came together, faithful to their vows,
at the proper time, O Tiger-among-men, not from desire, or at the wrong time. 6
From (the brahmins) indeed, those female *kṣatriyās* obtained pregnancies by the thousands,
then they delivered, O King, *kṣatriyas* (who were) respected for heroism,
boys and girls, to once again build up the *kṣatriya* population. 7

The tale is repeated later in the same book of the epic (*Mbh.* 1.98.3-4):

evam uccāvacair astrair bhārgaveṇa mahātmanā

²⁸ Rāma Jāmadagnya (also known as Paraśurāma) is a colorful and wide-ranging character, and all or parts of his story are retold or mentioned many times in a variety of texts (see Collins 2020:152). He is perhaps best known for the decapitation of his own mother (*Mbh.* 3.116), for which his father grants him a long life, the undoing of the killing, and the eradication of it from the memories of all concerned. Treatments of the character and his role can be found in Goldman 1978, Choudhary 2010, and (most exhaustively) Collins 2020.

²⁹ This story also presents an interesting funhouse-mirror image of the Prajāpati story; instead of killing their own fathers, sons kill one another’s fathers.

triḥsaptakṛtvah prthivī kṛtā niḥkṣatriyā purā
evaṃ niḥkṣatriye loke kṛte tena maharṣiṇā 3
tataḥ sambhūya sarvābhiḥ kṣatriyābhiḥ samantataḥ
utpāditāny apatyāni brāhmaṇair niyatātmabhiḥ 4

In such a manner, with various weapons, by the great-souled descendant of Bhṛgu
 thrice seven times the entire world was made empty of *kṣatriyas*.

When in this way the world was made empty of *kṣatriyas* by the great-souled one, 3
 then, having come together with all the female *kṣatriyas*, from all sides,
 children were begotten by the self-controlled brahmins. 4

Not only does the massacre cost the *kṣatriyas* their lives; it steals their legacy and adds a further degree to their permanent subordination to the brahmins.³⁰ But this etiology has especial ramifications for many of the *kṣatriya* heroes in the tales of deer-form killing which take place in the third age of the world; they are not just murderers, or committers of *brahmahatyā* (the specific sin of brahmin murder); they are patricides.

2. The Killer Is a *Kṣatriya*

In five of the seven epic versions, Rudra’s role as the killer is assigned to a member of the warrior class. By one sort of logic, it might be assumed that any god in a brahmāṇic story would be represented by a member of the priestly class in an epic repurposing of the motif, but the differential is an effective way to convey the oppositional aspect of the relationship between Prajāpati and his sons within the new genre. Rudra’s mythology is also particularly conducive to assigning his role to a character from the warrior class. In the *Vedas*, Rudra is identified (along with his brother Pūṣan and Indra) as a “Ruler of Men” (*kṣayadvīra*, *RV* 1.114.2, 3), frequently referred to as the “Lord of the Beasts” (*paśupati*),³¹ and connected with archery (*RV* 2.33.10, 14; 5.42.11; 10.126.6); his mortal analogue would quite reasonably be a royal hunter.

The incorporation of *kṣatriya*-brahmin tension also precipitates some remodeling of the narrative in respect to the nature and directionality of crime versus punishment: where the sons of Prajāpati carry out an intentional murder yet escape reprisal, the standard epic versions change the act to an accidental killing which is harshly punished.³² This is a substantive alteration to the tale’s fabric, and at first glance might simply suggest that there are very different rules for gods and mortals. However, one episode makes it clear that the harsher treatment only applies when

³⁰ There is a powerful relevance here to Pāṇḍu’s punishment: sons kill a father, and by doing so lose the chance to father their own children. As Goldman points out in respect to Kalmāṣapāda’s similar situation, “The curse serves to both symbolically castrate the offending king and further punish him by forcing him to yield his own wife to an avenging father figure” (1978:357). That father figure in Kalmāṣapāda’s story is the brahmin seer Vasiṣṭha, who appears in the tale of Saudāsa and eventually frees Kalmāṣapāda from his curse at *Mbh.* 1.168.

³¹ Cf. *ŚBr.* 5.3.3.7 and 6.1.3.12; also see *AitBr.* 3.33.3 (quoted above).

³² The story of the Haihaya prince is the notable exception here, of course.

the mortals in question are *kṣatriyas*. In the story of Parāvasu at *Mbh.* 3.139, the sole epic version in which the killer is a brahmin, the consequences of patricide are again avoided, and by the same stratagem as the sons of Prajāpati use to evade retribution. Just as the gods suffer no repercussions after slaughtering their sire,³³ Parāvasu, the brahmin who shoots his own father, is able to repair the situation with the assistance of his brother, and through their cooperation the killing is completely undone. Comparing the events in *Mbh.* 3.139 with those from *AitBr.* 3.33 or *ŚBr.* 1.7.4 reveals a thoroughgoing similarity in elements absent from the *kṣatriya*-centered versions:

- Like Prajāpati, Raivya is the only one of the epic victims given no chance to cry out or deliver a curse as he dies.
- Just as Rudra, the brother who actually wielded the bow, is not part of the group carrying out the revivification, so too the murder-committing brother (Parāvasu) is not the one who manages its fallout (that task falls to Arvāvasu).
- Just as Prajāpati’s sons cooperate to pacify the dropped flesh, Parāvasu and Arvāvasu repair the situation by working together.
- Just as Prajāpati’s sons undo the effects of their actions via ritual, Parāvasu and Arvāvasu employ ritual solutions to expiate Parāvasu’s crime.
- Prajāpati and Raivya are both restored to life.
- In contrast to nearly all the scenes with *kṣatriya* hunters, the Prajāpati and Parāvasu episodes end peaceably for all concerned, with no lingering ramifications.

Also of note in the Parāvasu episode is the fact that it is the only version in which the killer is not engaged in hunting; the significance of this for our analysis rests on mores regarding the practice of the hunt.

3. Hunting

The “King Who Kills a Deer that Is Actually a Person” motif in the epics is inseparable from cultural connections between the hunt and Hindu kingship. All of the *kṣatriya* versions of these tales occur in the context of hunting, and this cannot be purely out of the logical convenience of having a bow and arrows at the ready for the killing. In ancient India, professional hunting was one of the most sinful occupations imaginable, and professional hunters are often vilified.³⁴ However, when done according to protocols, hunting can be an acceptable act

³³ The actual killer, Rudra, receives only a reward (dominion over cattle) for his deed, and while Bhaga and Puṣan are maimed, this stems more from insufficiently cautious behavior in the ritual than from any responsibility for their father’s death.

³⁴ Except when they aren’t. The great epic contains several embedded narratives which feature laudable hunters, for example, *Mbh.* 3.196-206, a carefully constructed remonstrance to smug-minded orthodoxy in which a short-tempered brahmin is forced to seek instruction in *dharma* from an introspective and insightful hunter, or *Mbh.* 8.49.34-40, the tale of Balāka, discussed below. Brodbeck (2009:71-86) gives an excellent and nuanced overview of paradoxes inherent in the characterization of hunting in Hindu thought and literature.

even for holy men, as the epic heroes often bring up in their own defense. Rāma, for example, tells his monkey opponent Vālin, “For that matter, even royal sages learned in *dharma* go hunting” (*yānti rājarṣayaś cātra mṛgayām dharmakovidāḥ*; *R.* 4.18.34). The *Mahābhārata*, too, cites the hunting practices of one of the great seers (*Mbh.* 1.109.14):

*agastyah satram āsīnaś cacāra mṛgayām ṛṣiḥ
āranyān sarvadaivatyān mṛgān prokṣya mahāvane.*

The *ṛṣi* Agastya, sitting at a (sacrificial) session, went hunting,
after having consecrated in the great forest the wild deer, dedicated to all the gods.

Royal hunting is portrayed as both an established prerogative and an act that is heavily weighted with moral hazard. On the one hand it is clear that hunting was in some way expected of a ruler: it is, for example, a source of game which may be used to feed hungry subjects (as noted in Brockington 1998:191-92, 225). While being told of the Pāṇḍava brothers’ life in exile in the forest, King Janamejaya specifically inquires as to whether the heroes fed themselves and their retinue with game or with agricultural products; Vaiśampāyana informs him that Yudhiṣṭhira himself killed “deer, with purified arrows” (*mṛgāṁś caiva śuddhair bāṇair nipātītān*; *Mbh.* 3.47.4), and that the menu (always offered first to the brahmins) included “*rurū* deer, black antelope, and other ritually pure forest animals” (*rurūn kṛṣṇamṛgāṁś caiva medhyāṁś cānyān vanecarān*; *Mbh.* 3.47.7). In such a context, Yudhiṣṭhira’s hunting is apparently both admirable and kingly. Beyond the acquisition of food, across many ancient cultures the hunt was viewed as valuable practice for making war.³⁵ As Pāṇḍu tells Kīṁdama, “Whatever practice (is used) in the slaying of enemies, that (practice) is allowed in the slaying of deer. . . . This truly (is) the proper conduct of kings” (*śatrūṇāṁ yā vadhe vṛttiḥ sā mṛgāṇāṁ vadhe smṛtā. . . . sa eva dharmo rājñāṁ*; *Mbh.* 1.109.12-13).

Far more abundant, however, are restrictions or prohibitions on the practice of kingly hunting. The *Mānavadharmaśāstra* (VII.50) describes hunting as a vice on the order of alcohol consumption, gambling, or promiscuity, and this is echoed in a variety of sources.³⁶ The *Nītisāra*, for example, devotes considerable space to weighing the risks of the hunt to king and kingdom and balancing them against its benefits. It ultimately specifies that if a king wishes to hunt, he should be provided with a well stocked but risk-minimized game park in which he can be supervised while doing so (*Nītisāra* 15.30). For a Hindu king hunting was an act of delicate brinkmanship leading into dangerous territory, both literally and metaphorically.³⁷ For the warrior-class men of the epic, the introduction of hunting into any plotline injects a hint of jeopardy into the tale. Narratives which involve kings and the hunt are often structured to induce a king to stray toward recklessness or poor judgment, and the motif of the hunt-exhilarated king

³⁵ Cf. Allsen 2006 for a detailed survey of the practice of royal hunting all over the Eurasian world, and Abusch 2008 on hunting’s role in the formal education of princes in the ancient Near East.

³⁶ For more on hunting as a vice, see Doniger 2009:320-21.

³⁷ See, for example, Chaplin 1943; Falk 1973; Sinha 2016; Thapar 2001.

crops up in tales as different as those of Pṛthu³⁸ and Viśvāmitra.³⁹ Even when heroes retain their composure and the hunt is undertaken for legitimate purposes, it is still associated with risk: just as Rāma's pursuit of the deer-form Mārīca gives Rāvaṇa the opportunity to abduct Sītā, the Pāṇḍava brothers are away hunting at *Mbh.* 3.248 when Jayadratha abducts Draupadī. Though the text assures us that their hunt was required to feed brahmins, the brothers' enjoyment in the sport is stressed, as the quest for animals beguiles them into splitting up and leaving their wife alone and unprotected (*Mbh.* 3.248.1-4):

tasmin bahumrge 'raṇye ramamāṇā mahārathāḥ
kāmyake bharataśreṣṭhā vijahrus te yathāmarāḥ 1
prekṣamāṇā bahuvīdhān vanoddeśān samantataḥ
yathartukālarāmyāś ca vanarājīḥ supuṣpītāḥ 2
pāṇḍavā mṛgayāśīlāś carantas tan mahāvanam
vijahrur indra pratimāḥ kaṃcit kālam arimdamāḥ 3
tatas te yaugapadyena yayuḥ sarve caturdiśam
mṛgayām puruṣavyāghrā brāhmaṇārthe paramtapāḥ 4

In that game-rich forest, the great warriors (were) enjoying themselves;
 in Kāmyaka the best of the Bharatas went about like immortals. 1
 Looking around at many types and regions of the forest on all sides,
 and rows of groves beautifully in bloom, delightful in accord with season and time. 2
 The Pāṇḍavas, hunting deer in the great forest,
 went about like Indras at that time, those tamers-of-the-foe. 3
 Then they, at the same time, went in all the four directions
 after deer for the sake of the brahmins, those tigers-among-men, those burners-of-the-foe. 4

It is clear that hunting is one of the signifying activities of a king, however problematic its outcomes might be at times. However, the fact that its most laudable function is killing deer to feed to brahmins becomes somewhat surprising given the degree to which an equally profound affiliation between brahmins and deer also permeates the texts.

³⁸ King Pṛthu pursues the Earth in the form of a cow and compels her to provide nourishment for humans in a scene deliberately structured to resemble a hunt, and the terrified earth-cow is explicitly likened to a deer: “Becoming a cow, she fled, terrified / like a hunter-harried deer” (*gauḥ saty apādravad bhītā / mṛgīva mṛgayudrutā; BhāgP.* 4.17.14). Though Pṛthu is doing his royal duty by protecting his starving subjects, during the pursuit he becomes transcendent with rage and veers dangerously close to committing the grievous sin of killing the earth-cow—which would of course have brought about the destruction of his subjects as well.

³⁹ In yet another tale of royal privilege gone out of control, King Viśvāmitra is hunting when he arrogantly attempts to seize the Kāmadhenu from Vasiṣṭha (*Mbh.* 1.164). For general summaries of episodes treating hunting in the epics, see Brockington 1998, especially 191-92, 225, 417; Brodbeck 2016:71-86; Sinha 2016.

4. The Animal-Form or Deerskin-Clad Victim

In ancient Indian religion and society, cattle were the obvious primary animal of cultural focus, but the significance of deer and other ungulates (particularly the black antelope or blackbuck) in ritual and narrative is supported by copious evidence.⁴⁰ Eggeling, for example, asserts (1882:I, 23 n. 2):

The skin of the black antelope may be regarded as one of the symbols of Brāhmanical worship and civilisation. Thus it is said in Manu II, 22-23: “That which lies between these two mountain ranges (the Himālaya and the Vindhya), from the eastern to the western ocean, the wise know as Āryāvarta (the land of the Āryas). Where the black antelope naturally roams about, that should be known as the land suitable for sacrifice; what lies beyond that is the country of the Mlekkhas⁴¹ [sic] (barbarians).”

Unlike the cow, whose symbolism permeates every level of Hindu culture, deer and antelope have a deep but narrow association with the priestly class, as well as with ritual and the sacrifice. The connection between ascetic sages and antelope/deer encompasses a variety of elements, from the similarities between the words that designate them (*ṛṣi* (“ascetic sage or seer”) and *ṛśya/ṛśya* (“the male of the white-footed or painted antelope”) or *riśya* (“a deer or antelope”)), to their solitary existences in the forest, to the antelope skins (*kr̥tti*) which are the standard accoutrements of the career ascetic. Blackbuck hides were the preferred garments and seats of holy men, as well as performing other more arcane functions such as serving as the “placenta” during the ceremonial process in which a consecrated individual becomes an “embryo” and is then reborn (cf. *AitBr.* 1.3). Brahmin ascetics even display a propensity to metaphorically or actually be or become ungulates, from R̥śyaśṛṅga—named for the antelope horn on his head—whose parents were a human ascetic and a female deer (*Mbh.* 3.110-13), and Mādhavī, daughter of King Yayāti, who becomes a *mṛgacāriṇī*, an ascetic who lives in the

⁴⁰ Given their importance in myth and ritual, the Sanskrit nomenclature surrounding deer is surprisingly inconsistent (see, for example, Eggeling’s note (1900:V, 338 n. 1) on his attempt to make sense of the word *gomṛga* at *ShatBr.* 13.3.4.3). Deer (family Cervidae) and antelope (family Bovidae) are both members of the order Artiodactyla (even-toed ungulates) and are outwardly very similar creatures with similar habits. Their primary distinction is that deer have antlers which are shed each year where antelope have horns. The Sanskrit terms have been included above in every instance in which they occur in the texts, and translated as seems most likely, but there is significant overlap in the various meanings. The largest difficulty lies in accurately translating *mṛga*, which is both the most common term for deer, but also used more generally in its earlier meaning of “wild animal”; Monier-Williams (1899:828) lists its meaning as “a forest animal or wild beast, game of any kind, (esp.) a deer, fawn, gazelle, antelope, stag, musk-deer.” The word also forms the base of six compounds which apply exclusively to antelope: *citrāmṛga*, *kṛṣṇāmṛga*, *vātāmṛga*, *pumāmṛga*, *puṣāmṛga*, *tārāmṛga*. Monier-Williams gives ten other terms which can apply equally to both species (*harīṇa*, *maru*, *maruka*, *riśya*, *mayu*, *nyāṅku*, *kravyaghātana*, *nityaśāṅkin*, *bhāryāru*, *eṇa*), while a host of others are listed as applying only to antelope (*aiṇeya*, *bhāraśṛṅga*, *bhāryāru*, *binducitra*, *binducitraka*, *calana*, *cāruḷocana*, *cārunetra*, *chikkāra*, *citrāṅga*, *eṇa*, *eta*, *jāṅghika*, *kadalīn*, *kālapṛṣṭha*, *kālasāra*, *kṛṣṇa*, *kṛṣṇapucchaka*, *r̥ṣṇasāra*, *kṛṣṇasāraṅga*, *kṛtamāla*, *madhyama*, *mahājava*, *manthara*, *śikharin*, *śikhiśṛṅga*, *śikhiyūpa*) and sixteen which apply only to deer (*bhīruḥṛdaya*, *cañcu*, *divaukas*, *harīṇaka*, *harṣula*, *kauṭilika*, *ligu*, *mṛḍika*, *pallavāda*, *plavaṅga*, *sāraṅgaja*, *sulocana*, *sunayana*, *alpaharīṇa*, *gandhamṛga*, *vanastha*).

⁴¹ *Mlecchas*.

manner of a deer, in order to avoid marriage (*MBh.* 5.118.7 and 5.119.20, 24),⁴² to the doomed *r̥ṣi* Kiṃdama, who describes how he spends time in deer form on account of modesty and to alleviate his social anxiety (*Mbh.* 1.109.28).⁴³ This brahmin ascetic-deer affiliation is not observable only in the *Mahābhārata*; *Bhāgavata Purāṇa* 5.8 tells the story of the ascetic Bharata who becomes the custodian of a fawn who has lost its mother; Bharata becomes so immersed in his complete devotion to the orphan that his own body wastes away entirely and he is reborn as a deer. When the brahmin warrior Rāma Jāmadagnya (discussed above under #1) discovers that his father has been slain, he explicitly likens this killing of a brahmin by *kṣatriyas* to a deer hunt (*Mbh.* 3.117.1):

maṃpārādhāt taiḥ kṣudrair hataṣ tvam tāta bālīśaiḥ
kārtavīryasya dāyādair vane mrga iveṣubhiḥ

As a result of my transgression, by these vile ignoramuses you were killed, Dear Father,
 by the sons of Kārtavīrya, in the forest as (one might shoot) a deer, with arrows.

Altogether, a clear picture emerges showing a kinship or equivalence between brahmins and deer; it should perhaps not be surprising, then, that an equally clear association can be traced between deer and that other major signifier of a brahmin: the sacrifice.

The sacrifice (*yajña*) is the incontrovertible center of Hindu thought and religious practice, and its performance not only solicits the benevolence of the gods, but reenacts and reasserts one Hindu conception of the fundamental nature of reality: that everything is a recurring cycle of consumption. As a famous formulation in the *Bṛhadāraṇyaka Upaniṣad* has it, “everything is just food and eater of food; (in the sacrifice) *soma* is the food and Agni is the eater” (*idaṃ sarvaṃ annaṃ caivānnādaś ca, soma evānnam, agnir annādaḥ*; *Bṛ.ĀrUp.* 1.4.6.82). Sacrifice aligns the microcosm of its performers with this macrocosmic relationship between “food and eater of food” (*anna* and *annāda*); it is “the visible form of an all-pervading divinity” (Daniélou 1991:63). Having his flesh offered for consumption to other gods makes Prajāpati the consummate exemplar for this conceptualization, and there are analogues to the sons’ act of ingesting his flesh in the human rituals modeled after Prajāpati’s death and revivification.⁴⁴

While Prajāpati’s story may be the first narrative expression of a *vinculum* between deer and the sacrifice, it is by no means the extent of it. Numerous passages draw a line between deer-

⁴² Mādhavī’s lifestyle and dedication eventually result in her father Yayāti recouping the prestige he lost when he began to despise all people and be overcome with pride in heaven.

⁴³ One of the few references to the ungulate-human equivalency that does not directly reference a special relationship to the priestly class is a “flipped” version: the Pāṇḍavas are told to go see Lake Mānuṣa, “. . . where black antelopes, O King, tormented by a hunter, / having plunged in that lake, became human” (. . . *yatra kṛṣṇamṛgā rājan vyādhena paripīḍitāḥ / avagāhya tasmin sarasi mānuṣatvam upāgatāḥ*; *Mbh.* 3.81.53).

⁴⁴ The ritual describing the human-consumption analogue to the divine consumption of Prajāpati’s flesh is described in *ŚBr.* 1.7. Also relevant is *ŚBr.* 2.2.4, which describes how Agni was born from Prajāpati’s mouth, “therefore, Agni is an eater” (*tasmād annādò ‘gniḥ*; *ŚBr.* 2.2.4.1). Agni then goes on to make several attempts to eat Prajāpati before the demiurge learns to pacify the hungry fire god with dairy products.

and antelope-killing and the sacrifice—or at the very least, with *complicated* or problematic sacrifice—and in many instances the sacrifice is embodied as an ungulate. In the *Śatapatha Brāhmaṇa*, for example, Yajña, the personified sacrifice himself, is hunted in the form of a blackbuck before mysteriously disappearing and leaving only his skin behind (*ŚBr.* 1.1.4.1):⁴⁵

átha kṛṣṇājīnam ádatte yájñasya ivá sarvatvāya. yajñó ha devebhyó 'pacakrāma sa kṛṣṇo bhūtvā cacāra. tāsya devā anuvīdya tvācam evāvacāyā jahruḥ.

Then he takes the black antelope skin, in respect to the wholeness (as it were) of the sacrifice. Indeed, Yajña went away from the gods, and having become a **black antelope**, he wandered. The gods having found only his skin, gathering (it) up, they bore it off.

The ruined sacrifice of King Dakṣa shows us another mythological coalescence of deer, hunting, and the sacrificial ritual when Yajña attempts to flee from the wrath of Śiva (the later, much expanded persona of Rudra) by taking the form of a deer (*mṛga*) (*VamP.* 5.26-27, 43):

*agnau prañaste yajño 'pi bhūtvā divyavapur mṛgaḥ
dudrāva viklavagatir dakṣiṇāśahito 'mbare 26
tam evānusaśāreśaś cāpamānamya vegavān
śaraṃ pāśupataṃ kṛtvā kālarūpī maheśvaraḥ 27
... evaṃ kṛtvā kālarūpaṃ trinetra yajñaṃ krodhān mārṅaṇair ājaghāna
viddhaścāsau vedanābuddhimuktaḥ khe saṃtasthau tārakābhiścītāṅgaḥ 43*

When the fire disappeared, Yajña (did) too, having become a deer of divine form;
he fled, gone into overwhelming fear, together with the offering. 26
The Lord, indeed, pursued him, having bent (his) bow swiftly,
(and) having fixed a *pāśupata* arrow to that bow, the great god, in the form of Yama (did this). 27
... Having taken his Yama-form, the Three-Eyed One angrily struck Yajña with arrows.
And that one, pierced (but) free from the perception of pain, remained in the sky with limbs placed
by means of stars. 43

As did Prajāpati in *AitBr.* 3.33 (as cited above), Yajña, too, becomes a constellation. It must be concluded that at some level, or in some early phase of cultural development, the sacrifice was entangled with (or perhaps seen in a kind of perpetual apposition to) the hunt. Though correspondences between hunting and sacrificial killing have been noted in a variety of

⁴⁵ There are multiple references to this story in the *brāhmaṇas*; cf., for example, the following, which records the same tale, but omits the sacrifice's antelope form and replaces the hunting with a request from the gods that it return: “Yajña ran away from the gods. Those gods marked his departure with a blessing, (saying) to him, ‘Listen to us! Come back to us!’ He said, ‘Let it be so!’ (and) verily he returned to the gods. With him returned, the gods worshiped. Having sacrificed with him, the gods became that which is this (now)” (*yajñó ha devebhyó 'pacakrāma. tāṃ devā ānvamantrayan tā naḥ śṛṇūpa na āvartasvétī. só 'stu tathéty evā devān upāvavarta. tēnopāvr̥ttena devā ayajanta tēneṣṭva itād abhavanyād idam devāḥ*; *ŚBr.* 1.5.2.6).

ancient cultures,⁴⁶ there is little overt intersection between the two in ancient Indian literature or ritual. However, the scenes described above suggest that some form of covalence linked the two practices at some early point. When these scenes are laid alongside the description of Prajāpati's deer form in the *Aitareya Brāhmaṇa*, a complex system of equivalencies in the texts springs into focus: Prajāpati is a deer; Prajāpati's killer is a hunter. Brahmins are deer; *kṣatriyas* are hunters. Prajāpati is the sacrifice; his murderer is therefore performing an analogue to the sacrifice, and in fact, Rudra, the killer of Prajāpati's deer form, is saluted as *yajñasādham*, "Accomplisher/Perfecter of the Sacrifice," at *RV* 1.114.4. Rendered in chart form, the binaries underlying the epic scenes of deer-form murder look like this:

Father	Brahmin	Deer	The sacrifice
Son(s)	<i>Kṣatriya(s)</i>	Hunter(s)	The hunt

Table 3.

Within this tale at the very least, the hunt is constructed as a kind of *kṣatriya* mirror-image of the sacrifice. Certainly, the sacrifice and the hunt share many characteristics: hunting also embodies the cycle of *anna* and *annāda*, it requires the death of an animal, and it can bring disastrous results if performed incorrectly. Warrior-class killing happens on the battlefield and in the forest, and priestly-class killing is performed within the sacrifice; both are a part of the proper and necessary functioning of the world. A further similarity lies in the fact that in these tales, the dangerous outcomes are linked to the production of children.

5. Offspring-Related Consequences

Prajāpati's executioners are his children and (as discussed above) there are clear textual reasons to see the brahmins killed in deer form as being murdered by their supposed mythological descendants. However, in the epic variants, offspring expand into another significant dimension of the narrative as they also become the locus of the penalty that each killer faces, often manifested in a form tailored to the circumstance of each killing. The denial or loss of offspring for the *kṣatriya* killers is a multiform and thoroughgoing part of the epic modifications: Pāṇḍu and Kalmāṣapāda are deprived of the chance to father their own sons for killing a brahmin during intercourse, Daśaratha is destined to lose a son for killing a brahmin youth, and Rāma (whose story's adherence to the template is the loosest) loses access to his wife, a consequence functionally similar to Pāṇḍu and Kalmāṣapāda's situations, albeit in his case temporary.

Given the fact that Prajāpati's killers face no such punishment, why should there be such

⁴⁶ Burkert examined the similarities between hunting and the sacrifice across a variety of ancient societies and concluded that "One could . . . separate hunting and sacrifice on principle. In the hunt, one might argue, killing is not ceremonial but practical and subject to chance; its meaning and goal, both quite profane, lie in obtaining meat for food; a wild beast must be seen in opposition to a tame domestic animal. And yet the very similarity of hunting and sacrificial customs belies such a distinction" (1983:15).

a regular narrative connection between hunting-associated accidental murders and the loss of one’s posterity? The likely answer lies in Prajāpati’s role as the “Lord of Offspring” and the complicated equivalence between the sacrifice and the hunt: in particular, there is one form of the sacrifice which is restricted entirely to brahmins, performed to secure offspring, and whose etiology once again positions Prajāpati as a hunted victim.

The *agnihotra*, the twice-daily dairy oblation which may only be performed by members of the priestly class, has a unique status among the sacrifices, and in *ŚBr.* 2.2.4.1-3, we learn that the mythological origins of this ritual lie in Prajāpati’s omnipresent yearning for offspring. As in most stories that include the demiurge, the tale is situated at the beginning of time, and describes the god’s generation of Agni, the quintessential eater, and the first of Prajāpati’s children to attack him (*ŚBr.* 2:2:4.1):

*prajāpatir ha vā idamāgra éka evāsa
sā aikṣata katham nu prajāyeyéti so 'śrāmyatsa tápo 'tapyata sò 'gnímeva múkhāj janayām cakre
tād yād enam múkhād ājanayata tasmād annādò 'gniḥ.*

Prajāpati alone, indeed, existed here in the beginning. He considered, “How may I be reproduced?”

He toiled and performed acts of penance. He generated Agni from his mouth; and because he generated him from his mouth, therefore Agni is a food-eater.

Eternally hungry, Agni pursues his creator with a gaping mouth (in effect, hunting him) and Prajāpati, fearful of being eaten, invents the *agnihotra* to satisfy the fire god instead, thus mythologically positioning it as an alternative or substitute for the hunt. It is clear that there are procreative undertones to the rite even aside from these mythological origins; the *agnihotra*’s connection to procreation is abundantly noted in the scholarship.⁴⁷ Presumably because of the

⁴⁷ While surely not the full sum of the *agnihotra*’s sprawling layers of significance, its connection to fertility is obvious even to those who view it as a secondary aim of the text. Thus “L’agnihotra est un sacrifice qui a pour objet de procurer au sacrifiant la prospérité, la santé, la longévit , la richesse en b tail et, surtout une nombreuse descendance m le, c’est- -dire la continuit  de la race. . . . L’agnihotra est un charme de f condit ” (Dumont 1939:vii). Bodewitz was convinced that solar ideology was at the root of the *agnihotra*, and maintains that fertility was a secondary role, only mentioned so frequently in the br hmanical literature because “The disappearance of the sun and its reappearance from the dark night, which forms the central theme in the speculations on the *agnihotra* was described with the image of conception and delivery. This image thrust itself upon the authors of the *br hma as*, who did not hesitate to use it for one of their well-known obsessions: fertility” (1976:147). Skeptical as he is about the true relevance of a procreative aspect to the ritual, he goes on to supply five pages of textual citations from the *br hma as* on the *agnihotra*’s fertility-related powers.

association between dairy products and the male generative fluid,⁴⁸ the text describes Prajāpati's performance of the *agnihotra* as an act of reproduction, another manifestation of the way in which sacrifice, hunt, and procreation are intertwined with Prajāpati's character (*ŚBr.* 2.2.4.7):

*sá hutvā prajāpatiḥ / pra cājāyatātsyatás cāgnér mṛtyór ātmānam atrāyata sa yó haivām vidvān
agnihotrām juhóty etām haiva prajātim prajāyate yām prajāpatiḥ prajāyataivām u haivātsyatò
'gnér mṛtyór ātmānam trāyate*

Prajāpati, having made a sacrificial offering, reproduced himself and protected himself from Agni-death. Thus the wise man who offers the *agnihotra* reproduces himself as that very Prajāpati who reproduced himself once upon a time in exactly that way and protected himself from Agni-death who was about to eat him.

An episode in Book 3 of the *Mahābhārata* draws another illuminating direct connection between the hunt and the *agnihotra*. While none of the Pāṇḍava brothers ever enacts the “Killing of a Brāhmin in Deer Form” themselves, at several instances just such an event seems to loom in the offing. At *Mbh.* 3.295, the Pāṇḍava brothers are living an exemplary and virtuous life at a hermitage when they are approached by a panicking brahmin who has lost his *araṇis* (ritual drilling woods) right before performing his evening *agnihotra* (*Mbh.* 3.295.7-11):

*ajātaśatrum āsīnam bhrātrbhiḥ sahitam vane
āgamya brāhmaṇas tūrṇam samtapta idam abravīt 7
araṇisahitam mahyam samāsaktam vanaspatau
mṛgasya gharṣamāṇasya viśāṇe samasajjata 8
tad ādāya gato rājams tvaramāṇo mahāmrgaḥ
āśramāt tvaritaḥ śīghram plavamāno mahājvaḥ 9
tasya gatvā padaṁ śīghram āsādy ca mahāmrgam
agnihotrām na lupyeta tadānayata pāṇḍavāḥ 10*

⁴⁸ While the *Śatapatha Brāhmaṇa* remains frustratingly silent on whether a cigar is sometimes just a cigar, it is emphatic and consistent in its assertions that dairy products offered to the fire are *always* semen: the homogeneity of semen, milk, and butter is asserted repeatedly in descriptions of sacrificial acts throughout the text, for example, “Melted ghee [is] indeed semen; truly, he pours out that very semen” (*réto vā ājyam réta eva itāt siñcati*; *ŚBr.* 1.9.2.7), or “Then she looks at the melted ghee. Assuredly the wife [is] the mistress, and melted ghee [is] semen” (*athājyam āvekṣate. yoṣā vai pātnī réta ājyam*; *ŚBr.* 1.3.1.18). An etiology of the milk-semen equivalency is found alongside Agni's birth story, and it shares significant verbiage (marked in bold) with *ŚBr.* 1.7.4.1 and its description of Prajāpati's sexual activity with his daughter: “Now, Agni **desired** [the cow]: ‘**May I couple with her,**’ he thought. **He joined with her sexually**, and in her (his) semen became that milk . . . that's why it is hot (when it is) first milked; it is Agni's semen, indeed” (*tām u hāgnir abhidadhyau / mithunyanayā syāmīti tām sāmabbhūva tasyām rétaḥ prāsiñcat tāt páyo 'bhavat . . . tasmāt prathamadugdhām uṣṇām bhavaty agner hi rétaḥ*; *ŚBr.* 2.2.4.15).

Nor is the semen-dairy equivalence confined to the *Śatapatha Brāhmaṇa*; see, for example, *TB* 2.8.2.3, *RV* 1.100.3, or *RV* 1.160.3, which also equate dairy products with semen. The equivalency of all dairy products to one another is also made clear elsewhere, for example, “There he acquired either a ghee offering or a milk offering; but really both are actually that milk” (*tātra viveda ghṛtāhutī vaivā payāahutīm vobhāyam ha tvēva tatpāya eva*; *ŚBr.* 2.2.4.4 and 2.2.4.5). This equivalence may also be seen in the epics, such as the divinely presented milk-porridge (*pāyasa*) which impregnates the wives of Daśaratha at *R.* 1.15.17.

*brāhmaṇasya vacaḥ śrutvā saṃtapto 'tha yudhiṣṭhiraḥ
dhanur ādāya kaunteyaḥ prādravad bhrātṛbhiḥ saha* 11

Ajātaśatru was sitting with his brothers in the forest.
Having approached (them) swiftly, a brahmin, greatly distressed, said this: 7
“My *araṇīs* (were) hanging suspended on a tree, a king of the woods,
when a deer was rubbing against it; on his horn 8
taking them [the *araṇīs*], he left, O King; the huge deer ran away,
from the *āśram* he ran swiftly, leaping, very fleet! 9
Quickly having gone on its track, and having gone after the huge deer—
let my *agnihotra* not be spoiled! Bring (the *araṇīs*) back, O Pāṇḍava.” 10
Having heard the brahmin’s words, Yudhiṣṭhira was greatly distressed.
Having taken his bow, the son of Kūntī ran after (the deer) with his brothers. 11

The forest setting, the nearby hermitage, the pursuit of a large and powerful deer: all are acutely reminiscent of the encounter which led to their father’s death. As the brothers press deeper into the forest, they are overcome by thirst. One by one they approach a pool in the forest and are stricken into a deathlike state by an invisible voice. This tale ends happily, however, when an unexpected father-son connection suddenly manifests as the dangerous power presiding over the pool is revealed to be the god Dharma (father of Yudhiṣṭhira) wishing to test (and then reward) his son.

Not only is this the closest the heroes of the great epic ever come to enacting the motif, but it brings us to another quality shared by the hunt and the sacrifice: as actions, both are the near-exclusive provenance of one *varṇa*, but are frequently performed as a service for the other. The typical *yajña* is performed by brahmins on behalf of *kṣatriyas*, while the optimal form of the *kṣatriya* hunt is (as attested above) one done to feed brahmins. But both *kṣatriyas* and brahmins also conduct their salient activities for their own personal benefit. For warriors, this is the recreational hunt, where for brahmins, it is the *agnihotra*, the personal twice-daily act of worship forbidden to the warrior class. Table 4 depicts this correspondence:

	Kṣatriya	Brahmin
Cross- <i>varṇa</i> service	Hunting performed to feed brahmins	Sacrifices carried out on behalf of <i>kṣatriyas</i>
Personal benefit	Hunting performed for sport	The <i>agnihotra</i>

Table 4.

It is in the “personal” versions in the lower register of Table 4 that the rules for the two classes reverse, as if reflections of one another in a mirror. Where the *agnihotra* (unless skipped or

somehow severely misconducted) brings assurance of progeny, the hunt—its dark counterpart or antithesis—is the jeopardizer of lineage, a potential cause of the eradication of the family line.⁴⁹

6. Demarcation of Phases of the Narrative

The final issue to be addressed is this motif's regular recurrence, especially in view of the fact that the Sanskrit epics generally avoid the conspicuous reuse of thematic material. Yet again, an element from the *Śatapatha Brāhmaṇa*'s account of the assassination of Prajāpati suggests an underlying rationale for its repeated use. Though the description of the murder at *ŚBr.* 1.7.4.1-4 is shocking, more attention is actually paid in that narrative to its aftereffects than to the killing itself. As described above in the section on the brāhmaṇic versions, the description of the sex and murder occupy only a scant three verses, while the rest of the narrative portion of the chapter is dedicated to the gods' repeated attempts at damage control (*ŚBr.* 1.7.4.5-9). The sons decide as a group to kill Prajāpati, but they pay the price for their transgression one at a time. One by one, the killers try to "pacify" the fragment of their father's flesh; one by one they suffer terrible consequences, each time marked by the *Śatapatha Brāhmaṇa*'s refrain of "it has not yet become calmed/pacified" (*nò nvèvātrāśamat*; *ŚBr.* 1.7.4.7, 8). It is not until Bṛhaspati, the preceptor of the gods, gives it to Savitr for "impulsion" that "thenceforward it was pacified" (*tato 'rvācīnaṃ śāntaṃ*; *ŚBr.* 1.7.4.8).

These proportions are to some degree reflected within the individual epic versions as well: in each one, the killing is more important as a catalyst than as an event unto itself. But the template can also be seen on the larger scale as encompassing the epic versions as a group. Just as the sons of Prajāpati repeat their attempts to pacify the flesh, in the epic variants, the divine transgressions from the beginning of time are reenacted over and over again by *kṣatriyas*, until Kṛṣṇa's acceptance of his own killing and his forgiveness of the hunter who shot him brings the final pacification.

The reuse/recurrence of the primal scene of murder aligns the epic narrative with Hindu cosmology, reflecting the innate periodicity of the Hindu conception of time as an endless cycle of *kalpas* ("eons") each followed by *pralaya* ("dissolution"). This pattern is tightly bound to Prajāpati, who is often the first being to appear at the beginning of time (as at *ŚBr.* 2:2:4 or 6.1.1) and has an enduring connection to the act and time of creation. Through his position as the creator of beings and as the primordial sacrifice, his tale became synonymous with "beginning" in the epics. By having principal figures re-perform this allegory from the beginning of time at the outset of their stories, the epics ground themselves within this conception of cyclical time. The scene establishes the epic narratives as a part of a template imposed at the onset of the eon,

⁴⁹ Examining other episodes, Brodbeck (2016:71-86) does find a corresponding association between a king's progeny and well conducted hunting, concluding that "Success at hunting seems to give a king success in getting a good heir, and wildness is glossed with a tendency not to give daughters away" (86). Even so, the fundamental point holds that while the *agnihotra* is a low-risk, high-reward activity, in the epics, hunting is a high-risk, and at best moderate-reward activity. Another connection between hunting, beginnings, and denial of offspring occurs at the beginning of the *Ramāyaṇa*, with Vālmiki's curse upon the Niśāda hunter for killing the male *krauñca* bird during mating at *R.* 2.13-14: the incident relates a sin committed while hunting that becomes the mythological account of the origin of the *śloka* and results in the hunter being cursed with death.

unavoidable, inevitable. Prajāpati’s sons committed their crime and laid down a pattern for its resolution: attempt, attempt, attempt, finally followed by appeasement. On the human scale, the mortal heroes must recapitulate the crime over and over again until a divinity, Kṛṣṇa, steps in to impel a resolution, just as Savitr does for his brothers in the *Śatapatha Brāhmaṇa*. In a perfect reverse analogue to Prajāpati’s creation, Prajāpati has just finished the act of creating his divine family, where Kṛṣṇa has just finished ensuring the total destruction of his. In this final, “backwards” presentation of the motif, the core of the tale remains intact (a person shoots a deer who is actually a person), but illicit copulation is replaced with recumbent meditation; Kṛṣṇa is the blameless victim, where it is his killer who is unclean; and warrior-priest conflict collapses upon itself within the persona of Kṛṣṇa, both warrior and god. Finally, in contrast to the emphasis on retribution throughout the epic versions, punishment is replaced by forgiveness, as Kṛṣṇa, having just orchestrated the slaughter of his kinsmen, forgives his own killer. The death of Kṛṣṇa brings about the end of the heroic age; the primal sacrifice from the beginning of time is reenacted at the fin-de-siècle.

