Poetries in Contact: Arabic, Persian, and Urdu

Ashwini Deo
Paul Kiparsky

1 Introduction

The Arabic method of metrical analysis devised by al-Khalīl Ibn Aḥmad of Basra (b. 718) came with Islam into Persian, and spread from there with the rest of Persian literary culture into Urdu and Ottoman Turkish.[1] The shared metrical taxonomy for the four languages provided by al-Khalīl's elegant system is a convenient frame of reference, but also tends to mask major differences between their actual metrical repertoires. The biggest divide separates Arabic and Persian, but Urdu and Turkish have in their turn innovated more subtly on their Persian model.

What are the origins and causes of these disparities in metrical practice? Are they due to features of earlier indigenous traditions of versification in Persian, Urdu, and/or Turkish that were folded into the newly adopted Islamic system in these languages? Were they motivated, or even required, by the different phonological structures of the languages? Could contact with other coterritorial poetries have played a role — in the case of Urdu, poems and songs in the Sanskrit-derived quantitative meters that continue to flourish with undiminished vitality in Hindi and the other modern Indo-Aryan languages?

Elwell-Sutton (1976) argued that Arabic-style metrical analysis is ill suited for the Persian meters, and that the profound differences between the two metrical systems speak for their independent origin. Building on his work, Hayes 1979 proposed a generative analysis of Persian meters that departs significantly from Prince's (1989) generative analysis of the Arabic system. Though his focus is synchronic, he suggests that some Persian meters are indigenous, while others "were borrowed into a pre-existing system that was remarkably well prepared to receive them, and which imposed its own extensive modifications on the borrowed meters" (p. 235). Utas (1994) comes independently to a similar conclusion, arguing that New Persian meter is a fusion of inherited pre-Islamic Persian and adopted Arabic elements.

We pursue this line of inquiry by exploring in detail the formal distinctions between the indigenous Persian and Urdu elements and the Arabic ones with a view to gaining a clearer understanding of their historical relationship. We propose that the Persian/Urdu meters fall into three classes:

(1) A core of Arabic meters modified and pruned to conform to Persian metrical constraints determined by an indigenous metrical tradition. These consist of trimeter and tetrameter lines with fixed numbers of syllables and moras, allowing catalexis, ancipitia at line edges only, and no resolution.

[1]We are very grateful to Frances Pritchett for building her extensive web resource for Urdu, and making Ghalib's ghazals (with their meter classification) and the Urdu Meter Handbook available on it. We have relied heavily on this resource and eagerly await its completion with Mir Taqi Mir's works. We also thank our audience at the Poetics Workshop at Stanford, on April 10, 2010.

(2) A set of native Persian meters based on the (extended) *Rubāʿī* pattern, all with ternary feet.

(3) A small layer of innovative meters based on Indic four- and five-mora meters.

Our findings support the following historical scenario. Persian created a hybrid metrical system by adopting a subset of Arabic meters and modifying them to conform to Persian constraints, while also retaining a class of indigenous meters that were analyzed within the Arabic system. Further, Arabic meters which were not unobtrusively assimilable into Persian despite modification, dropped out of use. In passing into Urdu, the resulting hybrid system is enriched even more as Indian poets expand the Persian repertoire with a further group of meters embedded in Indo-Aryan versification patterns. Finally, a few of these trickle back into Persian in the work of bilingual poets from the 15th century onwards, first in the Deccan, and later in Delhi.

This historical trajectory of the metrical repertoire from Arabic to Persian to Urdu reveals a tension between two types of quantitative meter. The typical Arabic meters are WEIGHT-SENSITIVE, much as those of Classical Greek and Latin. In such meters the contrast between light and heavy syllables functions to mark the opposition in prominence between Strong and Weak metrical positions. In contrast, the Persian and Urdu meters tend to be MORA-COUNTING. Mora-counting meters are based on feet with a fixed number of moras (usually four moras, just as in Sanskrit), and their principal rhythmic interest comes from distributing the constant total weight of the feet in different ways among their syllables. The Indo-Aryan vernaculars inherited their mora-counting meters from Sanskrit. The indigenous Persian system, to the extent that it can be reconstructed, also appears to exhibit this property. The Persian-Urdu repertoire manifests the negotiation between these two distinct poetic functions of quantity.

2 Arabic meter

In order to make sense of the traditional taxonomy, we must briefly introduce the theory behind it. While the Arabic meters go back to pre-Islamic poetry, their traditional classification and description follows the system devised by al-Khalīl. Al-Khalīl divided the meters into five CIRCLES, each with a different sequence of heavy and light syllables on its perimeter, and observed that each meter could be represented by starting at one of the syllables in its circle and going around it a specified number of times.

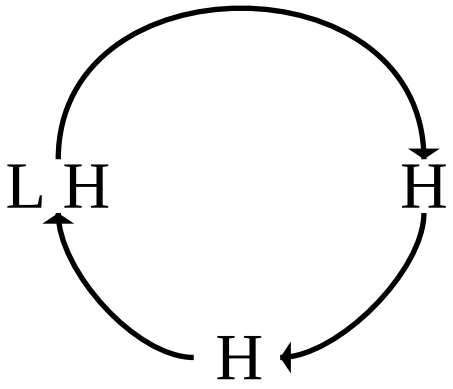

Figure 1: Circle III

This figure illustrates the derivation of the class of meters which al-Khalīl put into his circle III. Metrical positions are defined by elements which consist of one or two syllables of specified weight, e.g. H (a heavy syllable), or LH (an iamb). Suppose we write the sequence LH-H-H around the circle, start at any point and go around it once. This generates the three feet LHHH, HLHH, HHLH, or in metrical notation ⏑–––, –⏑––, and ––⏑–, which are respectively called *hazaj*, *ramal*, and *rajaz*. Going around the circle three times, or equivalently writing the sequence three times and going around the circle once, as al-Khalīl does, generates meters consisting of three such feet, and so on. In the traditional classification, each circle has a specified number of repetitions of some sequence of elements on the perimeter, and each group of meters is identified by its circle and its starting point.

Al-Khalīl's schema generates five idealized basic circles, numbered I-V as in (1). Each circle generates a basic grid, and each grid in turn generates a family of prototypical meters. The five circles and the families that belong to each are listed in (1), with their respective grids shown on the right.

(1)

I.	a. *ṭawīl*	LH H LH H H…
	b. *madīd*	H LH H H LH…
	c. *basīṭ*	H H LH H LH…
II.	a. *wāfir*	LH L L H…
	b. *kāmil*	L L H LH…
III.	a. *rajaz, sarīʿ*	H H LH…
	b. *ramal*	H LH H…
	c. *hazaj*	LH H H…
IV.	a. *munsariḥ*	H H LH H H HL…
	b. *xafīf*	H LH H H HL H…
	c. *muẓāriʿ*	LH H H HL H H…
	d. *muqtaḍab*	H H HL H H LH…
	e. *mujtas*	H HL H H LH H…
V.	a. *mutaqārib*	LH H…
	b. *mutadārik*	H LH…

Al-Khalīl and his followers then posit a set of rules which apply systematically to the prototypical patterns in (1) to derive the various actual meters assigned to each pattern. The application of these rules in various combinations generates the formidable inventory of surface metrical patterns that we reproduce in (2) below.

Our list is based on Paoli (2009) and on Wright's grammar (third edition, 1951: 362-367).[2] We adopt Wright's foot divisions, without committing ourselves to any particular analysis of the Arabic meters (though approaches along the lines of Schuh (1999) and Paoli (2009) seem to us the most promising). In accord with standard metrical notation, ⏑̲ and ⏑̄ show ANCEPS positions, where ⏑̲ is usually filled by a heavy syllable, and ⏑̄ is usually filled by a light syllable. ⏑⏑̲ stands for a BICEPS, a position which can filled either by a heavy syllable or by two light syllables. ⏑̄⏑̲ stands for a position which is either ⏑⏑, –⏑, or – (in *mujtaṯh*, *khafīf*, and *mutadārik*). '=' marks a superheavy (three-mora) syllable. In the initial sequence ⏑̄⏑̲, at least one of the two syllables must be heavy, except in *rajaz* and perhaps in the rare trimeter form of *basīṭ*.

