# The Early Coinage of Central Asia 

 BYMICHAEL MITCHINER

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## Preface

The coing under discusaion vere all struck in what may be aptly termad the periphery of the civilised world. To the south and southweat of these regions lay the urbanised kingdoms of the Iranian-Afghan plateau that were aucceasively ruled by Achaemenid Persian, Macedonian and Indo-Greek or Parthian sovereigas, while to the north and northeast lay the lands of the Central Asian nomade. The coinage of thia buffer region, which generally lay between the Caspian Sea and the Padr mountains, is traced from ite origins in the fourth century before Christ until the time vhen the Mohamedans establiahed a unified currency for the area in the period of Abbasid caliphs. The fundasental political rearganisation of this region, produced by the ingress of the migrant Iueh Chi in the second century before Christ, ia emphasised and the history and coinage of this people ia traced until some decades after one of their clans founded the Kushan kingdon about the time of Chriat.

During the half century that has elapaed since these coln aeries vere last discussed as a whole by Allotte de la Fuye, a oubstantial body of nev efdence has accumulated and it is hoped that the exposition presentad here vill mat with the general approval of acholars and prove ueffl to collectors viahing to stady these series. This work vould not have been posaible vithout the help and criticism of numerous friends and colleagues to vhom the author vould like to regiater hla gratitude.

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# THE RARLI COINAGE OF CINNTRAL ASIA. 

by Michael Mitchiner

The coins discussed in this paper vere iscued between the time of Alaxander the Great and the Mohammedans in the region that is bounded to the north and south by the Aral Sea and the Central Afghan mountains, to the east by the Jaxartea and the Pamira and to the west by the Caspian Saa. Uithin these confines the land foras three geographical diviaions that vere often the seate of separate kingdoms.

It is a land of generally barren elevated steppe in which the main centres of population tended to cluater along the rivers that vere often separated from each other by deaert. Ita three main centrea of population were Choreamia in the vest, Sogdiana in the east and Bactria, together vith other diatricts of the north Afghan plateau, in the south. Sogdiana situated between the middla Jarartes and the middle Oncus was watered by these two rivers as well as by smaller rivers, such as the Zeravahan, flowing north from the Pamirs. Its northern limit was the Kizyl Kum desert between the lower Jaxartea and lower Oxus. South of the Oxus the eastern end of the north Afghan plateau comprised the district of Bactria, ringed by the Pamirs in the east, by the Afghan messif in the south and extending westwarde to include the valley of the Murghab river. West of this the valley of the Hari Rud formed the northern part of Aria and further vest the north Afghan-Iranian plateau comprised the diatricte of Parthia and Hyrcania which included the Meshad region. Choresmia, aituated to the north of Hyrcania and to the north-west of Bactria, occupied the eastern shore of the Caspian. Choresmia and the various districte of the north Afghan plateau all had as their common frontier a large desert, the Kara Kum, lying between the Coxus and the Caspian. This desert formed the south-eastern and eastern frontier of Choresmia, the northern frontier of Aria, the northern and north-western frontier of Bactria and was only aeparated from Sogdiana by the Oxus.

Although the geography of this area played a major role in its hiatory, there was another equally important factor. This was the situation of Choreamia, Bactria and Sogdiana as a buffer zone between the nomad tribes to the north and east and the urbanised kingdoms on the rest of the Iranian-Afghan plateau. The history of this area is dominated by three major waves of nomad migration that had as their consequences the establishment of Scythian (Saka) tribes during the pre-Achaemenid period, the establishment of the Yueh Chi during the second and first centuries before Christ and the establishment of the Hephthalites in the fourth and fifth centuries after Christ. All these movements placed Choresmia, Bactria and Sogiana outside the main stream of Iranian-Afghan culture so that during the intervening periods their history was marked by settlement of the nomads vith re-assertion of urban culture and the formation of nev and stable kingdoms that progresaively became more closely integrated with the other urbanised kingdoms on the Iranian-Afghan plateau.

Choreamia, Bactria and Sogdiana acquired their urban culture when they formed satrapies of the Persian Empire from the eixth century before Christ and it is important to remember that during the rest of the pre-moslem period these three districts formed the north-eastern outposts of Iranian-Afghan culture and coinage and that they were also the outposts of urbanisation. For most of this periad they were
outposts vhose aettled vay of life differed aharply from that of normal tribes beyond their frontiers whose tendency to migrate presented a constant threat of invasion.

## EARLI HISTORY.

This region entered hietory with the foundation of the Persian Empire by Cyrue (c.560-520 BC) and Darius I (c.520-486 BC), and vas introduced by Herodotuc. He described the peoplea living around the Bactrian plain as the Choreamians, the Parthians and the Hyrcanians, the Sarangians and the Thamanaeans and suggested that when the Persians occupied Bactria some of ita Inhabitants were expelled to Choresila. Herodotue named these peoples by the territories they occupied and not by any tribal name, for they were, respectively, inhabitante of the astrapies naned Choresmia (Chorasmians), Parthia (Parthians \& Hyrcandana), Dranglana (Saranglana) and Satagidia (Thamanaeans)? Herodotus also described how Cyrus, who vas auccessiful in his occupation of Sogdiana and founded the city of Cyropolis on the Jacrartes, campaigned againat the Massagetae who were then a poverful tribe living across the Jaxartes? When Cyrue crossed this river the Massagetae defeated his army and he was killed.

The administrative diflsions, or eatrapies, of the early Persian emplre were defined in the Blsoutun and Naqe-i-rustan inacriptions of Darius I and amplified by Herodotus. Satrapies conformed, in general, to the geographical divisions already noted and for many centurles most regions continued to be knom by the same names. They are shown in Table I the last colum of which, taken from Arrian's account of the campaign of Alexander the Great, ahowe modifications that occurred during the Achaemenid period.