Conclusions

In the murdered body of Prajāpati the sacrifice and the hunt merge (or revert to some even more ancient shared significance), and the conflict between Prajāpati and his sons as expressed through the imagery of the deer and its hunters lays down an enduring pattern for narrative interactions between brahmins and *kṣatriyas*. Combining Hindu conceptions of the sacrifice and cyclical time with warrior- and priestly-class tension and capitalizing on the strong associations between brahmins, deer, and fatherhood, the murder of a person in deer form is used to mark the pivot point between phases of a narrative or of time itself, and serves as a reminder that the world of the epics is itself envisioned as a massive ritual of sacrifice. As a succession of epic characters reenact the elements of the initial divine parricide, the story is revealed to play a part in a larger program: just as Prajāpati’s murder carries serious consequences for his divine family, its human-sphere reenactments precipitate similarly seismic events. Each episode marks a turning point in the narrative, an upheaval that takes much of the rest of the text to smooth out. Much like the refrain at *ŚBr.* 1.7.4.7-8, “it has not yet become pacified” (*nò nvèvātrāśamat*), as the gods repeatedly find themselves unable to neutralize the piece of Prajāpati’s dropped flesh, the “pacification” required of—or exacted upon—the warrior-class heroes following each deer-form murder leads to the formation of a corresponding cyclical/repetitive structure in the epic narrative.

Stories and motifs are frequently duplicated and reused in epic literature, but rarely in such an intentional and programmatic fashion; most significantly, the tale can produce this resonance with only a palimpsest of the original pattern. The motif’s reduplication and deployment in the text functions as a marker of every age’s ultimately relentless march towards tragic degeneration, culminating in the version which marks the onset of the *Kali Yuga*. In every phase, the *kṣatriya* debt is reincurred, until it is finally appeased by the willing martyrdom of Kṛṣṇa. While every iteration of the tale adds differentiating features, the shared foundation is clearly visible in all, aligning narrative with cosmology and imbuing the plotline with deep

cosmological meaning. The “King Who Kills a Deer that Is Actually a Person” is an object lesson in the way the tools of oral narrative can be used to reflect cosmological principles, and the reuse of a theme can serve as a powerful tool in social and religious messaging.

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Type-Token Ratio and Entropy as Measures to Characterize a Forgery of Oral-Formulaic Epics

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The Queen's Court and Green Mountain Manuscripts (*Rukopisy královédvorský a zelenohorský*, together abbreviated "RKZ" in Czech) present an unusually successful case of literary forgery. These pseudo-medieval Czech manuscripts, presenting folk lyrics, ballads, and epic songs seemingly recorded in the late-thirteenth and in the ninth to tenth centuries, respectively, were taken by most scholars to be genuine monuments of medieval poetry, over the objections of only a few dissenters, for at least sixty years following their discovery in 1817 and 1818. By the late nineteenth century, the manuscripts' imitation of the Old Czech language no longer convinced experts in Czech historical linguistics, who led in their unmasking.¹ Along with the Old Czech language, the epic poems in the manuscripts also imitated the forms of traditional oral epic poetry, familiar at the time from Vuk Karadžić's first publications of Serbian songs (1814 and 1815) and similar traditions (Russian *byliny* and Homeric epics). Their successful imitation of these models, and the limits of that success, have not been sufficiently studied and understood. In this article, we present the results of a project that aimed at characterizing South Slavic and Russian oral-formulaic poetry using informatics measures, such as entropy, and standard natural language processing measures like Type-Token Ratio (TTR) for measuring lexical variance, for comparison with their imitation in the Czech forged manuscripts.

The Manuscripts

Václav Hanka "discovered" the first of the two manuscripts while exploring the vault in a church tower in Dvůr Králové on September 16, 1817. The second was mailed anonymously in November, 1818, to the Highest Burgrave of the Bohemian kingdom for inclusion in the collections of the new national museum. Details emerged later showing it had been uncovered in the castle Zelená Hora. The Queen's Court (Královédvorský) Manuscript contained six epic poems (one fragmentary), two ballads, and six lyric songs, while the Green Mountain (Zelenohorský) Manuscript contained what at first appeared to be fragments of two epic songs but are better understood as one (relatively) complete epic. The leading Czech expert at the time

¹ See Cooper 2018 for a bilingual edition of the manuscripts, which includes an introduction that outlines their reception and influence in Czech culture from the time of their discovery to their unmasking in the mid-1880s.

in Slavic antiquities, Josef Dobrovský, welcomed the discovery of the first manuscript but doubted the second, which was much older than any known fragments of writing in Czech and presented evidence of a highly developed Czech culture in that early period. Soon, he would name his students in Slavistics, Hanka and his roommate Josef Linda, along with Josef Jungmann, as the likely promulgators of the fake (Ivanov 1969:199). Nearly 200 years of subsequent investigation have yielded no direct evidence of the conspiracy linking it to its authors, but the indirect and circumstantial evidence (linguistic, literary, historical, and psychological) indicating Hanka's involvement is overwhelming. The cases for the involvement of other possible collaborators are less decisive.

The form of several of the epic songs of the manuscripts suggests that their models were the South Slavic oral epics in *deseterac* (ten-syllable, unrhymed) form. The single epic of the Green Mountain Manuscript (*Libuše's Judgment*) and two of the epics from the Queen's Court Manuscript (*Oldřich and Boleslav* and *Jaroslav*) are entirely in ten-syllable, unrhymed verse. Two additional epics from the Queen's Court Manuscript, otherwise written in lines of continually varying syllable length, include significant passages of consecutive lines in ten-syllable form (*Čestmír and Vlaslav* and *Záboj, Slavoj, and Luděk*).² As we shall see, other features of the poetic discourse also indicate a relationship to the South Slavic oral epic form. The South Slavic tradition of oral epics in the shorter *deseterac* line were being presented at that time by Vuk Karadžić to a European reading public eager for examples of native epic poetry, and his songs quickly became a hit. Václav Hanka was among those at the very forefront of this enthusiastic reception.

In the autumn of 1813, both Hanka and Karadžić arrived in Vienna and came under the tutelage of the Slovenian scholar Jernej Kopitar. Hanka was continuing his law studies at the university and was recommended to Kopitar by Dobrovský, with whom he had recently begun to study Slavistics. Karadžić was more advanced than Hanka, and with Kopitar's encouragement published both his new grammar of Serbian and a first small collection of folksongs in 1814, followed by a second and larger collection of songs in 1815 (Dolanský 1968:15-16). Hanka responded to Karadžić's first volume by calling on the Czechs to collect their own folksongs in a short, anonymous article in a Vienna-based Czech periodical. The article was followed by Hanka's translation of one of the lyric songs from the collection (Máchal 1918:xix-xx; Cooper 2010:96-97). Kopitar reviewed the second volume in 1816 in *Wiener allgemeine Literaturzeitung* and included translations of five songs into German. Hanka translated these same five into Czech, adding two additional lyrics from the volume and one from the first collection, and published it in 1817 as *Prostonárodní srbská muza, do Čech převedená* (*The Serbian Folk Muse, Led Over into Bohemia*) (Dolanský 1968:22-23).³ Of the eight songs Hanka translated, three

² Our analysis ignores single lines and couplets of isolated ten-syllable lines and only includes passages of three lines or longer in ten-syllable form. For *Čestmír* this includes eighty-four of the 229 lines of the poem; for *Záboj* just twenty-one of 255 lines. The remaining two epic poems use, in one case, a native Czech eight-syllable line and, in the other, a ballad-like stanza, both also unrhymed.

³ The small volume also included translations of two Russian songs.

were in the *deseterac* form of traditional epic.⁴ Hanka, following Kopitar, thus preceded with his translation the later and more substantial efforts by the brothers Grimm (in Förster and Tieck 1818) and Sir John Bowring (1827) (Karadžić 1997:11). And, Hanka was completing his translations of Karadžić's epic and lyric songs in the same period as the epic and lyric songs of the forged manuscripts were likely being composed.

The imitations of Slavic oral epic poetry in the Manuscripts proved at the time very convincing to expert judges, both foreign and domestic, and in studies of the poems, the resemblance was remarked and served as a sign of the ancient origin of the poems and the authenticity of the manuscripts. František Palacký, the first historian and honorary “father” of the Czech nation, connected the ten-syllable epics explicitly to Slavic epic forms in 1829, and the lack of rhyme was an important authenticating factor for him as well (Dobiáš et al. 2015:310ff.). The critic Václav Nebeský declared, in an extended discussion of the manuscript published in 1852-53, that “every line of the Queen's Court Manuscript is certainly also a witness to its authenticity,” and he cited the recognizability of the poems to Serbs, Russians, and other Slavs as corroborating evidence (Dobiáš et al. 2015:373-74). But how good, in fact, are these Czech imitations of Slavic traditional oral epic poetry? Thanks to the work of Milman Parry and Albert Lord and its extensions by John Miles Foley (1990 and 1991), Patricia Arant (1990), and others, we know far more today about the “oral-formulaic” form and nature of Slavic oral epic poetry, about how it is composed using a limited but flexible repertoire of formulaic patterns at the level of phraseology (formulas), pattern scenes (themes), and story (song) patterns, than any imitators in the early-nineteenth century could have penetrated. The South Slavic tradition, which is the primary model for the epics in the Manuscripts, has been particularly intensively studied and described. From our contemporary perspective, then, how well did the forgers do?

Imitating Folk Epics

The answer is: very well in some respects and not so well in others.⁵ For one thing, it is likely impossible to create an oral-formulaic verse form if one does not exist in your language (as we now know to be the case for Czech folk tradition) and if, instead, one is translating and copying a verse pattern from a language that has different meter-forming stress and length characteristics. Foley revises Parry and Lord's description of the formulaic phraseology of oral-traditional epic, seeking a set of general rules that would account not only for formulas but also for the wider spectrum of poetic diction, including formulaic systems and grammatical and syntactic patterns.⁶ He proposes a set of traditional rules (which he formulates for ancient Greek, South Slavic, and Old English epics) based on the prosody of the verse form in each language. These rules account for the metrically sound generation of every verse line, while formulaic

⁴ These ranged from forty to 201 lines in length in Hanka's translation. See Tureček 2015 on how Hanka's translation represented Serbian songs.

⁵ Cooper has prepared an in-depth study on this topic for a book-length study of the Czech Manuscripts, from which the following short summary and examples have been taken.

⁶ See note 12, below, for the analysis of a single line and the multiplicity of patterns that converge there.

patterns, sound patterns, syntactic parallelism, and other verse characteristics are second-level shaping processes (Foley 1990:173-75). Such traditional rules are impossible to formulate for the Czech epics in the manuscripts, the verse pattern for which derives from an implicit translation from the *deseterac*. As Roman Jakobson (1935) showed long ago, the verse in the Manuscripts' epics follows a pattern that was already visible in Hanka's translations of Karadžić's epics. Because Czech word stress is immobile, fixed on the first syllable of the word, and vowel length only plays a secondary role in meter—both unlike in Bosnian-Croatian-Serbian—the verse characteristics change in the translation. Unlike in South Slavic verse, and *also unlike in native Czech ten-syllable verse* (which existed only in genres other than epic), in Hanka's translations and in the verse of the Manuscripts, there is a higher incidence of stress on the seventh syllable than on what should be the metrically marked ninth syllable. This translated and imitated verse, then, is revealed as non-native in its metrical features (lacking what Foley calls the Indo-European principle of right justification),⁷ a sure sign for Jakobson that the verse is formed on an implicit orientation toward the *deseterac* (Jakobson 1935:48-49). Not only, then, does the Czech verse not follow Foley's traditional rules for South Slavic verse (it cannot, the language having different metrical characteristics); it also exhibits features that would greatly challenge the formulation of its own traditional rules (the higher incidence of stress on the seventh syllable is highly unlikely to be traditional and native, given its deviation from the pattern in native Czech ten-syllable verse; the caesura is also mobile in a manner that varies unpredictably from poem to poem, in contrast to the strictly fixed caesura of the *deseterac*).

On the other hand, the forgers were quite successful in imitating the rich texture of the phraseology of the epic discourse, the formulaic patterns, sound patterns, syntactic parallelism, terracing, and thematic focus that further shape the phraseology, according to Foley, within the context of the traditional rules. The opening lines of the first song in the Queen's Court Manuscript, *Oldřich and Boleslav*, establish the discourse patterns well (ll. 1-9, 49-61):⁸

<p>... sě v črn les tamo, kam[o] sě vládyky sněchu, sedm sich vládyk s udatnými sbory. Výhoň Dub tamo s niem [s] snahú chváta se vsjů chasů svojů temnem nočniem. Sě chasa mu bieše na sto chlapův, vsěch sto jmieše v nožnách <i>břietné meče</i>, k mečem vsěch sto jmieše <i>mocná paže</i>, k Výhoňu v útrokách statnú vieru.</p>	<p>... into the dark forest To the place where the lords had assembled, Seven such lords with stalwart companies. Výhoň Dub speeds there eagerly With his entire band in the dark of night, A band of about a hundred men, All hundred had a sharp sword sheathed, And a strong arm each one for the sword, And stout faith in Výhoň in their guts.</p>
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Two-thirds of the lines (1, 3, 5, 7, 8, 9) end in adjective-noun combinations that could easily be formulaic (those italicized are quasi-formulaic in the Manuscripts, being repeated in two cases

⁷ Right justification names the tendency of verses to be more flexible in their metrical and formulaic aspect at the beginning of the verse line (on the left) and gradually more inflexible, strictly aligned with the meter, and formulaic as one moves toward the end of the line (on the right).

⁸ This epic is fragmentary, as the partial first line begins the first full page of the manuscript but is preceded by two pages that have been cut away, leaving text only on the inner margins. So, this is really the beginning of the end of the epic. Text and translations are from Cooper 2018. The same discourse patterns could be demonstrated in the opening lines of *Libuše's Judgment* for the Green Mountain Manuscript.

with synonymous rather than identical adjectives).⁹ The *črn les* (“black forest”) of the first line is part of a thematic focus on a gathering in a dark forest to conspire against an illegitimate or foreign power and recurs in that function in the opening of *Záboj, Slavoj, and Luděk*. Many of the remaining adjective-noun combinations relate to another thematic focus in this opening: a descriptive theme that fleshes out the accoutrements of the *udatní sbory* (“stalwart companies”), with their *břietné meče*, *mocná paže*, and *statnú vieru* (“sharp swords,” “strong arms,” and “stout faith”). The passage is also characterized by repetitions occurring at multiple levels, from assonance and alliteration and other sound patterning (*tamo-kamo*, *sněchu-snahú-statnú*, *chváta-chasa-chlapov*, *bieše-jmieše-meče-paže*, *nožnách-útrobách*); to preposition repetitions (*s*, “with,” in the fourth line, with the second instance added as necessary by the editors)¹⁰ and word repetitions, sometimes repeated through grammatical changes (*tamo*, *sto*, *chasú-chasa*, *meče-mečém*); to syntactical forms. The final three lines of the passage all repeat the same syntactical units in a kind of parataxis, even if they are slightly rearranged in order. If A = *všech sto jmieše* (“all hundred had”), B = *v nožnách* (“in sheaths,” or in other containers), C = *brietné meče* (“sharp swords,” or another adjective-noun pair), and D = *k mečém* (“for the sword,” or for some other dative object), these lines are then of the form ABC, DAC, DBC. The variation in the line openings returns to strict parallels in line ends, which we expect from the principled right justification of the verse (which is visible and well imitated at this level, if not at the metrical level).

What is notable about several of the other quasi-formulas in the Manuscripts is that they are derived from traditional Russian epithet-noun phrases. Their repetition in the Manuscripts, then, also echoed their repetition in Russian sources, for those that were familiar with them, confirming their traditional status and suggesting again their antiquity from a shared Slavic heroic past. One appears in the address to prince Oldřich by Výhoň Dub early in that epic, urging him on to the fight (ll. 16-22):

„Hoj, poslyš, ty <i>veleslavný kněže</i> ! Bóh ti bujarost da u vsě údy, bóh ti da věhlasy v <i>bujnú hlavu</i> ; ty ny vedi proti zlým Polanóm! Po tvém slově pójdem v pravo, v levo, buď v před, buď v zad, u vsě <i>pótky líté</i> . Vzhóru! Vzmušte chrabrost bujných srdec!“	“Hark you now, o glorious prince! God gave you vim in all your limbs, God gave you wit in your <i>brash head</i> . Lead us now against the evil Polans! By your word we’ll go right or left, Forward or backward in all fierce battles. Arise! Wake valor in vigorous hearts!”
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The brash or reckless head is a commonplace in Russian traditional oral epic. A typical example, which also includes a *formula of address* similar to the one here, can be found in the epic *Ilya*

⁹ We should recall here Parry’s definition of the formula: “a group of words which is regularly employed under the same metrical conditions to express a given essential idea” (Lord 1960:30). In his work on the South Slavic material, Lord analyzes repetitions within or across the two cola (four syllables + six syllables) that make up the line to account for the metrical conditions. Because the amount of material is so small for the ten-syllable Czech epic imitations, we take any repetition of two or more meaningful words as a quasi-formula.

¹⁰ Repetition of prepositions is rare in the South Slavic *deseterac* form but more common in the longer Bugarštica form and definitely common in the longer Russian *bylina* line, so this also has Slavic oral-formulaic epic antecedents. The Old Czech text of the Manuscripts in Cooper 2018 is taken from Dobiáš 2010, the most recent scholarly edition.

Muromets and Kalin Tsar recorded by Gilferding from the singer T. G. Riabinin: “Ай же ты, Владимир-князь да стольнокиевский! / Не сруби-тко мне да буйной головы” (“Hail to you, Vladimir, Prince of Capital Kiev! / Don’t cut off my reckless head!”) (Илья Муромец и Калин-Царь n.d.).¹¹ This adjective-noun phrase was not, however, traditional in Old Czech poetry, although the adjective existed both in the sense of “vigorous” and in the sense of “unruly.” It is embedded here, though, in a speech that abounds in traditional and quasi-formulaic phraseology. It ends a pair of lines formed by parallel syntax (*bóh ti da X v/u Y*) that also feature significant sound repetition (*bujarost—bujnú hlavu*). In this case, we also have the repetition of the adjective in a compound neologism, combining the sense of *bujný* with *jarý* (“vigorous” or “fervent”), which is suggestive of Greek epic compounds. The adjective repeats again in the final line in a combination that does not recur in the Manuscripts. The repetitions in this passage already begin to establish the would-be traditional, quasi-formulaic nature of the epithet even before it repeats in the epic *Jaroslav*. Other quasi-formulas appear in the passage as well: *pótky lúté* (“fierce battles”), which repeats in *Jaroslav* (l. 277), and the phrase *veleslavný kněže* (“glorious prince”), which is echoed in the epic in eight-syllable lines, *Ludiše and Lubor* (l. 4). Finally, the everyday formulaic language of right or left, forward or backward, rounds out the traditional and quasi-traditional phraseology of this passage. The skillful forgers, as we see here, were able to enrich the forms of South Slavic oral epic with traditional language and features from other prestigious or related traditions (Russian and Greek) in their Czech imitation.

The analysis of these two short passages suggests how qualitatively well the Czech imitators were able to simulate traditional oral epic phraseology in its many-layered features. Not all passages yield as well to such analysis, though, and the number of repeated, quasi-formulaic phrases seems small even relative to the tiny size of the Manuscripts’ corpus (the epics entirely in ten-syllable lines combined with passages in ten-syllable form from the two others amount to a total of 576 lines, just under 3,100 words): for example, just twenty-five epithet-noun combinations repeat within or across songs in that corpus, to which we can add only thirteen more if we allow confirmation of combinations in those lines from other parts of the Manuscripts (as is the case for the phrase “glorious prince” noted above). How might that compare quantitatively to the repetitions in the South Slavic or the highly repetitive Russian *bylina* traditions? Is there a quantitative measure that could be used to characterize oral-formulaic verse, or does the multiformity of different formulaic systems preclude easy quantitative characterization and necessitate a tradition-dependent analysis? In our case, is there a measure that would give an indication of how close the known imitation is to its models?

Formulaic Density as a Measure and Associated Digital Methods

The notion of “formulaic density” has been used, and critiqued, as a measure that can characterize oral-formulaic verse and distinguish it from other types. The method derived from Parry’s and Lord’s demonstrations, on sample passages from the *Iliad*, the *Odyssey*, and the *Song*

¹¹ Russian text from the website Русские Былины (<https://www.byliny.ru/content/text/ilya-muromets-i-kalin>, accessed September 9, 2019). Translation from Bailey and Ivanova 1998:68. Flajšhans suggests it comes from a commonplace in the *bylina* collection by Kirsha Danilov (Vojtěch and Flajšhans 1930:7).

of *Bagdad* from the Parry collection, of the pervasiveness of formulaic phrasing in texts, the formulaic nature of which had been well established (Bynum 1978:6-7; Lord 1960:45ff.). It involved underlining with a solid line those phrases (or lines and half-lines) that repeated exactly in the corpus of the singer (Homer or Salih Ugljanin) and with a dotted line those phrases that belonged to a formulaic pattern, repeating rhythm and syntax and at least one word, and calculating the percent of the sample that, by evidence of repetition, was formulaic (solid lines) or belonged to formulaic systems (dotted). The method was used, though, as a kind of measure to try to establish the oral origins of texts whose oral provenance had not been established, not only in studies of Old English literature (by Francis P. Magoun and others) but also by Lord and his students on a variety of medieval texts from different traditions (Bynum 1978:8-11; Lord 1986:479). The results were highly disputed, not only regarding the methods of conducting the calculations but also concerning whether such a test was at all diagnostic of the oral origins of the texts.

David E. Bynum, in his critique of this practice, objects to the mechanical application of the method as a test to texts that have not had their formulaic nature established, and in particular to the highly problematic definition of formulas in such tests as any phrase that repeats within the same text or elsewhere, noting that Parry himself cautioned against such a reduction (1978:6). After all, non-formulaic poetic texts also make use of various kinds of repetitions for thematic and emphatic purposes, and repetition in formulaic texts can also be of those varieties. Lord himself retrospectively concurred with this criticism (1986:491-93). Foley reviewed the problems with the use of “formulaic density” as a test as part of his argument for establishing the principles of genre-dependence and tradition-dependence for analysis (quantitative or otherwise) of the traditional, formulaic nature of any texts. That is, formulaic composition belongs in particular only to certain genres of oral poetry, not all, and how that formulaic nature is realized differs from one language tradition to another (including in the aspect of how pervasive formulaic repetition is) (Foley 1990:3-4). When Foley then replicates the method of analysis by underlining and calculating percentages of repetition of two sample texts in his volume (167-70), he insists “that the present study aims not at a determination of orality via formulaic density (if indeed this were possible) or other quantitative goal, but rather at a general demonstration of formulaic structure and the more fundamental role of traditional rules” (129 n. 9), perhaps thus returning the method to its original purpose. In the process, though, he also aims to show, through his in-depth analysis of the phraseology, how Lord’s treatment of formula impoverishes our understanding of it by glossing over “the natural heterogeneity of traditional phraseology” by testing only for identical units (172-73). Foley’s extended discussion of the formulas and systems disclosed by this analysis demonstrates that repeated phrases often are not simple formulas in themselves but can belong to more than one formulaic system of different lengths, varying from

a half line to multiple lines, and of different sorts.¹² To these fundamental criticisms of the method one might also add the glaring problem of the use of a representative short sample text to conduct the calculation, where any other fourteen- to twenty-five-line passage from the same poem might yield quite divergent results.

Digital methods offered the possibility of improvements in calculations of formulaic density, greatly facilitating the search for repeated words and phrases (even through simple searching of digital text or computer concordances) through corpora of unwieldy length for manual searching (such as all of Homeric epic or 12,000 lines of South Slavic epic). But the major problems with the method, like inattention to genre-dependence and the misleading definition of formulas as verbatim repetitions, often remained. Vikis-Freibergs and Freibergs addressed the “sampling problem” with their method for calculating the formulaic density of an entire corpus of texts (1978:333). They also addressed the variety of different kinds of formulas, defining three types (“syntagmatic”—any verbatim repetition; “paradigmatic”—repetition with possible substitution; and “syntactic”—minimal verbal repetition within a repeated syntactical shape (331-32)), but given the inadequate language processing possibilities at that time (1978), limited themselves to only the first, exact repetition (and that without regard to its metrical shape or place in the poetic line).¹³ Furthermore, they chose as the corpus for their calculation a set of short lyric songs (Lithuanian sun-songs), which are of undoubted folk origin but not at all the sort of song that the oral-formulaic theory was formulated to account for: longer epic or narrative songs recomposed in performance in a manner facilitated by a highly structured, traditional phraseology. They conclude, very problematically, that “formulaic structure is typical of oral literature” in general, and that “Furthermore, this characteristic seems independent of the genre of literature in question, since our short, lyrical songs seem to be as formulaic as the long narrative epics analyzed earlier” (338). They certainly found repetitions in their corpus, but are these really formulas at all, or the kind of repetition and variation one might find in any set of folksong variants on a narrow topic?

Nikolayev applies his new algorithm to a corpus of texts that have been independently shown to be formulaic, Russian *byliny*, but follows Vikis-Freibergs and Freibergs in his definition of the formula, for the purposes of formula-searching and calculation of formulaic density, as verbatim repetition (Nikolayev 2016:112). Where Vikis-Freibergs and Freibergs

¹² Foley’s analysis, even of the first line of his first sample passage, demonstrates this sufficiently. The line, *Kad je Pero knjigu načinijo* (“When Pero formulated the letter”), has solid underlines for the first three words (first colon formula) and for the next two words (second colon formula), as well as a solid line under the first four words and dotted under the final word (whole-line formulaic system with possible substitution of the final verb). But, the first colon formula also belongs to a substitution system where any other two-syllable name or noun can be inserted for Pero; and the second colon formula also exists as a substitution system with different verbs following different line openings. Moreover, the first colon substitution system (“When X”) is of an entirely different type than the second colon one (“composed/formulated/decorated the letter”), which has limited substitution of the verb, because it hardly contains the “essential idea” of a formula at all, but sets up, with a tremendous variety of two-syllable subject words, a limitless number of possibilities for finishing the line. Foley further demonstrates how the line is a product of traditional rules at a more fundamental level than formulaic repetition (1990:178-80). The method of “formulaic density,” which considers primarily exact repetitions, reduces this complexity and simply calculates this line as 100% formulaic.

¹³ We are perhaps only now becoming potentially capable of addressing the complicated issue of syntactic repetition with the kind of natural language processing possible for some languages.

supply different density numbers for differently sized units of repetition (word pairs, word triplets, lines, and couplets), which makes visible the multiform aspect of the formula, Nikolayev prefers to compute a “unified formulaic density” for a text or corpus (112), once again making different lengths of formulas invisible. The problem of treating any repetition as a formula is further magnified in Nikolayev’s approach when he calculates what he calls the “internal formulaic densities” of each poetic text, that is, the portion of the text that repeats within the same poem, and averages across the corpus of poems (124). Repetitions within poems can be for emphasis, for delineation of theme, or for any of a number of poetic purposes outside of formulaic composition, while repetitions across poems (involving different themes and characters) are more likely to be formulaic.¹⁴ Nikolayev does, in the end, calculate a formulaic density across the entire corpus, which he finds to be 56% for his large corpus of *byliny* (125).

Nikolayev expresses surprise at the lack of follow-up on Vikis-Freibergs and Freibergs’ calculations of formulaic density for a whole corpus of texts (111), but it seems likely that this is attributable to the fundamental criticisms of formulaic density that emptied the notion of its diagnostic power and analytical utility. If formulaic density cannot be used to determine if a text is composed using the phraseology of an oral-formulaic tradition or not, then what does that 56% figure for Russian *byliny* tell us that is of analytical importance? One might compare the closely related Russian “historical songs” and ballads, whose phraseology suggests they are also oral-formulaic, and see if they differ in density;¹⁵ or one might compare, across languages and traditions, to the much lower densities calculated for Old English heroic verse. In both cases, though, any understanding of differences in figures would necessitate a deeper understanding of the different formulaic systems in their multiformity and how they are deployed, a task beyond computer analysis. Could one also compare to literary epic poetry in Russian or to the great stock of Russian lyric poetry? One could apply the same algorithm to such a corpus, but what would the figure produced mean? Could lyric poetry be even 5% formulaic? Since those texts are not traditional or composed in an oral-formulaic manner, strictly speaking, their density of formula would have to be zero. Here one would have to give up the fiction that one is calculating formulaic density and acknowledge that one is calculating density of phrasal repetition in a particular manner.

A Different Approach

Why not start instead with a method of calculation that could be applied to any type of text and that might be diagnostic when comparing texts derived from traditional oral-formulaic phraseology to those composed in other manners? That is what we did in our attempt to compare

¹⁴ Lord (1960:45-46) avows that he chose his sample passage as one that avoided commonly recurring themes, like letter-writing, that occur even across poems, and that he did not include passages from other versions of the same song by the singer, in order to make the formula calculation more valid.

¹⁵ Bailey and Ivanova (1998) include two historical songs and one ballad in their translation of Russian folk epics, focused on the *byliny*.

the pseudo-folk epics of the Czech Manuscripts to their formulaic models and to other Czech literary and folk texts.

The measures we selected to test all proceed from calculations based on the repetition of words or pairs of words—in this, they resemble measures of formulaic density. But they are not based on any definition of the formula and can be applied to any kind of text.¹⁶ In a sense, we were testing for a symptom of formulaic composition, which results, we hypothesized, in increased textual repetitiveness, rather than trying to define a meaningful, quantifiable measure of the special forms of repetitiveness that characterize the formula. One of the most basic measures of the diversity or repetitiveness of a text's vocabulary, included in our tests, is *type-token ratio* (TTR), which is the ratio of the total number of unique words in a text (types) to its total number of words (tokens). Information theory offers, in measures of *entropy*, a number of more subtle measures of the relative uncertainty or, from the opposite perspective, predictability of texts based on their repetitions. These calculations are based not on a binary result (the word repeats or does not repeat) but on the word's probability within the text (the number of occurrences divided by the total number of words in the text). They thus employ a more nuanced quantification of repetitions. One can calculate the entropy for the words of a text (*unigram entropy*) or for successive pairs of words (*bigram entropy*). (See the section on methodology, below, for definitions of these measures and details on our implementation.) The measure of *conditional entropy* also initially looked promising for characterizing oral-formulaic poetry. This can be used to calculate the average uncertainty for the second word, given the first word, in successive pairs of words for a text. It is, in a certain sense, a measure of the predictability of the continuation of a phrase, given a word in the phrase. Intuitively, this looked like a good measure for a formulaic text, because someone familiar with the formulaic phraseology of a tradition can readily predict, given a word from a common formulaic phrase, the following word or words, even to the fairly probable completion of whole poetic lines.¹⁷ Given that, for all these measures, higher probabilities of repetition translate into lower total entropy, we hypothesized that the unigram entropy, bigram entropy, and conditional entropy of word pairs should be relatively low (low uncertainty) on average for oral-formulaic texts, in comparison to other genres of texts. The repetitive vocabulary of the formulaic texts should also result in lower TTR than for other texts.

Methodology

In information theory, entropy is a basic measure of information that is defined by the probability space of possible events and quantifies the uncertainty or amount of information that

¹⁶ The authors warmly thank our colleague Ted Underwood for an early consultation on methods, in which he shared possibilities he saw, including calculations of entropy, based on his broad expertise and experience in digital humanities, allowing us to get beyond the notion of formulaic density. We also would like to thank the National Center for Supercomputing Applications at the University of Illinois for funding for the project through a Faculty Fellowship for David Cooper and Michal Ondrejcek.

¹⁷ We casually tested this with a Russian-speaking colleague familiar with *byliny*, feeding her parts of phrases and adjectives that she readily completed with likely phrase continuations and formulaic adjective-noun combinations.

space represents. The Shannon entropy for a sample space X (in the case of this study, for example, some text in Czech) and probability space P where $p(x_i)$ is the probability of outcome x_i (the occurrence of a particular word or letter in the text), is given by Lubbe (1997:8):

$$H(X) = - \sum_{x=1}^n p(x_i) \log_2 p(x_i)$$

This can be used to determine the entropy of the words (unigram entropy) or pairs of successive words (bigram entropy) in a text. For unigram entropy, for example, if a text repeats the same word throughout, there is no uncertainty, and the entropy would be zero; if every word is unique, the uncertainty and amount of information in the text would be maximum for a text of that length. Another measure, conditional entropy, calculates the remaining uncertainty for one variable if the outcome of another variable is known. This can be used for pairs of words, based on the probabilities of the two words occurring together and individually, and allows us to calculate the uncertainty across the text for the second word, given the first word, in successive pairs of words for a text. The conditional entropy for Y given X for sample spaces X and Y and probability space P where $p(x_i, y_j)$ is the joint probability of outcomes x_i and y_j is defined as (Lubbe 1997:18):

$$H(Y|X) = - \sum_{i=1}^n \sum_{j=1}^m p(x_i, y_j) \log_2 \frac{p(x_i, y_j)}{p(x_i)}$$

Our Python code calculates TTR, unigram entropy, bigram entropy, and conditional entropy for texts.¹⁸ A significant challenge for our study, as for any study involving these measures, was normalization for text size. All of these measures change with the size of the text: entropy increases as the text gets larger (more information), while TTR tends to decrease with increasingly larger texts. The discrepancy between the size of our test text (the ten-syllable portions of the Czech Manuscripts, just under 3,100 words) and those texts and corpora of texts we wanted to compare it with (collections of *byliny*, South Slavic oral epics, and corpora of lyric poetry, epic poetry, and prose in all three languages, all tens to hundreds of thousands of words in size) was significant, making whole-text calculations, the norm for these measures, fundamentally impossible to compare. We initially adopted a known solution for this by breaking our larger texts into chunks of text the size of the small test text (3,093 words) and calculating average TTR, unigram entropy, bigram entropy, and conditional entropy across the chunks, with standard deviation. We report computed average values for chunks, including an estimate of the level of confidence reflected in the uncertainty bars (+/- one standard deviation). These results, based on precisely the same text length, are then directly comparable. For our final data set, we ran the calculations on a large set of texts, beginning with a small chunk size and increasing the chunk size with each iteration until the texts, one by one, fell out of the calculation as the chunk size exceeded their whole text size. Each text could be compared to any other that way at several identical chunk sizes.

¹⁸ Our final code and some test texts are available at <https://github.com/ncsa-mo/oral-formulaic-poetry>.

One of the methods used in natural language processing to reduce the “noise” of textual data is the removal of stop words. Currently, most researchers use manually curated stop word lists, which cannot be easily generalized across languages or corpora. Nikolayev, for example, uses a “stop-list of the most frequent function words,” such as ай, без, бы, в, and вам, in his analysis of Russian *byliny* (2016:113). The removal of function words is certainly an aid in the retrieval of formulas; however, the task of characterizing the whole text using unified measures, as we attempt to do, must take function words into account. The strict *deseterac* of the South Slavic oral-epic tradition, which influenced the work of the Czech forgers, favors the liberal use of conjunctions, especially at the beginning of line-initial formulas (Lord 1960:41-42). Similarly, the use of ай or да at the beginning of verse lines in Russian *byliny*, which are less strict metrically than the South Slavic epics, is an important component of rhythm and repetition. As an illustration, the 601-line *bylina* from the Putilov collection “Садко” (“Sadko”) contains 353 lines, or almost 59%, that begin with Ай. Such a high frequency of function words will have a substantial impact on both TTR and statistical calculations. Not only are stop words, then, an important component of the structure of the whole text, but considering that our aim is to determine the usefulness of informatics and statistical measures for the characterization of the whole text, not limited to the often variable definitions of formulas employed in other quantitative approaches, the most common, repeating, small words that combine with a myriad of other words are an essential part of the probabilistic space of any text for the calculations.¹⁹

Text Compilation and Preprocessing

Building our corpus of comparative texts presented challenges, not only in the finding or creation of electronic texts but also in their preparation for use in the calculation. Given the generally agreed upon principle that formulas maintain their identity across grammatical and morphological variation, and in general to capture the repetition of words, for these highly inflected Slavic languages, it was important to lemmatize the texts. For all three languages, we were able to find reliable lemmatizers we could use to produce accurate strings of lemmas from

¹⁹ Our calculations are not aimed at all, unlike those of Vikis-Freibergs and Freibergs or Nikolayev, at finding formulas in the text, but at a global measure of the text’s lexical variability and word-by-word uncertainty. An entirely separate aspect of our project did involve searching for formulas, for which we found the collocation tools in the Natural Language Toolkit (NLTK) to be a flexible and effective proxy, as formulas share some characteristics with natural language collocations. The method of “fuzzy” phrase matching offered by Broadwell, Leonard, and Tangherlini (2017) also looks promising for finding the kind of partial repetitions that define formulaic systems, though we did not attempt it.

the texts.²⁰ Some texts, though, presented special problems. Nikolayev (2016:113-14) noted the issue of the dialects in Russian *byliny*. It was necessary to edit many unusual and frequently occurring morphological features (adjective and verb endings, in particular) to standard forms—this reduced the uncertainties in the results to an acceptably low level.²¹ The South Slavic epics also had some orthographic features (especially the use of abbreviations) that troubled the lemmatizer, necessitating some pre-editing of the text.²² The pseudo-Old-Czech text of the Manuscripts presented unique problems, as the verb system, in particular, has changed radically in modern Czech, so the lemmatizer could not be used. Author Cooper made use of a concordance to the texts of the Manuscripts to lemmatize manually (Flajšhans 1897).

For our primary set of texts for comparison to the Czech Manuscripts, we wanted to include the texts that most likely served as models for Hanka and his collaborators, which meant the *deseterac* epics published by Karadžić in 1814 and 1815, as well as Russian *byliny* from the Kirsha Danilov collection, published in 1804.²³ For more representative samples of these oral-formulaic traditions, we also compiled larger selections of *byliny* and South Slavic epics from

²⁰ A 2018 study of four Russian morphological parsers showed that our chosen lemmatizer—PyMorphy2 (<https://github.com/kmike/pymorphy2>)—had a consistent accuracy of lemmatization above 93%, reaching 98.29% for OpenCorpora (Kotelnikov, Razova, and Fishcheva 2018). It was additionally chosen because of its permissive licensing under MIT License and ease of integration with our code. Our Czech lemmatizer, MorphoDiTa, Morphological Dictionary and Tagger (<https://ufal.mff.cuni.cz/morphodita>), uses the MorfFlex CZ 161115 language model as dictionary and tagger. It is discussed in Straková, Straka, and Hajič 2014. For South Slavic texts we used ReLDIanno, a text annotation service which is part of ReLDI, a SNSF-funded SCOPES project that enables processing of three South Slavic languages using srLex and hrLex inflectional lexicons of Serbian and Croatian languages. The implementation pipeline for ReLDI Tagger and Lemmatiser, a Slovene, Croatian, and Serbian lemmatizer with reported accuracy above 94% for both standard and non-standard texts, is described in Ljubešić et al. 2016. We are aware that there are challenges with accuracy metrics.