(2) Arabic meters

[2]Each of these authorities contributes some unique useful information of their own. Wright distinguishes between ⏑̲ and ⏑̄ for positions that Paoli represents uniformly as '×', and for which Stoetzer 1998 on the other hand sometimes shows invariant – and ⏑, respectively. Wright also gives some late meters and varieties of meters which are missing in Paoli's and Stoetzer's mostly pre-Islamic data. These are included here. Paoli draws attention to superheavy syllables as a distinctive feature of the final metrical position in some varieties of *ramal* and *sarīʿ*. Other differences between the three inventories probably have to do with the interpretation of variants of rare meters. In general, further study of the statistical distribution of metrical variants is required.

I.	a. *ṭawīl*	1.	∪–⏑ | ∪–⏒– | ∪–⏑ | ∪–∪– ‖ ∪–⏑ | ∪–⏒– | ∪–⏑ | ∪–––
		2.	∪–⏑ | ∪–⏒– | ∪–⏑ | ∪–∪– ‖ ∪–⏑ | ∪–⏒– | ∪–⏑ | ∪–∪–
		3.	∪–⏑ | ∪–⏒– | ∪–⏑ | ∪–∪– ‖ ∪–⏑ | ∪–⏑– | ∪–∪ | ∪––
	b. *madīd*	1.	⏑∪–– | ⏑∪– | ⏑∪–– ‖ ⏑∪–– | ⏑∪– | ⏑∪––
		2.	⏑∪–– | ⏑∪– | ⏑∪–– ‖ ⏑∪–– | ⏑∪– | ⏑∪–
		3.	⏑∪–⏑ | –∪– | ∪∪– ‖ ⏑∪–⏑ | –∪– | ⏒–
		4.	⏑∪–⏑ | –∪– | ∪∪– ‖ ⏑∪–⏑ | –∪– | ––
	c. *basīṭ*	1.	⏑–∪– | ⏒∪– | ⏒–∪– | ∪∪– ‖ ⏑–∪– | ⏒∪– | ⏒–∪– | ⏒⏒–
		2.	⏑⏒∪– | ⏒∪– | ⏒–∪– | ∪∪– ‖ ⏑⏒∪– | ⏒∪– | ⏒–∪– | ⏒⏒–
		3.	⏑⏒∪– | ⏒∪– | ⏒–∪– ‖ ⏑⏒∪– | ⏒∪– | ⏒–∪–
		4.	⏑⏒∪– | –∪– | ⏒–∪– ‖ ⏑⏒∪– | –∪– | ⏒–∪–
		5.	⏑–∪– | –∪– | ⏒–∪– ‖ ⏑–∪– | –∪– | ⏒–∪–
		6.	⏒∪∪– | –∪– | ⏒–∪– ‖ ⏑∪∪– | –∪– | ⏒–∪–
		7.	⏑–∪– | –∪– | ⏒–– ‖ ⏑–∪– | –∪– | ⏒––
		8.	⏒∪∪– | –∪– | ⏒–– ‖ ⏑∪∪– | –∪– | ⏒––
II.	a. *wāfir*	1.	∪–⏒⏒– | ∪–⏒⏒– | ∪–– ‖ ∪–⏒⏒– | ∪–⏒⏒– | ∪––
		2.	∪–⏒⏒– | ∪–⏒⏒– ‖ ∪–⏒⏒– | ∪–∪∪–
		3.	∪–⏒⏒– | ∪–⏒⏒– ‖ ∪–⏒⏒– | ∪–––
	b. *kāmil*	1.	⏒⏒–∪– | ⏒⏒–∪– | ⏒⏒–∪– ‖ ⏒⏒–∪– | ⏒⏒–∪– | ⏒⏒–∪–
		2.	⏒⏒–∪– | ⏒⏒–∪– | ⏒⏒–∪– ‖ ⏒⏒–∪– | ⏒⏒–∪– | ⏒⏒––
		3.	⏒⏒–∪– | ⏒⏒–∪– | ⏒⏒–∪– ‖ ⏒⏒–∪– | ⏒⏒–∪– | ––
		4.	⏒⏒–∪– | ⏒⏒–∪– | ∪∪– ‖ ⏒⏒–∪– | ⏒⏒–∪– | ⏒⏒–
		5.	⏒⏒–∪– | ⏒⏒–∪– ‖ ⏒⏒–∪– | ⏒⏒–∪– | –
		6.	⏒⏒–∪– | ⏒⏒–∪– ‖ ⏒⏒–∪– | ⏒⏒–∪–
III.	a. *rajaz*	1.	⏑⏒∪– | ⏑⏒∪– | ⏑⏒∪–
		2.	⏑⏒∪– | ⏑⏒∪– | ⏑–=
		3.	⏑⏒∪– | ⏑⏒∪– | ⏑––
		4.	⏑⏒∪– | ⏑⏒∪–
		5.	⏑⏒∪– | ⏑–=
		6.	⏑⏒∪– | ⏑∪–
		7.	⏑⏒∪– | ⏑⏒∪– | ⏑⏒∪– ‖ ⏑⏒∪– | ⏑⏒∪– | ⏑⏒∪–
	b. *hazaj*	1.	∪––⏑ | ∪––⏑ ‖ ∪––⏑ | ∪–––
		2.	∪––⏑ | ∪––⏑ ‖ ∪––⏑ | ∪––
	c. *ramal*	1.	⏒∪–– | ⏒∪–– | ⏒∪–– ‖ ⏒∪–– | ⏒∪–– | ⏒∪––
		2.	⏒∪–– | ⏒∪–– | ⏒∪– ‖ ⏒∪–– | ⏒∪–– | ⏒∪––
		3.	⏒∪–– | ⏒∪–– | ⏒∪– ‖ ⏒∪–– | ⏒∪–– | ⏒∪=
		4.	⏒∪–– | ⏒∪–– | ⏒∪–(–) ‖ ⏒∪–– | ⏒∪–– | ⏒∪–
		5.	⏒∪–– | ⏒∪–– ‖ ⏒∪–– | ⏒∪––
		6.	⏒∪–– | ⏒∪–– ‖ ⏒∪–– | ⏒∪=
		7.	–∪–– | –∪–– ‖ –∪–– | –∪– ‖ –∪–– | –∪–– ‖ –∪–– | –∪–
	d. *sarīʿ*	1.	⏑⏒∪– | –⏑∪– | –∪– ‖ ⏑⏒∪– | –⏑∪– | –∪=
		2.	⏑⏒∪– | –⏑∪– | –∪– ‖ ⏑⏒∪– | –⏑∪– | –∪–
		3.	⏑⏒∪– | –⏑∪– | –∪– ‖ ⏑⏒∪– | –⏑∪– | ––

