A Simple Two Mint Model for Western Kshatrapa Coinage

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The coinage of the Western Kshatrapas (hereafter WKs) is one of the most well understood series of Indian coins. Thanks to the facts that the coins typically name not only the issuer but also his father and that many of the coins, from Rudrasimha I onwards, are dated, numismatists have been able to construct a very coherent chronology for both the rulers and their coins. The very well constructed series has been ably presented in two excellent recent catalogues of WK coins, those of Jha and Rajgor (hereafter J&R)² and Senior.³ Nevertheless, problems and open questions remain.

One of the standard tools that numismatists employ to study coin series and thereby use them to shed light on history is to analyze and organize the coins by their mint of issue. Surprisingly, no one has yet taken this approach to improving our understanding of WK coins. In a recent paper, ⁴ I have suggested that such an approach can help us to solve some very old problems in WK history. Accordingly, in this paper I aim to flesh out my suggestion in greater detail and to look more deeply into a possible division of the silver WK coinage over a fairly long period into the product of two mints. I recognize that this is a highly simplified, probably overly simplistic, model of the actual mint structure of the coinage. But I wish to look at whether we might improve our understanding of Western Kshatrapa history by making this simple two-mint assumption. I also use the opportunity to publish for the first time many unlisted WK coin types from my collection.

Let me state at the outset that I have no specific geographic information that would allow me to separate WK coins by mint. We normally learn that any given issue was from a particular mint by the geographic distribution of finds. If there is a concentration of one particular type, distinguished by a mintmark or other such distinguishing feature, from one particular region, we conclude that that particular type was probably issued from a mint in that particular region. I have no such information for WK coins. What I do know is that it is possible to divide many of the coin series among the early Western Kshatrapa rulers into two distinct series that separate the coins naturally into two distinct groups. And what I am proposing in this paper is a hypothesis that these two groups may have been the products of at least two different mints. Making this assignment of the two groups to two distinct locations then proves useful in explaining several of the known anomalies in the WK coinage. So the reader should think of this as a "what-if" exercise. In what follows, I will be making the assumption that there were at least two official WK mints, differentiated by certain characteristics of the

¹ I wish to thank Shailendra Bhandare for many helpful email exchanges on Western Kshatrapa coinage.

² Amiteshwar Jha and Dilip Rajgor: *Studies in the Coinage of the Western Ksatrapas*, Nashik: Indian Institute of Research in Numismatic Studies, 1992.

³ R. C. Senior: *Indo-Scythian Coins and History* (3 volumes), London and Lancaster, PA: Classical Numismatic Group, 2001.

⁴ Pankaj Tandon: "The Western Kshatrapa Dāmazāda," *Numismatic Chronicle* 169, 2009 (forthcoming).

2,770

coinage, and seeing whether this assumption leads us to an improved understanding of WK history.

My general impression is that silver WK coins are found mostly in Gujarat and were probably minted there. J&R provide a list of hoard and stray finds of WK coins and I have compiled their information in Table 1. Apart from one very large hoard (the Jogelthambi hoard of 13,250 coins) which was found in Maharashtra, the table shows clearly that the bulk of the finds are in Gujarat, and it is reasonable to suppose that the coins were minted in that state. Unfortunately, J&R do not provide a breakdown of the finds by the key criterion that I suggest can be used to allocate the coins by mint, their legends, so it is not possible to see if there is any pattern in the finds. But that is getting ahead of the story.

State	# of hoards	# Coins	# of finds	# Coins	Total # Coins
Andhra Pradesh	2	259	2	10	269
Bihar			1	1	1
Gujarat	26	23,350 ⁵	18	355 ⁶	23,705
Karnataka	1	61	1	?	61
Madhya Pradesh	5	1,010	11	147	1,024
Maharashtra	8	15,168 ⁸	19	349	15,202

Table 1: Finds of WK coins, by state

2 Source: Compiled from J&R, Appendix-I, pp. 68-77.

I was led to the idea of different mints not by any observations on the geographic distribution of finds, but rather as a solution to a problem: the identities of the rulers known as Dāmajadasri I and Dāmaghsada II. 11 In my earlier paper, I argued that these two rulers were one and the same, a king named Dāmazāda. So let me summarize the argument here in order to show how the idea of different mints arose and how this idea helps us to better understand the WK coinage.

2,762

The ruler Dāmazāda

Rajasthan

The problem starts with Rudradāman. There appear to be three sons who name Rudradāman as their father: Dāmajadasri, Dāmaghsada and Rudrasimha. In his catalogue

⁵ Includes coins from only 23 of the hoards as the number of coins in the remaining 3 hoards was not recorded.

⁶ No information was available on the number of coins found in 5 of the stray finds.

⁷ No information was available on the number of coins found in 4 of the stray finds.

⁸ Includes coins from only 4 of the hoards as the number of coins in the remaining 4 hoards was not recorded.

⁹ No information was available on the number of coins found in 2 of the stray finds.

¹⁰ Includes information on only 2 of the finds.

¹¹ J&R, as did earlier authors, listed only one ruler named Dāmaghsada, a son of Rudradāman. However, Robert Senior has argued that Chastana had a brother also named Dāmaghsada, making Rudradāman's son Dāmaghsada II.

of WK coins at the British Museum, 12 E. J. Rapson had suggested that Dāmajadasri and Dāmaghsada were one and the same person. At the nub of the problem was the compound Brāhmī letter read as ghsa in the name of Dāmaghsada. Rapson thought this letter might represent the Persian letter za, so that the second syllable of the name would read $z\bar{a}da$, Persian for "son of." Rapson then suggested that the mint masters, after representing the name as $D\bar{a}maghs\bar{a}da$ initially, decided to Indianize it, changing the letter ghsa to a simple ja to represent the sound za and adding the syllable sri at the end to complete the Indianization. Thus in Rapson's conception, the "Dāmaghsāda" and "Dāmajādasri" coins were sequential in that order and the different spellings of the king's name were explained as a conscious decision made at a particular point in time. Note that I have changed the spelling of the two names by adding a second long vowel \bar{a} , changing Dāmaghsada to Dāmaghsāda and Dāmajadasri to Dāmajādasri in order to reflect the name Dāmazāda. None of the long \bar{a} diacritical marks are visible on the WK coins and therefore have to be imposed on the basis of the context.

Part of Rapson's argument no doubt stemmed from the fact that the British Museum's Dāmaghsāda coins at the time all named the ruler as kshatrapa only, while the Dāmajādasri coins named him as kshatrapa on some and mahakshatrapa on others. It was natural therefore for Rapson to have presumed, assuming the coins were all issued by the same ruler, that the Dāmaghsāda coins were earlier. But, pointing out that we now know of Dāmaghsada coins naming the ruler as mahakshatrapa, J&R pronounce Rapson's argument as "absolutely nullifie[d]." J&R ignore the possibility that the letter *ghsa* might represent anything else, appearing to take it at face value, and arguing therefore that the names Dāmajadasri and Dāmaghsada are so different that they must be the names of two different rulers.

However, there has been a long held view that the so-called letter *ghsa* should not be taken at face value, that it in fact represents a foreign sound, as Rapson had suggested. Indeed, there is also a long held view that the letter is not meant to be *ghsa* at all, but *ysa*. The Brāhmī letters *gha* and *ya* are difficult to distinguish, so there has always been a debate about which letter was intended here. The debate is reviewed in detail in my earlier paper. Authors such as N. B. Divatia, ¹⁴ Rapson, J&R and Senior opted to see the letter as *ghsa*. Except for Rapson, these authors perhaps prefer *ghsa* because this makes the name more pronounceable. If you are reading the names as written, it is much easier to say Dāmaghsada than Dāmaysada, even easier to say Ghsamotika (the name of Chastana's father, where the compound letter appears at the beginning) than Ysamotika.

On the other hand, authors such as G. Bühler, ¹⁵ H. Lüders, ¹⁶ and, more recently, experts on the Arapacana syllabary such as R. Salomon, ¹⁷ have read the letter as *ysa* and

¹⁴ N. B. Divatia: "The Ancient Indian Symbol for the Foreign Sound Z," *Journal of the Bombay Branch of the Royal Asiatic Society*, Vol. 26, 1921, pp. 159-170.