²¹ We did not alter unusual or phonetic spellings (акиян vs. океан), as we found our lemmatizer treated such forms consistently across occurrences. We tested Nikolayev's practice of using 4-grams as a substitute for lemmatized text, running a TTR calculation on a variety of texts in all three languages. Where he found that the practice exaggerated formulaic density calculations by just 1.5% (2016:114), we found a much larger exaggeration for TTR. We calculated TTR for the original text, 4-grams, and lemmatized text and compared how much the 4-grams and lemmatization reduced the number of unique words for the text. (Both methods address the difference in morphological endings for the same word in these inflected Slavic languages, enabling recognition of identical words by a short, 4-letter stem or assignment of the word to its lemma.) Overall, across a variety of texts in all three languages, the 4-gram method reduced the number of unique words by 40% *more* than lemmatization. For Russian texts it overreduced the number of unique words by 49% and for Serbian texts by 47%. The percentage for Czech texts was smaller, just 22%, because, for the Old Czech text of the Manuscripts, the 4-gram method actually resulted in a 17% smaller reduction in the number of unique words than lemmatization. For the modern Czech texts, the 4-gram method overreduced unique words by 30%. For our calculations, then, the 4-gram method results in an unacceptable level of error, reducing far too many different words to identity in their 4-letter stems.

²² The most common orthographic variation, even within a single corpus or text, was the variable use of *al'* or *ali*. All the abbreviated forms were changed to *ali*. Similarly, *da l'* was often used at the beginning of interrogative sentences or *l'* after the main verb, which had to be normalized to *da li* and *li*, respectively.

²³ We took digital versions of the Karadžić texts from the website Викизворник (https://sr.wikisource.org/wiki/Додатак:Епске_народне_песме, accessed November 18, 2019). These included the two epics Hanka translated, four from Karadžić's 1814 volume, and all the epic songs from the 1815 volume. From the Kirsha Danilov volume, we selected thirty-four texts that were entirely in verse form from the website of the Fundamental Digital Library of Russian Literature and Folklore (<http://feb-web.ru/feb/byliny/default.asp?feb/byliny/texts/kir/kir.html>, accessed August 5, 2021).

both Christian and Muslim singers.²⁴ For literary texts, our primary comparison would be to corpora we selected of literary epic poetry and lyric poetry in each language, mostly published in the last two decades of the eighteenth century and in the first third of the nineteenth century, that is, in the period leading up to and following the discovery of the manuscripts.²⁵ We also added collections of folk ballads in each language in order to include authentic Czech narrative folk poetry (which uses rhyme in a relatively short form and thus is likely a memorized, not oral-formulaic, genre) as a point of comparison, as well.²⁶

Results

Our initial results, calculated while we were still compiling and preprocessing many of our key sets of texts for comparison, showed that several measures were promising, with one surprising exception. We did not expect to see, as we did (Figure 1), that when translated into each of the three languages, Milton's *Paradise Lost*, a literary epic, had a *lower* conditional entropy than the oral-formulaic texts and the Manuscripts.²⁷ How could such a literary epic be less entropic, word-by-word, than oral-formulaic epic texts? The answer was that the kind of predictability oral-formulaic texts have in relation to other texts is not the same kind of predictability that the conditional entropy calculation was measuring. Because the calculation does not take all the possibilities presented by the language as potential options for the second word, once we know the first word, but only those possibilities *that are realized within the text or corpus used in the calculation*, a text with less repetition and more unique combinations of

²⁴ The expanded *bylina* corpus was taken from the volume edited by Putilov, available online in the Fundamental Digital Library of Russian Literature and Folklore (<http://feb-web.ru/feb/byliny/default.asp?feb/byliny/texts/bpu/bpu.html>, accessed August 12, 2021). The Muslim traditional epics were taken from Marjanović 1898—the third volume of a Matica Hrvatska publication, focused specifically on Muslim singers. The Karadžić texts from the 1814 and 1815 publication were expanded with the texts from Karadžić 1987.

²⁵ For Czech poetry, we were fortunate to be given access to the excellent “Corpus of Czech Verse” (Plecháč et al. n.d.) (many thanks to Petr Plecháč). The corpus includes nearly every volume of poetry published in the late eighteenth and nineteenth centuries, and texts are lemmatized. For Russian poetry, we selected texts from major and minor authors on the website Библиотека Максима Мошкова (<http://lib.ru/>, accessed July 27, 2021). For Serbian poetry, we selected nineteenth-century texts from the websites Антологија српске књижевности (<http://www.antologijasrpskeknjizevnosti.rs/>, accessed September 7, 2021) and Пројекат Растко (<https://rastko.rs/>, accessed September 7, 2021), as well as Popović 1968.

²⁶ Czech texts were from Erben's folksongs volume (1886). Russian ballads were from the electronic edition of Kirdan 2001, available at <https://www.booksite.ru/fulltext/bal/lad/yry/index.htm> (accessed July 27, 2021). Serbian narrative folk poetry texts were taken from Krstanović 1990, with additions from the websites Антологија српске књижевности and Пројекат Растко (see previous note).

²⁷ In Figure 1, all texts are chunked to the size of the ten-syllable parts of the Czech Manuscripts (RKZ); the graph gives the average conditional entropy across chunks, with uncertainty bars for one standard deviation. The value for the manuscripts is not an average, but calculated for the entire text, thus the lack of uncertainty bars for that value. Translations of Cervantes' *Don Quixote* into each language are included here as well.

words has much higher probabilities for those following words, and thus lower entropy.²⁸ What conditional entropy measured did not conform to our initial, intuitive understanding of it (beware, digital humanities scholars!). Conditional entropy was *not* a good measure, then, as we continued to see, for characterizing the oral-formulaic texts in contrast to other related kinds of texts.

Fortunately, some of the other measures we were also calculating looked (and eventually proved) much more promising. The evident lexical repetitiveness of the oral-formulaic texts shows up quite clearly in the most basic measure of lexical diversity, TTR. In these traditions, oral-formulaic texts make use of a relatively narrow, traditional, and even ritualized vocabulary. The somewhat more subtle but related informatics measure of unigram (word) entropy (which also accounts for frequency of repetition in the higher probabilities of common words) also proved useful for distinguishing the oral-formulaic texts from some similar types. Bigram entropy frequently demonstrated similar distinctions, but at a much smaller relative scale of differentiation.

The Czech Manuscripts' proximity in TTR to South Slavic and Russian oral-formulaic texts is shown in Figure 2, which includes results for just the ten-syllable parts of the Manuscripts, as well as for the Manuscripts in their entirety. At small chunk sizes, all the measurements for average TTR have large standard deviation uncertainty bars, but as we approach the full size of the texts or corpora, we get an accurate measure, and the final point for each curve represents a whole text/corpus measurement without any averaging across chunks.²⁹ (We are showing the deviation here only at three chunk sizes, for clarity.) The ten-syllable epic parts of the Manuscripts have the highest TTR figures but remain quite close to their likely

²⁸ A little thought experiment made this clear to us. Imagine an alternate world in which a contemporary oral-formulaic epic poetry exists in English, and that this heroic tradition is, for whatever reason, formulaically "happy." In a 2,000-word text from that epic poetry, we find the following formulaic adjective-noun combinations: "happy day" (three times), "happy horse" (two times), "happy home" (four times), "happy slaughter" (two times), and "happy wife" (sadly, just once). In real life, though, this culture is as unhappy as any other, so in a 2,000-word prose text, we find only these combinations: "happy day" (two times) and "happy birthday" (once). In the formulaic text, the probability of the word "happy" is 12/2,000 (it occurs twelve times); in the prose text, just 3/2,000. The conditional probability of "day" given "happy" in the formulaic text is just 3/12 (three out of twelve times, it follows "happy") or 1/4; but in the prose text, its conditional probability is a whopping 2/3 (it occurs two out of three times after "happy"). Higher probabilities mean lower entropies, and a quick calculation shows that the bigram "happy day" contributes five times more to the entropy sum in the formulaic text than it does in the prose text. The prose text is, indeed, by this manner of calculation far more predictable and thus lower in entropy.

²⁹ What do the uncertainty bars here represent? We are using statistical measures for whole texts but breaking our texts and corpora into chunks of different size in order to be able to compare measurements for texts of very different sizes. The data points, then, are averages across the chunks, which, depending on chunk size, could include less than any full single text; a handful of lyric poems by a single author or approximately a whole epic poem; lyric and epic poems by several authors or singers; up to a representative collection of literary or oral epic and lyric poems in a language from the period. The uncertainty bars thus show the variation in the statistical measure for different texts within the genre at a given sampling size.

models: the epics published by Karadžić and those of Danilov.³⁰ This closeness to their models translates into a distinct distance from contemporaneous Czech literary epic and lyric poetry, as is shown in Figure 3.³¹ The Manuscripts do not resemble, by this measure or by unigram and bigram entropy (Figures 4 and 5), the poetry that was being written and published in Czech in the decades surrounding their discovery (having a much less diverse vocabulary), but are closer to their models.³² Figure 3 also includes a collection of native Czech narrative folk poetry, from Karel Jaromír Erben's collection of folksongs (1886). These are not oral-formulaic narrative songs, but for these measures, they fall neatly into the range of the Russian and South Slavic oral-formulaic traditions. The Manuscripts fall in between native folk traditions, then, and literary traditions, but are much closer to the folk traditions they imitate. In fact, the Manuscripts' imitations very much resemble, by these measures, the much revered and canonical imitations of Russian folk poetry by Czech writer František Ladislav Čelakovský, as shown in Figure 6, a resemblance that belies the very different treatment of the Manuscripts' authors (as reviled forgers).

A distinct difference between oral poetic texts and literary poetic texts can also be seen in the Russian tradition, as Figure 7 shows. The distinction is not as pronounced in the case of Serbian literary texts (Figure 8), but this is not surprising when one remembers how important Karadžić's publications and folk traditions, in general, were for the formation of Serbian national literature in the nineteenth century. Many of the Serbian literary texts imitate or incorporate aspects of folk traditions. Foley's principle of tradition-dependence is worth keeping in mind here for the literary texts as well as the oral texts. These graphs also include results for ballads or narrative folksong texts, which, as in the Czech case, fall into the same range as the oral-formulaic texts (the Russian ballads may themselves be formulaic) and cannot be distinguished from them by these measures. Figure 9 shows the relationships as measured by TTR between all these texts together, with languages represented by shapes and text genres by color: oral texts in green, literary epic in blue, literary lyric in red, and imitations of oral texts, including the Manuscripts, in black. Even across languages, the oral poetic texts here are distinct from the literary ones, and the imitations fall in between. As for conditional entropy, Figure 10 shows how this more complex measure gave ambiguous results, with Russian literary texts showing lower

³⁰ Does the highly repetitive vocabulary of the Manuscripts resemble that of its models? Among the fifty most common words in the Manuscripts, Karadžić's epics, and the Danilov *byliny*, respectively, are the following related terms: *meč*, *sablja*, — ("sword"/"saber"); *kněz*, —, *kniaz* ("prince"); *slovo*, *slovo*, *slovo* ("word"); *Tatařin*, *Turčin*, — ("Tartar," "Turk"); *hrad*, *grad*, *gorod* ("fortress"/"city"); —, *car*, *tsar* ("czar"); and —, *konj*, *kon* ("horse"). The absence of "czar" from the Czech text is due to the different form of Czech kingship, but the absence of "horse" reflects an interesting reduction in the formulaic language and themes concerning horses from the South Slavic and Russian models.

³¹ For our study, the first important chunk size is 3,000 words, approximately the full size of the ten-syllable portions of the Manuscripts. Critically, there is little overlap between literary epic and lyric genres and oral genres, even if we were to double the uncertainty bars to two standard deviations, at chunk sizes that begin to represent meaningful measures of genres. Only the most marginal phenomena of the literary and oral genres overlap. The Manuscripts position themselves in the vicinity of their oral models and at a significant distance from the literary genres of their day.

³² In our results, unigram entropy shows very similar relationships between texts and genres to that shown by TTR. Bigram entropy also shows similar relationships, but less distinctly—Figures 4 and 5 zoom in a bit closer to a portion of the data to make the differences more visible.

conditional entropy than oral texts at smaller chunk sizes, and higher entropy at sizes representing larger collections of texts.

We can conclude, then, that TTR and unigram entropy are good measures for comparing the Czech Manuscripts' epic songs to the oral-formulaic traditions they imitated, and they show that the Manuscripts clearly distinguished themselves from their contemporary Czech literary-poetic practices, moving far in the direction of the oral texts, but not, in the end, quite as far in the direction of reduced and repetitive or ritualized lexicon.³³ TTR and unigram entropy, however, did not distinguish between formulaic and non-formulaic forms of oral narrative songs in our test corpora. The advantage of these measures from informatics and natural language processing over the notion of formulaic density is that they can be applied to any kind of text. TTR and unigram entropy look like good measures for distinguishing oral-formulaic epic poetry from literary poetry of all types in these language traditions, and thus as measures of texts of unknown provenance or imitations of oral-formulaic epics, to see how well they fit. Whether they will be useful for distinguishing oral-formulaic poetry from other types of texts in other languages and traditions, though, is something that must be tested in each case and on large corpora of texts, given how tradition-dependent the features of oral-formulaic texts can be.

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³³ Recall from the first passage examined above the existence of quasi-formulas in the Manuscripts where synonymous adjectives are applied to the same noun (*břietný/ostrý meč* ("sharp sword"), *mocná/silná paže* ("powerful/strong arms")). Traditional oral diction would more likely select one formulaic combination, rather than allowing two possibilities that transmit the same meaning under identical metrical conditions (all the adjectives here are two-syllable). This is one way in which the Manuscripts are less formulaically repetitive than their models.

Figures

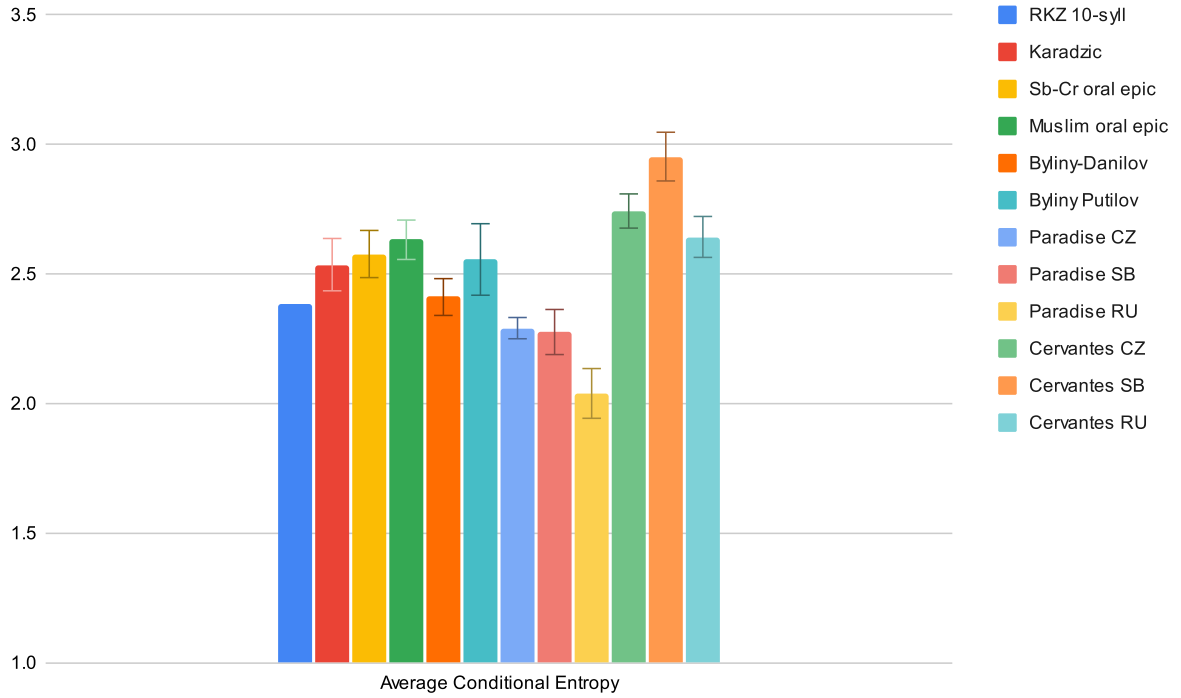


Fig. 1. Average conditional entropy at a chunk size equal to the length of the Czech manuscripts (RKZ) for corpora of oral-formulaic poetry, as well as translations of Milton's *Paradise Lost* and Cervantes' *Don Quixote*.

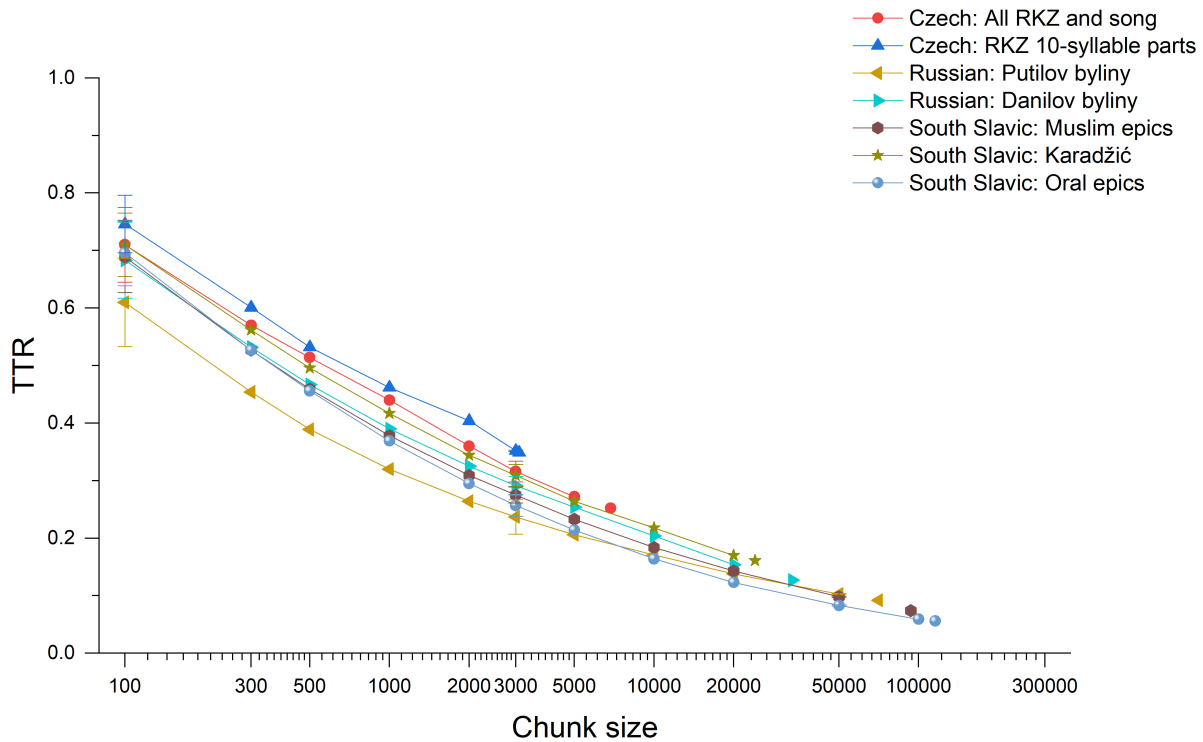


Fig. 2. Type-token ratio across different chunk sizes (on a logarithmic scale) for the Czech manuscripts in comparison with corpora of South Slavic and Russian oral-formulaic epics.

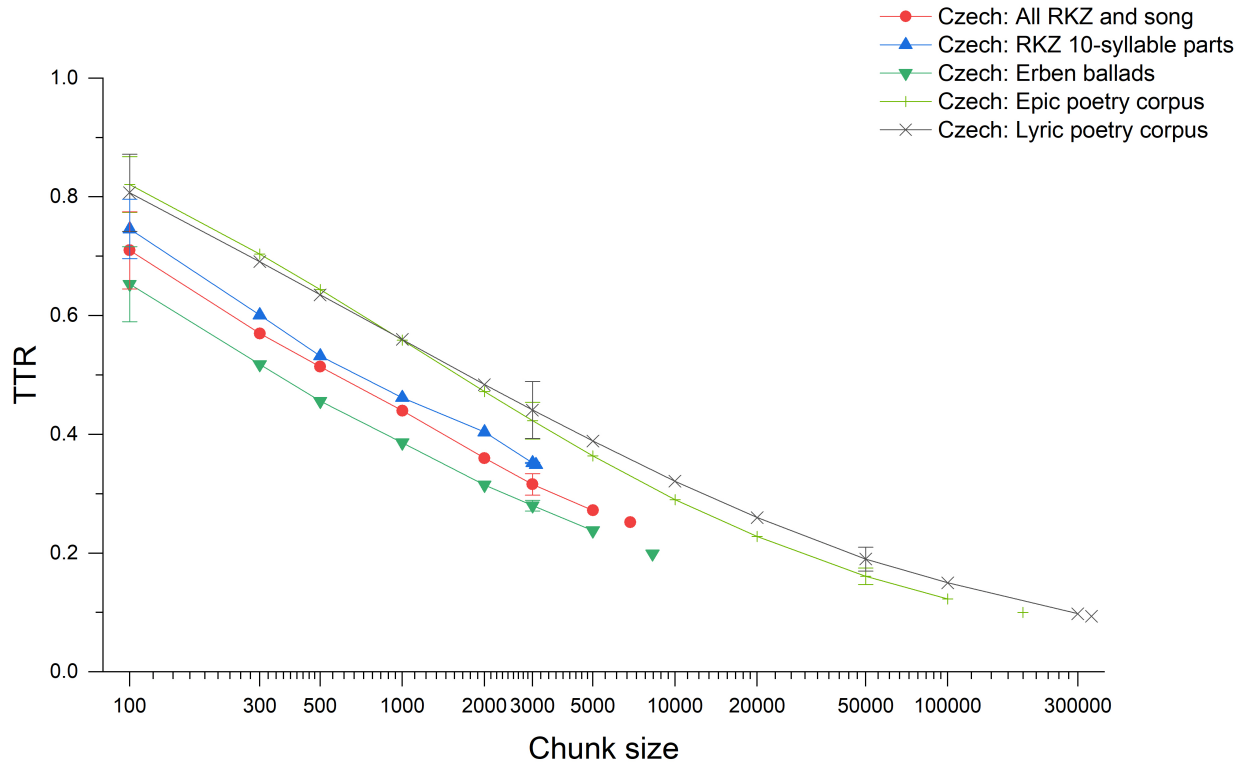


Fig. 3. Type-token ratio across different chunk sizes (on a logarithmic scale) for the Czech manuscripts in comparison with corpora of Czech literary epic and lyric poetry as well as Czech folk ballads.

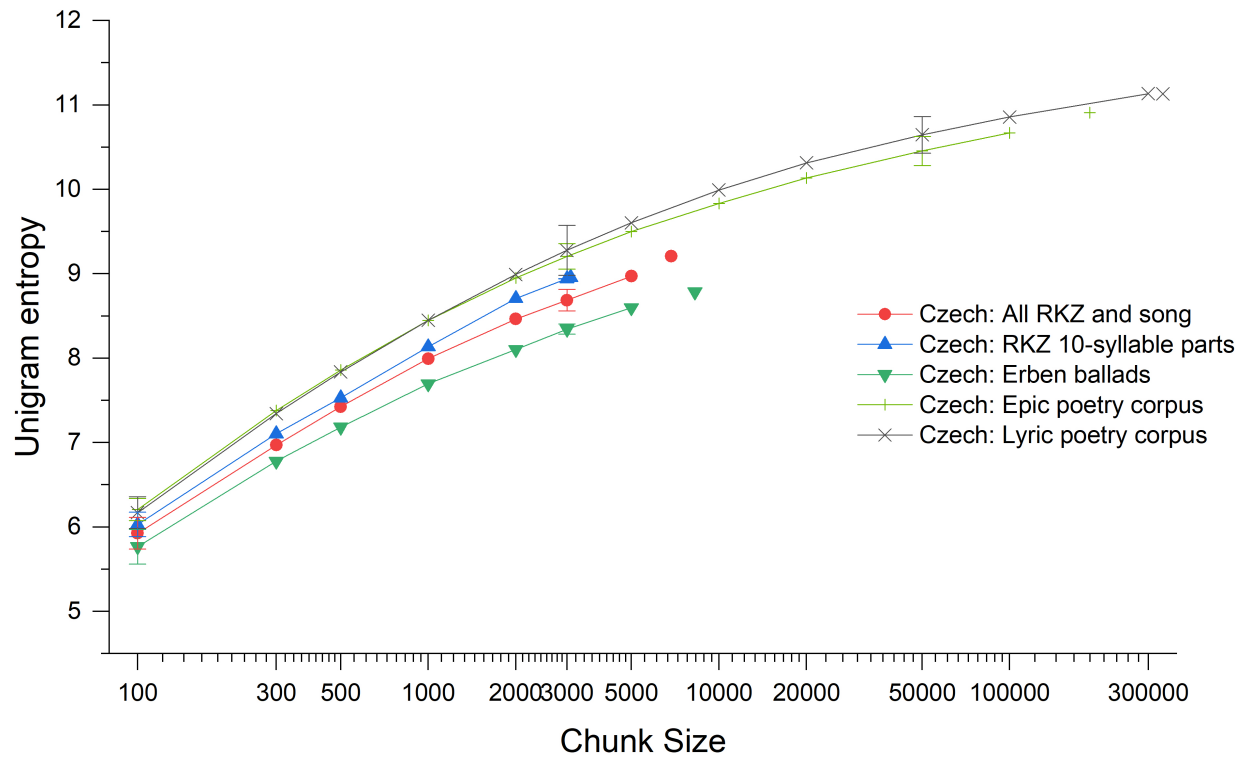


Fig. 4. Unigram entropy across different chunk sizes (on a logarithmic scale) for the Czech manuscripts in comparison with corpora of Czech literary epic and lyric poetry, as well as Czech folk ballads.

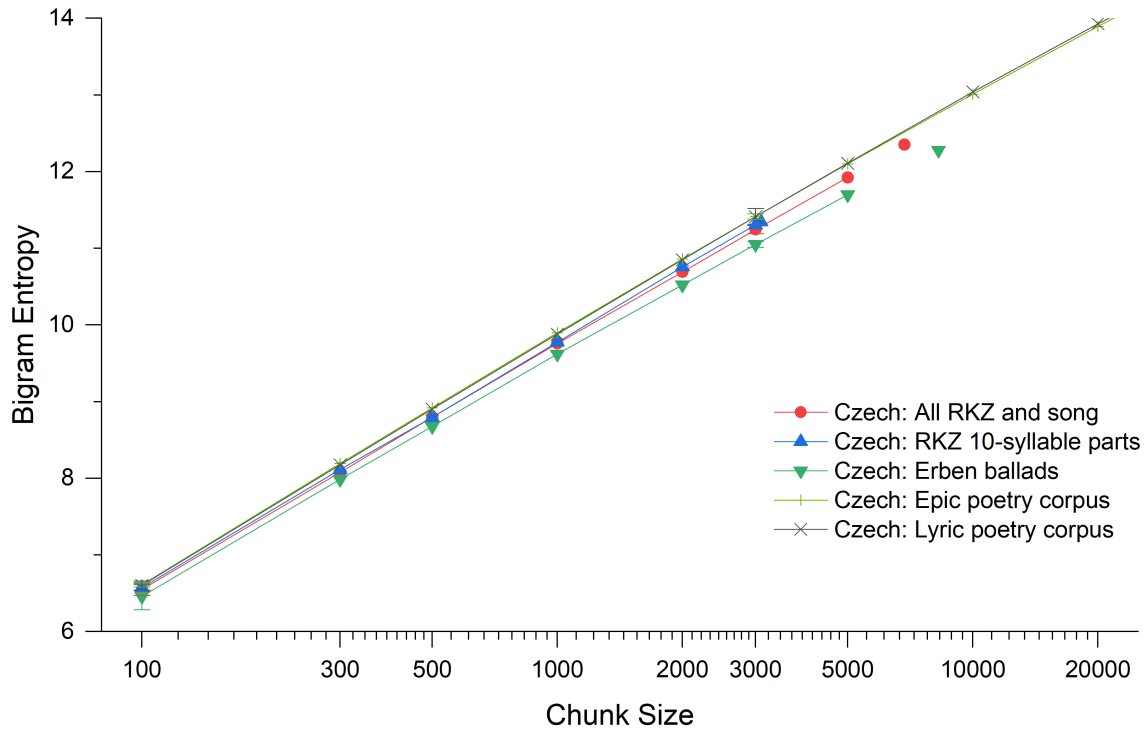


Fig. 5. Bigram entropy across different chunk sizes (on a logarithmic scale) for the Czech manuscripts in comparison with corpora of Czech literary epic and lyric poetry, as well as Czech folk ballads. The scale here is larger than on other graphs to make visible the smaller differences.

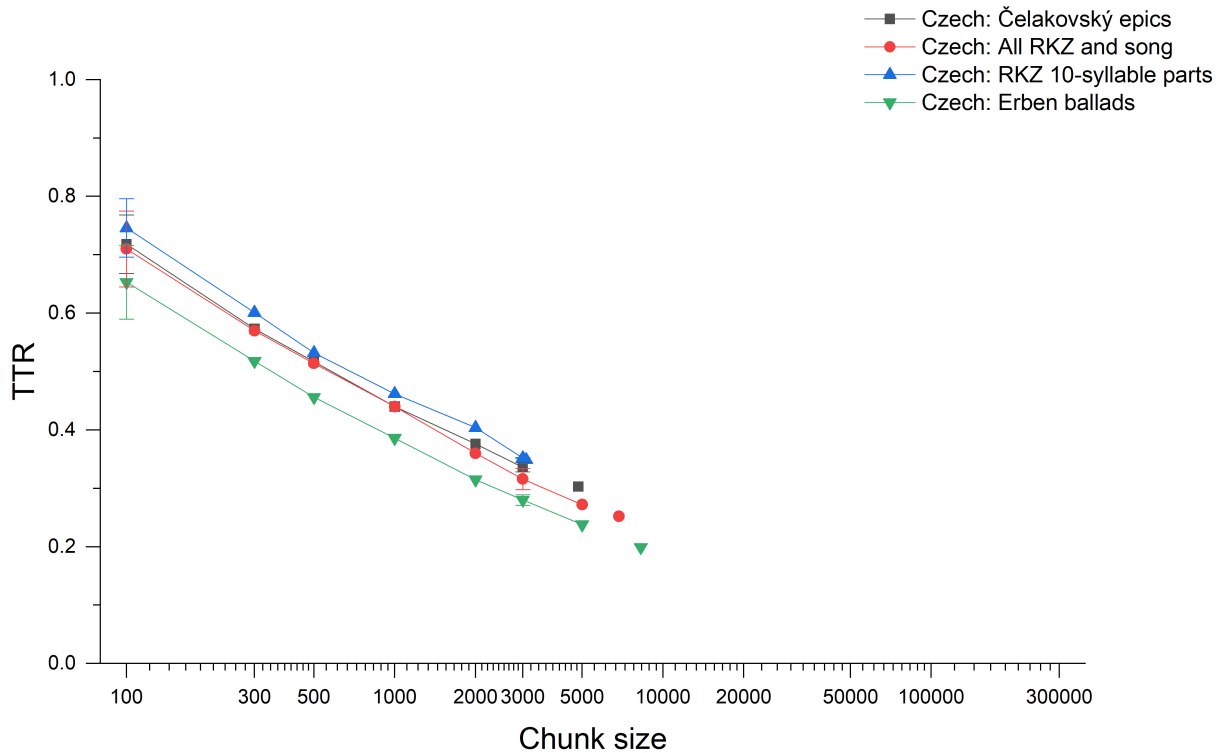


Fig. 6. Type-token ratio across different chunk sizes (on a logarithmic scale) for the Czech manuscripts in comparison with Čelakovský's *Echoes of Russian Songs* and Erben's collection of folk ballads.

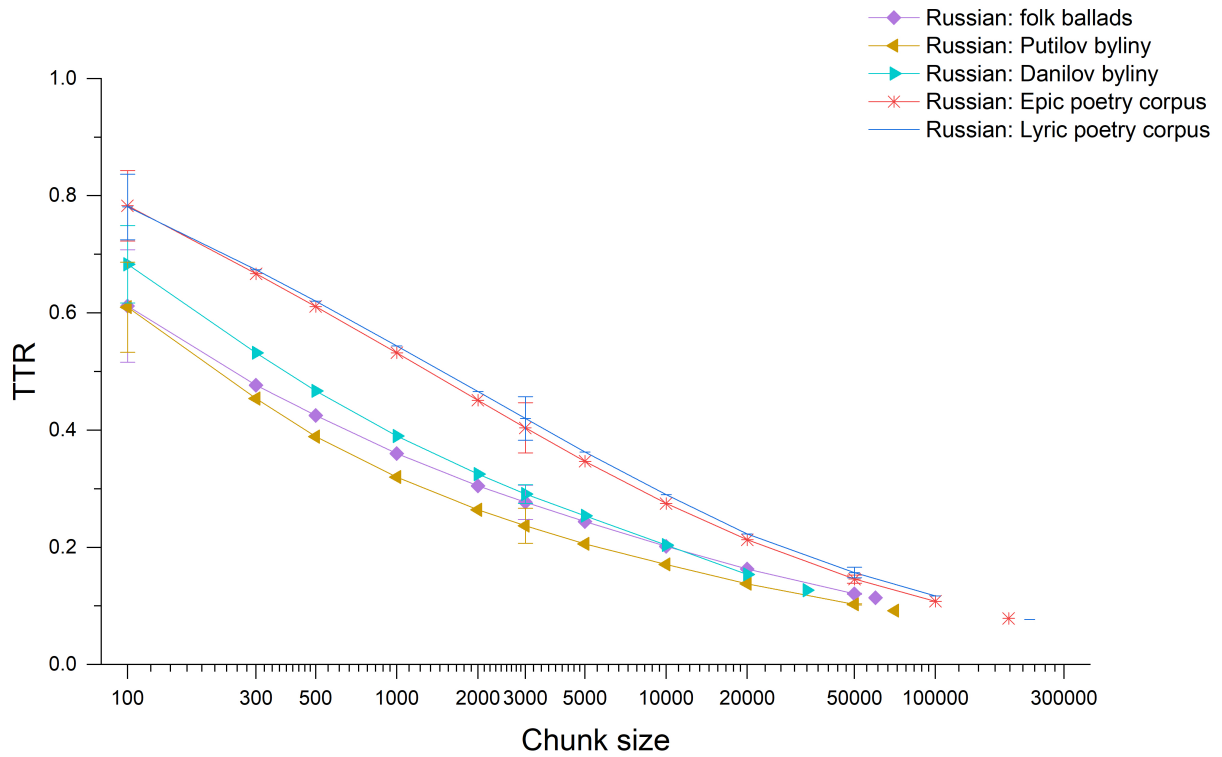


Fig. 7. Type-token ratio across different chunk sizes (on a logarithmic scale) for Russian literary epic and lyric poetry in comparison with Russian oral-formulaic epics and ballads.

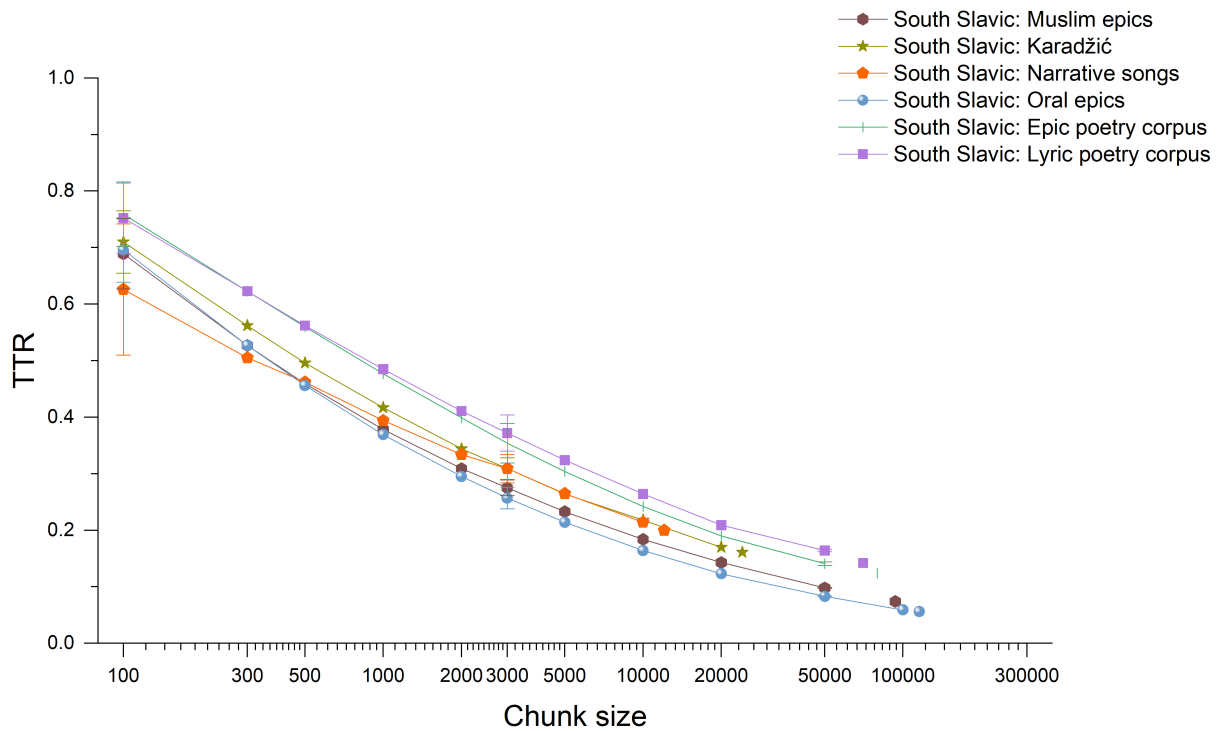


Fig. 8. Type-token ratio across different chunk sizes (on a logarithmic scale) for South Slavic literary epic and lyric poetry in comparison with South Slavic oral-formulaic epics and ballads (narrative songs).

