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# 'AṢ-ṢĀDU LLATĪ KA-S-SĪN — EVIDENCE FOR AN AFFRICATED ṢĀD IN SIBAWAYH?

**Abstract:** This paper argues that the  $S\bar{a}d$  of the early Islamic period was still an affricate. Evidence for this comes from a close reading of Sibawayh's description of the phoneme in light of early Greek transcriptions.

Keywords: Affricated Ṣād; historical Arabic phonology; Sibawayh

#### 1. Introduction

Since Steiner's (1982) monumental study of the Sade, it has been widely accepted that this sound was originally affricated in Proto-Semitic and in many early Semitic languages. His investigation of the Arabic data did not lead to any conclusive position on its status in the earliest attested periods of the language (81). Most scholars are of the opinion that the early Arabic Sad was a voiceless pharyngealized sibilant, [s<sup>c</sup>]; however, a few anomalies exist and should motivate us to re-examine the evidence. One of these was already pointed out by Steiner, namely, the spellings of the name of the town Sade Sade Sade in the 1st Islamic century papyri, e.g.:

P.Ness 3.60 11 Νεστάνων κλίμ(ατος) Ἐλούση(ς) χώρα(ς) Γάζης. (674 CE)

Interestingly, before the conquests, the town appears in Greek only as Ne $\sigma\sigma\alpha\nu$ -, suggesting that the new pronunciation was the result of the invasion. This spelling is reminiscent of Greek transcriptions of Punic words containing an affricated *Ṣade* in which the sound is rendered as  $\sigma$ ,  $\sigma\tau$ , and  $\tau$ , e.g. Steiner (1982:61ff). To this example, we should add a transcription of the *Ṣād* in a fragmentary Greek translation of Surat al-'Aṣr (Q 103) from the 9th c. CE.¹ The

<sup>&</sup>lt;sup>1</sup> See Høgel (2010:116).

translator either judged the Arabic العصر to be a proper noun or untranslatable as he simply transcribed the word in Greek, producing the following:

Mὰ τὸν ἀλέξαρ <alexar>, probably \*/al-'eṣar/

The use of ksi clearly points towards a stop onset for this sound, suggesting an affricate realization, perhaps [ts].<sup>2</sup>

These observations are complemented by several peripheral Arabic dialects in the southwestern Arabian Peninsula. There, the reflex of \*s is often [st], which seems to be a metathesized version of an original [ts] (Behnstedt 1987). While such a realization is possibly the result of substrate, it is equally possible that such a form points towards an affricated realization of this phoneme at some point in the history of Arabic.

### 2. Sibawayh's Şād³

Sibawayh's description of Arabic phonology includes 16 points of articulation, beginning with the glottis and moving forward to the labials.<sup>4</sup> Sibawayh then groups the consonantal phonemes of Arabic according to each of these points; the sounds signified by the glyphs  $\dot{\omega}$ ,  $\dot{z}$ , and  $\dot{z}$  are grouped together under the category wa min bayna waṣaṭi l-lisāni baynahū wa bayna waṣaṭi l-ḥanaki l-ʾaʾlā 'between the middle of the tongue and the middle part of the hard palate'. It must be emphasized that this fact only provides information about the place of articulation, and not the manner. Sibawayh discusses manner in another section, which I will deal with in (§3). With this in mind, let us turn our attention to the description of  $\dot{z}$ . Sibawayh classifies this sound with [s] and [z] as originating from the area slightly above the incisors, i.e., an alveolar point of articulation.<sup>5</sup> Thus, from Sibawayh's description, the Ṣād could be either an emphatic alveolar sibilant [s] or an affricate [ts]. In order to decide between the two, I think we must look to what Sibawayh says about how the Ṣād should not be pronounced.

Sibawayh has two categories of variant pronunciations – those which are suitable for the recitation of Qur'ān and poetry<sup>6</sup> and those which are not;<sup>7</sup> a variation of the  $S\bar{a}d$  is included in both. Sibawayh states the following about the  $S\bar{a}d$  of the first category –

<sup>&</sup>lt;sup>2</sup> Note, also, the different vocalization, \* 'isr vs. \* 'asr', and the epenthetic vowel between the second and third consonants.