¹⁵ G. Bühler: "Die indischen Inschriften und das Alter der indische Kunstpoesie," in *Sitzungsberichte der Akademie der Wissenschaften in Wien*, Phil.-Hist. Klasse 122, XI, Vienna: 1890, p. 48.

¹² E. J. Rapson: Catalogue of the Coins of the Andhra Dynasty, the Western Ksatrapas, the Traikutaka Dynasty and the Bodhi Dynasty, London, British Museum, 1908.

¹³ J&R, *ibid.*, p. 8.

¹⁶ H. Lüders: "Die Sakas und die "nordarische" Sprache," in *Sitzungsberichte der Akademie der Wissenschaften in Wien*, 1913, reprint: *Philologica Indica – Ausgewähltekleine Schriften von Heinrich Lüders* (Göttingen, 1940), pp. 236-255.

have been quite sure that it is meant to represent the foreign sound za. Clearly scribes in India, whether writing in Kharoshthi or Brāhmī, had a problem when transcribing foreign names that contained the letter za, since neither of the Indian scripts had a letter for this sound. On bilingual Greek-Kharoshthi coins, we see various solutions to this problem. The Indo-Greek kings Zoilos had their name transcribed as Jhoila, the Indo-Scythian name Azes was written as Aya, Azilises was transcribed as Ayilisha and Zeionises appeared as Jihunia. Thus Kharoshthi ja, jha and ya were all used as representatives for the sound za. In Brāhmī we have the one instance, somewhat later, of the inscription Piroysa on certain late Kushan or Kidarite gold dinars that has been understood to represent the name Piroz. So here we have an instance of Brāhmī ysa apparently being used to represent za.

A key new piece of evidence has now appeared that seems to settle any remaining doubts. There exist certain rare copper bilingual coins of the Pāratarāja dynasty, read recently for the first time by Harry Falk, ¹⁸ that have the name *Koysiya* in Brāhmī on the obverse and *Kojhiya* in Kharoshthi on the reverse, presumably representing the name of a king Koziya. Of course some might insist that the obverse legend might read *Koghsiya*, but I believe the evidence at this time is overwhelming that the letter in question is intended to be *ysa*. But that is beside the point. The more important point is that the Koziya coins show incontrovertibly that the compound Brāhmī letter (whether *ysa* or *ghsa*) is not to be read as written but is intended to represent the sound *za*. We know that Kharoshthi *jha* is sometimes used to represent *za* and that must be what it is doing in this name. If the king's name was genuinely Kojhiya, as opposed to Koziya, it could have been written as such in the Brāhmī transliteration. The fact that this was not done demonstrates that the letter is serving a different function: it is representing *za*.

Of course if this ligature represents za in the name Koziya, it no doubt represents the same sound in the names Dāmazāda and Zamotika. Thus the name read as Dāmaghsada, which should be read as Dāmaysāda, represents the name Dāmazāda. The final piece of evidence, that should dispel any lingering doubts, is that the name Dāmazāda has a perfectly intelligible meaning: "son of Creation." Nobody has yet proposed a meaning for the name "Dāmaghsada."

Having established that "Dāmaghsada" should really be read as "Dāmazāda," we return to the question of whether or not this Dāmazāda was the same king as "Dāmajādasri." Rapson's argument that the name was changed on the coinage after a certain date was shown by J&R to be untenable. Further, J&R pointed out that the "Dāmajadasri" and "Dāmaghsada" coins treat the name of Rudradāman differently. The patronymic on the Dāmajadasri coins reads *Rudradāmnaputrasa*, while on the Dāmaghsada coins it reads *Rudradāmaputrasa*. J&R therefore concluded that "Dāmajadasri" and "Dāmaghsada" were different kings.

All inconsistencies and problems in the face of the one king hypothesis can, however, be resolved if we allow that the "Dāmajādasri" and "Dāmaysāda" coins may have been issued at different mints. In fact, there may have been more than just two mints. There may have been many mints. All we need is that the mints could be divided

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¹⁷ Richard Salomon: "New Evidence for a Gāndhārī Origin of the Arapacana Syllabary," *Journal of the American Oriental Society*, Vol. 110, No. 2 (Apr-Jun 1990), pp. 255-273.

¹⁸ Harry Falk: "The Names of the Pāratarājas Issuing Coins with Kharoshthi Legends," *Numismatic Chronicle* 167, 2007, pp. 171-178.

into two groups, one of which followed one convention and the other followed a different convention. So for convenience I will refer to just two mints, A and B. Mint A, in my hypothesis, spelled Dāmazāda's name as Dāmajādasri and used the patronymic *Rudradāmaputrasa*, while mint B spelled Dāmazāda's name as Dāmaysāda and used the patronymic *Rudradāmaputrasa*. Under this hypothesis, we no longer need Rapson's notion of a conscious decision to "Indianize" Dāmazāda's name at a particular point in time, and we can account for the different patronymics simply as different conventions being followed at the different mints. Indeed, as I will show, the mints followed different conventions both before and after the rule of Dāmazāda. Thus treating "Dāmajādasri" and "Dāmaysāda" simply as different renderings of the same name seems eminently plausible. There is further support for this hypothesis in the coinage of Jīvadāman, and I will consider this later in the context of that king's coins.

The two mints in the coinage of Rudradāman

If we can separate the coins of Dāmazāda into two groups, which I am calling the products of two different mints, perhaps we can do the same for other rulers. In what follows, I am going to refer to the different groups as belonging to different mints, even though I have not proved that they were indeed issued at different mints. Think of this as a "what if" exercise ... do we get a plausible story if we assign the different groups to different mints?

Going back one generation from Dāmazāda, we have the coins of Rudradāman, whose coins exhibited two different legends also. One set of coins, which J&R refer to as Variety A, carried the legend:

Rājno kshatrapasa Jayadāmasaputrasa Rājno mahākshatrapasa Rudradāmasa. The other set, which J&R call variety B, reads

Rājno kshatrapasa Jayadāmaputrasa Rājno mahākshatrapasa Rudradāmasa. The difference between the two is that variety B drops the letter *sa* from the patronymic.

By referring to the styles of the two sets of coins, I would like to propose that coins of variety A should be grouped with the Dāmajādasri coins, while coins of Rudradāman's variety B should be grouped with the Dāmaysāda coins. Under the assumption that the different groups were struck at different mints, this would say that the variety A coins were issued at mint A and the variety B coins at mint B. In Table 2, I have placed side by side in two columns the coins of the different groups, what I am referring to as the issues of mints A and B. When seen in this way, we see very clearly that the styles of the coins produced in the different mints were quite distinct, while the styles at the same mint but between different rulers were guite similar. Coins of Rudradāman from mint A closely resemble the coins of "Dāmajādasri," while Rudradāman's mint B coins look very much like the "Dāmaysāda" coins. If we took just coins 5A and 5B of Rudradāman and coins 6A and 6B of Dāmazāda and tried to attribute them on the basis of the portrait alone (that is, without reading the reverse legends), I contend we would classify 5A (Rudradāman) and 6A ("Dāmajādasri") as belonging to one king and 5B (Rudradāman) and 6B ("Dāmajādasri") as belonging to another, such is the similarity of portrait style across rulers but within the same mint.

A similar phenomenon is visible on the reverses, although it is perhaps not as pronounced. We will see a consistency in legend conventions across different rulers as we look at Dāmazāda's successors, but for now, in comparing the coins of Rudradāman

and Dāmazāda, let us just look at the devices. One notable difference between the coins of the different mints is that the three hills of the *chaitya* are more rounded in the mint A coins, which also show a small pellet inside each hill. The hills in the *chaitya* in the mint B coins are not as rounded and they do not show the pellets. Further, the "base" of the *chaitya* (not the "river" below, rather the bottom of the two lower hills) on the mint B coins is longer than the bottom of the hills and sometimes is not even in contact with the hills themselves. These stylistic differences also seem to unite coins from the two different mints across the coins of Rudradāman and Dāmazāda.