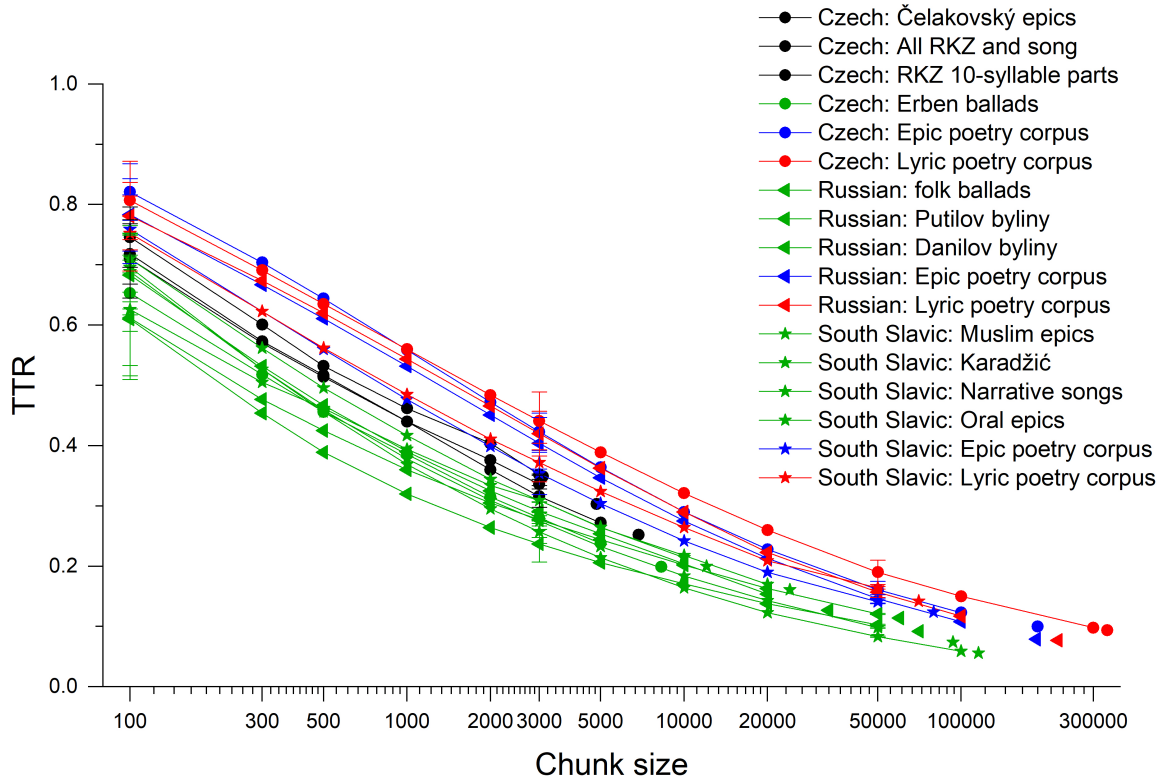


Fig. 9. Type-token ratio across different chunk sizes (on a logarithmic scale) for all study texts and corpora. Language is shown by shape, genre by color.

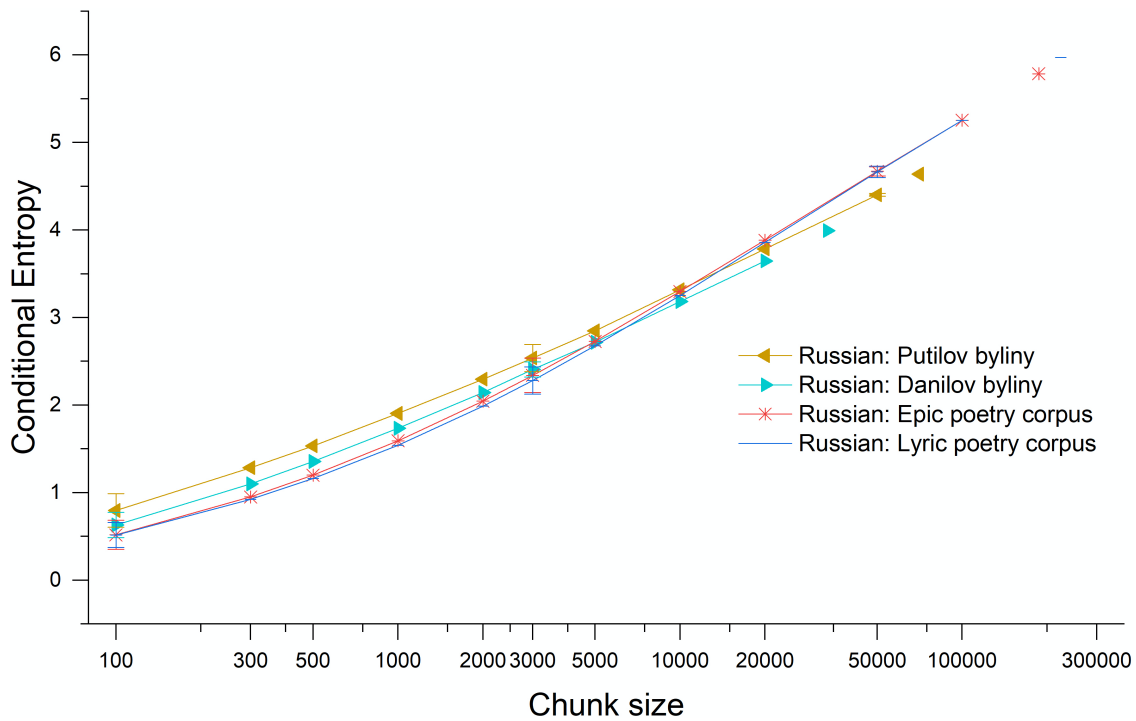


Fig. 10. Conditional entropy across different chunk sizes (on a logarithmic scale) for Russian oral epics in comparison to literary epic and lyric poetry.

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Driva Qele / Stealing Earth: Oral Accounts of the Volcanic Eruption of Nabukelevu (Mt. Washington), Kadavu Island (Fiji), ~2,500 Years Ago

Loredana Lancini, Patrick Nunn, Meli Nanuku, Kaliopate Tavola, Taniela Bolea, Paul Geraghty, and Rita Compatangelo-Soussignan

Introduction

Over the past two decades, it has become clear that culturally grounded stories, once uncritically dismissed as myth or legend, often contain information suggesting that they are informed by observations of memorable events, such as coastal inundation, volcanic eruptions, earthquakes, and meteorite falls (Nunn and Reid 2016; Nunn 2014; Masse 2007; Piccardi and Masse 2007). The principal value for natural scientists of recognizing these stories for what they are lies in the potential extension of detail, beyond that possible from retrodictive scientific enquiry, about the manifestations of these events and their effects on landscapes and their inhabitants. Understanding the empirical basis of these stories also allows insights into the ways in which people once explained such memorable events and how these explanations were conveyed orally, often exaggerated and reworked, across many generations (Nunn 2018; Taggart 2018; Kelly 2015)—a process characterized as “memory crunch” (Barber and Barber 2004).

Stories about volcanic eruptions which are likely to have some empirical basis have been recognized from many parts of the world (Nunn et al. 2019; Nordvig 2019; Riede 2015; Vitaliano 1973). While unquestionably grounded in cultural worldviews and filtered through cultural lenses, the nature of which is key to understanding the probable meanings of these stories, there is enough information within many to allow geologists to identify diagnostic information about particular eruptions. In the Asia-Pacific region, on which the present study focuses, common elements of many such stories include their use of analogues to explain unfamiliar phenomena and their attribution of cause to a supernatural being (like a god, monster, or giant) related directly to the affected peoples (Cashman and Cronin 2008). Many stories also recall plausible details about the eruption, including some unrecognized by scientific study, such as the toxic gas emissions from the c. 7,000-year-old eruption at Kinrara, Australia (Cohen et al. 2017:87-88), and the times when the fractious god Pele chased those who offended her, interpreted as memories of flank lava flows on the island of Hawai'i (Swanson 2008).

The practice of using ancient, culturally filtered narratives to illuminate the nature of past geoscientific phenomena and their impacts is termed “geomythology.” While geomythology remains somewhat radical among the community of natural scientists, it has also received

criticism from anthropologists and folklorists who deem its treatment of important questions—such as how “myths” develop from preliterate people’s experiences of catastrophic events—to sometimes be superficial and even perhaps misleading (Nordvig 2021; Henige 2009). These issues are revisited in the Discussion below.

The volcano of Nabukelevu, which dominates the western extremity of elongate Kadavu Island in southern Fiji, erupted at least three times during the three millennia that this archipelago has been occupied by people (Cronin et al. 2004). Stories about an eruption of Nabukelevu, known as Mt. Washington during Fiji’s colonial era, were first written down in the early-twentieth century and remain well known as oral traditions among contemporary Kadavu residents. Analysis of these stories has the potential to explain what happened during this eruption, how people living at the time in different parts of Kadavu rationalized what they saw, and how such stories were encoded in oral tradition and have been sustained since. This study focuses on these questions to reach a deeper understanding of this eruption and its impacts, physical and cognitive, on the people of Kadavu.

Study Area

While most of the land area in the Fiji Archipelago (Figure 1A) is volcanic in origin, there has been little volcanic activity since people arrived around 3,000 years ago. Within this period, volcanism has occurred only on Taveuni Island, the latest eruptions perhaps only a few hundred years ago, and at the western end of Kadavu Island, somewhat earlier (Cronin and Neall 2001; Nunn 1998).

People arrived in the Fiji Islands around 850 BCE, probably settling first at Bourewa and Qoqo in what is now the southwest part of Viti Levu, the largest island in the group (Nunn and Petchey 2013; Nunn et al. 2004). Fragments of their uniquely decorated pottery show they had dispersed to most parts of the archipelago by 550 BCE. The large yet isolated Kadavu group in the south of Fiji has no unambiguous record of occupation by these early (Lapita) people, although it would be surprising had they not reached it (Clark and Anderson 2009); mineralogically distinct pottery from this period found on the island of Moturiki in central Fiji is likely to have been manufactured on Kadavu, although where is unknown (Kumar et al. 2021).

Kadavu is the name used for the main island of the Kadavu group (Figure 1B), which formed from a series of volcanoes, oldest in the northeast and youngest in the southwest, resulting from proximal plate convergence along an ocean trench to the south of the main island (Nunn 1998). Kadavu soils are fertile and well watered, underwriting food production that today sustains a population of approximately 10,900 people living in sixty coastal settlements. Little is known about the early (pre-European contact in 1643 CE¹) history of Kadavu (Burley and Balenaivalu 2012), although it became an important transit site for trans-Pacific shipping in the 1870s (Steel 2016).

¹ Abel Tasman sailed through northeast Fiji in 1643, but James Cook seems to have made first contact when he landed on Vatoa Island in 1774. Sustained European contact began a few decades later.

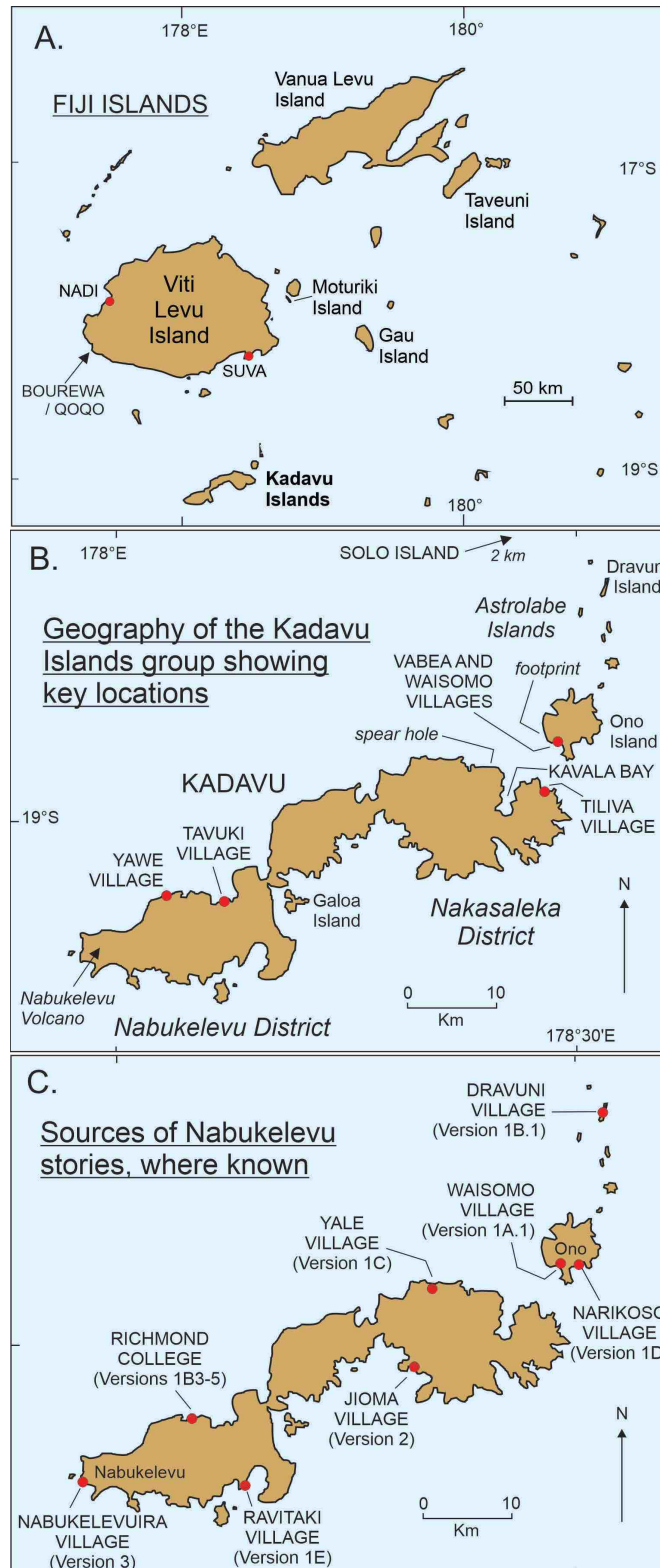


Fig. 1. Maps of Fiji and the Kadavu Islands. A. All Fiji showing location of Kadavu group. B. Geography of Kadavu showing key locations. C. Sources of Nabukelevu stories, where known.

For this study, the main island of Kadavu (and smaller islands nearby) was targeted both because of the conspicuous form of the Nabukelevu volcano (see Figure 2) but also because of the authors' pre-knowledge of several stories about its eruption. Fieldwork for this study was conducted on Kadavu on two occasions in 2019 by the three lead authors. Original stories likely to recall a volcanic eruption were collected from several places there, notably the villages of Nabukelevuira at the foot of the volcano and that of Waisomo on Ono Island, a key location in most stories.

Nabukelevu Stories

The common detail in almost all oral stories recalling the Nabukelevu eruption is that it involved an interaction between two gods (*vu* or supernatural beings) named Tanovo (from Ono Island) and Tautaumolau (from Nabukelevu). Names/spellings differ between stories, but these are considered the most authentic written versions. The essence of the story is that Tanovo travels from his home on Ono to Nabukelevu, where Tautaumolau has built a huge mountain (Figure 2). Angered by or envying Tautaumolau, Tanovo starts to dig material from the top of the mountain but is caught by Tautaumolau. Carrying woven baskets full of this material, Tanovo is chased by Tautaumolau through the sky along the elongate axis of the Kadavu group, dropping material in several places to create islands. At one point, one of these gods throws a spear at the other, creating a hole in a cliff (see Figure 4A). Finally, the two gods resolve their dispute.²

² None of the stories state who won the contest, possibly a memory of a truce that has been honored since.

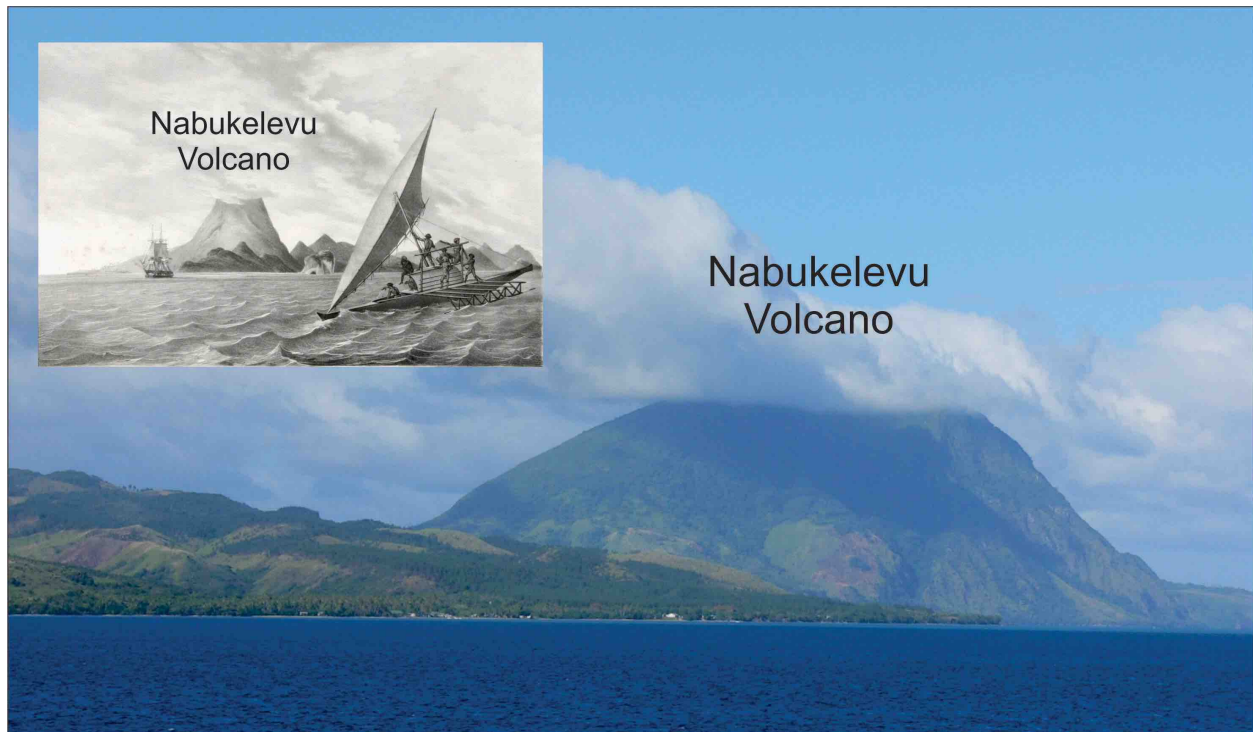


Fig. 2. Views of Nabukelevu Volcano. Main picture shows Nabukelevu from the northeast, its top hidden in cloud (source: Wikimedia Commons, <https://commons.wikimedia.org/wiki/File:Uluinabukelevu.jpg>). Inset shows Nabukelevu from the west in 1827 after the drawing by the artist aboard the *Astrolabe*. It is an original lithograph by H. van der Burch after original artwork by Louis Auguste de Sainson from the 1827 visit by French explorer Dumont d'Urville (source: Australian National Maritime Museum).

There are several known variations of this story which are considered important to understanding its evolution. These variations, sources of which are shown in Figure 1C and the proposed lineage of which is illustrated in Figure 3 below, are summarized in the following subsections: the first dealing with written (published and manuscript) versions, which represent transcribed oral traditions, the second with original oral traditions collected in 2019.

Recently Transcribed Versions of the Nabukelevu Story

The earliest written versions of this story date from the late-nineteenth and early-twentieth centuries (Beauclerc 1909; Deane 1909) and directly informed later versions (Nunn 1999; Riesenfeld 1950). These stories collected by settlers, probably independently of each other, are factual and likely to have been rendered verbatim. A slightly different version was published in 1965, probably obtained from a separate oral source given that the author was a mission teacher on Kadavu, as part of a compilation of stories (Hames 1960). This version of the story appears to have informed a 1971 Fiji Education Department booklet (Hamilton and Mansfield 1971). A third written version contributed to a compilation of Kadavu stories by high school student Sokoveti Lasini a decade later (Veramu 1981). Another version was published in 2017 by Kaliopate Tavola, Fiji's former Minister for Foreign Affairs (Tavola and Tavola 2017), published

more fully on his website (<https://kaidravuni.com>) and told more fully during discussions at the Fiji Museum in January, 2019.

There are three versions of the story in the Carey Papers, an unbound, unpublished collection of notes and observations by the students of Reverend Jesse Carey, written in Fijian, dated to the 1860s, and stored at the Mitchell Library, Sydney. These versions are by Patimio Nasorowale, Joeli Nau, and Leonaitasi Tuileva, Methodist students who were being trained at the Richmond Missionary College on Kadavu and who were invited to contribute as part of an intentional effort by Carey to compile ancient Fijian stories before they became forgotten.

Extant Oral Versions of the Nabukelevu Story

In January, 2019, three versions of the story were collected from persons in the Kadavu group of islands who were identified by community leaders as those who best knew the old stories. One version was collected from Ratu Petero Uluinaceva in Waisomo Village (Ono Island), another from Ratu Eveli Yalanabai in Nabukelevuira Village at the foot of the Nabukelevu Volcano, and a third, more abbreviated, version from Bulou Taraivini Likutotoka in Vabea Village (Ono Island). All interviews were in one or more dialects of Fijian, that of Ono differing significantly from that of Nabukelevuira, and collected in culturally appropriate contexts following proper protocols. It is of interest to note that many younger community members gathered to listen to these stories on these occasions, which were filmed by Jerry Veisa of the Fiji Museum. A final oral version of the Nabukelevu story comes from Ravitaki Village (Kadavu) and was obtained in Australia from Taniela (Dan) Bolea, a former Ravitaki resident.

Results

By analyzing the key elements of what we consider original (not repeated) stories, this section identifies thirteen distinct versions of the Nabukelevu story. Each version is assigned a number reflecting its proposed lineage, illustrated in Figure 3 and based on commonalities and differences identified through content analysis, summarized in the remainder of this section, and through the names of particular islands said to have been created by soil falling from Tanovo's baskets (Table 1).

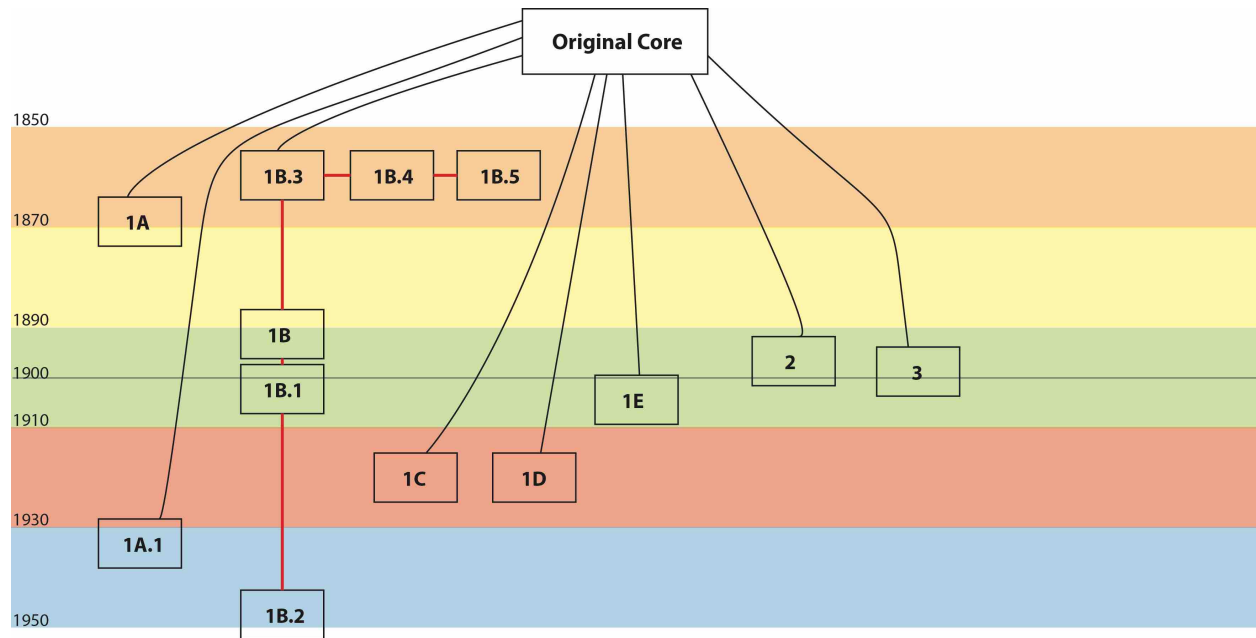


Fig. 3. Proposed lineage and chronology of Nabukelevu stories.

Version	Islands off mainland Kadavu	Astrolabe Islands
1A	Galoa	Bulia, Dravuni
1B		Dravuni, Solo
1B.1 and 1B.3	Nagigia, Kabarikinawa, Nanitove, Matanuku, Niuvaqau, Vaboa, Galoa, Yadatavaya, Tawadromu, Vanobia, Naitukuwalu, Waya, Vileileivi, Bala, Vanuatabu, Buabua, Vatulutu	Vurosewa, Vurolevu, Yabu, Buliya, Yaukuvesewa (Yaukuvelailai), Yaukuvelevu, Qasibale, Namara, Yanuyanuioma, Yanuyanuisau, Dravuni, Vanuakula, Solo
1B.2		Dravuni, Solo
1D		Yaukuve, Bulia, Dravuni
1E	Matanuku, Galoa, Yanuyanulevu, Niuvaqau, Kavote, Vunivesi	
2		Ono, Dravuni, Buliya, Vanuakula, Qasibale, Yaukuve, Solo
3		Qasibale

Table 1. Named islands formed by falling soil from Tanovo's baskets, in the reported order of creation.

Version 1 is that which involves all key elements, as outlined above, while Version 2 is distinct because there is no rivalry between the two gods, and Version 3 is unique because there is dispute but no explicit mention of a chase.

An early expression of **Version 1A** is that of Beauclerc (1909), who says he heard the story in 1871. It states that Tanovo, accustomed to enjoying the sunsets from his home on Ono

Island, discovered one night that a mountain had appeared at Nabukelevu to block his view,³ so he decided to travel there, pull down the mountain, and create new islands. Tautaumolau caught him in the act, so Tanovo hid under the sea with his baskets of earth, but Tautaumolau drank the ocean to expose him. Chased by Tautaumolau, Tanovo then unloaded his baskets of earth, forming islands (see Figure 5). Reaching the passage in the reef north of Ono, he turned south again until, exhausted, he hid under a rock at which Tautaumolau launched his spear, piercing it (see Figure 4A).

Beauclerc admits he may have forgotten some key details; we suggest that his identification of Dravuni as the island first formed when Tanovo was being chased and Galoa as the one next formed is an example of memory lapse, because all other variants of Version 1 have these islands in a more plausible order (see Table 1); Galoa is far closer to Nabukelevu Volcano than Dravuni.⁴ Beauclerc also mentions that while Tanovo is still on Ono (before traveling to Nabukelevu), he declares his intention to create new islands, a detail not found in other stories, where this is explained as an accidental consequence of Tanovo being surprised and chased by Tautaumolau.

Similar to this version is the oral account by Ratu Petero Uluinaceva (**Version 1A.1**), which, he stated, is essentially that which his uncle would have heard towards the end of the 1940s. Like Version 1A, this rendition of the story focuses on the enjoyment that Tanovo got every afternoon from watching the sun set from Ono Island—and the anger he felt when his view of the sunset became obstructed by a mountain (Nabukelevu⁵) raised to the southwest, as it does still in November–December:

For us who have heard the legend, we believe the sunset that was linked to Tautaumolau would have been around November/December. Indeed the best time for us here in this village to watch the sunset is around that time. The sunset then begins to move in the other direction so that by May, sunlight is shorter, the weather is cooler as the sun is further away from us. That is why when we talk about this story we think it must have occurred during the November/December period when sunsets are always really beautiful.⁶

³ Field surveys in 2019 show that Nabukelevu is indeed visible from several of the highest peaks on Ono Island.

⁴ Beauclerc also appears to have forgotten the names of the gods in the story he was told almost fifty years earlier, calling them by default Ra Ono (Tanovo) and Ra Buke (Tautaumolau).

⁵ The name “Nabukelevu” means “the great yam mound,” a familiar analogy to people in Kadavu, past and present.

⁶ Ratu Petero spoke in Standard Fijian (Bauan). In the original,

Ia na ka keimami nanuma keimami na rogoca na italoana ni vanua e tiko mai kina na ikarua ni vu qo o Teiteimolau mai Nabukelevu, kevaka ena dromu kina na siga, ena dromu tiko ena maliwa ni Noveba kei na Diseba, baleta na vanua e tiko kina o Nabukelevu—kevaka e via sarava tiko o koya ni via dromu na—ia na gauna vinaka duadua vei keimami na koro qo me keimami sarava na matanisiga ni keimami sarava ni sa dromu na yasana qo, lo sa dromu tiko i yasana qo, lo o koya ni qai lesu tale tiko me yacova na vula o Me sa dau lekaleka ga na lako ni matanisiga, sa dau vula i batabata vei keimami. Sa batabata na draki, na matanisiga sa yawa mai vei keimami. Sa qai dau cawiri cake mai o koya, na vula o Diseba sa dromu sara i yasana qo. Ia na vakasama keimami dau veitalanoataki koya tiko kina na vu qo, o koya na ka e yaco oqo baleta na mua ni yabaki—Noveba ki na Diseba—na vanua ya e dau dromu kina valekaleka saraga, dau rairai vinaka talega vei keimami na matanisiga ni dromu valekaleka saraga i ke.

A unique element of Version 1A.1 is that the mountain of Nabukelevu had existed for some time before Tanovo decided to go and lower it. Version 1A.1 recalls how Tanovo

set off early while it was still dark, as he wanted to get to Nabukelevu and commit his treacherous deed and be out of there before daylight. He took with him a few giant baskets of plaited coconut fronds. Then he proceeded to dig the earth . . . but as he was digging, the dawn broke. Tautaumolau had by then arisen and promptly spotted Tanovo's furtive activities. Tanovo fled, wanting to get to the top-end of Kadavu [its northeast extremity] before Tautaumolau could catch him. The furious chase got as far as the shores of Nakasaleka [district] when Tautaumolau got close enough and threw a spear at Tanovo. But it missed and instead pierced a large boulder and made a clean hole right through it [shown in Figure 4A].⁷

According to this version, Tanovo became increasingly aware of the danger from his furious pursuer, so he headed for the big reef (*Cakaulevu* or Great Astrolabe Reef) along which he traveled for some distance before turning left (west) and heading towards his home on Ono Island where he felt he would be safer. Around the same time, aware that the sunrise was illuminating him and his actions, Tautaumolau realized he was isolated, an aggressor in a foreign territory.

This version of the story, one presumably nurtured by the Ono people, does not discuss the conflict between Tanovo and Tautaumolau further, but continues with an explanation of how Tanovo has become embodied in the landscape of Ono Island:

To this day there are two streams below Tanovo's abode called *Mata i Tanovo* [meaning "the eyes of Tanovo" or "the face of Tanovo"] and if you want to go there, you will climb up one hill called *Duru i Tanovo* [the knee of Tanovo] and like a knee, you go up one side and descend down the other.⁸

While other versions of this story often involve a reversal of roles in the chase, the 1A versions are the only ones in which it is only ever Tautaumolau chasing Tanovo.

⁷ In the original,

Sa dua na siga sa baci raica tale toka o koya sa baci lai buawa vua na matanisiga sa lai tabogo, sa mani nanuma o koya, "Au sa na lako mada meu laki kelia laivi na delana qo, meu na kelia laivi me biu laivi i wai, me rawa ni dromu ga na matanisiga, au sa sarava." Ia e na gauna qo kevaka iko via raica na delana oya, iko na toso ga vakalailai i yasana qo sa na raici koya na delana ni sa basika. Sa mani gole sobu tu o koya dua na mataka lailai, qai tukuna o koya, "Me se mataka caca —'o yau na gauna meu butakoca kina na ka qo me se buto tiko ga na vanua meu sa lesu tale mai. Me qai ka ni mataka na vanua, meu sa yali mai." Sa mani kauta o koya e vica vata na isu lelevu sa qai laki kelia kina o koya na qele. O koya na qele ya e sega ni kelia me biuta laivi, o koya qai kauta mai. Qai kauta cake tiko mai o koya. Na gauna saraga e kelikeli oti ga sa lako talega mai na nona itokani o Teiteimolau, qai raici koya. Qai sasaga cake mai o koya i muana i cake i Kadavu ni se bera ni tarai koya o Teiteimolau. Nodrau sa veicemuri voli mai ya, qai yaco mai na baravi i Nakasaleka qai cokai koya rawa kina o Teiteimolau—qai cala na icoka ya. Kena cala ya qai lauta e dua na ucunivatu, se tiko ga qo, se qara vinaka saratu ga mai yasana kadua ki yasana kadua. E rawa ni da kele ga kina vaqo da tara na qara ya ni sa basika i yasana kadua.

⁸ In the original,

Ia na gauna qo, na delana dau tokatoka kina ya, e tiko e ra e rua na mataniwai, se yacana tiko ga o Mata i Tanovo. Tiko i ra e na gauna qo. Ia kevaka eda taubale i kea, e dua ga na delana dou na lai cabeta, na yacana tikoga Duru i Tanovo. Se wili tikoga vaka duruna ga—vaka ga na duru—lako ga vaqo, lai siro tale i yasana kadua.

All five **Version 1B** stories have the role of Tautaumolau as pursuer reversed when the pair reaches some northern point in the Astrolabe Islands and Tanovo starts pursuing Tautaumolau, perhaps because Tanovo felt empowered by being on his home territory. All 1B stories have the common detail that Tanovo was jealous of Tautaumolau because the latter's hilltop home was higher than his, so he decided to try and lower it.⁹

It is possible that the earliest of these stories (**Version 1B**) is that of Deane (1909), who states that this is a story he “heard previously,” although exactly when is uncertain; it is far more detailed and contextualized than that of Beauclerc (see above). He states that Tanovo and Tautaumolau are *vu*, ancestor figures whose deeds are invariably aggrandized and their legacy amplified, and who often pass into myth as protectors of clan groups, dedicated to their survival, alert to threats. Deane notes that both these *vu* are well known in Kadavu and that there are innumerable landforms associated with each. A distinct element of this version is that Tautaumolau was joined in his pursuit of Tanovo by the *vu* of nearby Tavuki and Yawe. As the pursuer-pursued roles are reversed, it is Tautaumolau who hides beneath the sea near Tiliva, then above Nakasaleka (perhaps Kavala Bay), and finally behind a headland that is pierced by Tanovo's spear (shown in Figure 4A).

Similar to this are the written and oral accounts of Kaliopate Tavola (**Version 1B.1**), born and raised on Dravuni Island, whose mission is to preserve such traditions and understand their significance. He first heard the Nabukelevu story in the late 1940s or early 1950s from his grandfather and others who stated they he had heard it first in the mid 1890s. The key difference here is that, after Tanovo dropped some of the earth from the baskets he had been carrying while fleeing Tautaumolau, Tanovo was “greatly relieved by disposing of his load. He became reenergized and it was written over all his face.” This allows Tanovo to become the pursuer rather than the pursued, a defining element of the 1B stories. Version 1B.1 has considerable detail about the route of the chase and the islands formed by the “soil” dropped from Tanovo's baskets.¹⁰ After the pursuer becomes the pursued, this version of the story also has Tautaumolau hiding in the “deep sea” at Nakasaleka whereupon Tanovo drinks all the water to reveal him, then hiding behind a huge rock at which Tanovo throws his “stick” to form a hole. Finally, Tautaumolau heads home to Nabukelevu.

The story (**Version 1B.2**) told in Riesenfeld's (1950) tome about the megalithic culture of Melanesia refers to Deane as a primary source but adds a few minor details, unlikely to have been obtained firsthand. Key among these is that the chase on mainland Kadavu is partly along its southern reef and partly along its spirit path (1950:590).

The fourth version of this story (**Version 1B.3**) is that by Joeli Nau, a Tongan (not Fijian)

⁹ In the past, many Fijians on high volcanic islands like those in the Kadavu group occupied mountaintop hillforts (*koronivalu*). We note the report of Titian Ramsay Peale, chief naturalist on the United States Exploring Expedition (1838-42), who saw on Kadavu “the remains of forts, consisting of stone walls 4 feet thick and about the same height surrounded by a dry ditch. They are always on the crests of hills” (Poesch 1961:174).

¹⁰ In order from the start to the end of the chase, these are Nagigia, then islands along Babaceva: Kabarikinawa, Nanitove, Matanuku, Niuvaqau and two smaller ones nearby, Vaboa, Galoa, Yadatavaya, Tawadromu, Vanobia, Naitukuwalu, Waya, Veilailaivi, Bala, Vanuatabu, Buabua, Vatulutu, Vurosewa, Vurolevu, Yabu and Buliya and then Yaukuvesewa (Yaukuvelailai), Yaukuvelevu, Qasibale, Namara, Yanuyanuioma, Yanuyanuisau, thence Dravuni and Vanuakula, and finally isolated Solo.

Methodist minister who studied at the training institute in Richmond on Kadavu Island and married a local woman. We know he traveled to Ono Island at some point and that he had a keen interest in recording and understanding such traditions. The close similarity between this version of the Nabukelevu story and that of Deane suggests they probably originated from the same source, some time during the mid-nineteenth century.

Another version of this story (**Version 1B.4**) is that told by Patimio Nasorowale, a Fijian “native teacher,” trained in Richmond, who claims that Tanovo was the common ancestor for all people in Kadavu. Since this is not a detail found in any other version, it could be an inference added by an outsider unfamiliar with Kadavu culture, although Tanovo is said elsewhere to be the common ancestor (*vu*) for many villages on both Kadavu and Ono islands.¹¹ Distinct in Version 1B.4 is that after throwing his spear at Tautaumolau, Tanovo returns to Ono.

The final version of this story (**Version 1B.5**) is by Leonaitasi Tuileva, another Richmond-trained “native teacher,” who also states that the whole of Kadavu was once subject to Ono, which may explain why Tanovo (the *vu* of Ono) was so irked by the actions of upstart Tautaumolau. This version states that it was only after the attempted spearing of Tautaumolau by Tanovo that the former tried to hide beneath the ocean.

The binding element of these six 1B versions is the reversal of roles in the chase around Kadavu, something that happened only after Tanovo reached the end of the Kadavu island chain on the north side of the Solo Lagoon (see Figure 5). In 1B and 1B.2, this point inspires the cry, “turn ye sons of Ono”;¹² in 1B.3, “our *masi* [barkcloth loincloths], of us people of Ono, are wet, let’s dry them in the sun”;¹³ and in 1B.4, the more challenging call of Tanovo to his rival, “See, you and I are both champions! Today we will both die!”¹⁴

Version 1C was told by schoolgirl Sokoveti Lasini from Yale on Kadavu about 1980 and was reportedly that told her by her grandfather, who probably heard it in the 1920s from one of his elders. The key distinct elements are that Tautaumolau almost caught Tanovo in Nakasaleka district and that the soil from his buckets formed only the small islands of the Ono district.

Another story (**Version 1D**) was told in 2019 by Taraivini Likutotoka from Vabea Village on Ono Island who, born at Narikoso on the same island, heard this story from her grandmother who had listened to it as a child, possibly in the 1920s. While key elements of the narrative are the same, the chase ends when Tanovo, returned to Ono, pushes this island away from mainland Kadavu using his foot. The footprint is visible in the cliffs (see Figure 4B).

Taniela Bolea from Ravitaki on Kadavu told **Version 1E** of this story, which he heard from his granduncle Kalaveti Cawa from Matanuku Island, who had heard it as a child, possibly around the year 1906. While admitting to being uncertain about some of the details, Bolea told a version of the story similar to others within the broader category of Version 1. The key difference

¹¹ Manuscript by E. Rokowaqa, *Ai tukutuku kei Viti* (Suva, c. 1937).

¹² In the original Bauan language, “Nī vuki na luvei Ono.”

¹³ In the manuscript original, “Sa suasua na noda masi na kai Ono, da raki mada.”

¹⁴ In the manuscript original, “Ia, daru sa tagane vata ga! Edaidai daru sa dui mate!”

is that the only islands “formed” by soil from Tanovo’s baskets are those close to Ravitaki Bay, suggesting a localization of the narrative.¹⁵

While working as a missionary and schoolteacher at Jioma on Kadavu in 1942, Inez Hames was told **Version 2** of this story by an elderly man (unnamed) who we infer would have heard it as a child in the 1890s. This version of the story is more sympathetic to Tautaumolau than most others. It states that the two gods were peaceably drinking kava (*yaqona*) together when Tautaumolau suggested removing part of mountainous Nabukelevu and putting it in the sea to extend his lands. Tanovo did not like this idea, so he decided to dig Nabukelevu himself and use the soil for his own purposes. In the ensuing chase, it is Tautaumolau who throws the spear at Tanovo. The soil is dropped to form Ono itself (as well as other islands), which is where the story ends.