Along the north-east Irandan-Afghan plateau the Parthian satrapy comprised the regions of Parthia and Hyrcania. Herodotue recognised these two regione and nearly two centuries later, at the time of Darius III, Phrataphernes vas called satrap of the Parthians and the Hyrcanians. Hyrcania, situated east of Parthia, vas traversed by Alexander on his way from Parthia to Aria? To the east of Eyrcania the satrapy of Aria was centred on the Hari Rud (Tedzhen) river whose valley it included from the Herat region northwards to where thie river, the Arius of Arrian and Strabo, ran dry In the Kara Kum deaert. To the east of Aria the remainder of the north Afghan plateau comprised the Bactrian satrapy. During the Seleucid period this territory that had comprised the Bactrian satrapy was anb-divided into Bactria, the plain sonth of the Oxus, and Margiana? the valley of the Kurghah rivar. The regions of the north-east Iranian-Afghan plateau, Parthia, Hyrcania, Aria, Margiana and Bactria, continued to be known by similar names ontil the early Sasaanian period. ${ }^{10}$

The central Afghan masaif comprised the aatrapies of Drangiana in the vest and Sattagydia in the east. Their inhabitants, the Sarangiane and the Thamanaeane, vere noted by Herodotus to have lived on the borders of Bactria. Dranglana vas under the cantrol of Baersenteil, satrap of Arachosia, at the time of Darius III but paid a joint tribute with Aria during the Seleucid period.

The remainder of Afganiatan, the vestern plateau south of Herat continuing south of the central massif (through Kandahar) and up the eastern aide of the masalf to the Kabul valley, comprised the rematnder of the Arian satrapy and the satrapy of Arachobia. Aria extended southwards from the Horat region of the Hari Rud valley to include the rest of the west Afghan plate $\frac{13}{3}$ and was separated from Arachosia by the deaert that lies betweon the Farah region of Aria, (watered by the Farah Rud eysten) and the Kandahar region of Arachosia (watered by the Helmund-Arghendab syotem). The latter satrapy extended up the east Afghan plateau to include the Kabul valley and had a frontier with the eatrapy of Gandhara east of Jalalabad. During the post-Achaenenid period the territories of Aria and Arachosia became more restricted. Alexander
elevated the Kabul valley to a diatinct satrapy, the Parapamisidac, but the rest of Arachoaia remained intact until the early Sassanian period when it was known as Turañ. Aria continued to denote the whole of the west Afghan plateau until after the nomad maration of the second century BC. Subsequentlif the southern part of Aria acquired the name Saksetan so that in later inscriptions, such as that of Shapur I at Naqs-irustam, the west Afghan plateau is divided into Aria, the valley of the Hari Rud, and Sakastan, Bouth-vest Afghanistan.

To the east of Afghanistan Darius I ruled the satrapies of Gandhara and India. Gandhara, the plain to the west of the Indus, was mentioned in both his inscriptions and remained a satrapy until the time of Darius III, to whose army it furnished elephanti? The rich Indian satrapy furnished about one third of the total tribute paid to Darius $I^{18}$ anc was probably a conqueat of his later reigin. Situated in the Tarila region, to the east of the Indue, this satrapy also appears to have remained part of the Peraian empire until the time of Darius III.

The remaining eastern satraples of Darius I were Choresma, Sogdiana and Saka. Choresmia, on the east Caspian coast to the north of Hyrcania, was separated from Aria, Margiana and Bactril by the Kara Kum desert. It was a satrapy of Darius I and of his successor, Xerxes, to whose army it furnished a contingent of troop but by the time of Darius III Choresmia was an independent territory inhabited by a Saka tribe known as the Dahae. Choresmia was not mentioned as a satrapy of Darius III but, instead, there vas report of a Saka contingent in his army who were his dependent allies. Onder their leader Muakes they were placed alongaide the Bactrian troopa as part of the command of Besans, satrap of Bactria and Sogdiank. The evidence for Alexander the Great is more apecific. Arrian identifies Saka allies in Alexander's army as belonging to the Dahae tribe and places this tribe in the region that was previously the Choresmian satrapy. Although the Dahae aupported Alexander they also aupported his enemy Spitamenes vhose army, in addition to his own Sogdian troops, included a aubstantial force of Massagetaean and Dahaean Sakas. Strabo, some of whose eridence on the Dahae belonga to the third century, amplifies the report in Arrian. The Dahaean Sakas who inhabited Choresmia belonged to the southern group of Dahae known as the Aparaian Dahae and were related to other groups of Dahae who lived further north along the east Caspian coast.?

The eatrapy of Sogdiana vas conquered by Cyrui who founded Cyropolif on the middle Jexartes and was named as a satrapy in both inseriptions of Darius I. It aent troops in Xerxes' ar ${ }^{30}$ and was governed by Beasile, the atrap of Bactria and Sogdiana, at the time of Darius III. Sogdiana lay betveen the Jaxartes and the Oxus but did not include all the territory between these two rivers. Ite limite were defined by Arrian. Maracanda, the 'Royal City' of veatern Sogdiana, was aituated on the river Polytimetus (Zeravahan) along which now lie both Samarkand and Bokhara. However, the main urban centre of the satrapy consisted of the seven cities situated along the bend of the Jaxartes and the greatest of these was Cyropolis. Sogdiana extended from the middle Jaxartes in the east to the middle Oxus in the wast and from the foothills of the Pamirs in the south to the Kizyl Kum desert in the north where the river Zeravahan runs dry. To the north-east of Sogdiana the territory lying between the lower Jaxartes and lower Orue, which consisted for the mast part of the Kizyl Kum desert, was now the domain of the Massagetaean Scythiaik who had previoualy been the poverful tribe living bejond the Jaxartes that defeated Cyruas. But in the fourth century when they lived in and around the Kizyl Kum desert and, acrose the Oxus, around the northeastern part of the Kara Kum desert they were no longer powerful; 'these Scythians are