<sup>&</sup>lt;sup>3</sup> All quotations of Sibawayh's 595 chapter on the phonology of Arabic come from the Sibawiki project (http://sydney.edu.au/arts/research\_projects/sibawiki/demo/bas565.txt.htm).

<sup>&</sup>lt;sup>4</sup> For a succinct summary of Sibawayh's treatment of phonology, see Carter (2004:120-131).

وممَّا بين طَرَف اللسان وفُوَيْقَ التَّنايَا 5

وهي كثيرة بؤخَذ بها وتُستحسن في قراءة القرآن والأشعار 6

و لا كثيرة في لغة من تُرْبَّضَي عربيّته و لا تُستحسن في قراءة القرآن و لا في الشعر

'the  $S\bar{a}d$  which would resemble the  $Z\bar{a}y$ '

This description clearly refers to a voiced variant of the  $S\bar{a}d$ , whatever its pronunciation might have been. Instances of a voiced z are found across the Arabic-speaking world, and are usually a result of assimilation, e.g., Levantine Arabic  $zg\bar{\imath}r < *sag\bar{\imath}r.$ 

The second pronunciation, which is unsuitable for formal purposes, is - الصاد التي كالسين

'the Sad which is like the San'

Carter (2004:124) interpreted this to be a description of a "de-emphasized [s] realized as [s]". While this is certainly possible, it begs the question as to why Sibawayh did not simply say 'the Sād which is not emphatic' or something along those lines. Sibawayh later uses the term 'itbāq to refer to the emphatic feature of the  $S\bar{a}d$ , and so the lack of precision here is unexpected. Moreover, the Sād which is pronounced without emphasis is not like the Sīn but is in fact the Sīn, as Sibawayh states later in unambiguous terms (see below). Of course, without any evidence to the contrary, this particular statement can only be considered a curiosity. However, returning to the Greek transcriptions mentioned at the beginning of this paper, there may be more to say. It is hard to imagine why writers would have rendered Arabic  $S\bar{a}d$  with Greek  $\sigma\tau$  and  $\xi$  if it were in fact pronounced as [s<sup>c</sup>]. Instead, these transcriptions strongly point towards an affricate of some sort. If we consider Sibawayh's description of the sound in this light, a new interpretation is possible – what Sibawayh meant by the Sād which is like the  $S\bar{\imath}n$  was a deaffricated variant of the sound, most probably [s<sup> $\varsigma$ </sup>]. This would, in turn, suggest that the original affricated pronunciation obtained in some varieties of Arabic in Sibawayh's time, probably [ts<sup>c</sup>], and that this must be the sound behind the aforementioned Greek transcriptions.

### 3. Challenges to the affricate hypothesis

Sibawayh's description of the  $S\bar{a}d$  in two other places raises some questions regarding whether or not it had an affricate property. The first is found in his description of the relationship between emphatic and plain consonants.

Sibawayh provides several examples in his chapter on assimilation of this process and ibn Jinnī states that the *Ṣād* experiences voicing assimilation when it precedes a voiced consonant (see Al-Nassir 1993:19).

<sup>&</sup>lt;sup>9</sup> Some have explained this form as an example of substrate influence from Aramaic  $z'\bar{\imath}r$ , but it is difficult to explain the presence of the  $\dot{g}$  if that were the case.

'As regards these four ... were it not for '**iṭbāq**, the  $T\bar{a}$ ' would become a  $D\bar{a}l$ , the  $S\bar{a}d$  would become a  $S\bar{i}n$ , and the  $D\bar{a}d$  would become a  $D\bar{a}l$ ; and the  $D\bar{a}d$  would have disappeared from speech because nothing else shares its point of articulation'.

This statement gives the impression that  $S\bar{a}d$  was only distinguished from  $S\bar{i}n$  by the feature of ' $itb\bar{a}q$ , which Carter (2004:127) translates as 'emphasis', and so Sibawayh's  $S\bar{a}d$  could not have been affricated. Such a conclusion, however, would be too hasty. Two issues require further discussion – the first is what exactly the term ' $itb\bar{a}q$  meant and second whether or not there were other affricates in Arabic in Sibawayh's period.