In noticing the differences in the coin legends, Rapson had sought to explain them as a chronological sequence. He noted that coins with legend A (which he referred to as variety a) seemed to feature a younger looking portrait than coins with legend B (which he referred to as variety b). ¹⁹ It is not clear whether this subjective judgment of which portrait looks younger or older is borne out in the larger sample of coins presented here. To me, some of the legend A coins seem to have quite an old-looking portrait. In any case, the differences in portraits are so great that they do not appear to be of the same face; the quality of portraiture is simply not that fine. So I prefer the explanation that the portraits reflect different styles at the two mints rather than age.

Before moving on, I wish to make a couple of points about the coins in the table. All coins are from my own collection or have passed through my hands at one time or another and, in general, I have chosen the best examples of any given type. In the cases of the coins of Rudradāman and Dāmazāda, the coins are not dated so I have attempted to select a few coins each to illustrate differences in style and to place these coins in an order that seems reasonable from a chronological point of view. For example, the first two coins of Rudradāman from mint A show a quite legible Greek legend BACIA..., the beginning of the word for king. So these seem to be early coins of the reign, before the Greek legend became completely blundered. The first coin from mint B has a portrait that seems most akin to the portraits on coins of Chastana and Jayadāman. It also has a remarkable feature: the blundered Greek legend runs all the way around the portrait. I have never seen this on any other WK coins, where the Greek legend normally runs only from about 8 o'clock to 5 o'clock. Beyond these seemingly early coins, the coins have been arranged in a manner that shows a progression to the coins of Dāmazāda. Details of the coins, including the weights, diameters, etc. are presented in Table 3.

Ideally, the chronological arrangement of the coins should be based on die studies that link successive coins. This may prove a daunting task. Despite having looked at hundreds of WK coins, I have rarely found any die matches. When I have found the occasional match, it tends to be a match for both obverse and reverse, thus not providing any kind of link for successive coin generations. Nevertheless, I hope in future it may become possible to undertake a serious die analysis of WK coinage.

Dāmazāda

I have already discussed the coins of Dāmazāda, but for the sake of completeness I explicitly state the characteristics of his coins from the two different mints. While he was kshatrapa, coins from mint A carried the legend

¹⁹ Rapson, *op. cit.*, pp. cxxi-cxxii. There is actually an inconsistency in Rapson's exposition. In the explanatory text (pp. cxxi-cxxii), he calls the variety with the *Jayadāmasaputrasa* legend variety *a* and the one with the *Jayadāmaputrasa* legend as variety *b*; in the catalogue (pp. 78-79) he reverses this.

Rājno mahākshatrapasa Rudradāmnaputrasa Rājno kshatrapasa Dāmajādasriya, while coins from mint B had the legend

Rājno mahākshatrapasa Rudradāmaputrasa Rājno kshatrapasa Dāmaysādasa.

After Dāmazāda took the title of mahākshatrapa, his mint A coins read

Rājno mahākshatrapasa Rudradāmnaputrasa Rājno mahākshatrapasa Dāmajādasriya,

and his mint B coins carried the legend

Rājno mahākshatrapasa Rudradāmaputrasa Rājno mahākshatrapasa Dāmavsādasa.

Classifying the coins to the different mints according to the legends they feature, we are able to then see very clearly the stylistic characteristics of each mint and the consistency of these styles with the coins of Rudradāman.

There is one other interesting difference that arises in the coinage of Dāmazāda between coins of the different mints. This is visible in Table 3, where the details of all the coins are presented. The table shows that, in the coinage of Rudradāman, the inception of the reverse legend was always at or around 12 o'clock. This is also true of the Dāmazāda coins from mint A. But the mint B coins of Dāmazāda are quite different, as the legend incept on these coins varies between 4 and 6 o'clock.

Rudrasimha and the problem of his temporary "demotion"

Dāmazāda was succeeded by his brother Rudrasimha I, who initially issued some undated coins as kshatrapa. They carried the legend

Rājno mahākshatrapasa Rudradāmnaputrasa Rājno kshatrapasa Rudrasihasa. The use of the patronymic Rudradāmnaputrasa marks this legend as belonging to mint A, as this was the form used for the patronymic on Dāmazāda's mint A coins. Thus it appears that Rudrasimha issued his kshatrapa coins from mint A only, as no coins are known to carry what would be the logical mint B legend

Rājno mahākshatrapasa Rudradāmaputrasa Rājno kshatrapasa Rudrasihasa.²⁰ The style of the kshatrapa coins also fits with the style of Dāmazāda's mint A coins. Looking at coins 10A and 11A, we see the portraits on the Rudrasimha coins closely resemble the portraits on the mint A coins of Dāmazāda. Also, the hills on the reverse chaitya have the characteristic rounded shape with pellets inside and the foundation line below is not longer than the hills themselves. Thus the mint A coins show full consistency between the coins of Dāmazāda and the undated kshatrapa coins of Rudrasimha. Further, Rudrasimha did issue coins as mahakshatrapa with the Rudradāmaputra legend (as well as the Rudradāmnaputra one), so he did eventually issue coins from mint B. The difference in legends becomes the distinguishing feature for the mahakshatrapa coins of the two mints. Coins from mint A carry the legend:

Rājno mahākshatrapasa Rudradāmnaputrasa Rājno mahākshatrapasa Rudrasihasa,

while coins from mint B read:

Rājno mahākshatrapasa Rudradāmaputrasa Rājno mahākshatrapasa Rudrasihasa.

²⁰ In their text (pp. 33-34), J&R say that the undated kshatrapa coins actually carry this (mint B) legend, but this is not borne out by their catalogue, where all undated kshatrapa coins do in fact carry the mint A legend.

It appears that Rudrasimha started dating his coins at the same time as he assumed the title of mahakshatrapa, as there are no undated coins listing him with that title. The first dated coins carry the date Saka 100 (= 178 CE assuming the Saka era started in the year 78 CE) and are known from both mints. So mint B appears to have started issuing coins of Rudrasimha at this time. In the table, I report for the first time five coins from mint A, carrying legend A, with dates that were previously unknown: 101, 110, 113, 117 and 119. These coins therefore fill several gaps in the series sequence, although a few still remain.

With the Rudrasimha mahakshatrapa coins, the stylistic differences between the coins of different mints start to diminish. The portraits are no longer as distinct from one another. Also, the hills of the *chaitya* on the mint A coins are no longer as rounded and the pellets start to disappear. In year 107, the "foundation" line of the *chaitya* also starts to exceed the length of the hill bases. After this time, therefore, it becomes more difficult to separate the coins by mint on stylistic grounds. Of course the legend difference persists.

Arranging Rudrasimha's coins by mint sheds new light on the issue of the so-called "demotion" of this king to kshatrapa in the middle of his reign. In his British Museum catalogue, ²² Rapson had observed that he had coins of Rudrasimha that named him as kshatrapa and were dated 110 and 112! Since he also had coins naming Rudrasimha as mahakshatrapa dated 103, 106, 109, 110, 113-116 and 118, the dated kshatrapa coins seemed to indicate that this king suffered some sort of demotion to kshatrapa in the year 110 and then recovered his position as mahakshatrapa in the year 113.

In their catalogue, J&R were able to add to the corpus of dated coins a kshatrapa coin dated 111 and mahakshatrapa coins dated 100, 112 and 119 (among others). It appeared from J&R's data that Rudrasimha became mahakshatrapa in the year 100, remained so until some time in the year 110, when he was reduced to kshatrapa again, and then regained the position of mahakshatrapa in the year 112.

Various theories were proposed to explain this seeming demotion and these have been discussed in detail by J&R. Rapson had suggested that Dāmazāda had been succeeded not by his brother Rudrasimha but by his son Jīvadāman. He based his argument on a coin of Jīvadāman in the British Museum's collection. At the time, the Museum owned five coins of this ruler, four of which (coins 289-2292) carried the mint B legend (see the next section for details) and had dates 119-120 and the fifth of which (coin 288) carried the mint A legend and had a date 1xx. Since Rapson was convinced that differences in legend marked different time periods, he guessed that the fifth coin must be earlier than 119 and speculated that it might be dated 100-103 or 110-113, since these were dates that would fill "gaps" in the Rudrasimha sequence. His preferred dating was to 100-103. That suggested that Jīvadāman actually succeeded his father Dāmazāda but was overthrown by his cousin Rudrasimha shortly thereafter. Rudrasimha's "demotion" mid-way through his reign might then be explained by Jīvadāman seizing

²¹ I have some doubts concerning the authenticity of the coin dated 101. The style is a bit odd. Also, it features a sun where the rays consist of dots rather than lines, a design that starts to appear consistently only in the coinage of Rudrasena I. Finally, the legend incept on this coin is at 6 o'clock, not the normal position for coins from this mint.