- 5 -
TABLE I. Eastern Satrapies of the Poraian Empire.

| Satrapy | Darius I ${ }^{\text {a }}$ | Dariue $\mathrm{I}^{\text {b }}$ | Herodotus ${ }^{\text {c }}$ | Herodotus ${ }^{\text {g }}$ | Herodotus ${ }^{\text {I }}$ | Artian ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bisoutun ingeription | Naqs-i-rustam ingeription | Regione paying tribute to Darius I | Contingents in Xerres' arm | Peoples around Bactria | Satrape of Darius III |
| Parthia <br> (incl, Hyreania) | 13.Parthava | 2.Parthava | 16.Parthians | Artabazue (Bactrian) | Eyrcanians \& Parthians | Phratapherne ${ }^{\text {k }}$ |
| Aria | 15. Haraiva | 3. Haralva | 26.Arlans | Siaames | - | Satibarzanet |
| Choresmia | 16. Ivarazmya | 6. Tvarasmir | 16.Choresmiane | Artabazue (Bactrian) | Choretumans | Nil (Independent) |
| ```Bactria (incl.Marglana)``` | 17.Bactris | 4.Bakhtria | 22.Bactrians | Hyataspes (Bactrian) | - | Beasua |
| Sogdiana | 18.Suguda | 5.Suguda | 26. Sogdians | Acanes <br> (Bactrian) | - | Bessus |
| Gandhara | 19.Gandhara (Paraparaebana) | 10.Gandhers | 7.Gandarians | Artyphiue (Bactrian) | - | not named |
| Saka | $\begin{aligned} & \text { 20.Saka } \\ & \text { (G1wiri) } \end{aligned}$ | 12. Saka-humaravarka Saka-tigra-khauda | - ${ }^{\text {d }}$ | Hystaspes (local) | - | not named |
| India | - |  | 20.Indians | Pharnacathea (cotton) | - | Taucle ${ }^{\text {d }}$ |
| Sattaggdia | 21.Thatagua (Sattagu) | 9.Thatague | 7.Sattagydians | - | Thamanaeans | - |
| Arachosia | 22. Haruvatia (Aruhatti) | 8. Haruvatis | $-0$ | - ${ }^{\text {b }}$ | - | Barsaente ${ }^{\text {a }}$ |
| Drangiana | 14.Zaranka | 7.2aranka | - | Phrendatea <br> (local-Modian) | Sarangians | Barsaentes |

a) c.520-486 BC. India (i.e. Taxila) was not yet conquered. Poraian names getran vith Babylonian in brackets were relevant.
b) Inscription on his tomb.
c) Herodotus, III, 88 ff. His 20 provinces are tribute districte not satrapies. Province 7 adds the Dadicae (cfr. note h) and Aparytae who were apparently tribes of Arachosia and Dranglama. Province 12 comprises 'Bactrians \& their neighbours as far as the Aegli,' it probably includes the Saka satrapy (vide text).
d) Apparently included in province 12.
e) and f) Apparently both included in province 7.
g) Herodotus, VII, 64 PP . Listed by commander with the uniform of troops given in brackets. Hystaspes' command comprised troops of both Bactria and the Saka satrapy (from Amyrgium-Gimiri with pointed hata-tigra khauda).
h) Artyphius commanded the troops of Gandhara and of the Dadicae (efr. notes e \& e) who were probably Arachosians.
i) Herodotus, III, 117 ff .

1) Arrian, III, 8 to 23 and elsewhere. Darius III died 330 BC .
k) Arrian, III, 8, 3 ff ; III, 23, 4. Satrap of Hyrcania \& Parthia.
2) Arrian, III, 8, 3 ff .
m) The independent Dahaean Sakas lived in Choresmia (vide text, Arrian, Strabo) but apparently sent troops in Darius' army as his independent ally (Arrian, III, 8, 3 ff ), and sent troops with Alexander (Arrian, $V, 12,2$ ) as well as against Alexander in Spitamenes' army (Arrian, III, 28, 8 ff ).
n) Arrian, III, 8, 3 pf. et seq. Satrap of Bactria-Sogdiana; commander of Indian troops from an adjacent region.
o) Arrian, III, 8, 6. The Indians 'on this aide of the Indus' provided elephants in Darius' army but their satrap is not named.
p) Alexander defeated Chorienes and conquered the Pareatakes of the western Pamire (Arrian, IV, 21 , 1 ff) where the Saka batrapy was probably situated (vide text) and from whence the Indian troops from territory adjacent to Bactria that were commended by Bessus in Dariue' army (Arrian, III, 8, 3 ff) probably came.
q) Taxilee, governor not king of the Taxila region (Arrian, IV, 22, 6; V, 3, 5 f ; $V, 8,2$ f) was treated as such by Alexander. For further discussion of Taxila during the late Achaemenid period see Mitchiner, Origins of Indian Coinage, 197.2. That his overlord was Persian may be considered likely but not proven.
r) Arrian, III, 8, 3 ff; III, 2l, 1. Satrap of the Arachotians and Drangians.
in great poverty, and also, since they have no cities and no settled habitations, so that they have no food for their horses, they are easy to perauade to take part in any war which may offer ${ }^{35}$. At a later date Strabo's somewhat ecleotic summary of the nomad migration in the second century $B C$ suggesta that the division of the land lying between the Jaxartes and Orus into Sogdiana and the territory of the Massagetaean Sakas was retained ${ }^{36}$. To the south Sogdiann included the foothills of the Pamirs, the region where Alexander captured the 'rook of Sogdiana' but beyond this the Pamirs were inhabited by tribes known as the Paraetakes ${ }^{37}$.