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		4.	⏑̄ ⏑̲ ∪ – | – ⏑̄ ∪ – | ⏑̄ – ‖ ⏑̄ ⏑̲ ∪ – | – ⏑̄ ∪ – | ⏑̄ –
		5.	⏑̄ ⏑̲ ∪ – | ⏑̄ – ∪ – | ⏑̄ – ‖ ⏑̄ ⏑̲ ∪ – | ⏑̄ ∪ – | ⏑̄ –
IV.	a. *munsariḥ*		⏑̄ ⏑̲ ∪ – | – ⏑̄ – ∪ | – ∪ ∪ – ‖ ⏑̄ ⏑̲ ∪ – | – ⏑̄ – ∪ | – ⏑̿ –
	b. *mujtath*		⏑̲ – ∪ – | ⏑̲ ∪ – – ‖ ⏑̲ – ∪ – | ⏑̿ – –
	c. *muẓārīʿ*		∪ – ⏑̄ ⏑̲ | – ∪ – – ‖ ∪ – ⏑̲ ⏑̄ | – ∪ – –
	d. *khafīf*	1.	⏑̄ ∪ – – | ⏑̄ – ∪ – | ⏑̄ ∪ – – ‖ ⏑̄ ∪ – – | ∪ – ∪ – | ⏑̿ – –
		2.	⏑̄ ∪ – – | ⏑̄ – ∪ – | ⏑̄ ∪ – – ‖ ⏑̄ ∪ – – | ⏑̄ – ∪ – | ⏑̿ –
		3.	⏑̄ ∪ – – | ⏑̄ – ∪ – | ⏑̄ ∪ – ‖ ⏑̄ ∪ – – | ⏑̄ – ∪ – | ⏑̿ –
		4.	⏑̄ ∪ – – | ⏑̄ – ∪ – ‖ ⏑̄ ∪ – – | ⏑̄ – ∪ –
		5.	⏑̄ ∪ – – | ⏑̄ – ∪ – ‖ ⏑̄ ∪ – – | ∪ – –
		6.	⏑̄ ∪ – – | ⏑̄ – ∪ – | ⏑̄ ∪ – –
	e. *muqtaḍab*		⏑̲ ⏑̄ – ∪ | – ∪ ∪ – ‖ ⏑̲ ⏑̄ – ∪ | – ∪ ∪ –
V.	a. *mutaqārib*	1.	∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | ∪ – – ‖ ∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | ∪ – –
		2.	∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | ∪ – ‖ ∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | ∪ – –
		3.	∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | ∪ – ∪ ‖ ∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | ∪ –
		4.	∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | ∪ – ‖ ∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | ∪ –
		5.	∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | ∪ – ∪ ‖ ∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | –
		6.	∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – | ∪ – ‖ ∪ – ⏑̄ | ∪ – ⏑̄ | ∪ – – | –
	b. *mutadārik*	1.	⏑̿ – | ⏑̿ – | ⏑̿ – ‖ ⏑̿ – | ⏑̿ – | ⏑̿ –
		2.	⏑̿ – | ⏑̿ – | ⏑̿ – | ⏑̿ – ‖ ⏑̿ – | ⏑̿ – | ⏑̿ – | ⏑̿ –

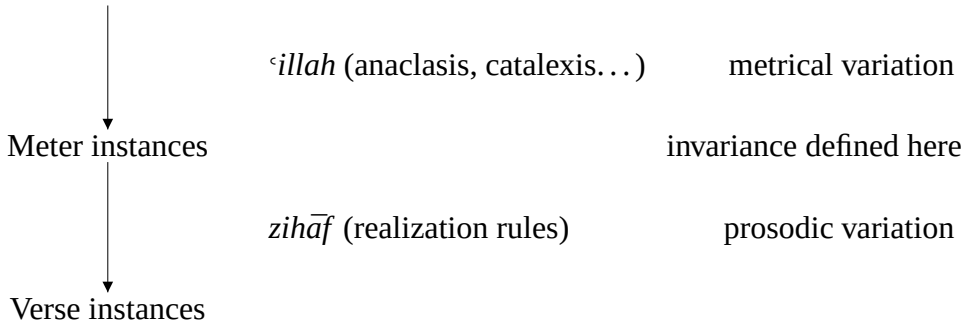
Even though many of these meters differ only trivially from each other, they are all distinct and every line of a poem must follow the same specific schema. The traditional theory derives each set of related meters (*ṭawīl*, *ramal*, *hazaj*, etc.) from a basic prototype by substitution rules called *ʿillah*, which have the effect of shortening, deleting, and syncopating feet and metrical positions (though they are formulated as operations on letters rather than on syllables; see e.g. Stroezer 1986: 55). For example, the abstract *ṭawīl* prototype underlies the meters *ṭawīl-1*, *ṭawīl-2*, and *ṭawīl-3*, each a fixed form that must be maintained faithfully throughout a poem.

The tradition also recognizes a second, sub-metrical type of variation, involving options in the realization of certain positions in a metrical schema *within a poem*, as shown in our list by such symbols as ⏑̿ and ⏑̲. This is free variation without metrical significance and need not be repeated in successive lines or in each foot within a line. It is derived by a second set of substitution rules called *zihāf*.

In modern terms, the theory has a pattern generator and two transducer modules:[3]

[3]From the perspective of pre-OT generative metrics, *zihāf* would correspond to prosodic rules (realization rules) and *ʿillah* would be a matter of variation in the metrical pattern. Any theory will clearly have to make some such distinction (Barsch 1995). What exactly the distinction would amount to in OT metrics remains to be investigated. At least roughly, *zihāf* corresponds to faithfulness violations and *ʿillah* corresponds to alternative rankings of markedness constraints.

(3) Abstract meter types



The reinterpretation of al-Khalīl's analysis by Weil (1958, 1960) has been influential particularly in generative metrics, and has in turn been reanalyzed by Halle (1966), Maling (1973), Prince (1989), and Fabb & Halle (2008). Prince shows how the regularities on which al-Khalīl based his system are captured by an analysis that is consistent with the principles of modern metrical theory and with the prosodic categories motivated by generative phonology. Prince's main conclusion is that most Arabic meters are based on ternary feet (anapests, amphibrachs, and left-and right-branching dactyls), with a quantitative iamb (⏑–) as peak and heavy and light syllables in the other two positions.

Contemporary theories that reject the al-Khalīlian approach include Stoetzer (1986), Schuh (1989), Golston and Riad (1997), and Paoli (2009). They differ very substantially from each other, and it is fair to say that no consensus has yet emerged. While we need not commit ourselves to any particular formal analysis of Arabic meters for purposes of this essay, we hope to address the issue in future work. For now, we turn directly to their counterparts in some other notable poetic traditions of the Islamic world.

3 Persian/Urdu/Turkish meters

The table below shows the inventory and traditional classification of the principal meters of Persian and Persian-derived Urdu and Ottoman Turkish verse, with such information about their frequency in Persian and Turkish as we have been able to glean. The two rightmost columns give the frequency of the meter in Persian according to Elwell-Sutton (1976: 163-7) and its frequency in Ottoman Turkish based on Andrews (1976: 27-29) and on additional data from Özuygun (2005: 281). For Urdu, we have found no comparable statistics in the literature,[4] so we have simply placed a check mark by those meters which are recorded for Urdu in Pritchett & Khaliq 2003 or instantiated in the anthology of Barker (1968). Impressionistically, the frequencies seem to be roughly comparable, however.[5]

(4) Persian, Urdu and Turkish meters š

[4]The figures in Bailey (1939) are suggestive but not enough for a detailed numerical comparison.

[5]Traditional metrical theory provides for a plethora of other variants of almost all these meters, which are used very rarely (in less than %0.1 of the corpus) or not at all. We have omitted these in the table and refer the interested reader to Elwell-Sutton (1976) for a complete listing. We have also omitted the rather rare meters *qarīb*, defined by the cadence . . . ⏑⏑––⏑–⏑–, and *mušākil* (–⏑–⏑⏑––. . . ⏑⏑––), because they seem to be special to Persian. The frequencies given here are for all types of poetry; those for the ghazal are on the whole similar, though there are some differences, which may be significant (e.g. *xafīf* is underrepresented and *ramal* is overrepresented in ghazals, as compared to other types of verse).