²² Rapson, *op. cit.*, pp. 89-93.

power once again for a brief period. Alternatively, if the Museum's fifth coin was dated 110-113, it might simply mark a period during which Jīvadāman took power in a struggle with Rudrasimha. So this would still provide an explanation for Rudrasimha's "demotion."

Rapson's theory was dealt a significant blow when coins of Rudrasimha as mahakshtrapa, dated 100, were found. In presenting mahakshtrapa Rudrasimha coins dated 100 and 102, J&R point out that this means there is "no basis for placing [Jīvadāman] before Rudrasimha I."²³ Further, J&R presented a coin (number 358) that was "very similar" to Rapson's coin and was dated 11x, probably 119. This coin provided further evidence that Rapson's coin was probably not dated 100-103 and suggested that it was probably dated 119. However, the number 9 was not conclusively visible on J&R's coin and so the possibility that Rapson's coin 288 was dated between 110 and 113 could not be ruled out. In particular, J&R had not even attempted to explain the differences in legends on the two coin types.

The two mint model, however, explains the differences in coin legends and thereby erases the "need" to find an early date for Rapson's coin 288. But it does nothing yet to explain Rudrasimha's "demotion" to kshatrapa during the Saka years 110-113. Having rejected the idea that it was caused by a power struggle between Jīvadāman and Rudrasimha, J&R considered other proposals and rejected all of them. These included the possibility that the usurper Isvaradatta took power briefly, that the Rudrasimha kshatrapa coins from 110-112 were die engraver's errors, or that they were mules. J&R gave cogent arguments against each of these suggestions. But they acknowledged they had no satisfactory explanation for Rudrasimha's apparent diminution of power. They concluded that it probably occurred at the hands of an outside dynasty, perhaps the Satavahanas, as a familial struggle could be ruled out with the exclusion of Jīvadāman from any early reigns.

A major change to the chronology occurred when Senior published his catalogue, as he now had a coin naming Rudrasimha as mahakshatrapa that was dated 111! There was therefore no longer a neat and convenient gap in the mahakshatrapa issues into which the kshatrapa issues could be placed chronologically. We now had coins naming Rudrasimha as kshatrapa as well as coins naming him as mahakshatrapa for each of the years 110, 111 and 112, a seemingly irreconcilable situation. Senior summed up the problem in a footnote, where he suggested that his S. 111 coin "surely indicates that the dated satrap issues were die engravers errors?" ²⁴

Allocating the coins by mint, however, reveals an important new aspect of this problem. All the dated kshatrapa coins of S. 110-112 are from mint A and all the known dated mahakshatrapa coins of the same years, including three presented here for the first time, are from mint B. It would appear, therefore, that there could have been a "demotion" of Rudrasimha that took hold in the geographic area around mint A, but that he maintained the position of mahakshatrapa in the area around mint B. Thus we are back to the situation that prevailed before Senior's S. 111 coin (Senior 333.41B) was published, only with the geographic detail created by the two mint theory.

Senior also published another coin that could perhaps bear on this problem and to which he referred in his footnote on the S. 111 coin: a coin of Rudrasena dated 112

²³ J&R, *op. cit.*, p. 9.

²⁴ Senior, *op. cit.*, p. 203, fn 1.

(Senior 339.60AD). The coin names Rudrasena as mahakshatrapa and carries a legend that would locate it at mint A (see the section on Rudrasena below for the details). Thus if the date on this coin is correct, it would suggest that it was possibly Rudrasena who replaced his father as mahakshatrapa at mint A during the years 110-112. I will discuss this possibility further in connection with the coins of Rudrasena.

Jīvadāman and his multiple reigns

Rudrasimha ruled until S. 119, the last date for which we have coins of his, and was succeeded by Dāmazāda's son Jīvadāman. Jīvadāman's coins also fall into two varieties characterized by variations in the legend. One variety uses *Dāmajādasriya* as the spelling for Dāmazāda's name, reading:

Rājno mahākshatrapasa Dāmajādasriyaputrasa Rājno mahākshatrapasa Jīvadāmna.

This variety seems to belong to the group that I am hypothesizing was struck at mint A, where Dāmazāda's name had been spelled *Dāmajādasriya* on Dāmazāda's coins and where the patronymic had been spelled *Rudradāmnaputrasa*. The other variety uses the genitive case (*Jīvadāmasa*) and spells the father's name as *Dāmajāda*:

Rājno mahākshatrapasa Dāmajādasaputrasa Rājno mahākshatrapasa Jīvadāmasa.

Under my hypothesis, these coins must have been struck at mint B, where Dāmazāda's name had been spelled $D\bar{a}mays\bar{a}da$ (a slight variation from $D\bar{a}maj\bar{a}da$, where the compound conjunct ysa instead of ja had been used to represent the sound za) and the patronymic had been spelled $Rudrad\bar{a}maputrasa$.

Organizing Jīvadāman's coins by mint completes the argument that "Dāmajadasri" and "Dāmaghsada" were in fact different spellings of Dāmazāda. Since there has never been any question that there was only one ruler by the name of Jīvadāman, it remained to understand why he sometimes called his father Dāmajādasri and sometimes Dāmajāda. J&R did not attempt an explanation. But now we have a full explanation, given the different conventions being followed at the two mints.

The portrait styles on Jīvadāman's coins seem to be consistent with the portrait style differences we observed on coins of Rudradāman and Dāmazāda. To my eye, Jīvadāman's mint B coins display the finer and more consistent style of the earlier mint B coins, while the mint A coins are a little cruder and more variable. There are no discernible differences in the style of the reverse devices ... those differences had disappeared in year 107 when Rudrasimha was in power.

I have already discussed the problem of Jīvadāman's multiple reigns, Rapson's idea was that Jīvadāman may have succeeded Dāmazāda and had a reign around S. 100-103, or may have attempted to overthrow Rudrasimha during S. 110-112. The multiple mint theory dispels the need for an early reign for Jīvadāman and therefore a chronology that has him ascending to the throne in S. 119 is all we need. Coin 34A presented below further supports J&R's argument that Rapson's coin 288 was probably issued in 119. Like J&R's coin 358, coin 34A below is of a style very similar to that of Rapson's 288, and shows a date of 11x, with a 9 as the last digit quite probable. Unfortunately the date is not definitive, however. But perhaps more convincingly, the last two coins of Rudrasimha from mint A, coins 32A (dated S. 118) and 33A (dated S. 119) do have clear dates and exhibit the same style as the Jīvadāman coins. In particular, the blundered

Greek legend in front of the king's face looks virtually identical in all of these coins. I believe these coins make a very convincing case that Rapson's coin 288 was in fact dated 119.

Finally, note that coin 36B is dated 121, a date previously unknown for Jīvadāman. Since the earliest known coin of Rudrasena is also dated S. 121, this coin removes any doubt about the year in which power transferred from Jīvadāman to Rudrasena, since now 120 is no longer a viable candidate.

Satyadāman

Although Jīvadāman was succeeded by his cousin Rudrasena, I consider next the coins of his brother Satyadāman, in order to conform with the order of rulers in J&R's and Senior's catalogues. J&R did not have a dated coin of Satyadāman and so it seemed natural to list his coins immediately after those of his brother. But Senior reported a coin that showed a clear date of 124. Coins 37A and 38A reported below also carry this date. Coin 38A in fact shares a reverse die with Senior's 338.2D, on which he had been unable to read a full date, so this coin confirms the date of 124 for that coin. Thus Satyadāman's coins are known only from that year and carry the legend

Rājno mahākshatrapasa Dāmajādasriyaputrasa Rājno kshatrapasa Satyadāmna, or its Sanskrit version

Rājno mahākshatrapasya Dāmajādasriyaputrasya Rājno kshatrapasya Satyadāmna.