The remaining eastern satrapy of the Achaemenid Empire was that of the Sakas. This satrapy was terned Saka (Persian) - Gimiri (Babyionien) in the Bisoutun inscription of Darius 1 and Saka-humaravarka, Saka-tigra-khauda (Sakas with pointed bonneta) in his Naqs-i-rustam insoription. Herodotus referred to troops from this satrapy in Xerxes' army as being under the same command as the Bactrian troops and noted that:- 'The Sacae, a Scythian people, wore trousers and tall pointed hats (ie. Saka-tigra-khauda) set upright on their heads and were armed with the bows of their country, daggers and the sagaris or battle are. Sacae is the name the Persians give to all Scythian tribes: these were actually the Scythians of Amyrgium (ie. Gimiri). '

This satrapy, whose soldiers wore local dress and were combined with the Pactrian troops, appears to have been situated in the Pamirs to the east of Bactria; the land inhabited by the Paraetakea at the time of Alexander and bordered by Sogdiana in the north, by Bactria in the west and by Gendhara in the south ${ }^{39}$. The satrapy is not mentioned elsewhere by name but additional evidence supports this location. Thus Herodotus suggests that Darius received tribute from beyond Bactria - a tribute of 360 talents paid by the 'Bactrians and their neighbours as far as the Aegli ${ }^{40}$ - while Darius himself supports this location in his two rock inscriptions where setrapies are not listed in geographical order but do show geographical grouping. In both cases the Saka satrapy ia grouped with Gandhara. The Bisoutun inscription lista in order:- Parthia, Drangiana-Aria-Chorasmia, Bactria-Sogdiana; Gandhara-Saka; Sattagydia-Arachosia while the Naqs-i-rustam inscription listat- Parthia; Aria-Bactria-Sogdiana-Chorasmias Drangiana-Arachoaia-Sattagydia; Gandhara-India-Saka.

## METRROLOGY

In Choresmia, Bactria and Sogdiana ailver coinage was struck according to three main weight atandarda; the Peraic standard introduced to all three regions during the Achaemenid period, the Attic atandard introduced by Alexander the Great and the Sasaanian derivative of the Attic standard introduced to Bactria in the third century $A D$, to Sogdiana in the late fifth century and to Choreamia at about the aame time.

Prior to the establishment of the Persian empire by Cyrus and Darius I silver was tariffed on the Iranian-Afghan plateau according to the Heavy Babylonian ailver atandard. Although there are no Iranian-Afghan coins of this period silver ingots have been found and use of the Heavy Babylonian ailver atandard was tranamitted from Mesopotamia to India before the foundation of the Achaemenid Empire. Two Babylonian veight atandards reached India earlier than c. 575 BC when various atatea began striking coins according to the Indian derivatives of these weight standards. Both Babylonian silver standards were based on the gold shekel of 8.18 grammes; on the Heavy standard this gold shekel was equivalent to 10 silver ahekela of 10.91 grammes while on the Light silver standard the same gold shekel was equivalent to 15 silver shekels of 7.26 grammes. The Heavy silver standard used on the Iranian-Afghan plateau was transmitted to Pakistan and the region north of the Ganges where coins vere struck on its Indian derivative, the Satamana ailver weight atandard, from about 575 BC. The main difference between the Mesopotamian and the Indian standarde was their underlying rationale; whereas the Heavy Babylonian shekel had an absolute weight of 10.91 grammes the Indian Satamana was, according to their custom, a standard uultiple of the average weight of a specified seed. The Satamana had an absolute value of 100 rattis but as one ratti was the average weight of a Gunja creeper aead (Abrus precatorius) and average seed welght varied according to the environment in which plante were grown through the range 0.104 to 0.117 grammes so the weight of the 100 Ratti Satamana ranged from 10.4 to 11.7 grames. In Kosala eilver was coined in denominations from half to $1 / 20 t h$ ( 5 ratti) Satamana during the period c.575-470 BC. By way of contrast the Light Babylonian silver shekel of 7.26 grammes was transmitted through seaborne trade to the west coast of India where it was adopted in Avanti and spread eastwarde up the Narbada river to Magadha on the middle Ganges, to Anga in Bengal and to Kalinga on the east coast. In these regions the Light shekel became the Double Karshapana of 64 Rattis ( 6.6 to 7.5 grammes) and coins were atruck frow c. 575 BC in denominations from the Double to the $1 / 32$ nd ( 1 ratti) Karshapana. Among the evidence used to date these series one may note that the coinage of Kosala and that of Anga ceased, respectively, around two decades after and before Buddha's nirvana ( $c .486 \mathrm{BC}$ ) when they were conquered by Magadha.

During the Achaemend period the Heary Babylonian weight atandard that had been current on the Iranian-Afghan plateau became the Persic weight standard adopted throughout the Eupire. The veights of the gold and silver shekels were each raised by $3 \%$ so that the Babylonian gold shekel of 8.18 grammes became the Persic shekel of 8.41 grammes which was coined as the Achamenid gold Daric (shekel) of thia weight and the Heavy Babylonian ailver shekel of 10.91 grammes became the Persic silver ahekel of 11.22 grammes. In the south-eastern aatrapies Satamanas (ilat and bent bars) and their fractions of the Taxila-Gandhara series continued to be struck and were equivalent to the Persic silver shekel as they had been to the Babylonian shekel ( 10.4 11.7 against 10.91 or 21.22 grammes), but in the western satrapies the range of denominations was restricted almost entirely to the Siglos of half shekel weight ${ }^{44}$

Dse of the Persic weight atandard in the north-esstern satrapien is not vouched for by ooinage beoause there apparently was no 45 though trade in precious metal was aotive.