			Metrical schema	*Urdu*	*Persian*	*Turkish*
I.	a. *ṭawīl*		(not used in Persian, Urdu, and Turkish)	—	—	
	b. *basīṭ*		(not used in Persian, Urdu, and Turkish)	—	—	
	c. *madīd*		(not used in Persian, Urdu, and Turkish)	—	—	
II.	a. *kāmil*		∪∪–∪– | ∪∪–∪– | ∪∪–∪– | ∪∪–∪–	✓	—	
	b. *wāfir*		(not used in Persian, Urdu, and Turkish)	—	—	
III.	a. *rajaz*	1.	–∪∪– | ∪–∪– | –∪∪– | ∪–∪–	✓	.8%	.3%
		2.	––∪– | ––∪– | ––∪– | ––∪–	✓	1.2%	1.2%
		3.	–∪∪– | –∪∪– | –∪∪– | –∪∪–	—	.1%	
	b. *hazaj*	1.	––– | –∪– | ∪––	✓	3.2%	.8%
		2.	––∪ | ∪–∪– | ∪––	✓		
		3.	––∪ | ∪–∪– | ∪–––	—	.7%	
		4.	–∪– | ∪––– ‖ –∪– | ∪–––	✓	<.1%	
		5.	––∪∪ | ––∪∪ | ––∪∪ | ––	✓	5.7%	
		6.	––∪ | ∪––– ‖ ––∪ | ∪–––	✓	1.3%	.3%
		7.	–∪– | ∪–∪– ‖ –∪– | ∪–∪–	✓	—	
		8.	∪––– | ∪––– | ∪––– | ∪–––	✓	6.0%	16.5%
		9.	∪––– | ∪––– | ∪––	✓	4.6%	
		10.	∪–∪– | ∪–∪– | ∪–∪– | ∪–∪–	✓	<.1%	
	c. *ramal*	1.	–∪–– | –∪–– | –∪–– | –∪––	—	.2%	
		2.	–∪–– | –∪–– | –∪–– | –∪–	✓	12.2%	33.3%
		3.	–∪–– | –∪–– | –∪–	✓	3.2%	
		4.	⏑∪–– | ∪∪–– | ––	✓	1.1%	
		5.	⏑∪–– | ∪∪–– | ∪∪–– | ⏑⏑––	—	.3%	
		6.	⏑∪–– | ∪∪–– | ∪∪–– | ⏑⏑–	✓	9.7%	16.6%
		7.	∪∪–∪ | –∪–– ‖ ∪∪–∪ | –∪––	✓	.6%	
	d. *sarīʿ*	1.	–∪∪– | –∪∪– | –∪–	✓	1.1%	
		2.	–∪∪– | –∪∪– | –∪∪– | –∪∪–	—	.1%	
IV.	a. *munsariḥ*	1	–∪∪– | –∪– ‖ –∪∪– | –∪–	✓	1.2%	
		2.	–∪∪– | –∪–∪ | –∪∪– | –	✓	1.5%	
	b. *mujtaṣ*	1.	∪–∪– | ∪∪–– | ∪–∪– | ⏑⏑–	✓	15.0%	4.3%
		2.	∪–∪– | ∪∪–– | ∪–∪– | ∪∪––	✓	.7%	
		3.	∪–∪– | ∪∪–– | ∪–∪– | –	—	.1%	
	c. *muẓāriʿ*	1.	––∪ | –∪–– ‖ ––∪ | –∪––	✓	2.0%	.6%
		2.	––∪ | –∪–∪ | ∪––∪ | –∪–	✓	13.2%	19.4%
		3.	––∪ | –∪–∪ | ∪–––	—	.3%	
	d. *xafīf*		⏑∪–– | ∪–∪– | –⏑⏑	✓	8.9%	3.3%
V.	a. *mutaqārib*	1.	–– | ∪–– ‖ –– | ∪––	✓	.1%	3.3%
		2.	∪–– | ∪–– | ∪–– | ∪––	✓	1.3%	
		3.	∪–– | ∪–– | ∪–– | ∪–	✓	1.9%	
		4.	∪–∪ | –– | ∪–∪ | –– | ∪–∪ | –– | ∪–∪ | ––	✓	<.1%	
		5.	∪–∪ | –– | ∪–∪ | –– | ∪–∪ | ––	✓	—	
	b. *mutadārik*	1.	–– | ∪∪– | –– | –– | –– | ∪∪– | –– | ––	✓	<.1%	

Continued on next page

		Urdu	*Persian*	*Turkish*
2.	–∪– | –∪– | –∪– | –∪– | –∪– | –∪– | –∪– | –∪–	✓		<.1%

Compared to (2), the Persian and Urdu inventory has shrunk, and the first two families of meters are quite decimated. The individual meters become more uniform in shape. Most of them substantially reduce the variation in syllable and mora count allowed by their Arabic namesakes. Bucking this trend, a few of the families, especially *hazaj*, become more diversified, and here we also find a great deal of variation in the distribution of syllable weight over metrical positions, as in the metrically interchangeable *hazaj 1* and *hazaj 2* (IIIb1/2). This is the phenomenon of anaclasis, or syncopation, to which we return below.

The most conspicuous overall differences between the two inventories can be summarized as follows. Ancipitia (positions allowing – or ∪) are found in Arabic in the majority of meters, and they can occur in any position of the line. In contrast, Persian and Urdu allow them only in two meters (IIIc *ramal* and IVd *xafīf*), and even there only at the left edge of line. Bicipitia (positions allowing – for ∪∪) can occur in Arabic in any foot of a line, but Persian and Urdu restrict them to the last foot. Catalexis, i.e. a missing position at the end of a foot, can likewise occur in Arabic in any foot, whereas Persian and Urdu only allow it at the end of a line, or at the end of a half line in those meters which require a caesura at the middle of a line. Finally, in Arabic the length of a line varies from 2 to 8 feet depending on the meter; in Persian and Urdu is is generally 3 or 4 feet, or 8 feet in the case of certain meters that have exceptionally short feet.

The common thread that ties these differences together is that Persian/Urdu shows a strong tendency towards isosyllabicity and isomoraicity compared to Arabic. The relatively equal weight of feet and lines is enforced by the metrical constraints stated, in somewhat informal terms, in (5).

(5) a. FOOT COUNT: A line has at least three three and at most four feet, with a strong preference for tetrameter. However, short (4/5 mora) feet of the Indic type may be combined into eight-foot lines.

b. FOOT SIZE: A foot has in principle a fixed number of syllables. Variation in syllable count is limited to BICIPITIA and CATALEXIS at the end of a line.

- BICIPITIA: In the last foot, a position requiring two light syllables may be filled by a heavy syllable.
- CATALEXIS: In some meters, the last position of a line or half-line is empty.

c. POSITION WEIGHT: Every position has a fixed weight. Variation in quantity is limited to ANCIPITIA at the beginning of a line in *ramal* and *xafīf*.

All meter-specific licenses of Persian are restrictions of corresponding more extensive Arabic ones. Thus, the anceps in the first foot of Persian *ramal* and *xafīf* (see (5c)) is a vestige of the anceps that Arabic allows in *all* feet of *ramal* and *xafīf*, as well as in several other meters.

It should be noted that we do not treat every case where ∪∪ varies with – as resolution. Rather, in line with standard treatments of quantitative verse (e.g. West 1982), we understand resolution as the splitting of basic – into ∪∪ in a Strong position (as in a Greek quantitative iambs or trochees of the form ∪∪∪). But ∪∪ alternating with – in Weak positions (as in the anapestic feet of a hexameter,

on in the last foot of Persian/Urdu *ramal 6*) is not resolution, but rather a biceps licensed directly by the metrical correspondence constraints.

The Persian restrictions are imposed in a variety of ways. Those Arabic meters which violate (5) irreparably simply go into disuse. That includes the extra-long (eight-foot) meters in Ia *ṭawīl*, Ib *basīṭ 1, 2*, and IIa *wāfir 1*, the extra-short two- and three-foot varieties of IIIa *rajaz*, IIb *kāmil*, and IVd *xafīf*, and finally all meters that would require catalexis inside a line or half-line, rather than at the end, namely Ia *ṭawīl* again, Ib *madīd*, and Ic *basīṭ*. The disappearance of *ṭawīl* and *basīṭ* is particularly striking since they are among the four commonest Arabic meters.

Many new meters of Persian and Urdu can be seen as counterparts of Arabic meters modified so as to conform to (5). Three-foot meters of the *rajaz* family are expanded into tetrameters.