Since the name of the father is spelled Dāmajādasri and the name of the king is in the nominative case as Satyadāmna, these coins were probably issued at mint A. At that time, Rudrasena I was issuing coins as mahakshatrapa from both mints, as we see below, and so Satyadāman must have served as kshatrapa under his cousin Rudrasena. But it appears he was given this title only in the localized area of mint A, as no coins of his from mint B are known. Another possibility is that Satyadāman's coins were not issued in one of the official mints, but in an entirely different mint that happened to follow the same convention as mint A. In this case, it could be possible that Satyadāman was in rebellion against Rudrasena I.

Rudrasena and his possible two reigns

The coins of Rudrasena I should perhaps have been presented before those of Satyadāman as it was he who was the successor of Jīvadāman. The earliest known coin for Rudrasena is dated 121 (J&R 366 and Senior 339.10D) and carries the legend

Rājno mahākshatrapasa Rudrasihasaputrasa Rājno kshatrapasa Rudrasenasa. The presence of the letter sa in the patronymic suggests that this coin was struck at mint A, where Rudradāman's coins also featured this letter in the patronymic. Until now, all known coins of Rudrasena as kshatrapa carry this legend and include the additional dates 122 and 124, suggesting that Rudrasena perhaps served as kshatrapa in the area of mint A only for the period 121-124. However, presented below are five previously unlisted types for Rudrasena as kshatrapa. Coin 41A is the first known coin of Rudrasena dated 123; it is a mint A coin since it has the mint A legend. There are then four coins that feature what is probably the mint B legend:

Rājno mahākshatrapasa Rudrasihaputrasa Rājno kshatrapasa Rudrasenasa.

The letter *sa* has here been omitted from the patronymic. Coin 39B is dated 121, 40B is dated 122, and then there are two coins dated 124: coin 42B with a Sanskrit legend to correspond to the known mint A coin of year 124 (Senior 339.14D) and coin 43B with a Prakrit legend, previously unreported for this year. These coins therefore fill in many gaps and indicate that Rudrasena held the title of kshatrapa in the areas of both mint A and mint B during the period S. 121-124.

Given this history, we would expect to find the first Rudrasena issues naming him as mahakshatrapa to be dated 124, and this is indeed what J&R report. However, Senior reports a coin with legend A dated 112 (!) and another, with unreported legend, dated 122.²⁵ And, in the table below, I report two new coin types: coins 45A and 47A are Rudrasena mahakshatrapa coins dated 121 and 123 respectively.²⁶ Note that, as in the case of the kshatrapa coins, the mints are being distinguished on the basis of the presence or absence of the letter *sa* in the patronymic. Thus, mint A coins read:

Rājno mahākshatrapasa Rudrasihasaputrasa Rājno mahākshatrapasa Rudrasenasa,

while mint B coins feature:

Rājno mahākshatrapasa Rudrasihaputrasa Rājno mahākshatrapasa Rudrasenasa.

I will discuss the S. 112 coin later, but the other coins clearly indicate that Rudrasena took the title of mahakshatrapa as early as S. 121. These coins all carry the legend A (assuming that Senior's coin does also) and that would indicate a localized assumption of full power. Indeed, the fact that Rudrasena was issuing coins both as kshatrapa and mahakshatrapa during the years 121-123 suggests to me that the two-mint model is insufficiently detailed to analyze WK coinage fully. I suspect that "mint A" coins were in fact produced in more than one mint and that Rudrasena assumed the title of mahakshatrapa in "mint A1" while continuing as kshatrapa in "mint A2."

After year 123, many coins are known for Rudrasena, covering the period 124-144, but there are many gaps in the listed sequences. In the table, I am publishing for the first time coins with the following dates:

mint A: 128, 131, 143, and

mint B: 126, 127, 129, 130, 131, 134, 136, 137, 138, 139, and 140.

These coins greatly expand the number of known dates for Rudrasena's coinage. The remaining gaps are indicated in the table.

Now let me turn to the coin dated S. 112. As I mentioned in the discussion of Rudrasimha's possible demotion to kshatrapa in the area of mint A during S. 110-112, the S. 112 coin of Rudrasena might serve as an important piece of information to solve this conundrum. Assuming this coin is not an error of some sort, it tells us that Rudrasena I served as mahakshatrapa at mint A in the year S. 112. This is precisely during the time when Rudrasimha's coins from that mint had "demoted" him to kshatrapa. Might Rudrasena have attempted an early overthrow of his father? That is possible, but I think it is unlikely. If such an overthrow had been successful, why would Rudrasena permit his

²⁵ Unfortunately, Senior identifies the coin only as 339.22R, indicating that the sun and moon are in reversed positions from the normal, but does not specify if the legend is A or B and also does not illustrate the coin.

²⁶ There is a chance that coin 47A is actually a kshatrapa issue as the letters *ma ha* in *mahakshatrapa* are mostly off the flan. But the spacing and angles of the visible letters suggest the presence of those letters on the original die.

father to keep issuing coins as kshatrapa? Surely he would have forced him to cease issuing coins altogether. And if the attempted overthrow were not successful, surely Rudrasimha would have kept issuing coins as mahakshatrapa. So it seems to me that a hypothesis that Rudrasena attempted to usurp the throne from his father is not very consistent with the outcome we observe, that Rudrasimha continued to issue coins but as kshatrapa, and that Rudrasena's mahakshatrapa coinage is rarer than his father's kshatrapa coinage.

I would like to propose an alternative hypothesis, that Rudrasimha voluntarily reduced his status to kshatrapa and advanced his son Rudrasena to mahakshatrapa in an attempt to either reduce his own responsibilities or to enhance his son's status as a probable successor. We can assume that Dāmazāda had been Rudrasimha's older brother. since he had succeeded their father Rudradāman. Therefore, Dāmazāda's son Jīvadāman must have had a fairly powerful claim to the throne occupied after his father's death by his uncle Rudrasimha. Indeed, this presumed claim is what prompted Rapson's speculation that Jīvadāman had in fact succeeded Dāmazāda, and had continued to wage a power struggle with Rudrasimha. Even if, as I have argued the coin evidence indicates, this power struggle did not manifest in Jīvadāman actually taking power and striking coins in his name, it may well have lain close below the surface. At a minimum, Jīvadāman probably had prior claim to the throne over Rudrasena at Rudrasimha's death. In the face of these circumstances, perhaps Rudrasimha attempted to increase his son's status and chances for succession by his unorthodox withdrawal to kshatrapa status. The fact that Rudrasimha's kshatrapa coins are more common (although still quite rare) than Rudrasena's coins from this time period might indicate that his coinage was more copious and hence that real power continued to lie in Rudrasimha's hands.

Of course, the Rudrasena S. 112 coin may simply be a die engraver's error. And, even if it isn't, the hypothesis I have proposed is purely speculative. So for now we must continue to wonder what in fact transpired in the Western Kshatrapa kingdom during the years S. 110-112. The two mint hypothesis has added richness to this problem but has not eliminated it.

The previously unknown prince Jīva?daman II

Although this coin is not illustrated, I mention here a coin reported by P.D. Chumble of a previously unknown prince whose name is not entirely clear, but which appears to be Jīvadaman.²⁷ The coin has a date of 127 and there is some confusion about the legend. In his note, Chumble mentions that the father's name is Rudrasena, but when he writes down the legend he writes:

Rajno mahakshatrapa Rudrasihaputrasa Rajna kshatrapasa Jīvadamna, indicating that the father is Rudrasimha. Looking at the photo as best as I can, it appears to me the legend actually reads

Rajno mahakshatrapa Rudrasenaputrasa Rajna kshatrapasa Jīvadamna, indicating that the father is indeed Rudrasena I, as Chumble's text indicated. Without examining the coin closely, I feel unable to say at which mint it may have been struck. If this Jīvadaman was indeed Rudrasena's son, it might have been quite natural for him to

²⁷ P.D. Chumble: "Some New and Rare Western Ksatrapa Silver Coins," IIRNS Newsline 32, Oct. 2001, p.3. I am indebted to Shailendra Bhandare for pointing out this coin to me and to Amiteshwar Jha for furnishing me with a copy of the publication.

be given the title of kshatrapa as preparation for an eventual succession. But he probably died young as he disappears from the record.