The final version of this story (**Version 3**) was told in 2019 by ninety-year-old Ratu Eveli Yalanabai of Nabukelevuira Village at the foot of Nabukelevu mountain. Renowned as a custodian of traditional stories, Yalanabau heard this story from his parents, who had heard it as children, probably in the first decade of the twentieth century. In this version, Tanovo and Tautaumolau are kin. Ratu Eveli states that the story is

. . . about the bargain between these two, the god of Ono [Tanovo] and the god from here [Tautaumolau]. This transaction started to become a bit difficult especially as the god of Ono became strident. He said, “I am going to scoop up this earth.” The god of Nabukelevu said, “That’s up to you. Our close kinship will not be erased away, irrespective.” So the god of Ono scooped up earth and filled his coconut frond basket, but clumps of earth started to fall through the gaps in the basket and formed those small islands. While the god of Ono was carrying his basket, the god of Nabukelevu was watching him from Ului Nabukelevu [the summit of Nabukelevu]. He got a stick and threw it at the god of Ono and caused the basket to burst and ended up forming all those islands in Ono.¹⁶

Analysis

Like many similar stories, it is likely that the Nabukelevu story analyzed here is built on contemporary cultural foundations from syncretized memories of distinct events, notably (a) a volcanic eruption (at Nabukelevu) that built up a mountain which obstructed views towards the southwest for people elsewhere in the Kadavu group (especially Ono Island) and (b) rivalry

¹⁵ These islands include all those in Ravitaki Bay as well as (in order) Matanuku, Galoa, Yanuyanulevu, Niuvaqau, Kavote, and Vunivesi.

¹⁶ Ratu Eveli spoke in the local Nabukelevu dialect. In the original,

Xa meri na nodru vixerexerei ga xedruxa xea, xedruxa na vu mai Ono vataxei na vu ga i e. Sa xora meri vani qai mai dredre valailai, vani dredre valailai na vixerexerei meri. Sa xora ga meri sa qai mani vaqaqa toxa na vu mai Ono. Xora ga vani xea sa qai xaia vani xea, “Olrait au sa luxuta na qele. Au sa luxuta na qele.” “Io vata vi ixo, vani o sa via luxuta na qele, nodaru viwexani tabu rawa ni taqusi, toxa dredre ga nodu viwexani.” Sa qai luxuta xeya. Luxuta na qele meri qai vatawana i nona vesavesa, qai se qera yarayara jiko na qele. Na jiko ni yanuyan lalai xea, ga meri na qele. Sa qai tube jixo na vesavesa xea me laxo jixo, sa qai toxa mai Ului Nabukelevu na vu xea. Qai taura na i xolo qai xolota, xa se qera tu xe meri na viyanuyan xa dra tu mai Ono meri, meri na xena italoana. Xia gena xa dra tu xe na viyanuyan mai Ono meri.

between two groups of people in the Kadavu islands which involved aggressive encounters in key places. Also of note is that stories which originated in the western part of Kadavu, closer to Nabukelevu, understandably privilege the views and histories of the people living there, while the stories from the other end of the islands, around Ono, tend to privilege the views and histories of local residents.

This section is divided into two main parts. The first looks at how analysis of selected elements of the narratives allows insights into the relationship between Tanovo and Tautaumolau, where they lived, and how and why particular landforms may have become linked to the stories. The second identifies those common elements in the narratives that are likely to recall the manifestations of volcanic activity, something which allows a likely age for the story to be proposed.

Narrative Analysis

Most versions of the Nabukelevu story collected do not identify the preexisting relationship between its two protagonists, Tanovo and Tautaumolau. Three versions explicitly identify rivalry (Versions 1B, 1B.1, and 1D), while two identify friendship or kinship (Versions 2 and 3). Given the geography of sources shown in Figure 1B, it would be premature to try to analyze these narrative traits other than to note that two versions asserting rivalry come from Ono Island while one involving kinship comes from Nabukelevu.

In all versions of this story except one, the god Tanovo is said to live on the island of Ono; the sole exception is Version 2, in which this island is created by soil falling from Tanovo's baskets, so it is stated that he lived originally somewhere on the eastern Kadavu mainland, possibly a default inference. In all other versions, where specified, the stronghold of Tanovo on Ono Island is said to have been at either Qilai Tagane (1B), Uluisolo (1B.1), Ului Ono (1B.5), or in the forest (1C). Recent surveys of Ono Island (Nunn et al. 2022) show that evidence for fortified hilltop settlement exists at Qilai Tagane and Uluisolo; no mountain known as Ului Ono is known to the present inhabitants. From both Qilai Tagane and Uluisolo, it is possible to see Nabukelevu Volcano, so it is plausible to suppose it once blocked the view of the sunset. Tautaumolau inhabits Nabukelevu mountain in most versions of the story, although no signs of former occupation have been found there to date by the researchers.¹⁷ In versions 1B.1 and 1B.3, Tautaumolau occupies a coral reef named Vunilagi (unlocated) offshore.

While there are numerous aspects of the stories that suggest they recall volcanic activity at Nabukelevu (see following section), there are other aspects that link to particular landforms. The analyses of these links might inform our understanding of the evolution of the story and the ways in which elements of culturally grounded narratives become anchored to place.

All versions of the story involve one god throwing a stick/spear at the other, creating a hole in a cliffed headland. This exists (name unknown) on the north coast of the Kadavu

¹⁷ Sometime in the mid-twentieth century, the Reverend Alan Tippet visited Naborua, a hillfort on the flanks of Nabukelevu Volcano. He explained (1958:147) that three ridges stretched out from the mountain

like the buttress roots of rain-forest trees, narrow with blunt ends and a precipice on each side. The fortress was perched on the central ridge. Its only path led along the mountainside, very narrow so that approach had to be in single file. The fort had a death drop on all sides . . . [T]he place they told me had never been taken. I don't wonder.

mainland, across from southern Ono (see Figure 1A), and is shown in Figure 4A. If its formation predated human arrival in Kadavu around 3,000 years ago, this landform thus provides an example of a fictional detail likely to have been added to a narrative to anchor it to place and remind local residents of it. Similar memory aids have been used in other oral cultures to prevent loss of traditional knowledge, including culture-defining stories of this kind (Kelly 2015). Yet it is also possible that this archway (“hole”) formed during the period of human occupation of these islands, possibly as a result of ground tremors during an episode of Nabukelevu volcanism.

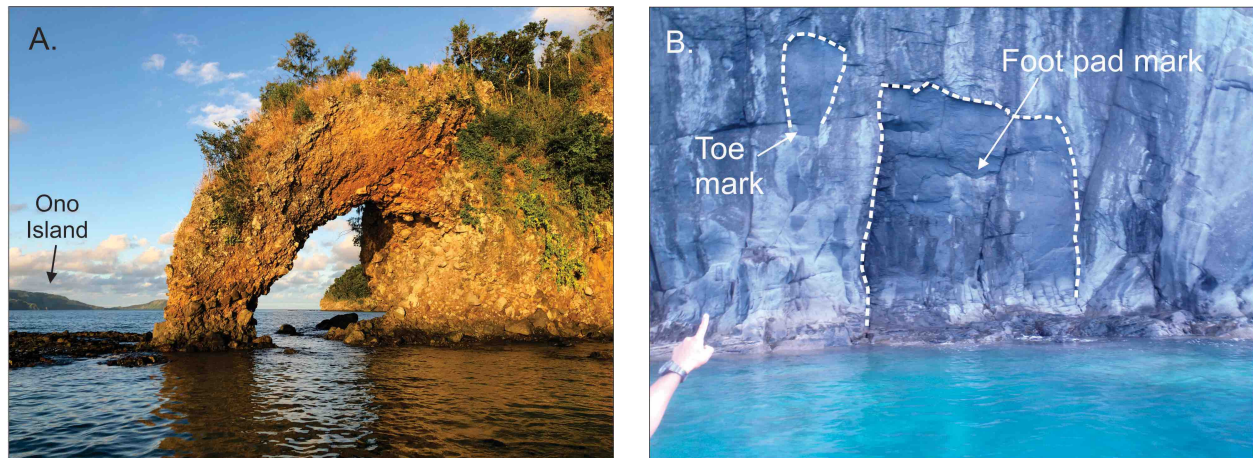


Fig. 4. A. The hole made when a spear was thrown by one god at the other, north coast of eastern Kadavu. B. The footprint on the cliff in southwest Ono made by Tanovo when he pushed this island away from mainland Kadavu. (Photos by Patrick Nunn.)

Similar arguments are applicable to the “footprint” of Tanovo, mentioned in all six Versions 1B, where he is said to have placed his foot in order to push his island of Ono away from the Kadavu mainland after his conflict with Tautaumolau. Shown in Figure 4B, visually interpreted according to the directions of local residents, this feature may postdate the arrival of people in Kadavu, even conceivably having occurred at the same time as Nabukelevu volcanism, perhaps because of earth tremors or tsunami impact. Alternatively, it may simply represent a collapse of the cliff at this location that created a footprint-like feature which then became part of the story.

Links to Volcanism

Numerous elements of the stories make it likely that they incorporate memories of volcanic activity at Nabukelevu (Cronin et al. 2004). Discussed in separate subsections below, these are the scooping-out of earth from Nabukelevu by Tanovo (Element a), the inferred initial confrontation at Nabukelevu between Tanovo and Tautaumolau (Element b), the chase along the island chain and back (Element c), the formation of islands through the dropping of soil from Tanovo’s bags (Element d), and the hiding of one god beneath the ocean and the drinking of the ocean by the other to reveal him (Element e).

a. Scooping-Out of Earth

While most versions of the story do not mention where Tanovo removed “soil” from Nabukelevu, Versions 1B.1 and 1B.2 (and many anecdotal observations from local residents) mention that material was scooped from the top of the mountain, which is why it has its characteristic saucer shape (see inset, Figure 2); Version 2 mentions a “hole” (perhaps a hollow) in the top of the mountain. This landform represents the summit crater, similar to that found at the top of many young volcanoes. In the case of Nabukelevu, this crater may have formed only after/during an eruption, so it may be a narrative detail that featured in the original version of the story, shortly after the event to which it refers.

b. Initial Confrontation

Few stories have much detail about the nature of the initial confrontation between Tanovo and Tautaumolau at the top of Nabukelevu, although some talk of Tanovo being surprised by his rival/friend. In Version 1A, the baskets into which Tanovo has been scooping earth from Nabukelevu are emptied before the chase begins—a possible recollection of the flank landsliding likely to have accompanied volcanic activity¹⁸—but in all other versions that involve a chase, Tanovo lifts these baskets of earth and takes them with him as he flees from Tautaumolau.

c. The Chase

The geographical route taken by the two gods as they flew (or perhaps ran) varies considerably between stories, sometimes being mostly on land, sometimes offshore, dropping material that created islands. It may be that the routes described in the earliest versions of the story did in fact trace the progress of the eruption (ash) cloud from Nabukelevu (observed from different places), but it seems implausible to us to suppose that modern versions of the story would necessarily be as accurate. Details of this are notoriously liable to modification, especially to incorporate places that have risen in importance and, conversely, to jettison places that lose status. For this reason, we attempt no analysis of the precise routes, yet we note that the overall direction—on which almost all versions agree—of the chase is similar. This involves a chase along the south side of the main island (and islands/reefs offshore) which ends in the Astrolabe Islands at the other end of the Kadavu chain. Whether it is Ono or Dravuni or Solo where the chase ends seems less important than the fact that it did end and—as all versions agree—it then reversed and returned to somewhere on the north side of Nakasaleka District.

It seems plausible to suppose this to be a recollection of the direction of an ash plume (perhaps not the only one) from Nabukelevu driving east along the Kadavu chain until, losing strength in the Astrolabe Islands, the wind starts to blow it back south (or southwest). A change in wind direction is not necessary, for the waning of eruption vigor and plume height would entail ash being transported less far from Nabukelevu, giving the impression to observers of the ash cloud traveling back to the southwest. In either scenario, such an ash plume would have been

¹⁸ A 5.3 magnitude earthquake shook Nabukelevu on October 21, 2019, and caused numerous landslides.

visible to people on the ground, it would have been smelt by them, and it would have made their eyes sting. Perhaps there were no toxic gases present in the plume, for this memorable detail would likely have featured in oral traditions, as it does for the c. 7,000-year-old eruption at Kinrara in Australia (Cohen et al. 2017:87-88).

d. Island Formation

Almost all versions of the story talk about baskets of soil being emptied, accidentally or deliberately, along the outbound route of the chase between Nabukelevu and the Astrolabe Islands. While accepting that the same reasons to treat this information cautiously as we cited for ignoring precise details of the route of the chase may apply here, there are clues from both place-names and geology that supply additional information to assess this information. For this reason, we look at those nine stories that have details specifying which islands were created by the soil falling from Tanovo's baskets, summarized in Table 1.

The locations of these islands are shown in Figure 5 and, if they approximate the route along which an ash (fine tephra) plume/cloud formed and moved, then a plausible reconstruction is shown in the inset of this figure. All accounts of the chase, as well as the order in which offshore islands are said to have formed, imply that the ash cloud moved along the south side of the main island and then turned back south somewhere north of Ono Island.

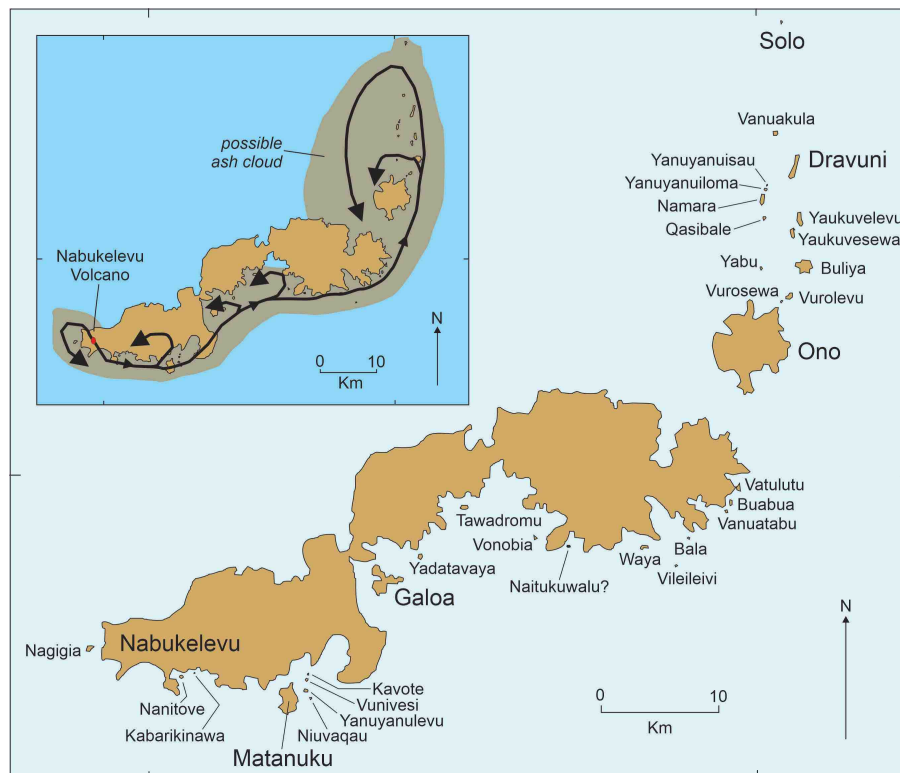


Fig. 5. Smaller offshore islands named in seven versions of the Nabukelevu story as having formed following the Nabukelevu eruption. Inset shows possible trace of the ash cloud based on the stories.

It is important not to take literally the detail in many stories that these small offshore islands actually *formed* during the eruption. This may well be a default position adopted by storytellers, otherwise at a loss to explain the presence of such islands and wishing to strengthen the credibility of their narrative by linking their presence to it. It is much more likely that “formation” in the stories actually means that these islands were built up, that material from the sky was dropped on their surfaces, as was the case for similar stories in neighboring Tonga (Taylor 1995). Closer to Nabukelevu, this material may well have included larger particles (lapilli); farther away it is likely to have been exclusively finer material (ash). This may be recalled in the name of the island Dravuni, in Fijian most likely meaning “ash” in this context, which is a bedrock (breccia and lava) island on which ash might have fallen at the time Nabukelevu erupted. Perhaps owing to the high rainfall in this part of Fiji and the regular incidence of tropical cyclones (hurricanes), no ash deposits dating from Nabukelevu have been found in any islands of the northeast Kadavu group.

Insights into the effects of this eruption can also be gleaned from some of the other island names shown in Figure 5. Of particular interest is the island of Galoa (“sunken place”) that may have been named after it sunk abruptly during this event, perhaps as a consequence of a flank landslide or coseismic subsidence, either of which could conceivably have occurred here at the time. Sinking also features in the name of Tawadromu (“sunken [*Pometia*] tree”) and may be implicated in the name of Kabarikinawa (“floating Kabariki [village]”), perhaps signifying an area of populated land washed out to sea. The names of all three places may also derive from the impact of a tsunami (see below).

e. Hiding under the Sea

At one point, either before, during, or at the end of the chase, five versions of the Nabukelevu story state that one of the gods, either exhausted or fearful, hid under the sea from his rival.¹⁹ Then the pursuer, realizing where his quarry was hiding, drank the sea (or otherwise caused its withdrawal) to expose him. This anecdote may be a recollection of the precursor to a tsunami in which the ocean is withdrawn, typically to an unprecedented (memorable) distance/depth, prior to a giant wave forming and running ashore. It is interesting that there is no mention of this wave in any of the versions of the story collected, but we suggest that does not invalidate the link proposed between this detail and a tsunami; sometimes the withdrawal of water may be more memorable than the subsequent wave, especially if observers are high above the coastline, as they may have been on Kadavu at this time.

The place where the water withdrew is not certain, but Version 1B states that it was “below Tiliva [village] and above Nakasaleka”; the latter may refer to either the district or the village, some ten kilometers west of Tiliva. Two other versions (1B.1 and 1B.3) state the place as Nakasaleka, another (1B.5) as “near Nakasaleka.” It is proposed that Kavala Bay (shown on Figure 1B), an unusually large coastal indentation in which the withdrawal of water would

¹⁹ Some versions of the story state that Tautamola, the god of Nabukelevu, was the one who hid; other versions state it was Tanovo, the god of Ono. Rather like the issue of who was the pursuer and who was pursued, especially towards the end of the chase, we regard this as unimportant and likely to reflect storytellers’ allegiances rather than any original recollection.

consequently have been more noticeable than most other places along this part of the Kadavu coast, is the likeliest place for this story. This proposition is supported by the fact that Kavala Bay is centrally located within Nakasaleka District and adjoins the “hole made by the spear,” an incident that precedes the “hiding” in most Version 1 stories.

It should be noted that tsunamis are comparatively common in the Kadavu Islands owing to their proximity to a zone of lithospheric plate convergence and to the effects of earthquakes centered there (Rahiman and Pettinga 2006; Nunn and Omura 1999).

Age of Stories

Allowing for the probable inclusion of ancillary details about memorable events unrelated to volcanism, we consider that the thirteen stories recall a volcanic eruption of Nabukelevu. Within the three millennia that people have lived in the Fiji Islands, Nabukelevu has been active on at least three occasions (Cronin et al. 2004).

The earliest was that which formed the present summit dome, sometime before 560-380 BCE (2420 ± 90 BP).²⁰ A subsequent event occurred sometime after 224-304 CE (1686 ± 40 BP) and involved landsliding and scoria deposition on the western side of the volcano around the village of Nabukelevuira. The most recent event occurred within the last 2,000 years, possibly as recently as 1630-80 CE, and involved flank collapse and the formation of a small dome on the northwest side of the volcano. There are details in some stories that allow us to favor one possibility over the others.

In Version 1A, the view of the sunset from Ono Island is more likely to have been blocked by a summit dome rather than a smaller flank dome, favoring the earliest of these three events. In the IB stories, the motivation of Tanovo to reduce the size of Nabukelevu is based on his jealousy about this mountain being higher than the one he occupied on Ono, again favoring the earliest volcanic event.

It is unlikely that the two most recent events would have produced an ash cloud of sufficient volume and extent to “drop soil” around Nabukelevu and farther away, a judgment that by default favors the earliest mountain-forming eruption as the source for the stories. The tsunami (inferred from the withdrawal of the sea) could have been caused by flank collapse of the kind that characterized each volcanic event at Nabukelevu, although the earliest would appear most probable because of its likely greater magnitude.

Finally, the fact that places far away from Nabukelevu, perhaps as far as Solo Island eighty kilometers distant (shown in Figure 5), are named in the stories as having been affected by Nabukelevu volcanism suggests that the memorable incident they recall was not localized, as appears to have been the case with the two more recent eruptive events. In support of this, several details in these stories, especially the throwing of the spear and the hiding beneath the sea, are likely to be located in Nakasaleka, fifty kilometers or so away, suggesting an event with more widespread effects is being recalled than that in the two most recent ones.

On balance we favor the summit-dome forming event dated to 800-350 BCE (or earlier)

²⁰ Ages BCE are calendar years calculated from calibrated radiocarbon ages; BP (Before Present) dating refers to reported age in radiocarbon years, where “Present” is 1950 CE.

as the memorable event at the core of the Nabukelevu stories. Subsequent episodes of volcanism may have contributed to certain narratives, maybe even helping sustain their memorability and popularity among Kadavu people.

Discussion

This section discusses the nature of the volcanism stories from Kadavu, specifically the evolution of the relationship between such catastrophic geologic phenomena and the associated myths, before focusing in two subsections, firstly, on how such myths can function as social strategies for the preservation of collective memory and, secondly, on the use of such myths as risk-management strategies.

Geomythologists have attracted criticism for assuming there exists an etiological relationship between myth and geologic phenomena (Nordvig 2021). Yet there is no denying that myths of any kind which might explain/recall memorable geologic phenomena (like volcanic eruptions) are embedded in the worldviews of the people who observe them; for this reason, it has been argued that “disasters serve as social laboratories” (García-Acosta 2002:65), even revealers of the nature of ancient societies and the worldviews of their populations.

In this way, we can see that the stories about Nabukelevu volcanism naturally involve ancestral beings (*vu* in Fijian, often “gods” in translation) who can move through the sky and sea and air and are capable of superhuman feats (such as scooping out mountaintops and drinking the sea). Such beings were undoubtedly part of the worldview of Fijians 2,500 years ago which had evolved over previous generations, both within Fiji and beyond (Kumar et al. 2021; Burley 2013). For the earliest people had reached Fiji only about five hundred years earlier, their ancestors having developed their distinctive (Lapita) cultural identity in the Bismarck Archipelago (Papua New Guinea) a millennium earlier before setting out on intentional colonization voyages over the eastern horizon (Specht et al. 2014; Denham et al. 2012). No doubt their mythologizing of Nabukelevu volcanic eruptions was informed by the memories and understandings of their ancestors in the Bismarcks, who likely witnessed eruptions at Rabaul (Papua New Guinea), and perhaps at volcanoes in the Banks Islands (Vanuatu). Perhaps as they sailed east they also witnessed shallow underwater volcanism in Solomon Islands and Vanuatu, a phenomenon believed to explain the Maui (fishing-up of islands) myths across the Pacific (Nunn 2003).

But volcanic activity is comparatively infrequent in Fiji and adjoining island groups in the South Pacific compared to places like Iceland, Japan, and even Papua New Guinea where every generation is likely to experience (or hear about firsthand experiences of) volcanism. Consequently it is likely that the experience of catastrophic geologic events becomes more ingrained in the latter cultures than the former ones, where the multigenerational recurrence of volcanism (approximately every 500 years at Nabukelevu) means that it features more conspicuously in oral traditions. Anomalies require clearer explanation, as suggested by the place-specific, driver-specific nature of volcano myths in places like Australia (and of course Fiji), in contrast to places where volcanism (and kindred catastrophic phenomena) are far more frequent and consequently their understandings inform multifarious aspects of their mythologies.

Myths as Social Strategies for Preserving Memory

In preliterate societies, memories of catastrophic (or memorable) events often start to fade through time, their retelling in oral contexts becoming less believable. This may lead to a need to make such stories more compelling, something invariably satisfied by exaggeration and embellishment—their mythologization (Barber and Barber 2004). Yet we can infer, not least from the extraordinary longevity of many “myths” (Nunn 2018), that there remained in most such societies a strong desire to communicate a comprehensive (and expanding) body of information to each new generation to optimize their chances of survival. This was a particular imperative in uncommonly harsh environments, like arid Australia, earthquake-exposed Japan, and the drought-prone United States Southwest, for example. In this way, myths developed as “social strategies” for preserving memory, including the understanding of the natural environment and how and why it might change. Linked to this was an understanding about how its human occupants might confront and ultimately survive such change, a message with clear resonance for today (Nunn 2020).

In the case of Fiji and other pre-nineteenth-century Pacific Island societies, it is almost certain that knowledge about the island worlds in which they were situated was systematically passed on from one generation to the next, explaining why at the time of European contact in the late-eighteenth century, Pacific islanders were recognized as adroit sailors and navigators, for example (Irwin and Flay 2015; Lewis 1994). Stories about periodic catastrophe would have been an important component of this systematic knowledge transfer, not least because they were part of history, calibrating a people’s journey through history to the present, but also as part of future risk preparedness (Ballard et al. 2020; Galipaud 2002).

The Nabukelevu stories recounted above are likely to have been socially constructed as collective (or communicative) memories, principally to accommodate people’s observations and understandings of the uncommon volcanic phenomena they had witnessed. Yet while the earliest versions of these stories would inevitably have been situated within culture and worldview, they were not true cultural memories (Assmann and Czaplicka 1995). Only later, when the collective memories became sufficiently distanced in time did they morph gradually into cultural memories, sustained on Kadavu by the oral retelling of these stories and their linkages to place, such as the “footprint” and “spear-hole” shown in Figure 4, and even the anthropomorphization of landscape, as with the landscape of Ono Island and the body of Tanovo. Similar anthropomorphization occurs in Norse cultures (Nordvig 2021; Taggart 2018) and is interwoven with animist beliefs in many others in the Asia-Pacific region (Ballard 2020; Glaskin 2018).

In the same way as, for example, animist beliefs have become part of contemporary Buddhist practice in Cambodia (Work 2019), so it is clear that indigenous people in Fiji “often endorse simultaneous belief in distinct kinds of supernatural beings: the Christian God (Bible God) and various ancestor gods (*Kalou-vu*)” (McNamara et al. 2016:36). Such beliefs may help explain the longevity of Nabukelevu stories for probably more than two millennia, but it is also important to acknowledge the influence of language on this. All versions of the story collected from Kadavu for this study were rendered in one or more vernaculars that not only contextualized the narrative details but also secure their links to place in a way that might not have been possible if non-native languages had been used. This leads to the conclusion that

Nabukelevu stories represent mytho-linguistic constructions of environmental phenomena (Nordvig 2021; Barber and Barber 2004) and would likely fail to be sustained if *either* they could no longer be rendered in their original language *or* their mythical basis lost its credibility to become treated—as has been the fate of many “myths”—as worthless or at best entertainment (Deloria and Wildcat 2001; Vansina 1985).

Myths for Mitigation of Future Catastrophes

It seems clear that in most longstanding cultures located in places where catastrophic events periodically occur, an imperative evolved which entailed the systematic incorporation of every such event in oral tradition (as collective memory) in order for key details—what happened, how did it affect people, how did they cope—to be passed on to successive generations to optimize their chances of survival should a similar event affect them (Nordvig 2019; Lauer 2012; Sobel and Bettles 2000). The systematization of intergenerational pragmatic knowledge transfer may underlie our contemporary love of fiction; as Nunn put it, “our modern predilection for narrative may derive from our attention to survival stories” (2018:26).

Elements of “risk management” became part of cultural memory and thence what we today label as “religion” in ancient societies. This explains why religious beliefs are “so often tied to the experience of life-threatening situations and fear” (Nordvig 2021:22). In addition to functioning as both collective and cultural memories, the Nabukelevu stories—like many similar ones—also serve as part of a risk-management strategy, specifically to educate every new generation of Kadavu residents about the fundamental threat posed to their lives and livelihoods by this fractious volcano. There are many similarities to the *Yuu Kuia* (“Times of Darkness”) stories from the New Guinea highlands (Blong 1982) that are regarded by the Enga people as *atome pii* (“historical events”), not *tindi pii* (“myths”) (Mai 1981). Considering the *Yuu Kuia*, dense eruption clouds which blocked out the sun for several days, to have a supernatural cause, “people continued to live in fear, expecting that another event like the *Yuu Kuia* would bring . . . a worse disaster to them” (Mai 1981:127-28).²¹

A final point is that the mythologizing of catastrophe is not simply a trait of ancient or traditional societies. For example, contemporary myths around “climate change” and even the “coronavirus pandemic” abound, especially among people struggling to accept the profundity of associated threats or those who desire to reassure their constituencies that they remain in control (Wright and Nyberg 2014). Whether this realization means that constructions of myth in preliterate (oral) societies were not solely in the interests of group preservation is an interesting question that is beyond the scope of the present study.

²¹ The syncretism with Christianity, which arrived in the New Guinea highlands at least one hundred years after the *Yuu Kuia*, was articulated by an Enga informant around 1980 (Mai 1981:136): “I think the *Yuu Kuia* was caused by the power of God (Christianity). He shook the sky so hard that it caused the *kati yuu* (ash—the soil from the sky) to fall off.”

Conclusion

This study has presented and analyzed stories from the island of Kadavu in southern Fiji that plausibly recall a volcanic eruption which occurred in 800-350 BCE. These stories are well known among Kadavu people and others today, an example of the power of (largely) oral cultures to encode and preserve information about memorable events for thousands of years (Nunn 2018). Comparable stories about volcanic eruptions, commonly dismissed as myth or legend, found elsewhere also have an empirical basis that is in many cases helpful to reconstructing the precise sequence of component events. These include the pioneering work by Blong (1982) on “times of darkness” in highland Papua New Guinea, when it became shrouded with ash clouds; the research of Taylor (1995) into tephra eruption and deposition recalled by local stories in the islands of Tonga; and that of Cohen et al. (2017) on Gugu Badhun (Australian Aboriginal) stories about Kinrara (Queensland) eruptions around 7,000 years ago. Commonalities among stories concerning *maar* volcanism have also been analyzed recently (Nunn et al. 2019).

The existence of ancient stories about memorable events should encourage conventionally trained scientists to pay more attention to the traditional media through which these stories have been preserved and kept alive (Nunn 2018; Kelly 2015). There are practical reasons for this. In recent decades, it has been increasingly realized that the successful uptake of strategies for improving climate-change adaptation and disaster preparedness in rural Pacific Island contexts, for example, depends on an acknowledgement of traditional knowledge and practice (McMillen et al. 2017; Gaillard and Mercer 2013; Nunn 2009). Not only do these encourage ownership of such issues by the communities that drive them; they also ensure, as far as possible, that strategies are localized and informed by local residents’ collective memory of place.

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Temporal Patterning and “Degrees of Orality” in Occitan and French Oral Narrative¹

Janice Carruthers and Marianne Vergez-Couret

Introduction

This article explores tense usage and tense-switching in the temporal structuring of Occitan and French oral narratives, drawing on theoretical frameworks in linguistics and sociolinguistics, as well as perspectives from anthropology and folklore studies. It forms part of a larger project, *ExpressioNarration*, financed by a Marie Skłodowska Curie Fellowship, incorporating the creation of a digitized corpus of oral narratives that has served as the dataset for an analysis of three major temporal phenomena in discourse, notably tenses, frame introducers, and connectives. Our objective in this article is to analyze the use of different tenses on the narrative line and the phenomenon of tense-switching in narratives that reflect different degrees of orality, with a particular focus on the relationship between temporal patterns and questions relating to the channel of transmission, the sources of the narratives, and their performance context.²

Tense usage and tense-switching have been investigated from a range of theoretical perspectives in various types of oral narrative in French (conversational, performed, medieval, modern, and so forth) and indeed in many other languages (see Section 1, below). However, despite considerable discussion in the literature regarding the scalar nature of orality (see Section 2.1, below), research on tense patterns in oral narrative has generally not integrated this notion of scalarity into the analysis. Yet for minoritized languages, where a rich oral narrative tradition is often found, sharp divides between neat categories such as “oral” and “written” are not meaningful, given the complexities around questions relating to transmission, sources, and performance of stories. Moreover, a number of other factors can influence linguistic usage, including the status of different languages, the strength of revitalization movements, the impact of language contact, diachronic and diatopic variation, the role of story-type, questions of individual style, as well as language competency in bilingual contexts. In this paper, we take oral narrative in Occitan as a case study through which to explore the relationship between tense

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² Carruthers and Vergez-Couret (2021) examine frame introducers and connectives.

usage (including tense-switching) and orality, using a model and a corpus (both designed by and for the project) which incorporate a scalar perspective (Section 2, below). We also include a comparator subcorpus of French oral narratives.

Occitan is a Romance language with a rich literary history.³ It is spoken in southern France, in twelve valleys in Italy, and in the Val d’Aran in Spain. There is no agreed standardized variety, and the language is widely thought to have six dialects, namely, Auvergnat, Gascon, Lengadocian, Lemosin, Provençal, and Vivaroaupenc (Bec 1995), two of which, Lengadocian and Gascon, are included in our corpus. As with many of the regional languages of France, usage of Occitan has declined dramatically since the Revolution of 1789 and particularly in the course of the last hundred years. There has been little official support for regional languages in France, where Article 2 of the Constitution states that French is the sole official language. Indeed, laws designed to support regional languages (for example, the *Loi Deixonne*, enacted in 1951) have had little positive effect, and France has not ratified the European Charter for Regional and Minority Languages. However, it is possible that the provisions of the *Loi Molac* (*Loi relative à la protection patrimoniale des langues régionales et à leur promotion*), passed in 2021, will offer increased support to regional languages in the future.⁴ In practice, the fate of many regional languages is highly dependent on the strength of grassroots movements, with considerable successes in the cases of Breton, Occitan, Alsatian, and Corsican. So-called “native speakers” of Occitan tend to be older, rural citizens, but a revivalist movement has been active since the 1970s, with a network of not-for-profit associations, including the *Calandreta* schools (bilingual French/Occitan schools which are mainly but not exclusively primary), the *Institut d’Estudis Occitans*, and the *Centre de Formacion Profesionala Occitan*.⁵ The revival is visible on street signs and in newspapers, and is audible on radio and television. Several universities offer major or optional classes, and culturally, there is a substantial network of artists, including writers, singers, and storytellers.

Section 1 will give a brief overview of the tenses on which we will focus in Occitan and French, drawing on previous theoretical research relating to tense usage and tense-switching, and pointing up the differences between the two languages in the context of language contact. Section 2 will open with a discussion of the notion of scalarity in relation to orality and will outline the corpus we have constructed for the project, paying particular attention to sociolinguistic questions relating to speaker background and use of Occitan, channel of transmission, story sources, variation, and performance context. Our research questions are set out at the end of Section 2. The core of the analysis is contained in Sections 3 and 4. These

³ In literary terms, Occitan is perhaps best known as the language of the Troubadour poets (eleventh-thirteenth centuries) and for its more recent revival in the nineteenth century through the work of Frédéric Mistral and the *Félibrige*.

⁴ <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000043524722>

⁵ Ronjat (1930) put the number of speakers in 1920 at around ten million. The *Enquête sur l’histoire familiale* related to the 1999 census puts the current numbers of active users at around 700,000 (Sibille 2010). A recent sociolinguistic study of the regions of Nouvelle Aquitaine and Occitanie (<https://www.ofici-occitan.eu/oc/restitution-de-las-resultas-de-lenquesta-sociolinguistica/>), published by l’Ofici Public de la Lenga Occitana (2020), argues that seven percent of the population of these regions are speakers of Occitan. Extrapolating up to the whole Occitan-speaking area would give a figure of around 600,000 speakers.

sections focus, respectively, on tense usage on the narrative line in relation to the different degrees of orality in our corpus (Section 3) and on the frequency and function of tense-switching across the subcorpora (Section 4). The short section (5) that follows discusses apparently contradictory patterns. The Conclusion will draw together our findings and suggest avenues for future research.

1. Narrative Tenses in Occitan and French: Theoretical Reflections

1.1 Narrative Clauses and the Narrative Line

There are multiple theoretical approaches to defining the term “narrative.”⁶ For linguists, especially those working on oral narrative, most definitions are predicated on a macro-level assumption that the order of events in a narrative corresponds broadly to their sequence in time. As Labov and Waletzky put it, the translation of experience—real or imagined—into narrative is “one method of recapitulating past experience by matching a verbal sequence of clauses to the sequence of events that actually occurred” (1967:20; see also Labov 1997). At a micro-level, events are contained in “narrative clauses,” although the latter can also contain “states” that are bounded, that is, considered to occur within a bounded time period (Carruthers 2005:13-18). The link between narrative clauses and temporal sequence is captured theoretically in different ways, including frameworks based on discourse structure (Smith 2003), discourse relations (as in Segmented Discourse Representation Theory; Asher and Lascarides 2003), praxematics (Bres 2001), relevance theory (Moeschler 2000), and discourse-pragmatics (Fleischman 1990). All theories account for exceptions to the default assumption of temporal sequence, where events in sequential clauses may not succeed each other in time; in such cases, there is usually linguistic evidence that points to a relation other than sequence, such as simultaneity (Smith 2003:94-95). It is also important to note that stories obviously contain types of clause other than narrative clauses, in particular, descriptive clauses and direct discourse attributable to the characters in the story. The focus in this article is exclusively on tense usage in the narrative clauses that contain events on what we will term the “narrative line.”

In terms of the tenses that can appear as markers of events in narrative clauses, there are three main possibilities in French and Occitan: the *Passé Simple/Passat Simple* (PS), the *Passé Composé/Passat Compausat* (PC), and the *Présent Narratif/Present Narratiu* (Pnarr). However, there are significant differences between French and Occitan in terms of how the PS and PC operate in discourse, a factor that could be significant given the level of contact between the two languages. As background to our analysis in Sections 3 and 4, Sections 1.2-1.4 will give a brief overview of the established temporal and aspectual functions of these tenses in narrative discourse, including the phenomenon of tense-switching.

⁶ Fludernik (2009:1-12), for example, discusses a range of approaches.

1.2 PS and PC in French

In French, the PS is most frequently found as the narrative tense of many literary narratives. In this context, it references non-habitual, completed past-time events, which, when there are no counter-indications, are assumed to occur in sequence. We will refer to this function as that of marking the preterite.⁷ The PS is extremely rare in spoken French (especially where there is no link to a written script) but is attested in journalistic French, where it can have key discourse-pragmatic functions in the context of tense-switching in texts where it is not the dominant narrative tense. Waugh and Monville-Burstion (1986) highlight journalistic examples where the PS renders certain events or states more salient, referring to this as the PS's capacity for "detachment" and "dimensionalisation" (that is, creating clear boundaries around the event or state), which is in turn linked to its telicity and aspectual boundedness.

The PC has two main functions in modern French, hence its label as a "temps à deux visages" (Martin 1971:103). The first denotes the present perfect, which is the equivalent of the English "I have done" (*j'ai fait*), a function fulfilled by the PC in both written and spoken varieties of the language. The strong association of the PC with a present-centered perspective on an event or state is reflected grammatically in the present tense of the auxiliary verb. The second function is as a marker of non-habitual, completed past-time events (in other words, as a preterite) in spoken French and many varieties of the written language, which is the same function as that of the PS in many varieties of literary French. In other words, whereas some written modes, such as literary narratives, distinguish between a preterite (PS: *il fit*) and a present perfect (PC: *il a fait*), others, including most oral varieties, use the PC (*il a fait*) for both these functions.⁸

1.3 PS and PC in Occitan

The PS is the typical tense for narrative clauses in Occitan stories, whether written or spoken (Sibille 2015). In most varieties of Occitan, the PC does not normally mark events on the narrative line (as in the preterite function) but rather serves mainly as a present perfect, that is, it denotes completion in relation to the present, sometimes creating a "result state," whereby *ara ai manjat* (*maintenant j'ai mangé*) means, "I am now in a state of someone who has eaten and am no longer hungry" (Sibille 2015:255; see also Teulat 2008).⁹ In other words, the PC/PS opposition in Occitan mirrors the opposition in literary varieties of French but is distinct from the system in spoken French, with which it is in contact. It is also important to note diatopic variation in Occitan, whereby in the Gascon maritime region, the PC is now widely used in the

⁷ Note that we distinguish form (for example, PS) from function (such as preterite) throughout this paper.