A new weight atandard was introduced to the Iranian-Afghan plateau by Alexander the Great. After conquering the Persian Empire during the yeare around 330 BC . Alexander established the Attic weight standard throughout his Empire and introduced a coinage based on gold staters of 0.6 grammes, silver tetradrachms of 16.8 grammet and associated subsidiary denominations. On the Iranian-Afghan plateau this Attic weight etandard was retained by the Parthian kinge who ruled from the 3 rd century RC. to the 3rd century $A D$. though their tetradrachms and drachme tended to become slightly lighter. The Sassanian weight standard used by their successora was the same reduced attic weight standard but based on a lighter drachm whose normal weight was a little over 3 grames. Expansion of the Sassanian Empire introduced the Sassanian weight standard to Afghanistan where it was later adopted by the Hephthalites whose coinage commenced in Bactria at the end of the fourth century. With the Hephthalite conquest of Sogdiane towards the end of the 5 th century the Sassanian weight standard, coin types and coin fabrio were adopted by the Hephthalite kings of Sogdiana whose drachms normally weigh around 3 grammee. When the Arabs conquered the Sassanian Empire in the middle 7th century they adopted the Sassanian weight standard and coin fabric, initially for their Iranian-Afghan territory and subsequently, from AH. $B O$ (AD.701), throughout the Omayyad caliphate. The early Omayyad dirhems struck before AH. 80 weigh 3 to 4 grammes while subsequent post-reform dirhems of this caliphate weigh close to 2.9 grammes.

In peripheral regions, Bactria, the Kabul valley, Sogdiana and Choresmia evolution of weight standards was more complex. The Bactrian kings who ruled in northern Afghanistan from the middle 3rd to the late lst century BC. continued to coin on the Attic silver standard and struck tetradrachms weighing close to 16.7 grammes until the reign of their last king Hermae 48 . Following the second century nomad migration the Graeco-Saka states of western Bectria continued to coin on this Attic standard but their coinage became debased and the weight of the tetradrachm fell from around 16 to 12 grammes In eastern Bactria the Yueh Chi successors to the Greeks retained the Attic silver standard for their coins and the Kushans who, about two decades later (c.0 BC), succeeded to both regions of Bactria initiated their Bactrian coinage on the standard appropriate to each regiofn. After conquering north Pakistan Soter Megas introduced a uniform currency throughout the Kushan kingdom based on the reduced Indo-Greek weight tetradrachm of 8.3 grammes then current south of the Hindu Kush.

Outside Bactria use of the Attic weight standard ceased in Afghanistan about 312 BC when Seleucos ceded southern and eastern Afghanistan to Chandragupta Maurya. Until about 185 BC Mauryan punchmarked coins struck on the Karshapana weight standard were current. The Karshapana of 32 rattis ( 3.33 to 3.74 grammes) was originally struck to this weight and by the Mauryan period the average coin weight for the Karshapana was still 3.2 to 3.6 grammel. When the Mauryan Empire declined and the Bactrian Greeks expanded onto the eastern and southern Afghan plateau and into the plains of northern Pakistan they created a new weight standard. Their Indo-Greek weight standarid was based on a tetradrachm of 9.7 grammaj and appears to have been a compromise between the Attic weight standard they used in Bactria and the Karshapana weight standard used in the regions they conquered. The Indo-Greek tetradrachm weighed slightly more than half an Attic tetradrachm and almost exactly the same as three Karshapanas of the Mauryan period. With the debasement of the silver coinage that occurred during the reigns of Azes 11 and Hermaeus the weight of tetradrachms struck on the Indo-Greek standard fell to around 9.2 grammes for the debased issues of their later reigns.

Kujula's earlier Kabul valley isacues of copper tetradrachme, didrachme and drachme approximate to this veight as do the billon and copper tetradrachms of the IndoParthians. Succeeding bilingual tetradrachme of Soter Mogas veigh around 8.3 grammet and this is the weight he adopted for the general coinage he introduced throughout the Kushan kingdow.

To the north of Afghanistan the coinage of Sogdiana reverted to the Peraic weight standard when this kingdom acquired independence from Bactria about 200 BC. The Persic and reduced Peraic weight atandard continued to be used in Sogdiana until the Hephthalite conquest. During this period the veight of the Peraic totradracha fell from 11.2 grammes, through 10 grammes to around 9 grammes at the time of the nomad migration c .130 BC and stabilised at this veight throughout the Yueh Chi period until c.AD. 80. From that time until the Hephthalite conquest c.AD. 480 the kingdom of Sogdiana struck ouly drachme and hemi drachms; these give a theoretical veight of 8 grammes for the tetradrachm.

Choreamia, in contrast to Sogdiana, retained the Attic veight standard until the Kushan conquest but during these last three centuries BC the veight of the drachm fell progressively from around 4.2 to 3 grammes. Comments on the veight standards used in the post-Kushan Kingdow of Choreamia are tentative due to the dearth of known coin veights though it would appear that tetradrachms struck during the first five centuries $A D$ adhered to an Attic standard further reduced from that of Heraios while later coins vere drachms struck on the Sassanian standard.

These various weight standards and the coin weights for individual series are shown in Table II.