*Itbāq* literally means 'covered with a lid' (ibid.) and refers to raising of the tongue during the articulation of these sounds. The non-emphatic counterpart of each of these phonemes involves contact between the teeth and the tongue, with the exception of  $S\bar{\imath}n$ . Since the  $S\bar{\imath}ad$  and  $S\bar{\imath}n$  shared an identical point of articulation, this may have motivated Sibawayh to interpret affrication as a symptom of ' $itb\bar{\imath}aq$ . Affricates begin as stops and then are released as fricatives. The initial contact between the tongue and the alveolar ridge of an affricated  $S\bar{\imath}ad$  [ $s\bar{\imath}s$ ] could have been included as part of the 'covering' process. Thus, the removal of ' $s\bar{\imath}tb\bar{\imath}aq$  would not only result in the loss of velarization/pharyngealization but also affrication, resulting in  $s\bar{\imath}s$ . Thus, The  $s\bar{\imath}s$  which is  $s\bar{\imath}s$  is, therefore, not one without emphasis, but rather one without affrication.

This interpretation could have been especially possible if there were no other (unemphatic) affricates in Arabic. This point brings us to the status of  $\check{G}\bar{\imath}m$  and Sibawayh's remarks on the manner of articulation of the consonants. Sibawayh classifies the consonants of Arabic into two categories based on manner,  $\check{s}ad\bar{\imath}dah$  and  $\dot{r}ihwah$ , 'tight' and 'slack' (Carter 2004:126).

šadīdah: ء،ق،ك،ج،ط،ت،د،ب riḫwah: ه،ح،غ،خ،ش،ص،ض،ز،س،ظ،ث،ذ،ف

If  $\check{G}\bar{\imath}m$  was an affricate, then the classification of  $S\bar{\imath}ad$  in a different category of manner would constitute evidence against an affricated realization. But what evidence is there for an affricated  $\check{G}\bar{\imath}m$  in Sibawayh? As is well known, the original realization of this phoneme in Proto-Semitic, and indeed in Proto-Arabic, was a voiced velar stop, [g]. Sibawayh's description of the sound suggests that it no longer had this value in the pronunciation he endorsed. Its classification with  $\varphi$  [j] suggests that it was fronted to a palatal position. What is interesting about this fact is that palatal affricates are incredibly rare crosslinguistically. While possible, Sibawayh was more likely referring to a voiced

<sup>&</sup>lt;sup>10</sup> According to UPSID database, a voiced palatal affricate occurs in only 1.77% of its languages (<a href="http://web.phonetik.uni-frankfurt.de/S/S0409.html">http://web.phonetik.uni-frankfurt.de/S/S0409.html</a>). I thank my friend and colleague Marijn van Putten for this reference.

palatal stop [ $\mathfrak{z}$ ].<sup>11</sup> To determine if this interpretation is correct, we should first examine whether or not it produces anomalous descriptions of phonemes which are compared to the  $\check{G}\bar{\imath}m$ .

The  $\check{G}\bar{\imath}m$  which is like the  $K\bar{a}f$ 

This seems to describe the original velar stop pronunciation [g].

The  $\check{G}\bar{\imath}m$  which is like the  $\check{S}\bar{\imath}n$ 

This could signal a voiceless palatal stop [c]. Most scholars have interpreted Sibawayh's placement of the  $\check{S}\bar{\imath}n$  with the palatal [j] to indicate that it was realized as a voiceless palatal fricative [ç]. That its original lateral quality was lost is clear by the fact that Sibawayh states that the  $\bar{P}\bar{a}d$  shares its place of articulation with no other sound. The  $\check{G}\bar{\imath}m$  which is like the  $\check{S}\bar{\imath}n$  could therefore signal the voiced counterpart of  $\check{S}\bar{\imath}n$ , that is, a voiced palatal fricative [j].<sup>12</sup>

The  $\check{S}\bar{\imath}n$  which is like the  $\check{G}\bar{\imath}m$ 

Al-Nassir (1990:19) translates ibn Jinnī's explanation of this sound as follows – "it is the Shīn whose outlet occupies less "expanse" and retracts back slightly towards the Jīm". If this explanation is correct, then it would seem to describe a voiceless palatal stop [c]. On the other hand, it can equally describe the voiced allophone  $\check{Sin}$ ; the reference to  $\check{Gim}$  would then be the result of it occupying the same point of articulation.