⁸ See also Waugh (1987), who further subdivides these two main functions of the PC into four.

⁹ It is also possible to find examples where the event marked by the PC is much less clearly a perfect in relation to the present and functions more like a preterite, which is "recent" and therefore closer to the present, such as (Gairal 2001:81): *Arribèt fa cinc jorns, es tornat partir aqueste matin* ("he **arrived** five days ago, he **left** this morning"). However, examples such as these are not the norm (for a full discussion, see Sibille 2010).

preterite function. Lassalle (2017:82-83)¹⁰ dates this development to the late-nineteenth century, citing evidence also of non-standard PS forms that may suggest less widespread use of the PS in the area.¹¹ Since we have some stories in Gascon in the corpus, we will return to the question of possible diatopic variation.

1.4 *Présent Narratif and Tense-Switching*¹²

Use of the *présent narratif* (Pnarr) as a narrative tense for past-time events, particularly in oral varieties, is a well established phenomenon across a wide range of languages, including French. Early explanations tended to focus on the present-time functions of the Pnarr in making a past event appear more “present” and therefore more vivid, or in making the present of the narrator seem closer to the past event (Ollier 1978). More recent theoretical explanations tend to assume that the present is fundamentally an atemporal form that acquires its temporal meaning in context, thereby opening the way for a host of pragmatically motivated meanings (Fleischman 1990). In the context of research on tense patterning in oral discourse, the Pnarr is most strongly associated with tense-switching, that is, switching between the present and a past tense to mark past-time events on the narrative line (Carruthers 2005). In contemporary conversational French, this is usually a question of alternation between the PC and the Pnarr, since, as noted above, the PC functions as the preterite of informal spoken French. In Old French, there is clear evidence that alternation often involved PS and Pnarr, with PC/Pnarr also a possibility (Fleischman 1990). PS/Pnarr alternation is also possible, if rare, in performed storytelling contexts in contemporary French, as we shall see, but it is not normally found in conversational French. Although the Pnarr is mentioned in grammars and in descriptive accounts of Occitan (for example, Sibille 2015), there is no published research that we know of on tense-switching between past and present in oral varieties of Occitan.

Most research on tense-switching relates to the functions of the Pnarr in oral discourse, but, as mentioned above in Section 1.2, the PS has also been analyzed in journalistic French in alternation with PC and Pnarr. In some contexts, it is the switching itself, and the texture it can create in the narration of events that is paramount, rather than the individual functions of particular tenses. The possible effects and functions of tense-switching are well documented across many languages, including French but not Occitan. It is impossible to do these justice in a few lines, but among the most widely documented are a number of effects and functions that are related to each other in terms of marking phenomena that are linked to saliency and subjectivity (Carruthers 2005:74-97): for example, Pnarr or PS for **foregrounding salient events** where, as a

¹⁰ We are grateful to Jean Sibille for this reference.

¹¹ Interestingly, variation in the conjugation of the PS is also linked by Vaugelas (1647:109), in the early modern period, to increased use of the PC in French.

¹² We will use the term “narrative present/*présent narratif*” where the present marks past events on the narrative line. There is some variation in the terminology used in the literature. Sibille (2010) deploys the term “historic present” for this usage, reserving “narrative present” for contexts where both past events and states are rendered in the present, as found in some contemporary literary contexts. Fleischman (1990) uses the term “narrative present” in the same context as we do but uses “historic present” for contexts where it does not alternate with a past tense but is used consistently for past-time events in large stretches of text.

marked usage relative to the majority narrative tense in the surrounding discourse, the event(s) in question thus stand(s) out from the surrounding narrative; **turbulence at narrative peaks**, where rapid alternation between present and past occurs at a point of heightened narrative tension; **Pnarr and PC/PS structuring the narrative into different sections** or blocks with different discourse topics (or episodes), where Pnarr is the narrative tense in one block and PC or PS in the next; Pnarr **moving the narrative forward** where it occurs at the beginning of a new section or sub-section of the story, in some cases accompanied by frames such as *le lendemain matin* or by adverbials marking suddenness; **closure with the PC or PS**, where the aspectual perfectivity of the PC and PS (unlike the aspectual multivalency of the present which has both perfective and imperfective properties) reinforces a sense of completion, either of a section of the narrative or indeed of the entire narrative; and tense-switching to **speed up or slow down the narrative**, with the Pnarr associated more strongly with the former and PC with the latter. Fleischman (1990) divides such functions of tense-switching into textual (structural), expressive, and metalinguistic categories.

It could be argued that these types of function are brought together in many instances of tense-switching with **verbs of speech**, notably *dire*, which is a particularly frequent correlation (Carruthers 2005:70-74): rapid tense-switching with *dire* often occurs on the borders between direct speech and chunks of narrative text, breaking up the story in structural terms and anticipating or following the performance and subjectivity associated with direct speech.

In this article, we will explore the tenses found on the narrative line in different degrees of orality in Occitan, as well as the phenomenon of tense-switching, including a comparison with French. In practice, the focus will therefore be on PS, PC, and Pnarr in both languages.

2. The Corpus

2.1 A Scalar Approach

Research in linguistics, literature, anthropology, and folklore has moved well beyond the concept of a binary divide between “oral” and “written.” Amongst the best known models in linguistics is that of Koch and Oesterreicher (2001), where alongside a binary divide between oral and written channels, they propose a scalar polarity in relation to formality between *conception écrite* and *conception orale*, as well as a further set of continua between polarities relating to concepts such as private versus public communication, spontaneity versus preparedness, and intimate versus distanced relationship with interlocutors. Several of these parameters will emerge as pertinent for our discussion of oral narrative. Biber and Conrad’s multidimensional account of genre/register (Biber 1988; Biber and Conrad 2009) also maps the complex sets of relationships between linguistic features, situational features (for example, participants, setting, channel, communicative purpose, and topic), and what they term “dimensions” on a continuum between two polarities (such as oral versus literate discourse or narrative versus non-narrative discourse), rather than categorizing discourse in binary terms like “oral” and “written.” Indeed, in Biber and Conrad’s model, such an absolute distinction does not exist (Carruthers 2018).

Folklorists, anthropologists, and literary scholars working on oral literature have also increasingly rejected a binary oral-written divide, both in terms of the way in which broad societal factors relating to orality and literacy are framed, and also in relation to the properties of oral narrative as regards composition, transmission, and performance. Indeed, they argue that such binaries can easily lead to other false dichotomies, with writing becoming all too easily associated with sophistication, rationality, and the urban post-industrial world, and orality with small-scale, non-industrial, communal ways of life (Finnegan 1988). As Finnegan puts it: “how useful is this binary typology when it turns out that most known cultures don’t fit?” (141). Zumthor’s (1983) framework, too, brings out the more nuanced nature of societal dynamics, making a distinction between *oralité primaire/pure* (where there is no evidence of a writing system), *oralité mixte* (where a writing system exists but its influence is limited for sociological and/or educational reasons), and *oralité seconde* (where a writing system is strongly embedded in society, and its influence on orality is therefore inevitable).

Speaking specifically of oral literature, Finnegan (1988:110-22; see also 1977:23-24) demonstrates the “overlap” between oral and written in relation to sources (which can be oral or written or both in a given context), composition (which can involve both written and oral processes, including oral composition-in-performance), and dissemination (which can take a number of different oral and written forms, including publication). In his work on oral poetry, Foley (2002:39) also avoids clear-cut divisions, taking a scalar approach which considers oral, aural, and written dimensions in his model of media categories in relation to composition, performance, and reception. The theoretical debate thus suggests that questions concerning sources/composition, transmission, and performance/dissemination are critical to the dynamic between oral and written in a given storytelling context and against a particular societal backdrop.

Our starting point is therefore that the concept of orality is a relative one, with different degrees of “oral-ness” in different contexts. It follows that our understanding of temporal phenomena in oral narrative has the potential to be greatly enriched and significantly more nuanced if the notion of different degrees of orality is embedded in the analysis, all the more so in a minoritized language where linguistic, societal, and practice-related factors are likely to play a role in the patterns attested. Moreover, beyond the question of scalarity, there is scope for variation across a number of other parameters, not least with regard to diatopic variation, diachronic changes, individual styles of storytellers or writers, different story-types, as well as varying levels of bilingualism and language contact. In this study, we have therefore aimed to strike a balance between devising a taxonomy that allows us to create a corpus which has the potential to show meaningful comparisons across different degrees of orality, while at the same time undertaking an analysis which is sensitive to the multiple possible levels of variation that may be found in the data. As Foley puts it, “the trick is to find a level that is just fine-grained enough to be diagnostic, just comprehensive enough to demonstrate some overall unities and offer some practical bases for comparison, and just flexible enough to accommodate the natural diversity of human expression” (2002:39).

2.2 The Four Subcorpora

The corpus created for the project contains four subcorpora of narratives (three in Occitan and one comparative corpus in French) based on a taxonomy which includes their channel of transmission (oral or written), consideration of story sources (written or oral), and their context of communication (as written texts to be read, as part of a community-based oral tradition, or as a more stylized public performance).¹³ These communicative contexts involve differing levels of spontaneity: stories recounted as part of an oral tradition are relatively spontaneous and informal, whereas contemporary public performances for an audience generally involve higher levels of pre-planning and a relatively staged context, sometimes with music, props, and costume (cf. Koch and Oesterreicher 2001).

All our stories are drawn either from the European repertoire of traditional stories or from other cultures around the world, although these can incorporate regional and local references. Where possible, in the metadata, we have given the story categorization using Aarne and Thompson's (1961) widely known classification system, including general categories (such as Animal Tales, Tales of Magic, Anecdotes or Jokes, Formula Tales, Tales of the Stupid Ogre, and so forth), subgroups (for example, Wild Animals and Domestic Animals, Supernatural Adversaries, and The Stupid Man), and tale-types (as in, AT 124, Three Little Pigs; AT 303, The Twin Brothers; AT 1696, What Should I Have Said; and so on). The stories that we could categorize using the Aarne-Thompson system were classified as *contes* (since they are clearly identifiable as part of the European oral tradition), while those not falling under these categories were classified as *récits*.¹⁴ Given the nature of the data (that is, in a minoritized language with limited sources available), it is not always possible to achieve a perfect balance as regards the story-types included in each subcorpus, although we have tried to do this as far as possible (Carruthers and Vergez-Couret 2018). All available metadata regarding storytellers (age, region, gender, and so forth) and/or publication factors are also recorded in the header for each story. Every attempt was made to balance the corpora as far as possible for gender, although this was not possible for the all-male cohort of writers in the case of the published stories. Any issues relating to diatopic variation will be raised in our discussion (we have stories in both Gascon and Lengadocian), but it was not always possible to balance the subcorpora in this regard. The stories in the different subcorpora also vary in length, and we therefore distinguish between short stories (labeled "S": < 1,000 words), medium-length ("M": 1,000-2,000 words), long stories ("L": 2,000-3,000 words), and very long stories ("VL": >3,000 words).¹⁵

¹³ The corpus, *OcOr* (Vergez-Couret and Carruthers 2018), is available for download at <https://zenodo.org/record/1451753#.Y3UYUi2cZXg>. Carruthers and Vergez-Couret (2018) discuss the methodology employed, including fieldwork, digitization, annotation, and so forth.

¹⁴ In classifying the story-types we give the terms in French so as to distinguish clearly between *contes* and *récits*.

¹⁵ Given the variations in length of individual stories, the number of stories varies across the subcorpora. OOT = twenty-six stories, approximately 16,600 words; OOC = thirteen stories, approximately 19,000 words; FOC = thirteen stories, approximately 20,000 words; OWT = nineteen stories, approximately 18,200 words.

The four subcorpora are constituted as follows:

OOT (Occitan, oral,¹⁶ traditional): The stories in OOT are traditional stories in the sense that they are acquired and disseminated as part of an oral tradition, with most speakers born between the second half of the nineteenth and the early-twentieth century. They were collected by means of fieldwork among native speakers of Occitan, most of whom, given the period in question, were likely bilingual in French and Occitan, with Occitan more likely to be their mother tongue. The recordings are held in the COMDT (*Centre Occitan des Musiques et Danses Traditionnelles*) in Toulouse and have been subsequently transcribed, digitized, and analyzed by this project. The language used in OOT is thus in every sense “oral”: transmission and sources are oral, with no written influence. The performance is community-based, informal, and spontaneous in nature. Metadata on the storytellers is incomplete, with more information on dates of birth and less on place of birth or work.

OOC (Occitan, oral, contemporary): These stories are recounted by contemporary artists, taken from existing recordings and two Toulouse storytelling events organized by the project.¹⁷ Story transmission is oral (in front of an audience) and relatively spontaneous; in some cases, there is a strong performative dimension in the sense that the stories are practiced, stylized, and staged (with music, accessories, and so forth) in comparison to those told as part of an oral tradition in OOT. Indeed, the OOC descriptors in relation to performance, stylization, and staging, as well as the tendency to use written sources, mean that most storytellers in OOC would be considered to be “new” rather than “traditional” storytellers (see the discussion of FOC below). However, it is important to point out that some OOC storytellers self-identify as strongly associated with the oral tradition, and of course their use of a regional minoritized language places them closer to this tradition than those in our contemporary French corpus (FOC). Moreover, unlike FOC, oral sources can be used alongside written sources by the storytellers in OOC, especially by those who feel a strong link with the oral tradition. The storytellers in OOC are either native speakers of French who have learned Occitan (not usually through the school system) or are, to varying extents, bilingual in French and Occitan if they have a strong family connection with Occitan. All were born between 1944 and 1981, were educated in French, and are fluent French speakers. The storytellers in OOC are thus a heterogeneous group, sharing a number of descriptors with FOC and some with OOT.

FOC (French, oral, contemporary): As a point of comparison, our third subcorpus involving oral transmission is a selection of contemporary oral storytelling in French drawn from the *French Oral Narrative Corpus* (Carruthers 2013). These stories are recounted by contemporary artists and were recorded at the CLIO (*Conservatoire Contemporain de Littérature Orale*) and subsequently transcribed and digitized. Stories are performed in a relatively spontaneous context, albeit often with music, accessories, and some staging. In the case of FOC, sources are always written, and stories are worked into an oral performance which is practiced but not memorized. All storytellers

¹⁶ “Oral” and “written” in the titles of the subcorpora refer primarily to the channel of transmission.

¹⁷ One recording is taken from the DVD *Les contes du placard* by Florant Mercadier (2013) and used with his permission. All other recordings were made during two events held on September 28, 2016, and October 26, 2016, at *l’Ostal d’Occitania*, in collaboration with the *Institut d’Estudis Occitans* (IEO).

in FOC (as with most in OOC) would be termed “new” storytellers; they are not part of an oral tradition but use written sources that blend local, national, and international stories. Although the literature on storytelling draws a clear distinction between “traditional” (OOT) and “new” storytellers, for our corpus the difference is much clearer in FOC than OOC; FOC unequivocally concerns new storytellers, whereas this is the dominant (but not the only) group in OOC.

OWT (Occitan, written, traditional): The stories in OWT are also traditional in the sense that they have been collected through fieldwork with storytellers who form part of an oral tradition. However, unlike OOT, these are written, published versions of the stories, and there are no existing recordings of the original oral versions collected during fieldwork. This project has digitized the published versions.¹⁸ Metadata on the collection process and the original storytellers are of variable quality, but we know from information relating to names, gender, occupation, dates/places of birth, and publication dates that most storytellers were born in the first half of the nineteenth century, with the texts published in the late-nineteenth century. We know nothing about the storytellers’ knowledge of French, although it is likely, given the period in question, that most had little or no French. The writers were certainly educated (including teachers, an archivist, a judge, a poet, and so forth), born also during the nineteenth century; they published both in French and Occitan. We have no information on the nature of the fieldwork or on the relationship between the oral sources and the written published versions of the stories, and this is an issue to which we will return.

To use Zumthor’s terms (see Section 2.1, above), both OOT and OWT are products of an *oralité mixte*; although we know that the writers in OWT are literate in Occitan and French, this is not the case for the storytellers in OWT, while those in OOT may have acquired some literacy in French through the school system but not in Occitan. By contrast, both OOC and FOC are products of an *oralité seconde*, meaning that large swathes of society in general (including the audiences) and the storytellers themselves are strongly influenced by the literate culture around them and by their educational experience in that culture through the medium of French. That said, although the storytellers in OOC can read and write in Occitan, they have differing levels of literacy and fluency: Occitan is invariably somewhat less well embedded linguistically in their background and certainly perceived to be less prestigious than French in wider society.

Table 1 summarizes the descriptors of the four subcorpora (adapted from Carruthers and Vergez-Couret 2018):

¹⁸ Carruthers and Vergez-Couret (2018) discuss the complexities of this process

OOT	OOC	FOC	OWT
+ Spontaneous – Planning + Traditional	+ Spontaneous + Planning +/- Traditional	+ Spontaneous + Planning – Traditional	– Spontaneous + Planning + Traditional
Oral sources	Written and oral sources	Written sources	Oral sources
<i>Oralité mixte</i>	<i>Oralité seconde</i>	<i>Oralité seconde</i>	<i>Oralité mixte</i>
Speakers born between the second half of the nineteenth and the early-twentieth centuries	Speakers born from the mid-twentieth century onwards	Speakers born from the mid-twentieth century onwards	Speakers born in the first half of the nineteenth century

Table 1. Descriptors for the four subcorpora.

2.3 The Research Questions

In the light of our objective of exploring tense usage and tense-switching in relation to different degrees of orality, our core research questions are:

- What tenses are used on the narrative line in the four subcorpora, and how do the subcorpora compare with each other? What is the relationship between narrative tense usage and different degrees of orality, taking into account questions around written versus oral transmission, written and oral sources, and performance context in terms of tradition and practice?
- To what extent is tense-switching found in the four subcorpora, and how, if at all, is this related to different degrees of orality in terms of frequency, rate, and function?
- To what extent do other factors play a role in the patterns attested, such as individual variation in style, diatopic or diachronic variation, story-type, or language contact between French and Occitan?
- How clear-cut are the patterns? What factors might be at work in examples that do not fit the dominant patterns?
- Can the introduction of a scalar approach to orality enhance our understanding of tense usage in oral narrative? If so, what might be the wider implications of this in other domains?

3. Tense Patterning in the Four Subcorpora

3.1 *Tenses on the Narrative Line: Overall Patterns*

Our analysis of the major tenses occurring in narrative clauses for each subcorpus reveals a variety of patterns, as shown in Table 2.¹⁹ In each case, the table gives the number of stories with each of the possible narrative tenses (PS, PC, Pnarr) as the major tense on the narrative line or with a combination of two of these tenses in roughly equal distribution. We have defined a major tense as one that occurs in 60% or more of the narrative clauses in a story; thus, in many contexts, there will nonetheless be a significant presence of at least one other narrative tense, and we will return to this below. In seven stories, where the percentage distributions of two tenses were between 46% and 54%, it seemed arbitrary to speak of a major tense, and in these cases, we classified the story in the category 50/50.

Major tense (by story)	OOT	OOC	FOC	OWT
PS	5	6	1	14
PC	2	2	8	0
Pnarr	16	4	4	2
PS/Pnarr (50/50)	3	1	0	3

Table 2. Major tenses on the narrative line by story.

At the two ends of our table (OOT and OWT), the patterns are characterized by a strong preference for one tense as the major narrative tense, that is, Pnarr for OOT and PS for OWT. The picture is more complex for OOC and FOC. In OOC, although the main preterite form (in this case PS) is used most frequently as the major narrative tense, there is nonetheless considerable use also of the Pnarr in that role. As for FOC, the breakdown of the various patterns attested in this range of stories is similar to that found in previous research based on a larger corpus (Carruthers 2005): the PC plays a pivotal role and is quantitatively the most frequent tense, with the Pnarr also used as the major narrative tense. The PS is marginal, as we might expect (see Section 1.2, above). We shall return below to the PC's absence from OWT and to the stories where PC is the main narrative tense in OOC and OOT.

Table 2 shows clearly that each subcorpus operates differently in terms of major tenses on the narrative line. These initial observations open the way for further exploration of the relationship between the patterns attested and different degrees of orality, considering, where relevant, factors such as diachronic or diatopic variation, individual variation, and language contact with French. Sections 3.2 through 3.5 will focus on the question of **major tenses** on the narrative line in each of the subcorpora, as well as the **alternation patterns** attested, before moving in Section 3.6 towards some interim conclusions. Frequency, rates, and the functions of **tense-switching** will be considered in detail in Section 4.

¹⁹ See the discussion in Section 2.2 concerning balance across the corpus in terms of numbers of stories and numbers of words in each subcorpus.

3.2 Stories in OOT

The patterns in OOT are described in the following table:²⁰

Story Title	Storyteller	Tense pattern
“L’istòria d’un paisan del caulet” (S)	M. Berthoumieu	Pnarr only
“De passatge a Bordeu” (S)	Armand Lescouyères	Pnarr mainly/Some PS
“Lo ciror e la filha” (S)	Germain Montaubric	Pnarr mainly/Some PS
“La craba qu’èra bièn mentura” (S)	Alice Meyrat	Pnarr mainly/Some PS
“Histoires de tours du Drac” (S)	Noémie Batifol	Pnarr mainly/Some PS
“Un dròlle pas interessant” (S)	Hermine Calastrenc	Pnarr mainly/Some PS
“Fin volur” (S)	Hermine Calastrenc	Pnarr mainly/Some PS
“Josèp l’amic de las bèstias” (S)	Céline Calvet	Pnarr mainly/Some PS
“Lo marat e la marata” (S)	Mme Gibli	Pnarr mainly/Some PS
“L’œuf de jument” (S)	M. Berthoumieu	Pnarr mainly/Some PS
“Jan de l’ors” (S)	M. Berthoumieu	Pnarr mainly/Some PS
“La bèstia de 7 caps” (M)	M. Berthoumieu	Pnarr mainly/Some PS
“Le jeune homme et le lion” (M)	M. Berthoumieu	Pnarr mainly/Some PS
“Lo conte del nau lops” (S)	Marguerite Lagarde	Pnarr mainly/Some PS
“Le mic e mac” (M)	André Daste	Pnarr mainly/Very little PS
“Légende des animaux . . .” (S)	Elizabeth Barbedienne	Pnarr mainly/Very little PS
“Istòria de Gargantua” (S)	Céline Calvet	PS only
“Histoire du lac . . .” (S)	Noémie Batifol	PS only
“Joan d’Auret” (S)	Aurélie Philipot	PS/Pnarr
“L’ueu de cisampa” (S)	Storyteller_OOT_1	PS/Pnarr
“Le conte des trois poulettes” (M)	Maria Girbal	PS/Pnarr
“L’orra bèstia de la coeta verda” (S)	Céline Calvet	PS mainly/Some Pnarr
“Istoèra del curè d’Escaudes . . .” (S)	Daniel Lacampagne	PS mainly/Some Pnarr
“Un talhur seguit per un canh” (S)	Storyteller_OOT_2	PS mainly/Some Pnarr
“La taupa e lo grapaud” (S)	Storyteller_OOT_3	PC only
“Lo bon diu e lo pleu pleu” (S)	Storyteller_OOT_3	PC mainly/Very little PS

Table 3. Patterns in OOT.

The most common patterns for OOT are, in order of frequency: Pnarr mainly/PS, PS mainly/Pnarr, and PS/Pnarr in broadly equal proportions. Both Pnarr and PS are therefore central in OOT, even if Pnarr is present in greater proportions across the subcorpus. Broadly speaking, the patterns in OOT are thus very clear. OOT_3 is the only storyteller employing the PC on the narrative line, though she does so almost entirely consistently. There are two possible explanations for this, and it is impossible to know which is valid. We have no biographical

²⁰ S = short; M = medium; L = long; VL = very long—all refer to the length of the story (see Section 2.1, above). Note that we are using approximate terms such as “mainly,” “some,” and “very little” when describing the tense distribution. This is because (i) percentages would be based on low raw numbers in several instances, and therefore reliability would be inconsistent across the corpus; and (ii) raw numbers would not be meaningful in themselves and could obscure the patterns. Our description of the patterns is intended to draw out broad tendencies rather than to offer detailed statistical information.

metadata for the storyteller (who is anonymous), but we know that the story was recorded in 1973, that the speaker was elderly at that point, that (like the other speakers in OOT) she was a native speaker of Occitan who probably also spoke French, and that the recording took place in Moulis-en-Médoc, which is located outside but within fifty kilometers of the Gascon maritime area where the PC is regularly employed with a preterite function (see 1.3 above). There is thus a possibility, given the proximity, that she spent part of her life in the Gascon maritime area, or that she has networks there, and that this is therefore a case of diatopic variation. However, we cannot be certain of this. The other possible explanation is that we are dealing with a case of individual variation whereby the PC is used due to language contact with French. No other speakers in OOT can be located close to the Gascon maritime area, nor does any other storyteller use the PC, so it is difficult to draw reliable conclusions.

We shall return to the widespread use of tense-switching in OOT in Section 4.2, below, but note at this stage that, despite some evidence of individual storyteller preference in relation to the main narrative tense as PS, Pnarr, or PC, patterns are not clear enough and the number of stories per storyteller not sufficiently large to suggest that each storyteller has a preferred pattern.

3.3 Stories in OOC

The patterns found in OOC are highly diversified:

Story Title	Storyteller	Tense pattern
“L’ueu de mula” (S)	Storyteller_OOC_MC	PS only
“La hada e la goja” (S)	Storyteller_OOC_MC	PS only
“Les fées de la dune de Bombèt” (M)	Storyteller_OOC_MC	PS only
“Lo peisson-lèbre” (S)	Storyteller_OOC_MB	PS mainly/Some Pnarr
“Lo gabarròt” (L)	Storyteller_OOC_PB	PS mainly/Some Pnarr
“L’ase, lo moton, la pola e lo lop” (M)	Storyteller_OOC_PB	PS mainly/Some Pnarr
“Lo vailet e lo diable” (M)	Storyteller_OOC_PB	PS/Pnarr
“Lo grelh” (S)	Storyteller_OOC_FM	Pnarr only
“Lo dròlle logat” (M)	Storyteller_OOC_MB	Pnarr only
“La bòta” (L)	Storyteller_OOC_MB	Pnarr mainly/Very little PC
“La çaça volenta” (S)	Storyteller_OOC_MB	Pnarr mainly/Very little PC and PS
“Las abelhas” (L)	Storyteller_OOC_PV	PC mainly/Some Pnarr and PS
“La mair deu conte” (S)	Storyteller_OOC_PV	PC mainly/Very little Pnarr and PS

Table 4. Patterns in OOC.

First of all, it is less relevant in this case to look at the frequency for each pattern, as it is striking that particular patterns are often strongly—albeit not exclusively—correlated with individual storytellers. Most storytellers from whom we have more than one story seem to have one preferred tense as the main tense on the narrative line: PS for OOC_MC and OOC_PB, PC for OOC_PV. Two storytellers use the PC as a narrative tense, and one of these two (OOC_PV) uses it as his main narrative tense. However, although OOC_PV is a speaker of contemporary Gascon, he is not from the region where the PC in a preterite function is found, that is, the Gascon maritime, or from a neighboring area. Indeed, he is a young speaker who has acquired Occitan as a second language, largely through contact with native speakers, none of whom comes from the

Gascon maritime. It is most likely, therefore, that his systematic use of PC as the main narrative tense is an individual pattern that has developed through language contact with French. OOC_MB uses only a very small amount of PC towards the beginning of her stories. In conversation with her, it became clear that she usually recounts these stories in a bilingual context, where she alternates between French and Occitan. The passages where the PC is found in the corpus are ones that she normally recounts in French; it is most likely, therefore, that her use of PC, like OOC_PV's, relates to language contact with French, but unlike OOC_PV, OOC_MB makes occasional rather than systematic use of the PC in this function.

We can say with confidence that PS and Pnarr are both important narrative tenses in OOC: one or the other or both appear in all stories, and they are the most common principal narrative tenses in the subcorpus. Perhaps most striking is the fact that each storyteller tends either to have a preferred pattern for tense-switching or tends not to tense-switch. We shall return to this in Section 4.3, below.

3.4 Stories in FOC

The thirteen stories analyzed in our subcorpus reflect the wider patterns across the much larger corpus discussed in previous research (Carruthers 2005). They can be described as follows:

Story Title	Storyteller	Tense pattern
“Le fils du roi et le corbeau” (M)	Storyteller_FOC_ECv	PS only
“Ankou” (L)	Storyteller_FOC_PC	PC only
“Histoire de femmes” (M)	Storyteller_FOC_FD	PC only
“Le crapaud et la tortue” (S)	Storyteller_FOC_ECa	PC only
“Mange ma graisse” (S)	Storyteller_FOC_ECa	PC only
“Pokou 1” (S)	Storyteller_FOC_GB	PC mainly/Very little Pnarr
“Le roi des pigeons” (M)	Storyteller_FOC_IS	PC mainly/Very little PS and Pnarr
“Contes de Bourgogne” (M)	Storyteller_FOC_CM	PC mainly/Very little PS
“Le paysan et la paysanne” (L)	Storyteller_FOC_AK	PC mainly/Some Pnarr
“Le cordonnier de la ville du Caire” (M)	Storyteller_FOC_AB	Pnarr mainly/Some PC
“La chemise magique” (VL)	Storyteller_FOC_RN	Pnarr mainly/Some PC
“La compagnie des loups” (S)	Storyteller_FOC_JG	Pnarr mainly/Very little PC
“Le mari trompé” (M)	Storyteller_FOC_GB	Pnarr mainly/Very little PC

Table 5. Patterns in FOC.

In terms of frequency, the most common patterns are PC only and PC alternating with Pnarr; in the latter case, there are multiple patterns in terms of quantities of the two tenses, running from mainly PC through to mainly Pnarr. The PS is marginal, both as the sole narrative tense or in alternation with PC, as we might expect in the oral medium; its use is likely to be strongly influenced by literary or other written sources where it is the unmarked past tense in French (see Section 1.2, above). The Pnarr never operates as sole narrative tense; it is strongly associated with tense-switching and therefore always appears alongside either PC (in most cases) or PS and

PC (rarely). The use of PC is thus central to the patterns in contemporary French storytelling, operating as the sole tense on the narrative line or in alternation with Pnarr or occasionally PS (see Sections 1.2 and 1.4, above). We have no examples of PS/Pnarr tense-switching, probably because “a contemporary *oralité seconde* appears to be uncomfortable with NPR/PS and PS/NPR shifts” (Carruthers 2005:88), since the temporal properties and medium/register associations of the two tenses are totally divergent in French (present versus distant past; spoken discourse/proximity to speaker versus literary narrative/formal discourse).

3.5 Stories in OWT

The patterns found in this subcorpus are described in the table below:

Story Title	Author	Tense pattern
“Lo vielh e los tres volurs” (S)	Arnaudin	Pnarr mainly/Some PS
“Compair Loison e la mair deu vent” (VL)	Arnaudin	Pnarr mainly/Some PS
“Lo bon diu e lo diable” (M)	Arnaudin	Pnarr/PS
“La pelha arrecastada” (S)	Arnaudin	Pnarr/PS
“Lo gojat” (S)	Lambert	Pnarr/PS
“Peton-Petet” (S)	Lambert	PS only
“Las sorcièras” (S)	Lambert	PS only
“Joan Lo pigre” (M)	Bladé	PS only
“Los dus bessons” (M)	Bladé	PS only
“La flaüta” (S)	Bladé	PS only
“Pèl-d’Ase” (M)	Bladé	PS only
“Lo voiatge de Joanòt” (M)	Bladé	PS only
“Perqué las fumèlas . . .” (M)	Lalanne	PS only
“La formiga que s’enanava a la fèsta de Sabardu” (S)	Séré	PS only
“Las tres galinetas” (S)	Lambert	PS mainly/Some Pnarr
“Lo lop malaut” (S)	Bladé	PS mainly/Some Pnarr
“Lo maset” (S)	Montel	PS mainly/Some Pnarr
“Turlendú” (S)	Montel	PS mainly/Some Pnarr
“La formiga que s’enanava a . . .” (S)	Séré	PS mainly/Very little Pnarr

Table 6. Patterns in OWT.

Overall, there is strong preference for PS as the major narrative tense in OWT, the other possible tense being Pnarr. The most common patterns in order of frequency are PS only, PS mainly/Pnarr, and Pnarr/PS. In theory, as outlined in Section 2, above, OWT contains stories in print that were taken from fieldwork with oral storytellers, and indeed the two corpora closest to the oral tradition and oral sources (OOT and OWT) share the same two dominant tenses. However, the Pnarr is much more frequent in OOT, while the PS is the major tense in OWT. It is unlikely that this difference could be explained in terms of diachrony, despite the fact that OOT is a later corpus than OWT: there is no known evidence of a diachronic change of this sort. On the other hand, there is a vast amount of evidence, both diachronic and synchronic (Section 1.4, above), that use of the Pnarr, especially where tense-switching is attested, is strongly associated with the oral medium, so it is not surprising that the oral versions of the stories contain high levels of Pnarr. We have, of course, no way of knowing which tenses precisely were used in the oral

versions of the stories published in written form by the writers in OWT. It is very possible, though, that there may have been much heavier use of the Pnarr in the oral versions, and that in some instances, it may have been replaced by PS in the published written version, in line with the Occitan tense system and paralleled in literary texts in French (with which our writers would have been familiar), both of which may therefore have reinforced the choice of PS. Individual variations, even though they are not as strong as in OOC, suggest at this stage of the analysis that two writers, Bladé and Lambert, use the PS as the narrative tense more frequently in their collected stories than Arnaudin, where both PS and Pnarr are frequent. Stories in Arnaudin's collection share two strong features with those in OOT: the use of Pnarr as major tense and the numbers of stories where we find both the PS and the Pnarr. We shall return to the implications of this for questions relating to orality alongside our detailed analysis of tense-switching in Section 4.4.

Finally, we note that there is no use of the PC as a narrative tense in OWT, despite evidence in the metadata that four storytellers/stories and one of the authors (Arnaudin) are from the Gascon maritime area. It is possible, given the period in question (that is, collection in the late-nineteenth century), that some of these speakers may have used the PC as a narrative tense—we have no way of knowing, since there are no recordings. Lassalle (2017:83) notes that Arnaudin must have been aware of the loss of the PS in this area; however, he clearly opted for the normative PS in the published versions, alongside the Pnarr, the latter reflecting their oral sources.

3.6 Interim Conclusions: “Major Tense” Patterns in Relation to Orality

The major tense patterns outlined in Sections 3.2 through 3.5 would suggest that factors relating to transmission, sources, and performance context play a crucial role, alongside wider societal factors relating to orality and literacy. The two subcorpora with the clearest patterning are OOT and OWT. The stories in OOT are the most “oral” in the full corpus, with oral transmission, sources, and belonging firmly to an oral tradition. High use of Pnarr and high numbers of stories with more than one narrative tense are in evidence, both of which are strongly associated with oral narrative. Indeed, the storytellers in OOT are unlikely to have been influenced by written forms of the stories; they are native speakers of Occitan (who may or may not also have French) in a context of *oralité mixte*, that is, they have acquired their stories through an oral tradition, even if the society in which they live has developed a writing system in both languages. Not surprisingly, therefore, there is very little evidence of influence from French, with the possible exception of OOT_3, although it is not impossible that use of the PC by OOT_3 is a case of diatopic variation. OWT, on the other hand, as the only published collection in the corpus, shows much more standard use of Occitan tenses, with frequent use of PS as the narrative tense of choice and higher numbers of stories with only one narrative tense. Use of the Pnarr in OWT is likely to be an indicator of the oral sources of these stories: we will explore the possible link with tense-switching in Section 4.4.

Both FOC and OOC are more complex and more hybrid. Both involve contemporary oral performance, FOC drawing on written sources and OOC predominantly written but sometimes oral sources. Both are more formal and staged than OOT, particularly FOC, since it has no direct

connection with an oral tradition. The major tense patterning in FOC is dominated by the narrative tenses found in oral French, PC especially and also Pnarr, but there is nonetheless a presence of the more formal, literary PS, probably due to the prominence of PS as the narrative tense in source texts and to the strong inculcation of a written literary norm in some storytellers. Tense-switching is attested, but it is striking that most stories have either one sole narrative tense or have one narrative tense that dominates. There is evidence of the influence of language contact in the use of the PC in certain instances in OOC, both systematically (by OOC_PV) and occasionally (by OOC_MB). OOC is the corpus with the most individual variation, perhaps a reflection of the mix of influences found: some storytellers appear to be closer to the oral tradition in both sources and style (and thus perhaps more likely to tense-switch), while others are closer to the new storytelling patterns found in FOC in the sense that stories are dominated by the past tense form (PS in Occitan, PC in French), with some switching to Pnarr. We shall return to detailed questions relating to the frequency of tense-switching in OOC in Section 4.3.

4. Tense-Switching in Occitan and French

In this section, we will discuss the frequency and rates as well as the functions of tense-switching across the four subcorpora, working from the hypothesis that these are likely to be related to the different degrees of orality but taking into account other possible influential factors.

4.1 Overview

Tense-switching is attested in the four subcorpora in variable proportions:

	OOT	OOO	FOC	OWT
Percentage of narratives containing tense-switching (texts containing tense-switching / number of texts)	84.6% (22/26)	61.5% (8/13)	61.5% (8/13)	52.6% (10/19)
Average rate of tense-switching relative to number of narrative clauses containing verbs (narratives containing tense-shifting only)	1 switch per 4.1 clauses	1 switch per 6.7 clauses	1 switch per 9.7 clauses	1 switch per 3.6 clauses
Range of tense-switching rate across corpus (i.e., 1 switch per X clauses—narratives containing tense-shifting only)	X= between 2 and 13	X= between 4 and 50	X= between 4 and 55	X= between 2 and 9

Table 7. Tense-switching in the four subcorpora.

Type	Percentage of narratives containing tense-switching (text containing tense-switching / number of texts)	Average rate of tense-switching relative to number of narrative clauses containing verbs (narratives containing tense-switching only)
<i>Conte d'animaux</i>	80% (8/10)	1 switch per 4.8 clauses
<i>Conte de l'ogre dupé</i>	75% (3/4)	1 switch per 3.8 clauses
<i>Conte facétieux</i>	70% (7/10)	1 switch per 4.3 clauses
<i>Conte formulaire</i>	75% (3/4)	1 switch per 3.9 clauses
<i>Conte merveilleux</i>	69% (11/16)	1 switch per 5.4 clauses
Total Conte	73% (32/44)	1 switch per 4.8 clauses
<i>Récit contemporain</i>	100% (4/4)	1 switch per 9.3 clauses

<i>Récit facétieux</i>	100% (5/5)	1 switch per 9.6 clauses
<i>Récit légendaire</i>	58% (7/12)	1 switch per 4.8 clauses
Total Récit	76% (16/21)	1 switch per 7.6 clauses

Table 8. Tense-switching and story-type.²¹

Table 7 shows the percentage of narratives in each of the subcorpora containing tense-switching (on the top row); in the instances of tense-switching, the average rate of tense-switching across the stories (in the second row); and finally, the range of tense-switching rates (in the bottom row). Table 8 shows the percentage of narratives containing tense-switching in the major story-types and the average rate of tense-switching across these stories.