TABLE II. PRINGIPAL HEICHT STANDABDS CF SILVER COIRB.
A) BABYLONLAN vaight otanchards and oarly Indian dorivatives.

|  | Theoretical velent <br> Shokel <br> (Satamana) <br> (Double Karahapana) | Observed coin veights ${ }^{1}$ <br> $\begin{array}{llll}\text { Shekel } & 1 / 2 & 1 / 4 & 1 / 8\end{array}$ <br> (Satamana) <br> (2 Karshapana) |
| :---: | :---: | :---: |
| Heagy Babylonian Shakel ${ }^{2}$ <br> Indian Satamana ( 100 Rattid) ${ }^{3}$ | $\begin{aligned} & 10.91 \\ & 10.4 \text { to } 11.7 \end{aligned}$ |  |
| Kosala ${ }^{4}$ c.575-470 <br> Tardla-Gandhara c.575-330 <br> Afghan plateau c. $400-330$ |  | - 5.1 2.7 $(1.7)$ <br> 11.5 5.4 2.6 1.3 <br> 11.1 5.6 2.6 - |
| Light Babylonian Shekel ${ }^{5}$ <br> Indian Double Karshapana (64 Rattia) | $\begin{aligned} & 7.27 \\ & 6.66 \text { to } 7.48 \\ & \hline \end{aligned}$ |  |
| Avanti c.575-310 |  | $\begin{array}{llll}6.8 & 3.5 & 1.651 .0\end{array}$ |
| Magadha c.575-450 |  | 6.930 .41 .6 |
| after c. 450 |  | 3.2 - |
| Anga c.575-520 |  | $3.1-0.7$ |
| Kalinga c.475-260 |  | 1.51 .0 |

B) PERSIC weight atandard.

|  |  | Observed coin <br> Shekel <br> (2 aiglod) <br> (tetradrachm) | reighte <br> $\frac{1}{2}$ <br> (siglos) <br> (didrachw) | $\begin{aligned} & \frac{1}{4} \\ & \text { (1, aiglos) } \\ & \text { (drachm) } \end{aligned}$ | $\frac{1}{8}$ <br> ( $\frac{1}{4}$ aiglos) <br> (heildracha) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Vestern Satrapies ${ }^{6}$ | c. 500-330 | - | 5.6 | - | - |
| South-east Satrapies | c. 575-330 | Fide Satamana |  |  |  |
| Sogdian Kingdom ${ }^{\text {P }}$ | c. 200-180 | 12.2 | - | - | - |
|  | c. 180-150 | 10 | - | - | - |
|  | c. 150-130 | 9 | - | - | - |
| Sogdian Yueh Chi ${ }^{8}$ | c. $130 \mathrm{BC-AD}$. | 9 | - | - | - |
| Sogdian Kingdom ${ }^{9}$ | c. $80-480$ | - | - | 2 | 0.7 |

C) INDO-GREMK weight standard.

table II - cont'd.
D) ATPIC and reduced Attic woight otandards.

|  | Observed coln veighte |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bactrian Greek $^{16}$ c.250-130 | 16.7 | 4.1 | - | - | 0.65 |
| Parthia ${ }^{17}$ c.250-0 | 14.3-15.6 | 3.9 | - | - | 0.65 |
| c. 0-220 | 11.0-13.5 | 3.6 | - | - |  |
| Choresmian Dahae ${ }^{18}$ c.330-250 |  | 4.2 | 2.0 | - | 0.6 |
| c. 250-200 | - | 3.1 | 1.5 | - | 0.5 |
| c. 200-130 | - | - | 1.5 | - | 0.4 |
| c. 130-0 | - | 3.0 | 1.6 | 0.8 | - |
| Graeco-Saka 19 : Margiana (Mery) c.130-80 | 14 | - | - | - | 0.5 |
| : Weat Bactria(Balkh) c.130-80 | 16.4 | - | - | - | - |
| c. $80-0$ | 12.15 | 3.3 | - | - | - |
| East Bactrian Greak ${ }^{20}$ c.130-20 | 16.7 | 4.1 | - | - | - |
| Tueh Chi of Tu-mi (Qundur) ${ }^{21}$ c. 20-0 | - | - | 2.0 | - | - |
| Iueh Chi of Hi-thum(Bamiyan) ${ }^{22}$ c. 2000 | - | - | 2.3 | - | - |
| Kushan: Heraios (Qunduz+Bamiyan) ${ }^{23}$ c. $0-45 / 50$ | 12-15.5 | - | - | - | 0.6 |
| :Soter Megas ${ }^{24}$ : Qumduv c.45/50-85/90 | 12.5 | - | - | - | - |
| : Balkh c.45/50-85/90 | - | 4.1 | - | - | - |
| Choresmia:Post-Kushan Kingdom ${ }^{25}$ c.50-500 | 9 | - | - | - | - |

E) SASSANLAN veight standard ${ }^{26}$

|  |  | Totradrachm Drachn |  |
| :---: | :---: | :---: | :---: |
| Sassanian ${ }^{27}$ | c. 226-300 | 8-12 | 3 |
|  | c. 500-630 | - | 3 |
| Omayyad ${ }^{28}$ : pre-RePorm | 651-700 | - | 3-4 |
| : post-Refora | 699-750 | - | 2.9 |
| Sogdiana : Hephthalite kingdom ${ }^{29}$ | c. 480-810 | - | 3.2 |
| Choresmi a ${ }^{30}$ | c. 500-800 | - | 2.2-4.8 |

F) Changes in veight otandard by region 31


TABLE II - cont'd.