(6) a. Arabic ⏑⏑⏓ | ⏑⏑⏓ | ⏑⏑⏓ *rajaz 1*
Persian ⏓⏑⏓ | ⏑⏓⏑ ‖ ⏓⏑⏓ | ⏑⏓⏑ *rajaz 1*

b. Arabic ⏒⏓⏑ | ⏒⏓⏑ | ⏒⏓⏑ *rajaz 2*
Persian ⏓⏓⏑ | ⏓⏓⏑ | ⏓⏓⏑ | ⏓⏓⏑ *rajaz 2*

As usual, the *anceps* positions are replaced by obligatory length in deference to (5c).

Conversely, long meters can be clipped into tetrameters. Persian *munsariḥ* has two forms, one a catalectic tetrameter reduction of the corresponding Arabic hexameter form, the other perhaps truncated from the eight-foot *basīṭ 2*, with a caesura added in order to license the catalexis, and renamed as *munsariḥ* in order to fit it into the traditional nomenclature.

(7) a. Arabic ⏑⏑⏓ | ⏓⏑⏓⏑ | ⏓⏑⏑⏓ ‖ ⏑⏑⏑⏓ | ⏓⏑⏓⏑ | ⏓⏑⏑ *munsariḥ 2*
Persian ⏓⏑⏑⏓ | ⏓⏑⏓⏑ | ⏓⏑⏑⏓ | ⏓ *munsariḥ 2*

b. Arabic ⏑⏑⏑⏓ | ⏑⏑⏓ | ⏑⏓⏑⏓ | ⏑⏑⏓ ‖ ⏒⏑⏑⏓ | ⏑⏑⏓ | ⏑⏓⏑⏓ | ⏑⏑⏓ *basīṭ 2*
Persian ⏓⏑⏑⏓ | ⏓⏑⏓ ‖ ⏓⏑⏑⏓ | ⏓⏑⏓ *munsariḥ 1*

Ancipitia are retained only in the popular *ramal* and *xafīf*, as just mentioned. Elsewhere isochrony is imposed by turning them into fixed heavy or light positions.

(8) a. Arabic ⏑⏓⏓⏒ | ⏑⏓⏓⏒ ‖ ⏑⏓⏓⏒ | ⏑⏓⏓⏓ *hazaj*
Persian ⏑⏓⏓⏓ | ⏑⏓⏓⏓ | ⏑⏓⏓⏓ | ⏑⏓⏓⏓ *hazaj*

b. Arabic ⏒⏑⏑⏓ | ⏒⏑⏑⏓ ‖ ⏒⏑⏑⏓ | ⏒⏑⏑⏓ *sarīʿ 1*
Persian ⏓⏑⏑⏓ | ⏓⏑⏑⏓ | ⏓⏑⏑⏓ | ⏓⏑⏑⏓ *sarīʿ 1*

c. Arabic ⏑⏓⏑⏓ | ⏑⏑⏓⏓ ‖ ⏑⏓⏑⏓ | ⏒⏑⏓⏓ *mujtath*
Persian ⏑⏓⏑⏓ | ⏑⏑⏓⏓ | ⏑⏓⏑⏓ | ⏑⏑⏓ *mujtath*

Sometimes an anceps gets fixed in both ways, so that metrically equivalent variations of Arabic become separate Persian/Urdu meters which cannot be combined within a poem.

(9) Arabic ⏑⏑⏓⏓ | ⏑⏑⏓⏓ ‖ ⏑⏑⏓⏓ | ⏑⏑⏓⏓ | ⏑⏑⏓ *ramal 5*
Persian ⏓⏑⏓⏓ | ⏓⏑⏓⏓ | ⏓⏑⏓⏓ | ⏓⏑⏓ *ramal 1*
⏑⏑⏓⏓ | ⏑⏑⏓⏓ | ⏑⏑⏓⏓ | ⏑⏑⏓ *ramal 5*

Resolution is generally eliminated. For example, in the Arabic *kāmil* meter, the Weak subposition is realized as a heavy syllable, and its Strong subposition may be resolved into two light syllables. In Urdu this is not just an option but a requirement. The initial position of every *kāmil* foot is realized as ⏑.[6]

(10) Arabic ⏑⏑–⏑– | ⏑⏑–⏑– ‖ ⏑⏑–⏑– | ⏑⏑–⏑– *kāmil 2*
Persian ⏑⏑–⏑– | ⏑⏑–⏑– | ⏑⏑–⏑– | ⏑⏑–⏑– *kāmil*

As mentioned, the last foot of the line allows conversely – for ⏑⏑ in some meters, which we do not treat as resolution. In Persian and Urdu the versions are used interchangeably by some poets (Pritchett and Khaliq 2003), while others treat them as distinct meters, as do metrical theorists. These pairs are *ramal* 3, *ramal* 4, *xafīf*, and *mujtaṣ* 1.

The constraints in (5) obliterate the distinctions between some of the Arabic meters. So instead of saying that *wāfir* disappears, we may equally well say that the loss of resolution and ancipitia causes some of it varieties to merge with *hazaj*:

(11) Arabic ⏑––⏑ | ⏑––⏑ ‖ ⏑––⏑ | ⏑––– *hazaj 1*
Arabic ⏑–⏑⏑– | ⏑–⏑⏑– ‖ ⏑–⏑⏑– | ⏑–⏑⏑– *wāfir 3*
Arabic ⏑–⏑⏑– | ⏑–⏑⏑– ‖ ⏑–⏑⏑– | ⏑––– *wāfir 4*
Persian ⏑––– | ⏑––– | ⏑––– | ⏑––– *hazaj 8*

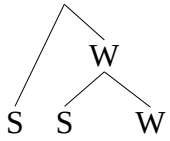
4 The Persian constraints

The constraints in (4) largely account for the Persian modifications of the Arabic meters. But where do these constraints themselves come from? Suppose we assume that at least some of the Persian meters originated independently of Arabic and the Arabic metrical model (Lazard 1975: 613). Then the constraints in (4) may reflect the indigenous Persian verse tradition that shaped and altered the Arabic repertoire that it encountered.

Although virtually no Pre-Islamic Persian verse survives, the family of *Rubāʿī* meters, with no Arabic counterpart, restricted to the *Rubāʿī* verse form of quatrains and never imported into the Ghazal form, provides a glimpse into the nature of this metrical tradition. In fact, a closer look at the *Rubāʿī* meters reveals that they conform exactly to the constraints in (4). We hypothesize that this family represents but a part of a larger indigenous repertoire of mora-counting Persian meters, to which the adopted Arabic meters were assimilated.

The *Rubāʿī* meters are six-mora tetrameters with a final catalectic foot (Bailey 1939, Pritchett and Khaliq 2003). The prototypical *Rubāʿī* foot has the form ––⏑⏑, with a syncopated variant –⏑–⏑ allowed in the second foot. The meter is thus built on right-branching dactyls,

(12)



[6]Barker et al. (1968 :xlix) cite another form of *kāmil* where ⏑ is obligatory in odd feet and optional in even feet. We have found no examples of it so far; in any case it also differs from the Arabic *kāmil*, where resolution is optional throughout.

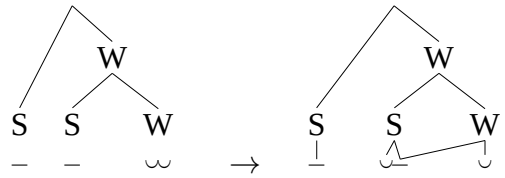
by means of the following correspondence rules.

(13) a. Each position is realized by a bimoraic trochee.
b. A Strong position must contain a heavy syllable.
c. Syncopation is allowed in even feet.
d. There are maximally four syllables per foot.
e. The final foot is catalectic (only the Peak position is realized).

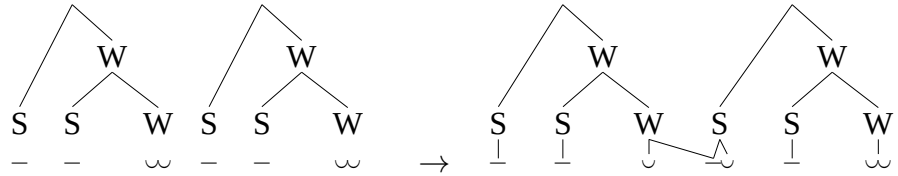
The *Rubā'ī* meters conform to the Persian preference for tetrameters, and they are isomoraic (except for line-final catalexis). There is no resolution: neither of the Strong positions can be realized as ⏑⏑.