It is important to note at the outset of this discussion that initial figures suggest that story-type is not significant: the four major categories of *conte* in the corpus (*contes d'animaux*, *de l'ogre dupé*, *facétieux*, and *merveilleux*) all have a similar percentage of stories with tense-switching (between 69% and 80%), and there is no noteworthy difference between *contes* and *récits* (see Section 2, above) at 73% and 76%, respectively. There are some differences in the rates of tense-switching, with *contes* showing one shift every 4.8 clauses and *récits* one every 7.6 clauses. Although the difference is not strikingly large, we will nonetheless keep this in mind in the discussion below. We note also that within the *contes* category, while there are some differences between the story-types (ranging from changes every 3.8 clauses for the *ogre dupé* category to every 5.4 for the *contes merveilleux*), there is not enough evidence to suggest major differences, and in any case, the numbers are too small to draw conclusions. Within the *récit* category, the lower percentage of *récits légendaires* with tense-switching may be linked to the fact that they tend to be shorter, while the higher rate is attributable to the influence of one particular subcorpus, OOT, where there are relatively high numbers of *récits légendaires*, as we shall see in Section 4.2.

In Sections 4.2 through 4.5, we will discuss the implications of these figures for the link between tense-switching and degrees of orality. The functions and textual effects of tense-switching across the four subcorpora are broadly familiar from previous research and echo those discussed in Section 1, above. In our analysis of each of the subcorpora, we will therefore focus on any striking tendencies in terms of the function of tense-switching in particular subcorpora and any links to the degree of orality in question.

4.2 OOT

Perhaps most striking is that the percentage of stories in OOT where we find tense-switching (84.6%) is considerably higher than in any other subcorpus. In fact, only four stories have no tense-switching, and these are all of short-length. Where tense-switching is attested, the rate is very high, averaging one switch every 4.1 clauses, with the lowest possible rates of tense-switching still relatively frequent, at one switch every thirteen clauses. Indeed, as shown in Table 2, above, the proportions of each tense reach 50/50 in three stories. In other words, most stories

²¹ *Conte d'animaux* = Animal Tale; *conte de l'ogre dupé* = Tale of the Stupid Ogre; *conte facétieux* = Anecdote or Joke; *conte formulaire* = Formula Tale; *conte merveilleux* = Tale of Magic; *récit contemporain* = contemporary story; *récit facétieux* = anecdote (in the broadest sense); *récit légendaire* = legend.

contain tense-switching, and within these stories, the rate is high. Again, while we might point to a small difference between *contes* and *récits* (15/16 *contes* contain tense-switching, and the rate is one switch every 4.1 clauses, while 7/10 *récits* contain tense-switching, and the rate is one every 4.4 clauses), this is not sufficiently large to be significant. The key finding with regard to OOT is that switching frequency and rates are strongly correlated with a high degree of orality, since OOT is the most strongly oral of our subcorpora in terms of transmission, sources, and performance tradition.

All familiar functions of tense-switching mentioned in Section 2, above, are attested, although it is important to point out that, given the highly spontaneous and relatively informal nature of OOT, the patterns are not always neat and clear-cut. One striking feature, perhaps not surprising given the high rates, is the sustained use of switching throughout the story, or at least throughout the Complicating Action (the central part of the narrative in terms of events; Labov and Waletzky 1967). A second striking feature of this subcorpus is the use of tense-switching in parallelisms across episodes and sub-episodes. Parallel episodes are a well known feature of stories in the oral tradition (Guézennec 2010); these are sequences, usually three or more, where a broadly similar series of events is repeated but with variations, either each time and/or where the final series results in a different outcome than the previous series. In our corpus, they are particularly frequent in the three Occitan corpora which are more strongly attached to an oral tradition than FOC, even if OWT involves published versions.

In Example 1, where the story is recounted largely in the Pnarr, a king sets a series of challenges to a group of suitors who are seeking his daughter's hand in marriage. Only one suitor, Josèp, passes the first test (1a) and is then required to undertake two more tests (1b and 1c), constituting three episodes (a, b, and c). The beginning of each episode is marked by the use of the PS, first with the verb *dire* and then for a significant event where Josèp thinks (*pensar*) of how he might solve the challenge set by the king. In the first two cases (a and b), this act is accompanied by the adverbial *tot d'un còp* ("suddenly") and in the third (c) by the connector *puis* ("then"). Within each episode, there is then a return to the Pnarr for a series of broadly similar events, notably Josèp calling (*apelar*) the carp in episode (a), ants in episode (b), crows in episode (c), and then Josèp arriving (*arribar*):²²

Example 1

a) **e lo rei lor diguèt_{ps}** [. . .] (and the king said to them)

e tot d'un còp Josèp pensèt_{ps} a la carpa/ diguèt_{ps} [. . .] / **e la sonèt_{ps}** / la carpa arribà_{Pnarr} / **e li diguèt_{ps}** [. . .] (all of a sudden Josèp thought of the carp / he said [. . .] / he called it / the carp arrives / and he said [. . .])

²² Our examples include only the narrative line, for expedience. Descriptions and direct speech are not included; their absence is marked by [. . .]. The clauses in PS are in black and bold, while the clauses in Pnarr are black (not bold). Translations in English are given in grey and in brackets, while summaries of events are reported in grey and in square brackets. Finally, the tenses of all verbs are indicated in subscript. Transcription of oral material in Occitan and French does not contain punctuation as such (as is standard practice), although in order to facilitate comprehension, we have used a forward slash in both the transcription and the translation to indicate a change of narrative clause (see Section 1.1). We have also used a forward slash in OWT in Example (4), which of course contains punctuation as it is a written text. Summary text in square brackets contains punctuation for ease of comprehension.

b) **lo rei li diguèt_{PS}** [. .] (the king said to him)

[Josèp starts the test but he fails]

tot d'un còp pensèt_{PS} als formilhs / e apèla_{Pnarr} les formilhs / les formilhs arriban_{Pnarr} (all of a sudden he thought of the ants / and he calls the ants / the ants arrive)

[the ants solve the test and Josèp takes credit for it with the king]

c) **lo rei diguèt_{PS}** [. .] (the king said)

[Josèp starts the test but fails]

puís pensèt_{PS} als gòrbs / e apèla_{Pnarr} les gòrbs / les gòrbs arriban_{Pnarr} (then he thought of the crows / and he calls the crows / the crows arrive)

[the crows solve the test, and Josèp takes credit for it with the king]

At the end of the story, the king's decision that Josèp can marry his daughter is again introduced by *dire* in the PS, and the final significant act of marrying is also in the PS:

Example 2

lo rei li diguèt_{PS} [. .] / (the king said to him) /

e voilà cossí Josèp se maridèt_{PS} ambe la filha del rei (and this is how Josèp married the king's daughter)

There are at least three functions of tense-switching at work in this story. Most strikingly, structural parallelism in the story is mirrored by parallel use of tenses, with (almost) consistent use of the Pnarr and PS for particular events in the sub-episodes, the “almost” in this analysis reflecting the spontaneous nature of OOT. Second, although both PS and Pnarr have the capacity to highlight particular events (the PS through dimensionalization/detachment and the Pnarr through foregrounding; see Section 1, above), it is the PS that does so in this story, with the unmarked dominant tense being the Pnarr. Finally, the capacity of the PS to emphasize closure at the end of the story is also attested: it reinforces a sense of completion (see Section 1, above). Indeed, of the fifteen OOT texts with Pnarr/PS alternation where Pnarr is the dominant narrative tense, eight close the story with the PS.

4.3 FOC and OOC

FOC and OOC have the same percentage of stories containing tense-switching (61.5%), a figure situated in between the lower levels in OWT (see Section 4.4) and the higher levels in OOT. This position is not surprising, since we are dealing with two subcorpora where transmission is oral but sources are usually (though for OOC not always) written and with highly educated storytellers who are working in a context of *oralité seconde*. Both corpora also demonstrate a similar range of tense-switching rates where switching is found (4-50 in OOC and 4-55 in FOC), suggesting that there is considerable variation within each subcorpus. In FOC we cannot explore individual storyteller patterns, as there is only one story for each storyteller. However in OOC, where we have two or more stories from several storytellers, it is clear that the two storytellers who claim to use oral sources and to be close to the oral tradition (Storyteller_OOC_PB and Storyteller_OOC_PV) are those with the highest tense-switching rates

in all their stories, whether *contes* or *récits*. Their influence on overall figures is probably the reason why there is a considerable difference in the average rate of tense-switching across FOC and OOC where it is attested: it is higher for OOC (1 switch every 6.7 clauses) than for FOC (1 every 9.7), despite the fact that there are proportionally more *contes* in FOC than *récits*.²³ In other words, for both FOC and OOC, the degree of orality is again the dominant factor in shaping the frequency of tense-switching, with considerable complexities related to the continuum between new and traditional storytelling in the case of OOC; factors such as *récit* versus *conte* are more variable and certainly secondary.²⁴

In terms of the function and effects of tense-switching, both FOC and OOC demonstrate a wide range of familiar functions, for example, foregrounding salient events, turbulence at narrative peaks, structural roles, and closure with the PC (FOC) or PS (OOO). Perhaps not surprisingly, OOC contains substantial numbers of parallelisms where tense-switching exhibits patterns that are similar to Example 1, above. This is particularly the case where storytellers are close to the oral tradition (for example, it occurs in three stories by Storyteller_OOC_PB), but it is also found with one storyteller who is in the “new storyteller” category (OOO_MB).

For example, in “Gabarròt” (Table 9), a fantastic tale recounted by Storyteller_OOC_PB, PS is the main narrative tense, and Pnarr is exploited for structural and foregrounding purposes. In this story, a king announces that he will give his daughter in marriage to whomever can build him a boat that can sail on land as well as at sea, and three brothers attempt the mission. Each of the three episodes is introduced by verbs of speech in the PS, and in the first two episodes, the early events (preparation of the bread, finding the old man at the crossroads, discussion with the old man to whom the young man declines to give a piece of his bread) are foregrounded through use of the Pnarr, with the remainder of the episode (his failure to build the boat) in the PS. The third episode is structured similarly up to the point where, instead of refusing to give the old man a piece of his bread, the young man gives him the bread. From that point onwards, the same events that lead to failure in the first two episodes (continuing his journey, arriving in a wood, knocking down a tree) lead to success in the final episode, where the sequence of events previously marked by the PS is marked by the Pnarr:

	Episode 1	Episode 2	Episode 3	Translations
Block 1	diguèt _{ps...} diguèt _{ps}	diguèt _{ps...} diguèt _{ps...}	signuèt _{ps...} demandèt _{ps...} faguèt _{ps...} partiguèt _{ps...} trobèt _{ps}	diguèt (said) signuèt (was) demandèt (asked) faguèt (did) partiguèt (left) trobèt (found)

²³ See Table 8, which shows that rates are generally higher for *contes* than for *récits*.

²⁴ For example, of the three storytellers in OOC who recount *récits*, two use tense-switching. OOC_MB (who is firmly in the “new storyteller” category) has a very low rate (one every 26.2 clauses), whereas for OOC_PV, who identifies strongly with the oral tradition, the rate is very high (one every 5.3 clauses).

Block 2	aprèsta _{Pnarr...} tròba _{Pnarr...} demanda _{Pnarr...} ditz _{Pnarr...} rapèla _{Pnarr...} demanda _{Pnarr...} ditz _{Pnarr...} rapèla _{Pnarr...} ditz _{Pnarr}	aprèsta _{Pnarr...} ditz _{Pnarr...} ditz _{Pnarr...}	ditz _{Pnarr}	aprèsta (prepares) tròba (finds) demanda (asks) rapèla (calls back) ditz (says)
Block 3	diguèt_{ps...} contunhèt_{ps...}	diguèt_{ps...} donèt_{ps...} contunhèt_{ps}	donguèt_{ps...} diguèt_{ps}	diguèt (said) contunhèt (continued) donèt/donguèt (gave)
Block 4	arribèt_{ps...} tombèt_{ps...} assagèt_{ps...} demorèt_{ps...} diguèt_{ps...} s'en tornèt_{ps}	arribèt_{ps...} tombèt_{ps...} se metèt_{ps...} demorèt_{ps...} comprenguèt_{ps...} s'en tornèt_{ps}	arriba _{Pnarr...} tomba _{Pnarr...} tomba _{Pnarr...} se vira _{Pnarr...} torna _{Pnarr...} virar _{Pnarr...} monta _{Pnarr...} s'en vai _{Pnarr}	arribèt (arrived)/ arriba (arrives) tombèt (fell)/tomba (falls) assagèt (tried) demorèt (remained) se metèt (started) comprenguèt (understood) s'en tornèt (went back) se vira (turns) torna vira (turns back) monta (goes up) s'en vai (leaves)

Table 9. Tense patterning in “Gabarròt” (OOC).

In “Gabarròt,” the transformational outcome of the story in the final episode is conveyed in the Pnarr rather than the PS of the previous episodes, foregrounding success; the tense switch to Pnarr is sustained across the final seven narrative clauses, marking the fact that the young man’s luck has changed such that he can head towards the king’s castle and claim the king’s daughter.

A second tendency in OOC and FOC which distinguishes them from OOT (where rapid tense-switching is widespread) is that we find more instances of “small blocks” of text exhibiting a tense shift, that is, shifts of tense for between one and four clauses. The surrounding text can involve smaller or larger sections of text in another tense, and this variability can be seen in the use of the PS in blocks 1 and 3 in Table 9, above, from OOC. Additionally, in FOC, there are more instances of one or two isolated shifts in a longer chunk of text where the narrative tense is stable. For instance, in Example 3, below, the story is reported in the PC,²⁵ and only one clause is foregrounded at the peak of the story (when the sorcerer picks out Pokou’s child as the one who is going to be sacrificed) with a switch to Pnarr:

Example 3

puis le sorcier a écarté_{PC} tout ça / il a regardé_{PC} Pokou / il l’a montrée_{PC} du doigt / il lui a dit_{PC} c’est cela que nous avons de plus cher / et il désigne_{Pnarr} l’enfant dans son dos / alors elle a dénoué son boubou / elle a pris son fils dans ses bras / et elle s’est mise juste au-dessus (de la) du²⁶ fleuve agité

²⁵ Note that in stories where the narrative past tense is the PC, black and bold are used for these clauses. The Pnarr clauses remain in black only.

²⁶ The storyteller self-corrects here from *de la* to *du*, but both are included in our literal transcription.

(then the sorcerer moved everything aside / he looked at Pokou / he pointed his finger at her / he said to her / that is the most precious thing we have / he points to the child on her back / so she undid her sling / she took her son in her arms / and she placed herself just above the fast-flowing river)

4.4 OWT

Relative to the other subcorpora, OWT contains fewer texts with tense-switching (52.6%), although where it occurs, the average rate is in fact higher than in OOT (one switch every 3.6 clauses), and indeed the lowest rate still indicates frequent tense-switching (one switch per nine clauses). This may be a reflection of the fact, on the one hand, that the stories in OWT were collected from oral performances (and therefore some may retain similar patterns to OOT), and, on the other, that OWT is nonetheless a written published collection destined for a reading public, and certain writers may opt to eliminate or reduce particular oral features (hence the lower percentage of stories with tense-switching). Indeed, two of the most represented writers, Arnaudin and Bladé, have clear individual preferences: all of Arnaudin's stories (he is closest to the oral tradition) contain switches, whereas five of Bladé's six stories have no switching, with only one switch in the remaining story. Caution is required in relation to the other authors because of the small quantity of stories, but Montel uses tense-switching in both of his texts, and Lalanne not at all in his one text. Two authors, Lambert and Séré, have more mixed patterns, and there is no obvious rationale for the choice in terms of story-type or length. As with the other subcorpora, the question of *contes* versus *récits* is not decisive: one out of two *récits* contain tense-switching, and nine out of seventeen *contes*, but the *récit* in question has a rate of switching that is higher than the average for all *contes*, because the author in question, Arnaudin, opts consistently for patterns that reflect the oral origins of the stories. In short, patterns appear to be individual, with some close to strongly written norms and others closer to OOT, most especially Arnaudin.

All tense-switching functions are attested in OWT. However, two tendencies stand out. The first, already hinted at, is that Arnaudin's stories have distinctly oral patterns, with rapid switching for a wide variety of functions (turbulence at narrative peaks, structural functions, and so forth). The second is that across OWT, while there are many instances of blocks of one to four clauses, there is a higher number of longer blocks than in the stories in FOC and OOC (where blocks of one to four clauses dominate), and there are far fewer individual tense switches. The blocks in OWT can be found in a variety of contexts, including peaks or sections of the story where we can have, for example, a run of several narrative clauses in the Pnarr with surrounding text in the PS. For instance, the story entitled "Lo Gojat" (where the main tense is the PS), can be divided into nine blocks, with three of them containing seven to fourteen clauses, the longest of which (the peak of the story) is in the Pnarr:

Block	Tense	Number of verbs	Summary of events in blocks
1	PS	1	[A man said to his wife that he was going to do some business at the market.]
2	Pnarr	3	[He sets off, arrives at the greengrocer's stall, and has a conversation with the owner.]
3	PS	7	[During the conversation, he explained that he wanted to buy a foal, ²⁸ having seen the lovely foals that his neighbor apparently bought there. The greengrocer told him that he had run out of foals but could sell him a mare's egg which was ready to hatch, but that the man would need to be careful not to drop it on the way home. He chose the nicest pumpkin and bought it from the greengrocer.]
4	Pnarr	1	[He sets off on the road home.]
5	PS	8	[The pumpkin fell, split in pieces, and in the process, hit a hare and caused it to run away. The man thought it was the foal that had escaped from the egg.]
6	Pnarr	14 (peak)	[The man goes back again to buy another egg. The greengrocer can only give him an egg that will require him to brood without speaking (otherwise the egg will be lost). He goes back home and gets into bed to brood, without saying a word.]
7	PS	4	[The man's wife, who was starting to get worried, called in the neighbors and brought them up to the bedroom.]
8	Pnarr	2	[To make the man react, one neighbor goes up to the man's wife, strokes her cheek, and gives her kisses.]
9	PS	2	[The man ended up reacting, speaking, and realizing the egg will not hatch. The story ends with the man blaming his neighbor and his wife realizing her husband is a fool.]

Table 10. Tense patterning in “Lo Gojat” (OWT).

This mixture of rapid tense-switching (where it occurs) and longer blocks of text is most likely a reflection of the oral sources, on the one hand, and the fact that these are written published texts, on the other. Individual variation across authors, as noted above, is also likely to be a major influential factor.

4.5 Interim Conclusions

High levels of tense-switching—both in terms of the volume of stories and the rate of switching—are strongly correlated with higher degrees of orality. Our most “oral” subcorpus (namely, OOT), where both transmission and sources are oral and form part of an oral tradition, shows the highest levels of tense-switching by every measure. OOC resembles FOC in many respects in terms of frequency, but it is clear that some storytellers who consider themselves connected to an oral tradition demonstrate patterns that are closer to OOT. OWT shows different patterns for different writers, with some containing little or no tense-switching (and thus conforming to written norms) and others showing patterns that have features in common with OOT, reflecting perhaps a wish on certain authors' parts to convey the oral nature of the stories. The functions and effects of tense-switching are familiar from previous research, and all types of function can occur in the different subcorpora, with some discernible patterns in particular subcorpora. One function stands out as characteristic of the *conte* in the oral tradition: the use of switching to structure parallel episodes in ways that highlight crucial similarities and differences across parallel episodes. Story-type and *conte* versus *récit* status do not appear to strongly influence patterns. By far the most important factor in determining frequency and rates of tense-

²⁷ This story is built on a farce where the main character is duped by his neighbors and the greengrocer.

switching is the degree of orality in question, with OOT, the most strongly oral subcorpus by all measures (transmission, sources, performance tradition), exhibiting the highest levels, and OWT, the least oral subcorpus, exhibiting the lowest.

5. Apparent Contradictions and Complexities

As noted in Section 2, above, in this type of corpus, where there are high levels of variation for a variety of reasons, data often do not show entirely clear-cut results. As our analysis above suggests, we are dealing much of the time with tendencies and patterns. Some elements of the analysis can even seem contradictory, pointing up the complexity of the interaction of different factors in some instances.

For example, OWT generally has low levels of tense-switching and therefore fewer instances of Pnarr, whereas OOC tends to have a certain level of tense-switching and therefore relatively frequent use of Pnarr, albeit in the context of highly individualized patterns. In each of these subcorpora, we can identify one writer (in OWT) and one storyteller (in OOC) where the patterns contradict the general tendency: the stories published by Arnaudin (OWT) demonstrate a relatively high level of tense-switching between PS and Pnarr, whereas the stories recounted by Storyteller_OOC_MC contain no tense-switching and therefore no Pnarr. We know from discussion with OOC_MC that she draws on Arnaudin's published stories as a major source of her narratives and that, in fact, she has drawn on a story published in the volume we have used to construct OWT, thus allowing us to make a direct comparison between the same narrative in each of two subcorpora. The similarities between the two versions are indeed striking with regard to the choice of verbs, tenses, vocabulary, structure, and frames (for example, *un matin*): this is clear both in Example 4, which gives a short passage from the beginning of the story from each storyteller, and in Table 11, which gives the tense patterning across the whole story in each version:

Example 4

un matin la goja que **devóps** anar tirar aiga mei de d'òra que de costuma / e quan **arribèps** a la hont dab la soa pinga / que **trobèps** la hada lo peu tot desligat asseduda au bòrd de la hont (OOC)

Un matin, que **calotps** anar tirar l'aiga mei a bona ora que de costuma, / e quan **arribètps** dab sas pingas, / que **trobètps** la hada seitada au bòrd de le hont, lo peu tot desligat / (OWT)

(one morning the servant was supposed to go and fetch water earlier than usual / and when she arrived at the fountain with her pail(s) / she found the fairy with her hair undone sitting at the edge of the fountain)

Tense	OOC version (MC)	OWT version (Arnaudin)	English translation
PS in OOC/ PS in OWT	que devó_{PS} ... arribè_{PS}... que trobè_{PS}... que saludè_{PS}... que digó_{PS}... que li demandè_{PS}... contè_{PS}...	que calot_{PS}... arribè_{PS}... que trobè_{PS}... que la saludè_{PS}... que dichot_{PS}... qui li demandè_{PS}... condèt_{PS}...	devó/calot (had to) arribè/arribèt (arrived) trobè/trobèt (found) saludè/saludèt (greeted) digó/dichot (said) demandè/demandèt (asked) contè/condèt (told)
PS in OOC/ Pnarr in OWT	e que se n'anèn_{PS}... orbín_{PS}	e que s'en van _{Pnarr} ... qu'aubrisse _{Pnarr}	anèn (went) / van (go) orbín (opened) / aubrisse (open)

Table 11. Comparison of the same story, “La Hada e la Goja,” between OOC and OWT.

However, in spite of the fact that there is clear tense-switching in Arnaudin’s printed version (that is, the last two verbs appear in Pnarr), there is absolutely no tense-switching in Storyteller_OOC_MC’s version of the story, with all verbs in PS. We cannot be certain of the rationale behind these patterns. It is possible, though, that on the one hand, Arnaudin’s texts are more faithful to the oral versions of the stories than either Bladé’s or Lambert’s (hence the switching), while on the other hand, OOC_MC’s version shows a high degree of normalization, perhaps due to her own training as an Occitan language teacher and her background as an educated French speaker in a context of *oralité seconde*. Indeed, all three of her stories in our OOC subcorpus follow the same pattern of PS as the major tense with no switching. This example of complexity demonstrates two things. First, patterns more typical of written published texts can be found in oral versions and vice versa. Second, the relationship between a written source and an oral performance, even where we know that a particular storyteller has drawn on a particular written source, is not always direct: many complex factors impact linguistic and stylistic choices.

Towards Conclusions and Future Research

Our analysis builds on a substantial body of work on temporality in medieval texts, conversational oral narrative, and performed oral storytelling in contemporary French. Our findings underscore not only the well established connection between tense-switching and orality but also the discourse functions that tense-switching can assume in context. However, we have sought to move beyond this, primarily through embedding a scalar approach to orality and building a corpus that has allowed us to analyze tense usage and tense-switching in relation to what we have termed different “degrees of orality.” In the context of storytelling in Occitan, the main factors we have considered concern the channel of transmission, the sources of the stories, and the nature of the performance (as part of an oral tradition involving a relatively intimate context or as a more staged public performance). Our corpus-based analysis, including a comparison with a contemporary French corpus, shows clearly that both tense patterning on the narrative line and the use of tense-switching are directly related to the parameters involved in these different degrees of orality: the greater the degree of orality in terms of transmission, sources, and performance tradition, the higher the use of the narrative present as a main narrative tense on the narrative line and the greater the extent of tense-switching as measured by the

combination of frequency across each subcorpus and rate of switching per number of narrative clauses. Moreover, in addition to familiar functions of tense-switching, our data show different types of distribution across the subcorpora (for example, blocks of discourse versus one-off switches) and reveal a particular structural usage in the context of parallelisms in the oral tradition. In terms of future research, there is more to be done around the notion of “performance” in relation to temporality. Previous research suggests that higher levels of performance markers (for example, higher quantities of direct speech, sound effects, asides, gestures, and so forth) tend to raise the levels of tense-switching (Wolfson 1982); comparative work across different degrees of orality could shed new light on this issue.

Notwithstanding the discernible patterns, the context of a minoritized language such as Occitan, alongside what Foley has termed “the natural diversity of human expression” (2002:39; see Section 2.1, above), unquestionably introduces complexities and even apparent contradictions into our findings. These include questions relating to language contact (for example, there is some evidence of the influence of French on Occitan tense patterns in OOC and possibly in OOT), differences between “new storytellers” and those self-identifying as closely linked to an oral tradition (within OOC), and, crucially, individual preferences on the part of writers or storytellers (this is particularly clear in OWT but also in OOC). Additionally there is one possible but unconfirmed case of diatopic variation in OOT. Although we have included a discussion of story-type at several points in this article, there is not enough evidence of clear patterning to draw any substantial conclusions in this regard, and the nature of the data makes it difficult to obtain a balanced corpus for an investigation of this nature. A larger corpus involving more storytellers/writers and more stories from each storyteller would facilitate further exploration of some of these complexities, particularly the question of individual variation.

In short, our findings suggest that any investigation of the relation between temporal phenomena and orality can be greatly enriched and nuanced by integrating a scalar approach not only into theoretical discussion but also into corpus building and analysis. In this instance, our object of study is a minoritized language which operates alongside a powerful national language; the precise way in which a scalar approach could be applied elsewhere will vary according to both context and language. It is hoped that our approach could serve to underpin analyses of temporality, or indeed of other linguistic features, in other minoritized languages, other language contact situations, or other types of discourse that require a theoretical framework and a corpus that move beyond an oral/written divide.

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Ethnopoetic Transcription and Multimodal Archives: Toward a More Comprehensive Approach to Slam Poetry Scholarship

Cara Losier Chanoine

Slam is a relatively young genre of poetry, created in 1985 by a Chicago construction worker named Marc Smith, who sought to challenge ivory tower ideas about creating and evaluating poetry (Woods 2008:18). Extant slam poetry scholarship is neither as prolific nor as comprehensive as that on some of its performance poetry siblings,¹ raising the question of why this may be the case. While the relative “newness” of the genre may account for some scholarly gaps, it is also worth noting that the complexities that define slam poetry can be difficult to analyze. One crucial area of slam poetry that has been scholastically marginalized is its bimodality,² particularly as pertaining to composition (and recomposition). While not every slam poem develops bimodally, bimodality does apply to a large body of work within this genre of poetry. In cases where bimodality applies, the slam poem is usually textually composed but intended for performance. This formal duality presents the opportunity to study how text and performance inform each other in composition and recomposition as part of the creative process.

¹ It is important to note, however, that the extant body of slam poetry scholarship includes crucial and insightful works. *Voicing American Poetry* by Lesley Wheeler (2008) and *The Cultural Politics of Slam Poetry* by Susan B. A. Somers-Willett (2009) provide detailed analyses of slam poetry as a form and institution, including attention to the multifaceted nature of slam poetry performance. Works by poet-scholars, such as *Words in Your Face* by Cristin O’Keefe Aptowicz (2007) and *Killing Poetry* by Javon Johnson (2017), offer important insider perspectives on slam poetry while also illuminating historical contexts, social significance, and cultural politics. Despite the richness of slam poetry scholarship, many other types of performance-based poetry have received more comprehensive scholarly attention. The griot tradition, the improvisatore tradition, and countless examples of ancient and otherwise historically-situated performance genres are widely addressed in ways that integrate them within broader theories of poetry performance. Key examples include “Coleridge’s ‘The Improvisatore’: Poetry, Performance, and Remediation” by Angela Esterhammer (2011), “Neon Griot: The Functional Role of Poetry Readings in the Black Arts Movement” by Lorenzo Thomas (1998), and dozens of works addressing epic poetry (including, but not limited to, Gregory Nagy’s (1996) *Poetry as Performance: Homer and Beyond*). Furthermore some extant scholarship on performance poetry has failed to provide slam poetry with a “seat at the table” during discussions in which slam poetry might be invoked as a relevant example. Both Thomas’s “Neon Griot” and Daniel Banks’s (2010) “From Homer to Hip Hop: Orature and Griots, Ancient and Present” invoke rap and hip hop, but not slam poetry, as contemporary links to the griot tradition, despite the presence of scholarship that addresses the relevance of slam poetry to Black culture and experience (with Somers-Willett’s aforementioned text serving as one example of this). The reasons for these potential imbalances and exclusions extend beyond the purview of this article but may be worthwhile to consider in relation to integrating slam poetry more fully within the larger context of performance poetry.

² I use the term bimodality to acknowledge the textual and performative formats of any given slam poem to which this approach to composition, recomposition, and dissemination applies.

It must be acknowledged that the relevance of the text to the study of slam poetry is not universally accepted. There are, however, also those scholars, editors, and practitioners who have made room for text in their understanding of slam poetry. In his introduction to the anthology *Bum Rush the Page*, Tony Medina writes: “This book exists in a paradox. While it will be closely related to what some are calling the spoken word—that which lives in performance—the poetry gathered here, for the most part, maintains the integrity of the page, of the written word” (Medina and Reyes Rivera 2001:xx). Medina’s commentary illustrates the complexities created by the proximity of page and performance but does not deny the significance of text in cases where performance poetry is published on the page. I argue that, in the case of bimodal slam poems, acknowledging both text and performance versions should play a crucial role in analysis centered around creative evolution and the situation of slam poetry in relation to other types of oral or oral-adjacent poetry. To fail to recognize multimodality in slam poetry (in cases where it exists) can lead to misunderstandings about how slam poetry fits within the larger genre of performance-based poetry. Scholarship that unpacks the compositional complexities of bimodal slam poetry provides a foundation for acknowledging and analyzing diverse modalities within the slam poetry genre to understand corresponding diversity within the creative process of slam poems.

The fact that the slam poetry genre includes a bimodal branch creates a variety of scholarship opportunities to explore how such bimodality impacts the creative process. Of particular importance, from my perspective, are insights into how a bimodal slam poem may be composed and recomposed across modes, as opposed to within a single mode. However, as any slam poetry scholar can confirm, slam poetry records have not been particularly widely archived, posing challenges to bimodal analysis. Such archives as do exist, such as video publisher Button Poetry’s Youtube channel, often only document one format of a given poem, as opposed to both text and performance. Finding both text and performance versions of a slam poem often entails descending into a Google rabbit hole of personal websites and YouTube channels, and even this process is often fruitless. This lack of representation hinders interested scholars’ understanding and analysis of the roles played by both text and performance within the creative process of bimodal slam poems. This article suggests that the creation of multimodal slam poetry archives may enable more productive scholarship within this area of the genre and outlines the potential directions such scholarship might take. An author-created archive of a single slam community is used to illustrate the concepts and value of the approaches discussed.

Bimodality, Plurality, and Change

A starting point for understanding bimodality within slam poetry lies in John Miles Foley’s classification of the genre as a voiced text. According to this classification, slam poetry can be understood as textually composed, orally disseminated, and aurally received (Foley 2002:39). It is necessary to understand how these different modes relate to each other in order to understand why bimodality is a significant and foundational feature of slam poetry. This line of reasoning also resonates with Jerome McGann’s ideas about scholarly editing: “The scholarly editor’s task is to clarify as much as one can the artistic process of creative activity, for it is that

process which *is* the literary work, whether we look at the work as a carrier of meaning (informational) or as a creative event (aesthetic)” (1991:71). Analyzing a slam poem’s existence across multiple modes is a way of understanding the creative process that McGann declares to be intrinsic to a work of literature. While slam poetry scholarship is not necessarily editorial work, it is work that shapes how other scholars, as well as members of the general public, understand the genre. More fully addressing bimodality, and interactions between modes, in scholarship enables a more complete representation of the genre by acknowledging this creative process as a feature of the poetry itself. This approach opens the door to various scholarly possibilities, including more comprehensive and accurate comparative analyses between the creative processes of slam poetry and those of other types of oral and oral-adjacent poetry.³

Intermodal and Intramodal Change

Before discussing how multimedia archiving could enable more productive analyses of bimodal slam poetry across modes, I must first clarify how these modes can, and do, interact as part of the creative process to which McGann refers. Foley’s model of the voiced text suggests a very linear kind of movement from text to performance. While this representation is accurate, the ways in which text and performance relate to each other in slam poetry also extend beyond this. For example, although the primary mode of slam poetry delivery is often performance, slam poems are also published in print. It is also worth considering that slam poetry texts often inform performance in various ways, and these texts are sometimes revised based on performative recompositions. A slam poem may evolve from text to performance, as Foley’s model suggests, but it may also evolve from text to text, performance to performance, or performance to text.⁴ In short, text and performance interact in ways that are both linear and recursive in the case of bimodal slam poems.⁵ The examples in this article will primarily analyze text-to-performance movement but will address other types concerning their potential for future scholarship.

Plurality and Versioning

To understand a bimodal slam poem as a literary work that evolves inter-modally and intra-modally is to understand it as a plural entity that exists across multiple versions of text and/or performance. Peter Middleton writes (2005:xi):

... poems are not like light, a wave or a particle depending on which way you look at them, they

³ More precise examples of such scholarship will be addressed later.

⁴ I use the term “inter-modal” to refer to changes that occur between versions of different format types and the term “intra-modal” to refer to changes that occur between versions of the same format type.

⁵ This linear and recursive evolution raises questions about whether a bimodal slam poem can be viewed as complete if the author intends to continue performing it or whether the poem’s final version is attained only when the author permanently discontinues its performance (and, complementarily, subsequent textual revisions). These questions may serve as genesis points for future scholarship.

have several aspects. Poems can be manifested as heterogeneous material objects; they can be events in performance; their multiple versions, published copies, and performances cannot be located in any single point of space and time . . .

A bimodal slam poem almost always exists in more than one text version and more than one performance version. Exploring the relationships between modes necessitates the acknowledgment of this multiformity, ultimately reinforcing the idea that a single performance or publication does not comprehensively define the poem.⁶

Embracing the plurality of slam poetry also entails an understanding of its potential for variation, especially how this potential is realized. Gregory Nagy's analysis of the Homeric epithet suggests that repetition may enable variation (1996:52):

The multiple repetition of the same, each repetition being different, is an idea encapsulated in the very identity of *Poludeukes* as a twin, one of the Divine Twins. The very idea of a twin conveys both sameness and difference. Here we may consider in general the semantic epithet: each time the epithet is repeated, it is both the same and different in meaning. With each of its countless returns, the epithet refers to the same thing, but to a new instance of the same thing.

Nagy's explanation highlights how repetition within a new context creates change. Because performance is a primary mode of slam poetry transmission, the same poem may be performed multiple times in various venues. A new venue may impact how a poem is performed, ultimately resulting in a new version. Consequently, repetition and recontextualization are vehicles of variance in the slam poetry genre.

The changes that occur as a result of such repetition and recontextualization may be understood as instances of *mouvance*, a term coined by Paul Zumthor and explored by Nagy. Nagy proposes that *mouvance* can be interpreted as "the process of recomposition-in-performance as actually recognized by a living oral tradition, where the recognition implies the paradox of immediate change without ultimate change" (1996:25). This concept also relates to what M. H. Abrams refers to as the fourth dimension of a poem. Abrams suggests (2012:2):

. . . poets, whether deliberately or unconsciously, exploit the physical aspect of language. It is this component—the act of its utterance—that I call the fourth dimension of a poem. . . the fourth dimension—one that is almost totally neglected in discussions of poetry—is the activity of enunciating the great variety of speech sounds that constitute the words of the poem.

The fourth dimension of poetry to which Abrams refers is often a part of recomposition through performance, since vocalization of text often results in its extension or evolution. However, because slam poetry is not strictly a living oral tradition,⁷ applying the concept of *mouvance* to

⁶ It is worth acknowledging that slam poets' perspectives on their work may be worthy topics of analysis regarding this framing. While these perspectives extend beyond the purview of this article, they may prove to be a fruitful foundation for future scholarship, particularly in cases relevant to multimodal archival work.

⁷ That is, not orally composed or preserved.

the genre requires a bit of adaptation. The fact that bimodal slam poetry exists in both text and performance means that performative recompositions may be reflected not only in future versions of the poem in performance but also in future versions of the poem's text.⁸ Additionally, it is possible for readers who are familiar with the performance of a slam poem to hear traces of the performance in the textual recomposition, almost as though the text were a sort of cross-modal palimpsest.⁹ In this regard, such recompositions are intermodal by nature. What I find most salient is how *mouvance* calls attention to performative recomposition, because this complicates the voiced text model of slam poetry proposed by Foley. The voiced text model poses text as slam poetry's sole mode of composition and performance as its sole mode of transmission. This interpretation precludes, however, the possibility of performative recomposition and textual versioning, which can, and do, happen within the genre. Of course, this type of versioning can be difficult to study, because, as previously mentioned, most extant slam poetry collections don't feature multiple versions of a given poem. My recognition of this lack led me to create a prototype for a multi-version, multi-format slam poetry archive. One function of this archive, which focuses on Slam Free or Die in Manchester, New Hampshire, is to illustrate how the composition and recomposition of slam poems extend beyond the linear and singular trajectory suggested by the voiced text categorization. I argue that bimodal slam poetry recomposition occurs between and within the modes of text and performance in a manner that is not always linear. One way to define this phenomenon would be as a bimodal and multi-directional form of *mouvance*, as conceptualized by Zumthor and analyzed by Nagy, that extends the concept of recomposition to address the complexities of the relationship between text and performance in slam poetry.

Thus far, I have established that a bimodal slam poem is neither a singular nor a static piece of literature. Slam poetry is, in part, defined by variation, evolution, and bimodality. However, extant public slam poetry records are not currently organized in a manner that facilitates scholarly analysis of these genre features. My conviction that these features of slam poetry are significant, and deserve more scholarly attention, was the primary motivation for the creation of the archive I will discuss in this article. In applying the archive to bimodal slam poetry analysis, I draw upon techniques that are heavily rooted in ethno poetics. In Dennis Tedlock's aptly titled essay "Ethno poetics," he describes the subject in question as the "study of the verbal arts in a worldwide range of languages and cultures" and notes that "The aim is to not only analyze and interpret auditory performances, but also to make them directly accessible through transcriptions and translations that display their qualities as works of art" (1992:81). My applications of ethno poetics incorporate artifacts from the aforementioned archive and are

⁸ Slam poetry's bimodality complicates the idea of "immediate change without ultimate change" to which Nagy refers. In the context of the bimodal, multi-versional branch of the genre, a more apt explanation might be that immediate change does not supersede the previous version, but instead creates a new version, allowing for the coexistence of both the initial version and the recomposed version.

⁹ The idea of performative voice echoed in a textual recomposition resonates with Zumthor's recognition of voice as a feature of text within his conceptualization of *mouvance*. This point is also relevant to the works of scholars who have analyzed the role of vocality in text, such as Jennifer Esmail's "'Perchance My Hand May Touch the Lyre': Orality and Textuality in Nineteenth-Century Deaf Poetry," in which the author asserts that "nineteenth-century deaf poets ambivalently maintained an idea of 'vocality' in their poetry while underscoring how that imagined 'voice' was a silent construct of print" (2011:510).

designed to illustrate how a multi-format comparative analysis of a bimodal slam poem can provide insights into composition and creative evolution. To speak to Tedlock's point, I believe that this is a necessary step toward being able to more fully "display their qualities as works of art" (1992:81). This work can serve as a foundation for further slam poetry scholarship, which may include comparative analyses of the creative processes of bimodal slam poems and other oral and oral-adjacent genres of poetry.