1. Average weight of well preserved coins. Cited as the average for the $25 \%$ of heaviest coins in the group. This minimises two errors; bias introduced by unuaually heavy coins and bias introduced by worn or unusually light coins. All weighte are in grammes.
2. Ten silver shekels equivalent to one gold shekel of 8.18 grammes.
3. One ratti weighed 0.104 to 0.117 grammes, the range in avarage seed weight for Abrus precatorius as influenced by such factors as climate. Cfr. Codrington, Ceylon Coins and Currency and Mitchiner, Origins of Indian Coinage.
4. Kosala, Taxila-Gandhara, Afghan plateau, Avanti, Magadha, Anga, and Kalinga: see Mitchiner, ibid. Note that Kosala denominations were $50,25,15,10$ and 5 rattis ( $\frac{1}{2}, \frac{1}{4}, 3 / 20,2 / 20$ and $1 / 20$ satamana) while for Taxila-Gandhara they vere $100,50,25$, $12.5,1$ and 0.5 rattis ( $1, \frac{1}{2}, \frac{1}{4}, \frac{1}{8}, 1 / 100$ and $1 / 200$ satamanas). Low denomination coins of 1 and 0.5 rattia were also struck in Avanti, Kalinga and the MagadhaMauryan realm ( $1 / 32$ nd. Karshapana * 1 Ratt1 $=$ Double Kakand).
5. Fifteen silver shekels equivalent to one gold shekel of 8.18 grammes.
6. see BMC. Persia.
7. infra Types 40-43; 44-48 and 49-56.
8. infra Types 57-59.
9. infra Tupes 60-64.
10. see BMC. Greek \& Scythic kings; Menander and contemporariea to Azilises, also the un-debased issues of Hermaeus and Azes II.
11. See types referred to in Mitchiner, Indo-Parthian and related coins.
12. Weights from PMC. and Author; refer to debased (post 10 BC : vide infra) issues.
13. Infra types 115-129.
14. See types referred to in Mitchiner, Indo-Parthian and related coins.
15. Infra Types 102-113, 133-161.
16. Vide Qunduz hoard; Memoires de la Délégation Archéologique Française en Afghanistan XX, 1965.
17. See BMC. Parthia.
18. Infra Types 1-3, 4-7 + 17-19, 8-13 + 20-28 and late period 30-39.
19. Infra Typea 74-77 (Margiana), 78-93 (Balkh).
20. Vide Qunduz hoard.
21. Infra Types 95-96.
22. Infra Type 94.
23. Infra Types 97-99.
24. Infra Types 100 (Qunduz), 101 (Balkh).
25. Infra Types 66-69.
26. Really a slightly more reduced Attic standard.
27. Weighte from BM. and Author.
28. See BMC. Arab-Sassanian, BMC. Arab-Byzantine and post-Reform Umaiyad.
29. Infra Type 65 and BMC. Arab-Sassanian for subsequent issues.
30. Infra Type 7.
31. Weights are given in terms of the tetradrachm so that where the drachm was the principal denomination its weight hac been quadrupled (eg. Dahae; Sassanians); the exception to this rule is the Karshapana. Weight standards are named; some dypasts and dynasties are noted in parenthesis. All issues are silver except West Bactria c.80-0 BC, Sogdiana c.80-480 AD and Kushans from Soter Megas onwards.

## ARAMAIC SCRIPT AND LEGENDS

The forms of aramaic acript used on Choreamian and Sogdian coins are diflaible into earlier and later groups that are aeparated by the rise of the kushan dyaasty. The early period, whych extende from the fourth century before Chriat until the first century $A D$ is characterised by Aramaic character forms that are only alightly evolved from the Achaemenid aramaic acript used on coint atruck in the Peraian Empire. The aramaic acripte of Sogdiana and Choreamia were the two derivatives of Achaemenid script in the region to the north-east of the Iranian-Afghan plateau and evolved along different lines from Perside and Elamite acripts which were the derivatives of Achaemenid script to the southwest of this plateau. These two south-western regions, subsequently districts of the Parthian and Sasaanian kingdoms, were aubstantially implicated in the evolution of the Parthian and Sassanian forms of Pehlvi aramalc acript. The aramaic acripta of Choreamia and Sogdiana evolved along a different path from those of Iran and whereas the aramaic acripte of Iran culminated in the creation of Sassanian Pehlvi those of Choreamia and Sogdiana continued to evolve along individual lines until the time of the Mohammedan conqueat.

The aramaic characters used on the Sogdian and Choresmian coinage are ahown in Table III where they may be compared with those used on Achaemenid coing. The following table lists the various names and titles that occur in the aramale legends and it will be noted that their repertoire is limited. A major step in deciphering these legends was Fuge ${ }^{5} 6$ analysis. He concentrated primarily on deciphering the legends of Euthydemos type tetradrachms that were struck by the kings of Sogdiana between c. 200 and 130 BC and continued by the Yueh Ch? Legends inscribed on Sogdian tetradrachms of c.200-130 BC provided auitable material for analyais because, besides being reasonably long, they are all variations on a standard theme. Comparison of a large number of coing led Fuje to recognise this basic theme and the combinations of characters that composed it. He was able to provide transliterations $A, H, K, M$ and $T$ for the most frequently recurring characters and to show the close links between these characters and their Acheemenid precursors. He showed that the two worde 'Mahat Malka' formed a basic component of the legends and that the ' $L$ ' in Malka was sometimes isolated and sometimes joined to the 'M'. Although Fuye's analysis provided a transliteration for the essential theme of these legends he failed to transliterate the actual legends that appear on the coins since he did not recogniae the deviations from the basic theme of the coin legend. Comparison of tetradrachms struck during this period shows that their legends comprise a number of distinct groups and evolve in regular progression from simple legends positioned on the left or the right side of the reverse that are composed of the title Malka and a name to complex circumferential legends containing three words of which two are elaborations of Mahat and Malka and the third is a name. The legends are also separable into two further groups, as Fuye recognised, a major group comprising short or circumferential legends that commence at 7 o'clock and have the characters base outwards and a minor group comprising short or circumferential legends that commence at 5 o'clock and have the characters base inwards.

Apart from 'Mahat Malka' and more elaborate renderings of these terme the remainder of the legend comprises the name of the kingdom (Sug = Sogdiana) or of the king (Hasa, Kagaha, Kamasa or Malta) and is formed of nine different aramaic characters. The characters for $A, H, K, L, M$ and $T$ all form part of the title Mahat Malka and are clobely related to the same characters in Achaemenid aramaic while $G$ and Ts are also basically Achaemenid characters. The character for $S$ occurs on both Choresmian and Sogdian coins
from the 4 th century $B C$ to the lat century $A D$ and its traneliteration appears clear from the various contexts in which it is used; the character is simplified fron its Achaemenid form and may be compared with the form of S lator used by the Sassanians.
 for deciphering other aramaic lagends from Choreamia and Sogdiana. During the preChristian era Choresmian and Sogdian acripte ware noarly the anme. Two nev characters were introduced by Choresmian coin legends, A and R. Although both characters have their Achaemenid form it should be noted that in some renderinge the characters for $K$ and $R$ are very aimilar so that transliteratian of the aramale character mat depend, in part, on its context.