By SYNCOPATION (the process called ANACLASIS in classical metrics) we mean a redistribution of the two weight units of a long syllable over two metrical positions, resulting in a kind of quantitative metathesis of ⏑— to —⏑ and conversely. A hallmark of mora-counting meters, it is an important source of metrical variation in Persian/Urdu, as it is in certain Greek meters and in Indo-Aryan meters (Deo 2007). We will assume that the displaced mora belongs to the Strong position, since that keeps the correspondence rules simpler by maintaining the generalization that Strong positions must contain a Heavy syllable.[7] This formulation permits exactly the two types of syncopation in (14) that we find in *Rubā'ī*.

(14) a. Leftward syncopation

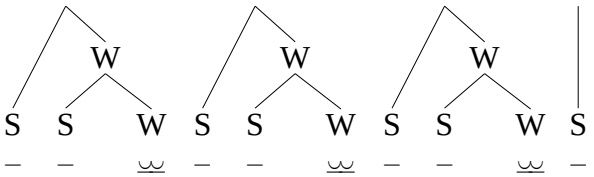


b. Rightward syncopation



The full inventory of *Rubā'ī* meters consists of twelve freely interchangeable line types. They are the eight patterns in (15),

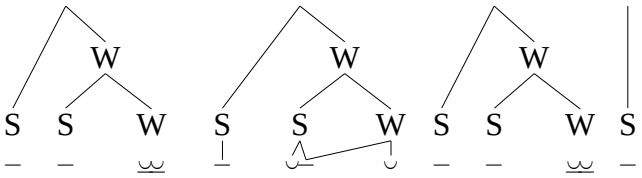
(15)



[7] The alternative would be to allow a Strong position to have a single Light syllable instead of a Heavy syllable if, in compensation, the syllable next to it is Heavy instead of Light.

plus four more resulting from leftward syncopation in the second foot:

(16)



We submit that the modifications that the Arabic meters underwent in Persian are adaptations to the correspondence rules represented by *Rubāʿī* and similar indigenous meters.

The remaining meters, containing many of the busiest workhorses of Persian poetry, are far removed metrically from their Arabic namesakes, as Elwell-Sutton observed. It is the purely Persian *Rubāʿī* meters that provide a working prototype for deriving the bulk of these popular meters. Traditional metrical analysis treats the *Rubāʿī* as a divergent type of *hazaj*. From a historical perspective, if we are right, it is conversely the *Rubāʿī* that served as a model for the new forms of *hazaj* and other meters in Persian.

Pritchett and Khaliq (2003) parse the *Rubāʿī* into ternary six-mora feet, but do not attempt to extend that anlysis to the other Persian meters. Hayes (1979), simplifying the patterns posited by Elwell-Sutton, does propose a comparable analysis of Persian meters as consisting of ternary feet of six moras each, possibly with catalexis, where each position corresponds to a bimoraic trochee, and one of these positions is realized by two light syllables. Though Hayes does not make the connection explicit, his proposal offers a window into the connection between the *Rubāʿī* and non-*Rubāʿī* Persian meters.

A subset of the Persian repertoire fits the *Rubāʿī* constraints in (13) directly, since it is characterized by the properties already established:

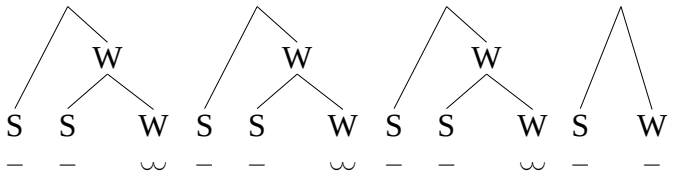
(17)
a. A line consists of four feet (tetrameter).
b. A foot has three metrical positions.
c. A metrical position has two moras (6 moras total per foot).
d. Strong position must contain a heavy syllable.
e. No ancipitia are allowed.
f. Syncopation is allowed in alternating feet.
g. Catalexis is allowed only at the end of a line or half-line.

The very common Persian *hazaj 5*, which makes up 5.7% of Elwell-Sutton's corpus, and lacks an Arabic counterpart, is a *Rubāʿī* in disguise. Its theoretical form is (18a), but refooting it as (18b) reveals it as an instance of (15),

(18)
a. – – ⏑ | ⏑ – – ⏑ | ⏑ – – ⏑ | ⏑ – –
b. – – ⏑⏑ | – – ⏑⏑ | – – ⏑⏑ | – –

which differs from the standard *Rubāʿī* realization of (15) only in that it keeps all but the final terminal Weak position.

(19)



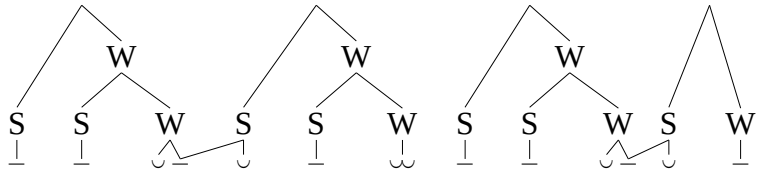
Hazaj 6 (1.3% in Persian and fairly common in Urdu) likewise has no direct Arabic counterpart. Persian metrists represent it as (20a), but we need only redraw the arbitrary foot boundaries as (20b) to recognize it as a tetrameter composed of four ternary feet of six moras each, in fact an even more direct reflection of the *Rubāʿī* than (19) in that it retains the entire fourth foot without undergoing catalexis.

(20) a. ––⏑ | ⏑––– ‖ ––⏑ | ⏑–––

b. ––⏑⏑ | ––– ‖ ––⏑⏑ | –––

With rightward syncopation, we derive four additional Persian meters from the same template, including one of the most frequent, *muẓāriʿ 2* (13.2% of the total Elwell-Sutton corpus, and entirely absent in Arabic).

(21)



As explained above, traditional scholars derive the innovated and modified meters of Persian/Urdu by extensive application of metrical substitution rules to the metrical prototypes posited by al-Khalīlian theory. The required substitution rules for Persian go far beyond what is needed in Arabic itself. Elwell-Sutton (1976: 61) cites *muẓāriʿ 2* as a particularly egregious example of how the Arabic theory complicates the treatment of native Persian meters. The Arabic-style derivation of *muẓāriʿ 2* postulates the following derivational steps.

(22) Basic foot: ⏑–––

⏑––– | –⏑–– | ⏑––– | –⏑––	anaclasis of ⏑––– to –⏑–– in feet 2 and 4
⏑––⏑ | –⏑–– | ⏑––⏑ | –⏑––	shorten the last syllable of feet 1 and 3
––⏑ | –⏑–– | ––⏑ | –⏑–⏑	drop the first syllable of feet 1 and 3
––⏑ | –⏑–⏑ | ⏑––⏑ | –⏑–⏑	optionally replace – by ⏑⏑ in foot 2
––⏑ | –⏑–⏑ | ⏑––⏑ | –⏑–	drop the final syllable of the line

This may be compared with the relatively simple analysis proposed in (21).

Table (23) lists the offspring of the canonical *Rubāʿī*, with frequencies for Persian according to Elwell-Sutton.