There is therefore nothing in Sibawayh's other references to the  $G\overline{\imath}m$  which contradict a palatal stop interpretation, but is there positive evidence for this pronunciation in the early centuries of the Islamic era? Several disconnected pieces of evidence suggest so. The first was already pointed out by Steiner (1982:80) – several Arabo-Sassanian coins bear the name  $z \mid z \mid z$  written as Hakak. While Steiner develops a rather complicated scenario to account for why  $[\overline{d3}]$  was written with the k sign, which signified Middle Persian [g], rather than the y sign (= Middle Persian  $[\overline{d3}]$ ), this is motivated by the belief that the realization of Arabic z was  $[\overline{d3}]$ . In fact, Middle Persian k [g] points towards a stop realization, either [g] or  $[\mathfrak{z}]$ .

<sup>&</sup>lt;sup>11</sup> This sound is known from several Arabic dialects today (see Watson 2002:16); the palatal stop reconstruction of Sibawayh's  $\check{G}\bar{\imath}m$  is also held by Gairdner 1925: 23; Fischer and Jastrow 1980: 105; Watson 1992: 73.

<sup>&</sup>lt;sup>12</sup> This sound is the immediate predecessor to the modern palato-alveolar fricative [3], typical of many Maghrebine and Levantine dialects.

In Greek transcriptions of Arabic from Nessana during the first Islamic century, attempts at indicating palatalization are found, e.g., Γιαφαρ <  $\Rightarrow$  and Γιαμ <  $\Rightarrow$  (Isserlin 1969:21). Early Arabic loanwords Berber and Neo-Aramaic also point towards a stop pronunciation. In particular, the word for 'Friday' in the Berber of the Libyan Oasis of Awjila precisely suggests an original palatal stop pronunciation in Arabic. <sup>13</sup>

In light of this discussion, we can carefully conclude that Sibawayh's  $G\bar{\imath}m$  was a palatal stop [J] rather than an affricate, which eliminates the problem of an affricate classified as a  $\check{s}ad\bar{\imath}d$  sound vis-a-vis the rihwah classification of the  $S\bar{\imath}ad$ . This also means that there were no affricates in the Arabic of Sibawayh to which he could have compared the  $S\bar{\imath}ad$ . The absence of this feature in other phonemes could have motivated Sibawayh to view affrication as a symptom of emphasis and explains why Sibawayh classified the affricated  $S\bar{\imath}ad$  as a rihwah sound. Affricates have properties of stops and sibilants and could have in theory been classified in either of Sibawayh's categories, depending on which aspect is emphasized. Since Sibawayh states that the removal of  $itb\bar{\imath}ad$  would transform the  $S\bar{\imath}ad$  into a  $S\bar{\imath}ad$ , it would seem that the sibilant quality of the sound was felt essential, thus tipping the scale to the rihwah category.

#### 5. Conclusion

To sum up our discussion – the transcription of  $S\bar{a}d$  in Greek from the early centuries of the Islamic era suggest that it was an affricate. A close reading of Sibawayh seems to corroborate this, while at the same time suggesting that the  $\bar{c}$  had not yet become an palato-alveolar affricate  $[d\bar{g}]$ . Sibawayh viewed affrication as symptomatic of ' $itb\bar{a}q$ , which causes him to connect the sound with the  $S\bar{\imath}n$  [s].

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<sup>&</sup>lt;sup>13</sup> Van Putten and Benkato note that the word for Friday in Awjila  $\bar{a}l\acute{e}gm\partial t$  must derive from an Arabic form \*al-ģumsat with a palatal stop reflex of  $\varepsilon$  (van Putten and Benkato forthcoming, §4.5).

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