Introducing the Archive

It has been a struggle to find multi-format records of slam poetry for use in my research on bimodality within the genre. In some cases, I had to abandon analytically promising poems because I simply couldn't find the requisite versions. I would find text versions but no performance records, or vice versa. Even when I could find the records I needed, it entailed a tedious process of combing random personal websites, blogs, and, of course, YouTube. I often wished for an accessible and, above all, an organized repository that would represent slam poems in a multi-versional and, when appropriate, bimodal manner, but such a thing did not exist. Of course, many conventional literary publications frequently publish slam poems in text, and projects such as Button Poetry are dedicated to compiling videos of slam poetry performances. It is not as though slam poetry is an undocumented genre. However, as established, text or performance alone comprises only part of what defines the genesis and evolution of a bimodal slam poem as a piece of literature.

I contend that the lack of organization and accessibility of slam poetry records has played a role in the limited extant scholarship on the genre's bimodality and versioning. In response, I created the Slam Free or Die multimedia archive, featuring slam poems by poets from the Slam Free or Die open mic and slam in Manchester, New Hampshire. While its current scope is admittedly limited, the archive is designed to bring both modes of bimodal slam poetry together to present individual poems as bimodal and poly-versional.

In conceptualizing this archive, I was influenced by other archives that feature performance elements, particularly the PennSound website. Not only does PennSound spotlight performances and readings as significant modes of literature, but it also attends to versioning by providing multiple records of some featured pieces. Both features are relevant to the motivation behind the Slam Free or Die archive. However, my goal is not solely to showcase the aurality of slam poetry but, rather, to emphasize the relationship between its text and performance elements. Towards this end, I gathered a variety of records, including text, audio, and video media. I solicited these records, as well as permission to use them, from individual poets.¹⁰ Ultimately, every poem featured in the archive is documented by at least one text-based record and at least one performance record (audio or video). All text-based versions of poems appear as written by the authors. Some poems are documented by multiple text or performance records, allowing for an analysis of *mouvance* both between and within modes.

¹⁰ It is worth noting that some poets granted permission for their work to be featured but then failed to provide the records of their poems. This lack of follow-through has been a persistent challenge in compiling the archive, and I hope to troubleshoot this more in the future as I continue to consider potential expansions.

To house the archive, I used the web-publishing platform Omeka, which is particularly suited to archival work (<https://sfod.omeka.net>). Once I created the site for the archive, I used two different features to index content: tags and collections. As I uploaded each artifact into the archive, I tagged it with the following classifications: author name, poem title, format (audio, video, or text), and year of publication/creation. The labeling enables users to target specific authors, poems, formats, or dates when searching for content. Additionally, if a user is browsing the entire catalog of artifacts, they can click on tag links at any time to create a narrowed list of content. I chose tag titles based on their relevance to the type of analytical work enabled by the archive. I also categorized content by format by creating collections for each format type. The archive currently houses three collections: audio, video, and text. Users who wish to study multiple poems within a particular format may use the links of the collections to generate lists of all artifacts within a specific format category. Of course, users may also use the tags to narrow their focus within any given collection further. At this point, the archive is relatively modest in size. However, as it grows, the tagging system and collections library will evolve to accommodate both content and user needs.

Applying the Slam Free or Die Archive to Analysis

Ideally, the representation of multiple versions and formats within the archive will both enable and encourage scholars to further study bimodality and versioning as features of slam poetry. One approach to this type of scholarship involves ethnopoeitic transcription. Many scholars, including Dennis Tedlock, Jerome Rothenberg, and John Miles Foley, have used ethnopoeitic transcription as a means of representing performative and paralinguistic features of poetry, a practice that bears relevance to the task of analyzing bimodal relationships in slam poetry.

I provide Jerome Rothenberg's description of ethnopoeitics to build upon and extend Tedlock's aforementioned definition of the same and provide a foundation for applying ethnopoeitic transcription to slam poetry scholarship. Rothenberg (n.d., "Introduction") describes ethnopoeitics as:

- (1) A comparative approach to poetry and related arts, with a characteristic but not exclusive emphasis on stateless, low-technology cultures and on oral and nonliterate [nonliteral] forms of verbal expression.
- (2) The poetry and ideas about poetry in the cultures so observed or studied.
- (3) A movement or tendency in contemporary poetry, literature, and social science (anthropology in particular) devoted to such interests.

Rothenberg's first definition is particularly relevant to the study of slam poetry because it highlights the ethnopoeitic focus on oral expression. Although slam poetry is not oral poetry by conventional definitions, it is what one might call an oral-adjacent or oral-influenced genre. As previously mentioned, Foley uses the term "voiced text" to contextualize slam poetry within the larger framework of oral poetry.

Rothenberg, Foley, and Tedlock have applied ethnopoeitics to the study of performative

and/or oral literature to illustrate the limitations of text-only representations of such works. This methodology aligns closely with the aim of making oral performances more broadly accessible, as outlined in Tedlock's definition of ethnopoetics. In some cases, such applications have taken the form of ethnopoetic transcription. Rothenberg describes such transcription in the following discussion of ethnopoetics (n.d., "Translation"):

Translation is carry-over. It is a means of delivery & of bringing to life. It begins with a forced change of language, but a change too that opens up the possibility of greater understanding. Everything in these song-poems is finally translatable: words, sounds, voice, melody, gesture, event, etc., in the reconstitution of a unity that would be shattered by approaching each element in isolation. A full & total experience begins it, which only a total translation can fully bring across.

Rothenberg's analysis suggests that an ethnopoetic transcription of performed and/or oral literature represents both words and features such as physical elements of performance, performative contexts, and nonlinguistic sounds. Ethnopoetics maintains that a performed/oral poem cannot be fully experienced or understood through text alone. Foley applies this line of reasoning directly to slam poetry in *How to Read an Oral Poem* by creating an ethnopoetic transcription of Lynn Procope's slam poem "elemental woman," using a system of formatting, symbols, and paratext to communicate features of performance, such as vocal dynamics, pacing, and emphasis. Essentially, he transcribes elements of performance over the plain text version of the poem. He suggests that "ethnopoetics can open up dimensions of oral poetry that conventional printed media institutionally ignore or obscure . . ." (2002:97), and that "ethnopoetic transcription does offer a way to partially recover what the conventional printed page deletes: the living, present dimensions that constitute a performance" (101). Foley's primary goal in applying ethnopoetic transcription seems to be, at least in part, to acknowledge and define the limitations of conventional text in representing oral poetry while also illustrating how adapted uses of text can account more fully for the nontextual features of an oral poem. Ethnopoetic transcription enables a type of analysis that encompasses both text and performance in cases of bimodal poetry. I assert that this type of analysis is necessary for any scholarship that addresses the creative and evolutionary processes of bimodal slam poems.

My suggested applications of ethnopoetic transcription to slam poetry differ slightly in purpose from those of Foley and Rothenberg in that I suggest that ethnopoetic transcription can be used to simultaneously represent multiple versions of a bimodal slam poem, across modes, in ways that illustrate the compositional and/or evolutionary relationships between such modes. A primary product of such analysis is a concrete and clear illustration of moments of change between versions, demonstrating how inter-modal and intra-modal *mouvance* produce multiple versions of a given slam poem.

My approach to ethnopoetic translation is rooted in the application of formatting styles and the addition of text-based cues as means of representing auditory and physical features of a bimodal slam poem. These formatting features are applied to a text version of the same poem with the intention of illustrating how the text is compositionally and creatively fundamental to

the performance and how the performance, in turn, extends the text.¹¹ The translation key below (which also appears in Appendix 1) outlines how these features are applied to indicate pauses, volume and speed variations, nonverbal elements of performance, and vocable and tonal variances and features.

Translation Key:

- pause: * (longer pauses = more asterisks)
- nonverbal physical performance and audience response: (described in parentheses directly under the relevant words)
- rising or falling volume: < + italicized words or > + italicized words
- increasing or decreasing speed: < + bold words or > + bold words
- tonal shifts/emphasis: all caps
- vocable additions to the text: underlined words
- vocable subtractions from the text: strikethrough words
- vocable paraperformatives: bold font
- physical paraperformatives: italic font directly beneath relevant lines

While my application of ethnopoetic transcription is largely informed by Foley's aforementioned transcription of "elemental woman," my methods and presentation do differ from Foley's in some fundamental ways. First, it should be noted that I do not provide a side-by-side comparison of text and transcription as Foley does in *How to Read an Oral Poem*. Instead, I include both the text and the transcription in the appendices. Regarding his application of ethnopoetic transcription in *How to Read an Oral Poem*, Foley also notes that "To make sense of the transcription, you as reader and reperformer must do two things: first, consult the digest of symbols that precedes it to learn your cues; and second, perform it aloud yourself. This exercise, like ethnopoetics itself, is participatory" (2002:98). My approach to ethnopoetic transcription, at least in this article, is designed to promote a more analytical, as opposed to participatory, engagement with slam poetry across modes. While the ethnopoetic transcription presented in this article does not preclude reader reperformance, this application is beyond the purview of this article. My use of ethnopoetic transcription relies on textual versioning as a means of representing compositional *mouvance* across modes.

To illustrate my theories through practice, I will analyze an ethnopoetic transcription of "Thoughts of Craving" by Tim Hopkins,¹² a poem currently featured in the Slam Free or Die archive. I created this transcription using one text version and one video version of the poem, both dating from 2013. I used Foley's ethnopoetic transcription of "elemental woman" as a guide for creating the included translation "key," which designates how formatting is used to represent performance. Ultimately, I superimpose the performance version of the poem over the text version by using symbols and formatting conventions to document significant performative features in relation to the text. The primary goal of the following analysis is to illustrate how the

¹¹ The text version of a bimodal slam poem is almost always composed prior to the poem's performance.

¹² See Appendix 1.

ethnopoetic transcription identifies and illustrates moments of *mouvance* and enables discussions about their interpretive significance.

Recomposing Diction, Syntax, and Other Linguistic Features

This ethnopoetic transcription illustrates several types of *mouvance*, but the first I will discuss is change created by the addition, subtraction, or reordering of the poem's linguistic elements. For example, the text version of some lines toward the end of the poem reads as follows: "I am begging for you to leave your drinks where / they lie / I'll pick them up and give myself one more / Blackout night." In performance, however, these lines become, "All I'm doing is begging for this party to stop ~~I am begging for you to~~ leave your drinks where / they lie / I'll pick them up and give myself one more >*silent* / (brings hands in to rest on abdomen) / (right arm outstretched, pointed finger) / *Blackout night*."¹³ Consistent with the transcription key, linguistic additions are denoted by underlining, whereas linguistic eliminations are denoted by strikethrough text. Through this formatting, the ethnopoetic transcription identifies such instances of *mouvance*, and the adjusted phrasing in the performance version of these lines creates a sense of tension that is less noticeable in the text version.

First, I will address the impact of linguistic additions. The phrase "begging for this party to stop" can be interpreted in two ways within the context of the poem. The phrase could suggest that the speaker wants the party to stop so that they will be left alone to succumb to the desire to drink. This line, however, could also indicate the speaker's desire to escape the temptation the party offers, even as the following phrases imply that this resistance is ultimately futile. Both interpretations reinforce the depth and gravity of the disease with which the speaker is grappling.

While the previous examples illustrate instances of performative *mouvance* consisting of linguistic additions, some recompositions take the form of line or phrase eliminations. In the last paragraph, the lines discussed also incorporate just such an elimination-based recomposition. The following lines from the ethnopoetic transcription identify the cut phrase through the use of strikethrough text: "All I'm doing is begging for this party to stop ~~I am begging for you to~~ leave your drinks where (arms outstretched) / they lie." The resulting syntax, "leave your drinks where they lie," creates a more imperative impression than "I am begging for you to leave your drinks where they lie." This moment of recomposition is not just syntactical, but also tonal, in nature. It changes the line from request to demand. It is important to note that the impact of such elimination-based recomposition is just as significant as recomposition that adds or restructures content. Recomposition is a sort of revision of something already complete, and it is generally known that such a process entails not only the crafting of new content but also the cutting of content that no longer serves the piece of writing. As the above example illustrates, recompositional eliminations can impact core features of the poem, such as its tone.

Other linguistic recompositions illustrated by the transcription include changes in diction. These occur when a word or phrase is replaced, as opposed to simply eliminated. In some cases,

¹³ It should be noted that types of *mouvance* other than linguistic additions and eliminations are represented in the lines of transcription presented above. The discussion that directly follows will, however, only focus on these additions and subtractions.

the recomposed diction subtly impacts the interpretive potential of the poem, as is illustrated by the following line from the transcription: “fake smiles get ~~you~~ me further than honest scowls.” In performance, Hopkins substitutes “me” for “you,” a seemingly slight change that is easy to miss. However, this recomposition takes the line from general to specific, ultimately suggesting a sharper sense of ownership on the part of the speaker. The word “you” distances the content from the speaker, whereas the word “me” personalizes it. This is more consistent with the overall content of the poem, which, while tapping into the common shared experience of alcoholism, is deeply personal in nature.

The linguistic features of this poem play a significant role in creating its voice, and, in turn, the voice plays a significant role in what the poem ultimately says about the experience of alcoholism. Because bimodal slam poems are, by nature, created for performance, one way of viewing the modes would be to consider text as a generative foundation and performance as a sort of apotheosis.¹⁴ The above discussion illustrates how linguistic additions, eliminations, and even slight changes in diction can, through recomposition, impact voice and, consequently, features like tension and tone. In the example of addition-based recomposition, the transition from figurative to literal voice between modes impacts the messaging by emphasizing desperation. Similarly, the absence of the cut phrase in the elimination-based example of recomposition results in a more commanding tone, which may also relate, more subtly, to the intensely demanding needs of the addiction. Even changes in pronouns, as illustrated above, are not always insignificant.

While the examples discussed are not exhaustive, it is my hope that they illustrate the ways in which using ethno poetic transcription as a tool of bimodal, multi-versional analysis identifies moments of bimodal *mouvance* and ultimately helps to illustrate why such moments are worthy of analysis. Of course, it is important to acknowledge that linguistic features are not the only features of slam poetry subject to *mouvance*. Because performance incorporates many physical facets and non-linguistic vocables, it is also prudent to consider the ways in which non-linguistic performative elements of slam poetry may function as recompositions, a topic which will be addressed in more detail in the following section.

Vocal Dynamics and Physical Performance

A genuine acceptance of slam poetry as a partially bimodal genre also entails the acknowledgment that paralinguistic features of performance are no less significant to the study of slam poetry than syntax and stanza breaks. I want to clarify that my goal here is not to debate the problematics of creating hierarchical relationships between text and performance, nor is it to “defend” performance as a valid mode of literature. My argument is based upon an egalitarian approach to text and performance within the slam poetry genre. I wish to propose that non-linguistic elements of bimodal slam poetry performance can be viewed as instances of recomposition when they extend the text or change from performance to performance. The

¹⁴ Of course, this apotheosis is perhaps a temporary one, as this article asserts that bimodal slam poems continue to evolve after their initial performances.

following examples will illustrate how ethnopoeitic transcription can be used to identify these moments of *mouvance* and understand their significance within the larger context of the poem as a plural piece of literature.

Voice

Vocal dynamics are slam poetry elements that depend on embodiment, making them strictly performative features within the genre. In “Thoughts of Craving,” Hopkins’ uses of vocal dynamics can be viewed as performative recompositions, or instances of *mouvance*, because they extend the interpretive potential of the poem beyond the text. One example of this is the manner in which Hopkins manipulates volume to emphasize certain lines within the poem. Many instances of such recomposition seem to highlight moments of existential reflection. Consider the following line from the transcription as an example: “< ***I mean I don’t think I’m I am whoever you think I am.***” The transcription uses italicization combined with a greater-than angle bracket to denote that Hopkins raises his voice at this point in the poem, which can be interpreted as a means of drawing attention to this claim about the speaker’s sense of self. This emphasis is compounded by a cooccurring increase in tempo, transcribed using the greater-than angle bracket combined with bold font. At some points, decreases in volume are equally impactful in drawing the audience’s attention. Hopkins emphasizes the line, “>*Well everyone but me**,” by lowering the volume of his voice.¹⁵ The stanza preceding this line focuses on describing a raucous drinking party, and the aforementioned line interpolates the speaker of the poem within this context. Because the speaker of the poem is a recovering alcoholic, it is significant that he feels othered by the party, making Hopkins’ use of vocal dynamics as an emphatic technique all the more apt and interpretively significant.

When shifts in pace and volume are used simultaneously, as noted in the first example above, these twofold moments of recomposition not only draw attention to the lines in which they occur, but also often create tonal shifts. Hopkins decreases both the speed and volume of his speech when he performs the following line: “>***I never wanted to be known by verbs or adjectives.***” This line of the poem is an analytically pregnant one, and it makes sense that Hopkins’ performance would draw attention to it by manipulating two separate features of vocality. If the audience pays close attention to a line, it is likely that they will spend more time unpacking its meaning than if nothing had drawn their attention to the line in the first place. In the case of this particular example, audience members might ponder which adjectives and verbs are implied, particularly within the context of the poem as a whole.

In simplest terms, instances of vocal *mouvance* tied to pacing and volume ultimately draw attention to the moments of a slam poem in which these recompositions take place. Additionally, analyzing such examples fosters an understanding of how these performative features are informed by the text, even as they incorporate mode-specific techniques to extend said text. Ethnopoeitic transcriptions, such as the one I have created of Hopkins’ poem, allow analysts to identify these moments precisely. Doing so enables discussions about why the poem

¹⁵ Denoted in transcription by combining italics with a less-than angle bracket.

was recomposed in these ways and how these recompositions impact the poem's interpretive potential.

Body

The embodiment of a slam poem that occurs through performance is the locus of much *mouvance*, be it auditory or visual. The vocal dynamics previously discussed exemplify one category of such *mouvance*. There are, however, many features of embodied performance that are visual, as opposed to auditory, and the following section attends to the ways in which some of them may function as recompositions.

The first example of physical recomposition, as illustrated by the transcription, occurs before Hopkins utters a single syllable: "*Stands on stage silently for 8 seconds / Walks up to the mic slowly.*" It should be noted that the performance video used to create the ethnopoetic transcription of "Thoughts of Craving" documents a performance within the larger context of a poetry slam. Poetry slams are generally raucous events, and the time between performances is filled with scoring, audience response, and host banter. Hopkins' deliberate pause serves as an opportunity for the audience to "settle" and a means of securing as much audience attention as possible. One interpretation of this pause as recomposition poses it as an illustration of the ways in which performance and text differ as modes of slam poetry dissemination. Not only would it be conventionally impossible to compose this pause as part of a text version of the poem, but it would also be unnecessary. However, there are other interpretive possibilities, as well. Even when setting aside the poetry slam event as a contextual feature, the transcription identifies the pause as a feature present in the performance version, but absent in the text version. A simple understanding of this would be as a performative addition to the poem. This view parallels the earlier discussion of performative vocables as *mouvance*. Consequently, it stands to reason that this example would raise similar questions, such as how this moment of physically performed *mouvance* changes the audience's experience of the poem.

In addition to creating audible paratext, slam poetry embodiment also creates visual paratext through the manipulation of the performing body. The performing poet's use of gesture, movement, and facial expression often extends or alters the meaning and/or impact of a given poem's text. Consequently, the physicality of performance often entails moments of recomposition, and these (generally) inaudible features are no less significant to an understanding of slam poetry versioning and creative evolution than the audible counterparts so far discussed.

The simplest type of physical recomposition demonstrated by the ethnopoetic transcription of Hopkins' poem is the use of gesture for the purpose of emphasis. This technique parallels the previously discussed use of vocal dynamics for emphatic purposes. Of course, this method comprises a visual, as opposed to auditory, appeal to the audience. As is the case with audible emphatic performance techniques, physical emphasis may be used to draw attention to lines that are interpretively dense, as illustrated by the following excerpt from the transcription:

>**I wonder how sincere I am, * if * I'm ever sincere**

(hands gesture low and outward) (arms drop to sides)

<**I mean I don't think ~~I'm~~ I am whoever you think I am**

(hands on center of chest) (arms pointed outward)¹⁶

Consider the gestures described in the parentheses. It is worth noting that they are relatively abstract, as opposed to being pantomime or symbolically recognizable gestures. Consequently, the independent meaning of these gestures is interpretively limited, suggesting that their primary purpose may be to emphasize the words they accompany. This draws the audience's attention to these lines, which may encourage them to more deeply consider both the meaning of the lines and their significance within the larger context of the poem. Because these lines suggest a moment of fraught self-reflection, this functionality makes sense. It is also of note that the lines themselves lend deeper meaning to the relatively simple gestures. For example, Hopkins drops his arms to his side at a moment when the speaker is questioning a feature of their identity. In this context, the gesture seems to suggest a sense of resignation or discouragement. Additionally, the use of inward and outward gestures in conjunction with the line that follows highlights the distinction between the speaker's "self" and the "you" of the poem, reinforcing the sense of discord between self-perception and public perception suggested by the text of the line itself. While the simplicity of these gestures allows them to function as a sort of performative beacon primarily, they achieve greater interpretive potential when analyzed in conjunction with their linguistic counterparts.

In some cases, physical and vocal emphasis techniques are used simultaneously, resulting in a multisensory appeal to audience attention. As footnoted, the excerpt discussed in the previous paragraph was also used, in part, to illustrate how Hopkins' manipulations of pacing and volume can be interpreted as moments of performative recomposition. While vocable and physical instances of performative recomposition do not always occur in tandem, they do so in the example discussed above. Through the simultaneous employment of physical and vocable recomposition techniques, Hopkins achieves a greater degree of emphasis than would likely be accomplished by either physical or vocable recompositions alone.

Physical recompositions may, and often do, extend beyond emphatic use of gesture or movement. Slam poets also frequently use gestures to physically perform features of their poems in ways that make said features more accessible and defined. Consider the following example:

>*and we're doing everything it tells us to like*

"Hold up! DRANK"

<"**Shots shots shots shots . .**"

(pantomimes taking shots 4x)

At this point in the poem, the speaker remarks on how the actions of the partygoers mimic the lyrics of the songs to which they are listening. When Hopkins performs the action of taking shots, he illustrates this moment of the poem in a manner that extends beyond simply

¹⁶ Part of this excerpt has been used in an earlier example, and this overlap will be addressed later on.

incorporating the lyrics into the text. In the context of the poem's general topic, alcoholism, the physicality of taking shots is also high-impact. This act of physical performance interpolates the reality of the poem within the shared performance space created by the performer and audience, a feat that would be virtually impossible to accomplish through text alone.

Another type of physical recomposition occurs when Hopkins uses gesture to evoke the landscape of the poem through performance, as illustrated by the following excerpt:

<*Some dude is pissing in a closet*

(points with right hand)

Two more are fighting in the ~~parking lot~~ driveway

(points with left hand)

The gestures associated with these lines situate the events described in the text in spatial relation to each other, creating a loose, fictional "setting" for the poem. While the basic details are clearly established in the text, the use of gestures to indicate these spatial relationships brings the setting into a slightly sharper focus. Additionally, Hopkins' use of the real-world performance space as an analog of his poem's actual setting serves as a partial bridge between the performance act and the world of the poem. Both the pantomime and landscape-sketching examples are intended to illustrate that physical performance can extend the text in ways that impact the audience's experience of a given poem. This suggests the significance of bimodality and how an analysis of individual examples of physical recomposition can serve a deeper understanding of the relationships between modes and the impact of bimodal evolution.

As in the case of linguistic-based instances of *mouvance*, recompositions rooted in non-linguistic vocalizations and physical performance yield important insights into the creative, evolutionary nature not only of this poem but of bimodal slam poems in general. Non-linguistic vocable features and physicality are features unique to performance. While standard linguistic recompositions can be represented through standard text, the features discussed in this section cannot. Recognizing these performance-centered features as part of the recomposition of the poem underscores the importance of performance in the creative process. As illustrated in the examples analyzed above, what we might call performance-specific *mouvance* enhances the speaker's emotional presentation and internal conflicts in the case of Hopkins' poem. Furthermore, it is worth noting that performance-specific *mouvance* can be viewed as generative, as opposed to revisionary. While linguistic recompositions can be understood as conventional revisions of existing text, performance-specific recompositions add a dimension of content that is absent in the text. The impact of performance-specific content on future iterations of text versions of a bimodal slam poem, as well as the evolutionary nature of this content from performance to performance, is an avenue of scholarship that may merit further exploration.

Understanding *Mouvance* through Ethnopoetic Transcriptions

The examples so far discussed provide specific illustrations of how ethnopoetic transcription enables the identification of specific instances and types of *mouvance* between

modes of bimodal slam poetry. The analyses that accompany these identifications are designed to illustrate how recomposition may impact interpretation, reinforcing the idea that any given slam poem is best understood as a plural piece of literature. Additionally, it should be noted that my discussion of “Thoughts of Craving” represents only a fraction of bimodal *mouvance* within the slam poetry genre. While my analysis addresses a text-to-performance comparison, it is also possible, as mentioned earlier in the article, to explore how a slam poem is recomposed from text to text, performance to performance, and even performance to text. Nonetheless, the examples of *mouvance* and/or decomposition within this article also illustrate the ways in which ethnopoetic transcription enables a more defined and precise understanding of how a bimodal slam poem may creatively evolve across modes.

The other types of intermodal and intramodal *mouvance* mentioned above can be viewed as opportunities to apply ethnopoetic transcription comparatively to further explore the changes that take place as a bimodal slam poem is recomposed. Another potentially fruitful angle of approach might entail longitudinal studies that consider multiple text and performance versions of individual, bimodal slam poems over extended periods of time.¹⁷ While such projects are beyond the scope of this article, they are likely to provide some relevant and salient insights. First, these types of projects would allow for the consideration of recursive models of recomposition. While the linear text-to-performance model of recomposition, which is the core focus of the examples in this article, is likely to be primary in most cases, a bimodal slam poem is often recomposed, either textually or performatively, after the initial performance. Determining the role and directionality of recomposition in the ongoing evolution of a bimodal slam poem can offer insights into the author’s creative process.¹⁸ Additionally, a body of such analyses might elucidate some trends and commonalities that apply to the creative process in a more general sense. In these ways, such work fosters a deeper understanding of the relationship between bimodal slam poetry and the broader category of oral-adjacent poetry.

Conclusion

The relationships between text and performance in bimodal slam poetry are nuanced, complex, and interpretively significant. The inclusion of these features in future slam poetry scholarship would contribute to a more comprehensive and accurate body of knowledge of the creative processes at play within the genre, helping to mitigate reductive understandings of slam poetry and ideally encouraging and enabling additional research. However, a lack of easily accessible bimodal representations of slam poetry continues to be a significant barrier to this type of academic work. My application of the Slam Free or Die archive has illustrated not only how

¹⁷ This raises the questions of when a bimodal slam poem is “done” and which versions should be prioritized. These are difficult to address in a general sense, and the answers are likely to vary from poem to poem and from purpose to purpose.

¹⁸ This illustrates the need for multimedia slam poetry archives, which can preserve not only the artifacts themselves but also their contexts, such as dates of production. Scholars must have access to this information in order to fully unpack recursive and linear *mouvance*.

such bimodal archives may play a role in surmounting this accessibility barrier but also the type of scholarship to which these archives may contribute.

Slam poetry has always been a scholastically marginalized genre compared to most other performance-based literature. This may be partly due to the fact that it is difficult to analyze the full scope of its features. While bimodality is only one such feature, I hope that the preceding analyses have illustrated that it is, indeed, a significant one. My work here is intended not only to expand the scope of slam poetry scholarship to include a more multi-dimensional approach to modality but also to illustrate the ways in which reimagining documentation and archival processes can encourage and enable more rigorous, accurate, and complex work on the genre. While my focus here has been bimodal poetry, it is certainly feasible that similar attention could be given to other compositional modalities of slam poetry. For instance, improvised slam poems may be analyzed across versions with an aim toward understanding the role played by oral recomposition within the genre. Additionally, scholarly acknowledgment and exploration of how diverse creative processes within the genre are tied to different modalities, and combinations of modalities, would provide opportunities to comparatively analyze compositional diversity relating to slam poetry. It is my belief that such work can contribute to the existing, and hopefully growing, body of slam poetry scholarship in ways that will help to ensure that slam poetry is represented in a manner that is accurate, multifaceted, and relevant to the larger tradition of performance poetry.

River Valley Community College

Appendix 1: An Ethnopoetic Transcription of “Thoughts of Craving” by Tim Hopkins

Text Source: 2013

Video Source: 2013

Translation Key:

- pause: * (longer pauses = more asterisks)
- nonverbal physical performance and audience response: (described in parentheses directly under the relevant words)
- rising or falling volume: < + italicized words or > + italicized words
- increasing or decreasing speed: < + bold words or > + bold words
- tonal shifts/emphasis: all caps
- vocable additions to the text: underlined words
- vocable subtractions from the text: strikethrough words
- vocable paraperformatives: bold font
- physical paraperformatives: italic font directly beneath relevant lines

Stands on stage silently for 8 seconds

Walks up to the mic slowly

This party is on fire tonight!

(arms spread, points up)

(turns palms out)

I mean roaring thunder loud

(right arm outstretches, finger points toward the audience)

We have that mainstream stereo bumping in the background

(left arm outstretches alongside right) (drops arms, pushes palms back behind him rhythmically)

>and we're doing everything it tells us to like

“Hold up! DRANK”

<“**Shots shots shots shots . .**”

(pantomimes taking shots 4x)

<***Some dude is pissing in a closet***

(points with right hand)

Two more are fighting in the ~~parking lot~~ driveway

(points with left hand)

<***And ~~everyone~~ body is >fucked up on something*** **

(arms open wide, looks up)

>*Well everyone but me* *

(lowers eyes, right hand out at waist level)

and I don't always enjoy the role that I play

In fact it's nights like ~~this~~ these *

that I'll find myself staring

(gesture outward, left hand)

I-see at my friends drinking

And I'll ask them to share *

(gesture outward, right hand)

< **with a smart ass smile**

(gestures across mouth with finger on right hand)

and a half assed chuckle

>**I wonder how sincere I am, * if * I'm ever sincere**

(hands gesture low and outward) (arms drop to sides)

< **I mean I don't think I'm I am whoever you think I am**

(hands on center of chest) (arms pointed outward)

Or maybe I've become something we've never met *

(back and forth pointing between self and audience)

~~Maybe he's better than I am~~

I think that you're better off with me "this" way

(point outward) (point inward to center of body)

>**And Whatever it is you want to call it** *

(emphatic gesture, left hand)

> **I can't escape the question**

Is reality what you've been forcing in my ears?

(arms begin to spread out) (raise hands, point index fingers toward temples)

I mean labels are slapped on everything

So quick

(snap with left hand)

Labels are slapped on everyone

So quick

(snap with left hand)

So many people * misdiagnosed **

Building lives of rubble that look like homes >**but never feel** >**like anything more than dirt**

(hands gesture upward, gaze upward)

>**I never wanted to be known by verbs or adjectives**

(left hand out, palm up) (right hand out, palm up)

I've always thought of myself as noun

(hands in against abdomen)

When I looked in the mirror

(arms out, fingers in frame gesture)

I never thought Recovering or Damaged when I all I saw was human

(arms down at sides)

>**And here, * you call me, * alcoholic***

>A problem * is only a problem when it is deemed so

<and A good feeling is only a “good” feeling when you’ve decided that it is so
(emphatic gesture, right hand)

<Maybe I was taught happiness wrong

(spreading gesture with hands)

Learned escaping to a world on mute

(raises hands near head)

Was better than suffering the volume

(presses palms to sides of head)

<I miss the old times * the silence ~~of~~ in a blackout night

(emphatic gesture, right hand)

I’m told I’m not supposed to

(emphatic gesture, left hand)

< Don’t tell the war stories

<One day at a time

(counting on right hand, one finger)

One hour at a time

(counting on right hand, two fingers)

One minute, One moment, at a time

(counting on right hand, four fingers)

(right hand down)

<A craving can last one moment, one minute

(counting on left hand, one finger, two fingers)

<One hour

(counting on left hand, three fingers)

<one day

(counting on left hand, four fingers)

And I Can’t say that I’m comfortable

<**But after enough time**

(emphatic gesture, right hand)

Dirt ~~begins to~~ feels like home

fake smiles get ~~you~~ me further than honest scowls

And all I’m trying to do is <scream above ~~the~~ your noise

(puts right hand on abdomen)

So when I see my friends drinking

I ask them to share

with a smart ass smile

a half assed chuckle

All I’m doing is begging for this party to stop ~~I am begging for you to~~ leave your drinks where

(arms outstretched)

they lie

I'll pick them up and give myself one more >*silent*

(brings hands in to rest on abdomen)

(right arm outstretched, pointed finger)

Blackout night

Appendix 2: Text Version of “Thoughts of Craving” by Tim Hopkins

Thoughts of Craving

This party is on fire tonight!
I mean roaring thunder loud
We have that mainstream stereo bumping in the background
doing everything it tells us to like
“Hold up! DRANK”
“Shots shots shots . . .”
Some dude is pissing in a closet
Two more are fighting in the parking lot
And everyone is fucked up on something
Well everyone but me
I don’t always enjoy the role that I play
In fact nights like this
I see my friends drinking
And I’ll ask them to share
with a smart ass smile
a half assed chuckle
I wonder how sincere I am, if ever
I don’t think I’m whoever you think I am
Or maybe I’ve become something we’ve never met
Maybe he’s better than I am
I think you’re better off with me “this” way
Whatever it is you want to call it
I can’t escape the question
Is reality what you’ve been forcing in my ears?
I mean labels are slapped on everything
So quick
Labels are slapped on everyone
So quick
So many misdiagnosed
Building lives of rubble that look like homes but never feel more than dirt
I never wanted to be known by verbs or adjectives
I’ve always thought of myself as noun
When I looked in the mirror
I never thought Recovering or Damaged when I all I saw was human
And here, you call me, alcoholic
A problem is only a problem when it is deemed so
A good feeling is only a “good” feeling when you’ve decided it is so
Maybe I was taught happiness wrong
Learned escaping to a world on mute

Was better than suffering the volume
I miss the silence of a blackout night
I'm told I'm not supposed to
Don't tell the war stories
One day at a time
One hour at a time
One minute, One moment, at a time
A craving can last one moment, one minute
One hour
one day
Can't say I'm comfortable
But after enough time
Dirt begins to feel like home
fake smiles get you further than honest scowls
And all I'm trying to do is scream above the noise
So when I see my friends drinking
I ask them to share
with a smart ass smile
a half assed chuckle
I am begging for you to leave your drinks where they lie
I'll pick them up and give myself one more silent
Blackout night

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Born and bred in Ravitaki Village on the main island of Kadavu, Taniela Bolea graduated in management studies and rose to become the founding publisher of Fiji's *Daily Post* newspaper. He was later appointed Chief Executive Officer of the Fiji Audio Visual Commission and today remains interested in the unwritten histories of his people, especially those who communicate neither in writing nor in English yet who have much knowledge about the past that is relevant to its understanding and our collective future.

Janice Carruthers

Janice Carruthers is Professor of French Linguistics at Queen's University Belfast, Northern Ireland. A major strand of her research focuses on oral narrative in French, both conversational and performed, with a particular interest in temporal structures. Publications in this field include *Oral Narration in Modern French: A Linguistic Analysis of Temporal Patterns* (Legenda, 2005), two digital linguistic corpora (one coproduced with Marianne Vergez-Couret), and a series of articles on tenses, frames, and connectives. She has also published on the structure of spoken French, on sociolinguistic variation and language change (including, with Wendy Ayres-Bennett, the *Manual of Romance Sociolinguistics*, De Gruyter, 2018), and on language policy. Her research has been funded by the Arts and Humanities Research Council and by Horizon 2020 (EU).

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Cara Losier Chanoine is an associate English professor and the Liberal Arts department chair at River Valley Community College in New Hampshire. Her scholarly work currently focuses on the relationships between text, performance, and media in performance poetry. This work is, in part, informed and enriched by her dual roles as scholar and practitioner. She participated in the National Poetry Slam four times as a member of teams from New Hampshire and Massachusetts and is a longtime open mic poet. She is also the author of three poetry collections, the most recent of which is *Philosopher Kings*, released by Silver Bow Publishing in January, 2023.

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Rita Compatangelo-Soussignan is Professor of Roman History at Le Mans University (France). Since 2017 she has been the Deputy Director of the Centre for Research in Archaeology, Archaeometry, History, involving the French National Centre for Scientific Research (CNRS), the Ministry of Culture, and the Universities of Rennes, Nantes, and Le Mans. In the framework of various international programs, her multidisciplinary research focuses on ancient landscapes, geography, and science. She is the author or editor of several books, including *Landmarks and Socio-Economic Systems* (Rennes, 2008), *L'expérience de la catastrophe* (Norois, 2019), and *Living with Seismic Phenomena in the Mediterranean and Beyond between Antiquity and the Middle Ages* (Archaeopress, 2022).

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Paul Geraghty

Paul Geraghty (in Fijian, Paula Qeretī) graduated from Cambridge with an MA in Modern Languages (French and German) and earned his PhD from the University of Hawai'i with a dissertation on the history of the Fijian languages. He was recruited by the Fijian Monolingual Dictionary Project that evolved into the Institute of Fijian Language and Culture, of which he was Director from 1986 to 2001, and he was recognized for his service in researching and revitalizing Fiji's linguistic and cultural heritage with the award of Officer of the Order of Fiji in 1999. He is the author of several books, including *The History of the Fijian Languages* (University of Hawai'i Press, 1983), and is well known in Fiji as a newspaper columnist and TV presenter, cohosting the weekly program *Vueta na Vosa* on Fiji TV.

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Loredana Lancini was recently awarded her PhD by the University of Le Mans (France) for a dissertation entitled, *Phénomènes volcaniques et traditions mythiques: Du monde grec colonial aux sociétés de l'Océan Pacifique (îles Fidji)*, which included her study of Nabukelevu Volcano traditions in Fiji. Working at the interface of deep history and geology, she is commencing her academic career and hopes to continue research on oral traditions of catastrophic events in the Pacific islands.

Meli Nanuku

Meli Nanuku has degrees from the University of the South Pacific and was formerly the Education Officer at the Fiji Museum, tasked with collecting and organizing some of the vast archive of traditional knowledge that exists only in the memories of elderly Fijians—and is rapidly disappearing. For this study, Meli Nanuku performed all traditional protocols in the communities studied and took the lead in interviewing elders and translating their responses. He is currently pursuing graduate studies in linguistics.

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With over three decades of research experience in the Pacific islands, geologist Patrick Nunn is Professor of Geography at the University of the Sunshine Coast (Australia) and the author of more than 350 peer-reviewed publications (including several books), most about the Pacific region. He is the author of *Climate, Environment and Society in the Pacific* (Elsevier, 2007) and

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Kaliopate Tavola

Hailing from Dravuni Island in Kadavu and trained as an agricultural economist, Kaliopate Tavola was Fiji's Minister for Foreign Affairs from 2000 to 2006. He maintains a website (www.kaidravuni.com) that tells the world about Kadavuan oral traditions and demonstrates that "myths and legends" of the people of these islands are solidly based in fact and observation, not made-up stories.

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Emily Blanchard West

Emily Blanchard West is General Editor of the *Journal of Indo-European Studies* and Professor of History and Classics at St. Catherine University in St. Paul, Minnesota. Most of her work centers on understanding the relationship between the Greek and Sanskrit epics as descendants of a shared Indo-European tradition, placing particular emphasis on the oral-literary processes which guided their evolution. In an ongoing collaboration with Tzvi Abusch, she explores narrative remnants of cultural contacts between India and Mesopotamia, and has an ongoing interest in the way oral narratives incorporate, and are shaped by, religion and ritual.