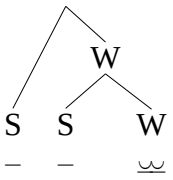
(23)	Meter	Pattern	Derivation	Frequency
1.	*hazaj 5*	––⏑⏑ | ––⏑ | ––⏑⏑ | ––	Catalexis	5.7%
2.	*hazaj 6*	––⏑⏑ | ––– ‖ ––⏑⏑ | –––		1.3%
3.	*hazaj 7*	–⏑–⏑ | –⏑– ‖ –⏑–⏑ | –⏑–	Syncopation, catalexis	—
4.	*hazaj 4*	–⏑–⏑ | ––– ‖ –⏑–⏑ | –––	Syncopation in odd feet	<1%
5.	*muẓārīʿ 1*	––⏑ | –⏑–⏑⏑ ‖ ––⏑ | –⏑––	Syncopation across feet, catalexis	2%
6.	*muẓārīʿ 2*	––⏑ | –⏑–⏑⏑ ‖ ––⏑ | –⏑–	Syncopation across feet, catalexis	13.2%
7.	*hazaj 1/2*	––⏑⏑ | –⏑– | ⏑––	Syncopation	3.2%

5 The remaining meters

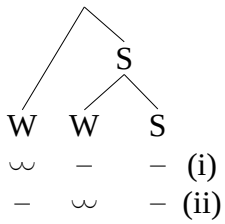
The meters analyzed in the preceding section are direct instantiations of the *Rubāʿī* foot pattern modulo catalexis, syncopation, and variation in number of feet. We proceed to account for the remaining meters by expanding the foot inventory for Persian to principled variants of the attested *Rubāʿī* pattern.

The remaining new meters can be derived by extending the *Rubāʿī* in two ways. First, a new foot type is created by switching 'W' and 'S' in the original.

(24) a. Original *Rubāʿī* foot



b. Extended *Rubāʿī* foot



Secondly, the correspondence constraints in (13) are relaxed.

(25) *Rubāʿī* extensions

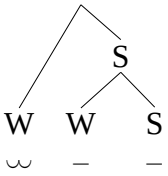
a. Ancipitia at left edge

b. Syncopation across feet

c. Pre-caesural catalexis

The expansion in foot inventory and relaxation of the *Rubāʿī*-specific constraints naturally derives a number of the popular meters. *Ramal 5* is a tetrameter of the LLHH pattern (24bi), but with final catalexis and initial anceps. *Ramal 6* is similarly an LLHH tetrameter, except that it involves syncopation between the first and second, and the third and fourth feet. *Mujtas*, another popular meter, exhibits final catalexis and syncopation within odd feet. A less frequent variant of the same meter eliminates catalexis.

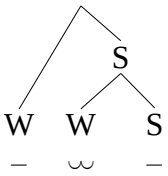
(26) Extended *Rubāʿī* foot (24bi) and its instantiations



	Meter	Pattern	Derivation	Frequency
1.	*ramal 5*	⏒⏑–– | ⏑⏑–– ‖ ⏑⏑–– | ⏓–	Initial anceps, catalexis	9.7%
2.	*ramal 6*	⏑⏑–⏑ | –⏑–– ‖ ⏑⏑–⏑ | –⏑––	Syncopation across feet	0.6%
3.	*mujtaṣ 1*	⏑–⏑– | ⏑⏑–– ‖ ⏑–⏑– | ⏓–	Syncopation in odd feet, catalexis	15%
4.	*mujtaṣ 2*	⏑–⏑– | ⏑⏑–– ‖ ⏑–⏑– | ⏓––	Syncopation in odd feet	0.7%

The second option for the foot-type in (24) is (24bii), where the weak subposition is realized by two light syllables, giving rise to a basic sequence HLLH. This generates another set of meters (albeit infrequent) subjected to the operations of syncopation and catalexis.

(27) Extended *Rubāʿī* foot (24bii) and its instantiations



	Meter	Pattern	Derivation	Frequency
1.	*sariʿ 2*	–⏑⏑– | –⏑⏑– ‖ –⏑⏑– | –⏑⏑–	—	0.1%
2.	*rajaz 1*	–⏑⏑– | ⏑–⏑– ‖ –⏑⏑– | ⏑–⏑–	Syncopation in even feet	0.8%
3.	*munsariḥ 2*	–⏑⏑– | –⏑–⏑ ‖ –⏑⏑– | –	Syncopation in even feet, catalexis	1.5%
4.	*munsariḥ 1*	–⏑⏑– | –⏑– ‖ –⏑⏑– | –⏑–	Syncopation in even feet, catalexis	1.2%

Finally, there is a set of *Rubāʿī*-based trimeters, straightforwardly derivable from the same constraints, making up altogether 15.9% of the corpus.

(28)	Pattern	Meter	Derivation	Frequency
	⏒⏑–– | ⏑–⏑– | ⏓–	*xafīf*	Ancipitia/Catalexis/Syncopation	8.9%
	––– | –⏑–⏑ | ––	*hazaj 1*	Syncopation in 3rd foot	3.2%
	––⏑⏑ | –⏑–⏑ | ––	*hazaj 2*		
	––⏑⏑ | –⏑–⏑ | –––	*hazaj 3*	syncopation in 2nd foot	0.7%
	––⏑– | ⏑–⏑⏑ | –––	*muẓāriʿ 3*	syncopation across feet	0.3%
	–⏑⏑– | –⏑⏑– | –⏑–	*sarīʿ 1*	final syncopation	1.1%
	⏒⏑–– | ⏑⏑–– | ⏓–	*ramal 4*	Ancipitia/ catalexis	1.1%

The relationship between *hazaj 1* and *hazaj 2* is functionally similar. They are variants which can co-occur within a poem, but their relationship is hard to understand on the conventional analysis, because the alternation between – and ⏑⏑ crosses the traditionally posited foot boundary.

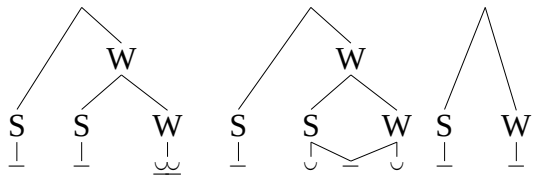
(29) Two forms of *hazaj*

a. – – – | – ∪ – ∪ | – – *hazaj 1*

b. – – ∪ ∪ | – ∪ – ∪ | – – *hazaj 2*

Our analysis makes them straightforward instantiations of the basic *Rubāʿī* pattern with syncopation in the second foot, differing from each other only in whether the W position of the first foot is realized as – or as ∪∪.

(30)



Some of these meters converge with Arabic meters by fixing the weight of the ancipitia as discussed above, but others can only be parsed in terms of *Rubāʿī* feet.

6 The Indo-Aryan contribution

As shown in the last section, a majority of the popular and other meters of Persian/Urdu are derivable from iterated six-mora ternary feet with a limited set of correspondence constraints. The final subclass of this repertoire is based on iterations of four-mora feet. What is interesting is that such iterated four-mora patterns characterize much of the Indic metrical tradition (Deo 2007). Such patterns feature strongly in classical Sanskrit verse and become even more frequent in Middle and New Indic versification. Further, their actual representation in the poetic corpora reveals an Indic bias. These meters are better represented in Urdu poetry than in Persian and seem to be identified as having an Indic origin.

(31) 1. *Mīr's Hindi* – ⏑⏑ | – ⏑⏑ | – ⏑⏑ | – ⏑⏑ ‖ – ⏑⏑ | – ⏑⏑ | – ⏑⏑ | – ⏑⏑

2. *mutadārik 1* – – | ∪ ∪ – | – – | – – | – – | ∪ ∪ – | – – | – –

3. *mutaqārib 4* ∪ – ∪ | – – | ∪ – ∪ | – – | ∪ – ∪ | – – | ∪ – ∪ | – –

4. *mutaqārib 5* ∪ – ∪ | – – | ∪ – ∪ | – – | ∪ – ∪ | – –

Our proposal fits well into the historical context of Indo-Persian poetic syncretism delineated by Faruqi (2003) and Pritchett (2003). Faruqi notes that Indic meters appear already in the earliest extant Urdu ("Hindvi") poetry; they outnumber Persian meters in the work of the Sufi poet Shaiḳh Bahā ud-Dīn Bājan of Ahmadābād (1388–1506). Another Gujarati Sufi poet, Shaiḳh Ḳhūb Muḥammad Cistī (1539–1614), even wrote a book entitled *Chand Chandāñ* about "the *piṇgal* and *ʿarūz* and the *tāl adhyāyaḥ*" (Sanskrit and Persian metrical theory and the (Indian) theory of musical rhythm).[8] Besides Gujarat and Maharashtra, another prominent site of this poetic hybridization was Golconda (near the present Hyderabad). The poems from Qulī Qutb Shāh's court, including the Sultan's own, have an unmistakably Indic flavor; their "female voices" (Petievich 2007) are a

[8] In the same vein, his poem *Jangnama* depicts a dispute between the *sari* and the *peshwaz*, and another dispute between the *choli* and the *tahband* (see Faruqi 2008 for this and other telling examples of syncretism).

standard convention in Sanskrit erotic poetry. Of Shaiḳh Aḥmad Gujrāt̄ı̄, court poet in Golconda from 1580-1881, Farruqi (2003: 834) says: “Sanskrit, Telugu, Arabic, Persian, are all grist for this poet’s mill”.