The previously unknown prince Isvaradeva

I have already discussed Satyadāman's coinage even though it was issued during the reign of Rudrasena I. Here I discuss the coin of a new king, Īsvaradeva, which I have published recently²⁸ and which was also issued during Rudrasena's reign. Coin 69 illustrates this coin. The legend reads:

Rajno mahakshatrapa Rudrasihaputrasa Rajno kshatrapasa Īsvaradevasa. Although parts of the legend are off the flan, I have shown in my paper that this reading is most probably the correct one. Thus Īsvaradeva was another son of Rudrasimha, like the king Rudrasena himself. The question is, was he a rebel attempting to seize power, or did he issue his coins under the suzerainty of his brother?

Attempting to assign the coin to a mint suggests an answer. Since the legend does not include the syllable *sa* in the patronymic, it is tempting to assign it to mint B. However, the coin has a feature seen previously only in mint A coins: the hills in the *chaitya* on the reverse are rounded and contain small pellets within them. This was one of the characteristic features of the mint A coinage during the reigns of Rudradāman and Dāmazāda and had never been seen on a coin of mint B. So on this ground the Īsvaradeva coin should be assigned to mint A. There is a further complication. The particular form of the *chaitya* seen on this coin, while previously a characteristic of mint A coins, had disappeared from the official coinages. It was last seen in Rudrasimha's undated kshatrapa coinage (see coins 10A and 11A), after which the pellets ceased to appear. Thus Īsvaradeva's coin seems to lie outside the normal sequence of official issues, suggesting to me that he was a rebel. The fact that his coinage is so rare and presumably had a very short issue period supports this thesis. In all likelihood, his brief "reign" was quickly brought to an end by firm action on the part of Rudrasena.

It seems to me also that the Isvaradeva coin adds support for the idea that Satyadāman was also a rebel against Rudrasena. His coins do not fit very neatly into the mint structure and he, like Isvaradeva, had a very short "reign." Thus it seems to me quite likely that he was a rebel whose rebellion was quickly brought to an end.

Dāmasena and the rebellions of Samghadāman and Dāmajādasrī II

After Rudrasena I, no ruler issued coins with the different style legends as previous rulers did and so it is possible that mint differences may be harder to identify. However, it may be that we can exploit the two mint theory some more and to this end I wish to make some observations about the coinages of Samghadāman and Dāmajādasrī II in opposition to Dāmasena.

Dāmasena became kshatrapa in S. 144, the last known year of Rudrasena I's rule. This may have happened while Rudrasena was still alive or, more likely, after he had died. J&R actually do not report any coin of Dāmasena as kshatrapa, but Senior does (type 346.10) and I have two such coins in my collection also. The legend on these coins reads

Rājno mahākshatrapasa Rudrasihasaputrasa Rājno kshatrapasa Dāmasenasa.

²⁸ See Pankaj Tandon: "Īsvaradeva: a new Western Kshatrapa king," submitted to JONS.

The presence of the extra letter *sa* in the patronymic (*Rudrasihasaputrasa* rather than *Rudrasihaputrasa*) suggests that these coins were probably struck at mint A.

The same is true of the vast majority of Dāmasena's mahakshatrapa coinage. The known dates cover all years from S. 145 to 158 and the legend reads

Rājno mahākshatrapasa Rudrasihasaputrasa Rājno mahākshatrapasa Dāmasenasa.

Once again, the patronymic features the extra letter *sa*, marking these coins as issues of mint A. The only exceptions to this norm are the rare coins of unknown date featuring a Sanskrit legend:

Rājno mahākshatrapasya Rudrasihaputrasya Rājno mahākshatrapasya Dāmasenasya,

which omit the extra letter in the patronymic. Whether this means these coins were issued at mint B is unclear. Why no Prakrit coins were issued from that mint would be very puzzling; I prefer to think that the Sanskrit legend coins were also issued at mint A or at a different mint entirely.

In addition to these coins, there exist the so-called "Bombay fabric" coins²⁹ in the name of Dāmasena that, assuming they were official issues, were probably the product of an entirely different mint, since their fabric, design and weight standard are so different from the other coins. I will not consider these coins in detail here as they form a quite separate phenomenon. Hopefully I will be able to study these coins in some future work.

As mentioned earlier, Dāmasena held the position of mahakshatrapa from S. 145 to 158 and it appears that he was succeeded by his son Vīradāman, who started issuing coins as kshatrapa in S. 156 and continued to do so until the year 160. His coin legend reads:

Rājno mahākshatrapasa Dāmasenasaputrasa Rājnah kshatrapasa Vīradāmnah. Once again, these coins include the letter *sa* in the patronymic, which I am treating as the marker for mint A. Thus it appears that Vīradāman was issuing these coins under the suzerainty, as it were, of his father and the transition from father to son was orderly.

Vīradāman never seemed to become mahakshatrapa as we do not know any coins of his naming him such. Perhaps he died early. His brother Yasodāman I started to issue coins as kshatrapa in the year S. 160 and quickly seemed to ascend to mahakshatrapa, as coins naming him as such are known for the years 160 and 161. Yasodāman's coins also seem to have been struck in mint A as the legend includes the marker letter *sa*:

Rājno mahākshatrapasa Dāmasenasaputrasa Rājnah kshatrapasa Yasodāmnah, and Rājno mahākshatrapasa Dāmasenasaputrasa Rājnah mahākshatrapasa Yasodāmnah.

So this transition seems to have been quite orderly as well.

But Yasodāman's reign was also short and he was quickly followed by yet another brother Vijayasena. Presumably when Yasodāman assumed the title of mahakshatrapa Vijayasena became kshatrapa, as we have coins of his dated 160 and 161. And then when Yasodāman's reign ended, Vijayasena assumed the title of mahakshatrapa. We have his mahakshatrapa coins dated S. 161-172. Again, Vijayasena's coins have the marker letter *sa* in the patronymic:

Rājno mahākshatrapasa Dāmasenasaputrasa Rājnah kshatrapasa Vijayasenasa,

²⁹ See J&R types 429-432 and Senior 346.80D. Several later kings also issued coins in this fabric, many of which remain unpublished.

and Rājno mahākshatrapasa Dāmasenasaputrasa Rājno mahākshatrapasa Vijayasenasa.

So once again the transition seems to have been quite orderly.³⁰

Against this backdrop of orderly transitions at mint A, with three sons (Vīradāman, Yasodāman and Vijayasena) following their father Dāmasena in quick succession, we have the case of Samghadāman, a brother of Dāmasena, issuing coins as mahakshatrapa while his brother was ruling. These rare coins are dated in only one year as far as we know, S. 149. As J&R point out, Samghadāman must "have been in rebellion against his brother for it was against the normal tradition" for him to call himself mahakshatrapa while his brother was already ruling as mahakshatrapa. We receive further confirmation of this speculation by looking at the legend on Samghadāman's coins:

Rājno mahākshatrapasa Rudrasihaputrasa Rājno mahākshatrapasya Saghadāmnah.

The marker letter *sa* is absent from the patronymic, indicating that this coin was struck at mint B. It therefore provides a geographic separation between Samghadāman's sphere of influence and that of his brother. Presumably Dāmasena put an end to the rebellion quickly, as we have no coins of Samghadāman after 149.

Another likely rebellion against Dāmasena may have taken place in the years S. 154-155. Dāmasena's nephew Dāmajādasrī, the son of Rudrasena I, issued coins during those years. As he named himself only kshatrapa on these coins, and as the dates of his coins seem to dove-tail nicely with the "following" kshatrapa coins of Vīradāman, Dāmajādasrī's rule has been taken to be a normal kshatrapa-ship under the suzerainty of Dāmasena. However, Dāmajādasrī's coins differ from those of Vīradāman and his successors in an important way: they do not carry the marker letter *sa*, indicating they were struck at mint B. They read:

Rājno mahākshatrapasa Rudrasenaputrasa Rājna kshatrapasa Dāmajādasriyah. To me, the fact that these coins were issued at mint B, like those of the rebel Samghadāman, seems to indicate that Dāmajādasrī was also a rebel, trying to stake his claim to the throne by setting up his authority at a location away from the central power. It is true that he took the title of kshatrapa only, 33 possibly in an attempt to appease Dāmasena and reduce his incentive to act militarily. But it appears that this strategy did not work. His rebellion appears to have been short-lived, as coins are known only for those two years 154-155, and mint B appears to have been subsequently shut down as we have no coins with the tell-tale legend after that time.