Faruqi moreover documents extensive Urdu/Persian bilingualism in north India, evidenced in bilingual glossaries and dictionaries compiled from the 13th century onwards, and in bilingual (*reḳhtah* “mixed”) poetry, serving as a vehicle for the “osmosis” of Urdu/Hindvi/Hindi literary culture into Persian, a process also documented in Alam (2003). The pathway by which Indic meters could have percolated into Persian is thus a historical reality.

The Delhi-based poet Muḥammad Taqı̄ Mı̄r (1722–1810) employed extensively a tetramoraic octameter, which closely resembles the *Chaupai* meter of Hindi used by Kabir and Tulsidas in their compositions. The fact that this meter is dubbed the *Hindi meter* further reveals its origin and mode of entry into the Persian/Urdu repertoire. The *mutaqārib* and *mutadārik* involve alternation of invariant four-mora feet. These meters have a rather sparse presence in Persian, and moreover, look nothing like their Arabic namesakes, eliminating the possibility of an Arabic connection beyond the nomenclatural one.

A closer look at the *mutaqārib* family reveals that two of its variants together account for 10% of the Urdu corpus examined by Bailey (1939).[9] In contrast, these meters account for 3.2% of the Persian corpus.

(32) *mutaqārib 2* ∪–– | ∪–– | ∪–– | ∪–– 1.3%
mutaqārib 3 ∪–– | ∪–– | ∪–– | ∪– 1.9%

The ascendance of these meters in Urdu, in comparison with Persian, can be accounted for when we observe that these meters have exactly the same structure as the popular Sanskritic meter *Bhujaṅgaprayāta* that is also used in later New Indic versification.

7 Conclusion

These adaptations of Indic binary mora-counting meters represent the final stage in the confluence of three great quantitative metrical traditions: Arabic, Persian, and Indo-Aryan. Typologically, the trajectory involves a shift from one type of quantitative meter to another. Arabic meter, like Greek and Latin, is *weight-sensitive*: syllable weight marks prominence. Indic, and, if our conjecture is on the right track, pre-Islamic Persian as well, tends to favor *isochrony*: rhythmic variety comes from redistributing syllable weight across metrical positions. The Classical Persian and Urdu repertoires are a result of the negotiation between these two types of quantitative meter.

[9] This is a rather small corpus (∼400 poems) and the proportions may not hold for a larger corpus search, but they are telling.

References

ALAM, MUZAFFAR. 2003. The culture and politics of Persian in precolonial Hindustan. In Sheldon Pollock (ed.) *Literary cultures in history,* 131-198. Berkeley: University of California Press.

ANDREWS, WALTER G. 1976. *An introduction to Ottoman poetry.* Minneapolis : Bibliotheca Islamica.

BAILEY, T. GRAHAME. 1939. A guide to the metres of Urdū verse. *Bulletin of the School of Oriental Studies* 9: 969–985.

BARKER, MUHAMMAD ABD-AL-RAHMAN. 1968. *A reader of modern Urdu poetry.* Montreal: McGill University Institute of Islamic Studies.

BARSCH, ACHIM. 1995. Metrics between phonology and theory of literature. *Poetics Today* 16: 411-428.

DEO, ASHWINI S. 2007. The metrical organization of Classical Sanskrit verse. *Journal of Linguistics* 43: 63-114.

ELWELL-SUTTON, L.P. 1976. *The Persian meters.* Cambridge, CUP.

FABB, NIGEL & MORRIS HALLE. 2008. *Meter in poetry: A new theory.* Cambridge, CUP.

FARUQI, SHAMSUR RAHMAN. 2003. A long history of Urdu literary culture, Part 1: Naming and placing a literary culture. In Sheldon Pollock (ed.) *Literary cultures in history,* 803-863. Berkeley: University of California Press.

FARUQI, SHAMSUR RAHMAN. 2008. Urdu literary culture: The syncretic tradition. `http://www.mirza-ghalib.org/miscellaneous.html`.

GOLSTON, CHRIS AND TOMAS RIAD. 1997. Classical Arabic metre and prosodic metrics. *Linguistics* 35: 111-132. `http://zimmer.csufresno.edu/~chrisg/index_files/ArabicMeter.pdf`.

HAYES, BRUCE. 1979. The rhythmic structure of Persian verse. *Edebiyat* 4: 193-242.

LAZARD, G. 1973. The rise of the new Persian language. *The Cambridge history of Iran,* Vol. 4, 595-632. Cambridge: CUP.

MALING, JOAN. 1973. *The theory of classical Arabic meter.* Ph.D. dissertation, MIT.

ÖZUYGUN, ALI RIZA. 2005. *Hasan Sezayî Divanı.* Baskı: Şenyıldız Matbaası.

PAOLI, BRUNO. 2009. Generative linguistics and Arabic metrics. in Jean-Louis Aroui and And Arleo (eds.) *Toward a typology of poetic forms: from language to metrics and beyond.* Amsterdam/Philadelphia: Benjamins.

PETIEVICH, CARLA. 2007. When men speak as women: Vocal masquerade in Indo-Muslim poetry. Oxford: OUP.

PRITCHETT, FRANCES W. 2003. A long history of Urdu literary culture, Part 2: Histories, Performances, and Masters. In Sheldon Pollock (ed.) *Literary cultures in history,* 864-911. Berkeley: University of California Press.

PRITCHETT, F.W. & KH. A. KHALIQ. 2003. A practical handbook of Urdu meter. Online version at `http://www.columbia.edu/itc/mealac/pritchett/00ghalib/meterbk/00_intro.`
Original print edition: South Asian Studies, University of Wisconsin at Madison, 1987.

PRINCE, ALAN. 1989. Metrical forms. In Paul Kiparsky and Gilbert Youmans (ed.) *Rhythm and Meter.* New York: Academic Press.

SCHUH, RUSSELL. 1999. Metrics of Arabic and Hausa poetry. In Paul F. A. Kotey (ed.), *New Dimensions in African Linguistics and Languages*. Trends in African Linguistics 3, Trenton and Asmara: Africa World Press, Inc., pp. 121-130.

STOETZER, W.F.G.J. 1998. Prosody. In Julie Scott Meisami and Paul Starkey (eds.) *Encyclopedia of Arabic Literature*, 619-622.

STOETZER, W.F.G.J. 1986. *Theory and Practice in Arabic metrics.* Ph.D. dissertation. Leiden.

UTAS, BO. 1994. Arabic and Iranian elements in New Persian prosody. In Lars Johanson and Bo Utas (edd.), *Arabic prosody and its applications in Muslim poetry.*. Swedish Research Institute in Istanbul, Transactions Vol. 5.

WEIL, GOTTHOLD . 1958. *Grundriss und System der altarabischen Metren.* Wiesbaden, Harrassowitz.

WEIL, GOTTHOLD. 1960. ʿArūḍ. *Encyclopedia of Islam* 667-677.

WEST, M.L. 1982. *Greek metre.* Oxford: Clarendon Press.

WRIGHT, W. 1951. *A grammar of the Arabic language*[3]. Cambridge: CUP.