Conclusion

In this paper, I have suggested that WK coinage may have been produced at several mints and have proposed a very simple division of some of that coinage into two mint classes based on differences in the forms of the reverse legends. This division has been shown to be consistent with stylistic differences also. The reallocation of coins into

³³ Recall that this was what Isvaradeva did also.

³⁰ When I say "orderly" I do not necessarily mean "peacefully." Quick successions of this kind suggest to me that the brothers used assassination as a method to hasten their rise to power.

³¹ J&R, *op. cit.*, p. 11.

³² See J&R, *ibid.*, p. 12.

these two mint classes was then shown to be extremely useful in solving many old problems from WK history. I believe that I was able to show that:

- 1. The multiple mint structure is possible to discern at least as early as the reign of Rudradāman.
- 2. Rudradāman's sons "Dāmajadasrī" and "Dāmaghsada" were one and the same person, whose name was Dāmazāda.
- 3. Rudrasimha's "demotion" to kshatrapa, which occurred during S. 110-112, was confined only to a local area (the area of mint A); he retained the full title of mahakshatrapa in the area of mint B.
- 4. Jīvadāman had only one reign, S. 119-121.
- 5. Satyadāman held power in only a local area (the area of mint A).
- 6. Rudrasena may have briefly held the title of mahakshatrapa in the area of mint A around S. 112, thereby accounting for Rudrasimha's "demotion."
- 7. Rudrasena may have faced several rebellions, from Satyadāman, Jīvadāman II and Īsvaradeva.
- 8. Both Samghadāman and Dāmajādasrī II may have been rebels against Dāmasena, as their coins are local products of mint B. Dāmasena issued coins only from mint A.

This wide array of conclusions shows the usefulness and power of the simple two-mint model. Now more work is needed to further confirm the veracity of this hypothesis, to identify just how many mints there were and to discover the actual locations of these mints. This could help clarify and deepen our understanding of the Western Kshatrapas and their history. Notably, I feel we may be able to begin to understand the complex relationship between kshatrapas and mahakshatrapas, which I have shown may have had a geographical dimension which so far has not been examined at all.

Table 2: Coins from the Different Mints

	Mint A	Mint B						
	Rudradāman							
1	STATE OF THE PARTY	COLUMBANA COLUMB						
2		TO SECURE						

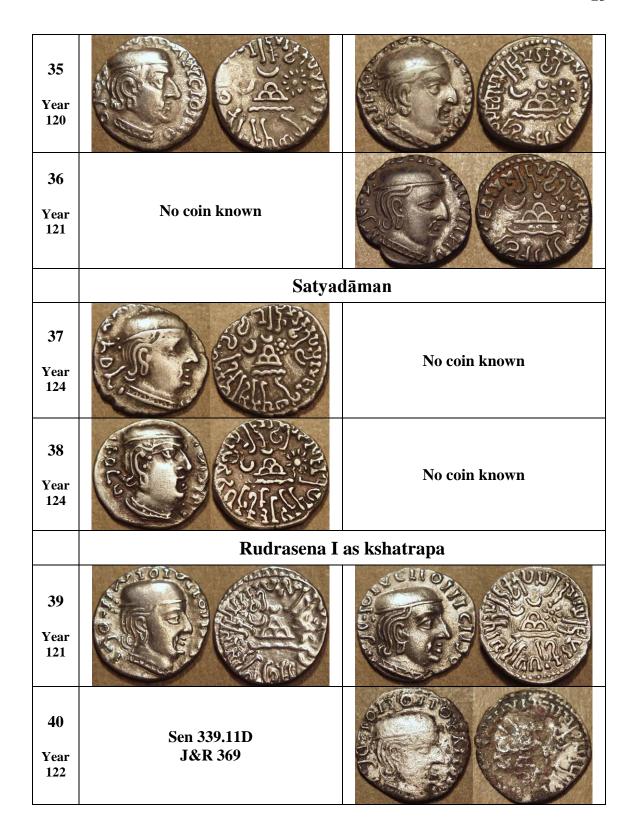




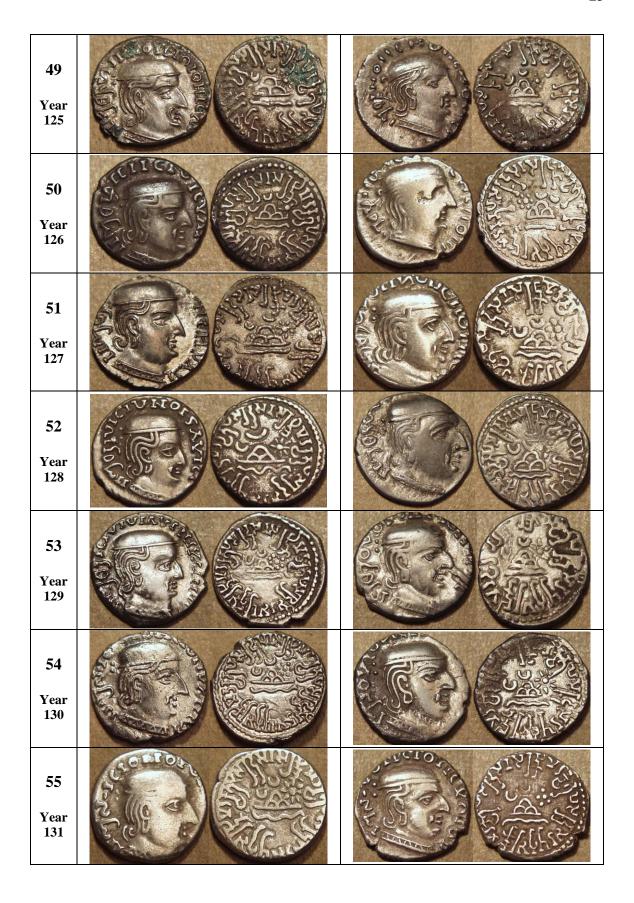
15 Year 103		No coin known
16 Year 104	TOTOLOGY SERVICE STATES	No coin known
17 Year 105		No coin known
18 Year 106		No coin known
19 Year 107		TO TO THE PARTY OF
20 Year 108	SA S	No coin known
21 Year 109		No coin known

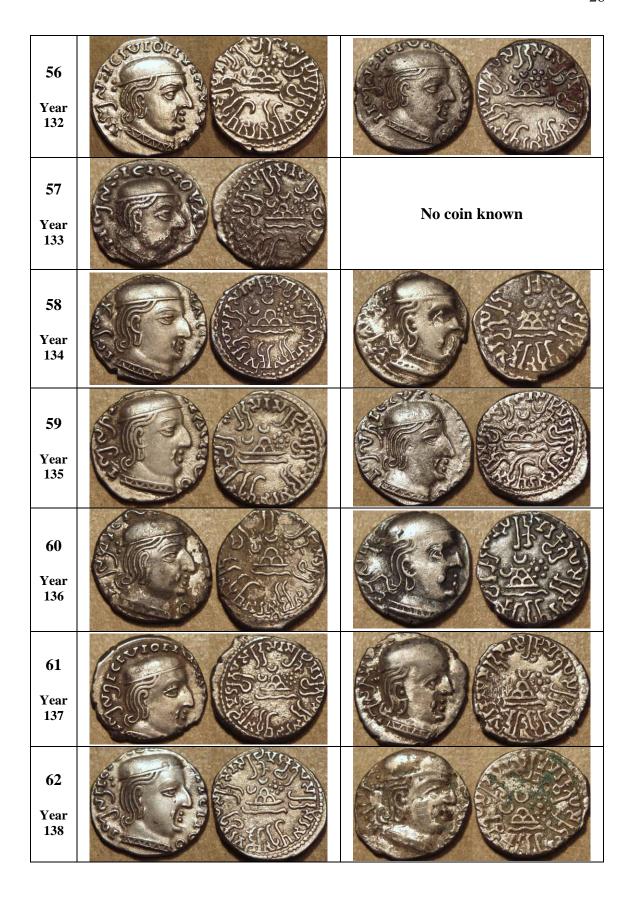
22 Year 110	SA SE	See next coin
	as kshatrapa	continuing as mahakshatrapa
23 Year 110		
24 Year 111		TO SERVICE STATE OF THE PARTY O
25 Year 112	SC CONTRACTOR OF THE PARTY OF T	
26 Year 112		
	as Mahakshatrapa again	continuing as Mahakshatrapa
27 Year 113		

28 Year 114		
29 Year 115	Sen 333.45A	
30 Year 116		The second secon
31 Year 117	TO THE SECOND PROPERTY OF THE PARTY OF THE P	No coin known
32 Year 118		No coin known
33 Year 119		Sen 333.49B
	Jīvad	āman
34 Year 119		



41 Year 123		No coin known
42 Year 124	Sen 339.14D	
43 Year 124	No coin known	
	Rudrasena I as	mahakshatrapa
44 Year 112	Sen 339.60AD	No coin known
45 Year 121		No coin known
46 Year 122	Sen 339.22R ?	No coin known
47 Year 123		No coin known
48 Year 124	STATE OF THE PARTY	





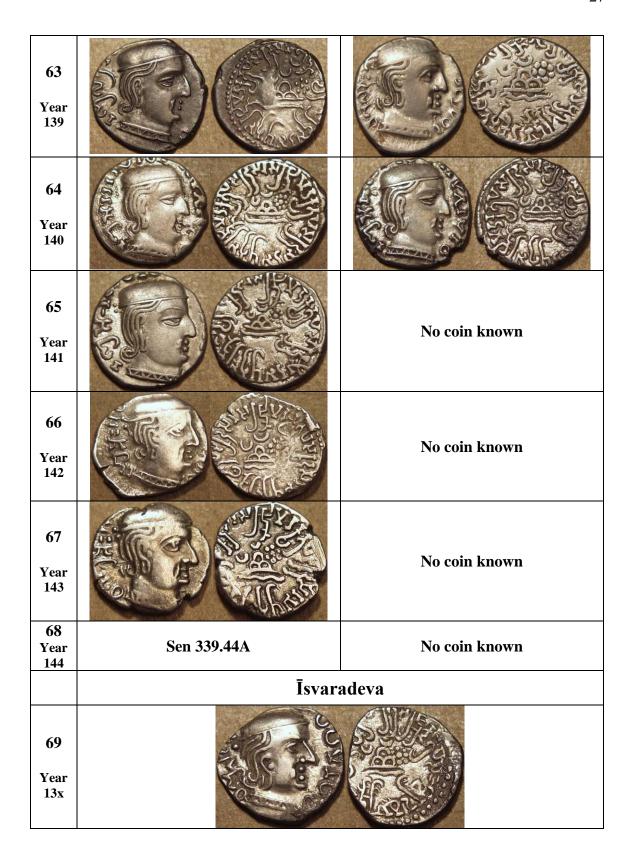


Table 3: Coin Details

	Weight (gm)	Diameter (mm)	Die axis (o'clock)	Legend Incept	Weight (gm)	Diameter (mm)	Die axis (o'clock)	Legend Incept
		Mir	nt A	_		Mir	nt B	_
				Rudra	dāman			
1	2.03	15.5	4	12	2.55	16	5	12:30
2	1.93	15.5	6	12	2.09	15.5	5	12
3	2.07	15	1	12	2.05	15	5	12
4	2.01	15	2	12	2.06	15	9	12
5	1.98	15.5	2	11:30	2.16	15	2	11:30
	Dāmazāda as Kshatrapa							
6	2.27	15	7	12	2.12	14.5	2	5
			Dāmaz	zāda as N	Aahaksl	natrapa		
7	2.14	16.5	5	12	1.90	15	9	5
8	2.25	15.5	7	12	2.22	15	9	6
9	2.19	15	9	12	1.95	14	5:30	4
		Rudr	asimha l	as Ksha	atrapa (undated (coins)	
10	2.02	16	11	12		No coins	s known	
11	2.11	15.5	7	12		No coins	s known	
			Rudr	asimha]	(dated	coins)		
		as mahak	shatrap	a		as mahak	shatrap	a
12	Sen 333.30A			2.08	14	8	3	
13	1.85	15.5	3	6	2.92	15.5	11	3
14	No coins known				2.19	15.5	5	2
15	1.98	14	2	10		No coins	s known	

16	2.17	14.5	6	12	No coins known				
17	1.91	15	11	4:30	No coins known				
18	2.14	15	3	5	No coins known				
19	1.86	15	1	1	2.34 15 3 8				
20	1.90	15	10	12		No coins	s known		
21	2.34	14.5	3	12		No coins	s known		
22	2.10	16	11	9		See ne	xt coin		
		as ksh	atrapa		con	tinuing as	mahaksh	atrapa	
23	2.16	15	12	11	2.08	14.5	3	2:30	
24	2.36	15	8	11	1.78	15	2	3	
25	2.04	14	5	11:30					
26	1.98	15	7	5	1.76	14	9	3	
	as	s Mahaksh	atrapa ag	ain	continuing as Mahakshatrapa				
27	2.00	14	11	12	2.19	15	12	6	
28	2.20	15	2	5	2.26	15	1	12	
29		Sen 33	33.45A		2.25	15	1	12	
30	2.26	14.5	9	12	1.94	14.5	9	3	
31	2.24	15	8	12		No coins	s known		
32	2.42	15.5	5	12		No coins	s known		
33	2.38	15	2	6:30	Sen 333.49B				
				Jīvad	āman				
34	2.20	15.5	12	10	2.37	14.5	3	11:30	
35	2.16	15	3	11:30	2.30	14	8	10	

36		No coins known				15	4	11	
				Satya	dāman	1	1		
37	2.02	15	12	12		No coins	s known		
38	2.24	15.5	12	11	No coins known				
	Rudrasena I as kshatrapa								
39	2.14	15	10	9	1.88	15.5	4	3	
40	\$	Sen 339.11	D, J&R 36	59	1.13	15.5	1	11	
41	2.34	14.5	12	11		No coins	s known		
42		Sen 33	89.14D		2.46	14.5	3	12	
43	No coins known				2.17	15	9	3	
	Rudrasena I as mahakshatrapa								
44		Sen 339	9.60AD			No coins	s known		
45	2.07	15	10	11		No coins	s known		
46		Sen 339	9.22R ?			No coins	s known		
47	2.26	14.5	9	10		No coins known			
48	2.42	14.5	1	8	2.34	15.5	6	12	
49	2.28	15.5	4	1	2.41	15.5	3	12	
50	2.29	14.5	3	1	2.11	15	3	12	
51	2.23	15	5	12	2.36	15	3	12	
52	2.17	15	6	1	2.22	15.5	9	12	
53	2.19	15	4	1	2.14	15.5	3	12	
54	2.30	15	8	1	2.31	15	6	12	
55	2.18	14	8	1	2.35	15.5	1	12	

56	2.32	15	2	2	2.20	15	4	2		
57	2.07	14.5	11	1		No coins known				
58	2.15	15	7	11:30	2.07 14.5 3 1					
59	2.27	14.5	3	1	2.26	14.5	11	1		
60	2.23	14.5	1	2	2.24	14	4	12		
61	2.42	14.5	6	1	2.19	14.5	3	12		
62	2.14	14.5	5	11:30	2.08	14.5	2	12		
63	2.12	15	10	1	2.47	14.5	3	11		
64	2.27	14.5	7	12:30	2.19	14.5	12	12:30		
65	2.24	14.5	11	12		No coin	s known			
66	2.33	15	6	12		No coin	s known			
67	2.20	13.5	3	12	No coins known					
68	Sen 339.44A No coins known									
				Īsvar	adeva					
69			2.08	15.5	4 6					