During the period from the lat to the 8th centuries AD the Sogdian and Choreanan seripte diverged from one another and evolved away from the character form used during the pre-Kushan period. Choreamian and Sogdian scripta of the early poat-Kushan period are close to their pre-Kushan prototypes though some character foras, for instance the Sogdian A and K evolved. Subsequently, character forms diverged further in both scripts but the evolution from their prototypes is generally easy to follow. These later character forms are discussed in the relevant sections.

Table III．Aramaic characters on coins of Sogdiana and Choresmia．

| Roman <br> Translit－ eration | Achaemenid coins ${ }^{2}$ | c． $200-$ 130 |  | $\begin{aligned} & \text { c.80- } \\ & 480 \mathrm{AD} \end{aligned}$ | c． 488 -800 | $\left\{\begin{array}{r} \text { Cho } \\ \text { c. } 330 \mathrm{c} .250 \\ -250 \end{array}\right.$ | esmia c． 130 -0 |  | $\begin{aligned} & \text { c. } 500 \\ & -800 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\Delta x$ | ＞ | $\triangle$ | $\triangle$ ¢ |  | $x+x y<$ | ＞$\lambda<$ | $\rightarrow+$ |  |
| в | y y | －－ | －－ | $\cdots y$ | DY | － | －－ |  | －－ |
| G | 7）$\wedge$ | ）$>$ | ＞ | －－ | －－ | $\rangle \subset \gg$ | $\lambda$ | －－ | －－ |
| D | 944 | －－ | －－ | －－ | －－ | －－－－ | －－ | －－ | －－ |
| H | 入 1 个 | $\uparrow \uparrow M$ | $M$ | $M$ | H | $\cdots r$ | －－ |  | $\mu$ |
| ©（ $\mathrm{Y}, \mathrm{w}$ ） | 477 | 7 | ว | ） | 77 | ロフ | 1 | －－ |  |
| z | 12 | －－ | －－ | －－ | －－ | －－－－ | －－ |  | ）） |
| H | H | －－ | －－ | －－ | －－ | －－－－ | －－ | －－ |  |
| ？ | $\checkmark$ | －－ | －－ | －－ | －－ | －－－－ | －－ | －－ | －－ |
| I | $\lambda$ | －－ | －－ | －－ | －－ | －－ | －－ | －－ | －－ |
| к． | 47y | YH1 | －－ | 4ソฯワ | 4 | －－у4r | －－ |  |  |
| L | Lし | 7 | －－ | ） | －－ | －－$\perp$ J | －－ |  | 1 |
| LK | －－ | －－ | －－ | －－ | －－ | －－－－ | －－ |  |  |
| M | 4 | $\dagger$ | －－ | 4 4 | －－ | －$\quad 4$ | －－ |  |  |
| MaL | －－ | H | $H$ | －－ | －－ | －－－－ | －－ |  |  |
| ＂ | 47 | －－ | －－ | －－ | －－ | －－－－ | －－ | －－ | － |
| s | m 3 | II）＜＜ | ）） | ग $\Pi$ | －－ | （ 1 ）（l | ）） |  |  |
| ＇A（ $\mathrm{E}^{\text {）}}$ | 00 |  | －－ | －－ | $<$ | －－OO | －－ | －－ | －－ |
| F | フヘ7 | －－ | －－ | －－ | －－ | －－－－ | －－ | －－ |  |
| Ts | $r$ | $p$ | －－ | －－ | －－ | －－－－ | －－ | －－ | －－ |
| 0 | 8 | －－ | －－ | －－ | －－ | －－ | －－ |  | －－ |
| R | 49 | －－ | －－ | －－ | 4 | －－ 4 | ） |  | $y$ |
| on | 6 | －－ | －－ | －－ | －－ | －－ | －－ | －－ | －－ |
| T | $p$ | $p \eta$ | $\eta$ | －－ | －－ | －pr | $p$ | －－ | －－ |

a．Satrapa？coins and those from Fhoenicia
b．Agrees with Frye＇s transliteration for the Bokhara drachms；vide infra．

TABLE IV. Aramaic worde used on coine of Sogdians and Chorsemia.

a. Common from Achaemenid (eg. Phoenicia) to Sassanian coins.
b. Yueh Chi apparently not entitled king until marriage with Sogdian royal family.
c. Malka replaced by Hub as royal title.
d. Fuye's translation.
e. Malaka (var.) always used to qualify Malka; apparently aynonymous with Mara (Lord; cfr. Frye).
f. Title adopted from Sassanians.
g. Fuye's translation. Used to qualify Malka or Yavug (Yakub).
h. cfr. Chinese equivalent Sa-mo-kien.
i. Frye's transliteration.
J. Ethnic title explained in the Wei chou; used by Yueh Chi to describe their ancestry. Later changing to Sogdian dynastic and then regal title, continued as auch (ie. King) by Hephthalites of Bokhara.
k. Only relevant to pre-Kushan Choresmia. No Sogdian rulers were Sakas.

1. Tribal name of the Sakesinhabiting Choresmia. In Greek coin legends KwaOI.
w. On Greek coin legends APA PrbPOY.

TABLE V. Tranacriptiona of the more important aramaic coin legends.

| Type |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3$ | $x y+$ | $+\pi$ <br> » $2$ | $\begin{array}{r} 1+> \\ y \end{array}$ | $\begin{array}{ll} 7 & + \\ 1 & + \end{array}$ | $\begin{aligned} & \hline>\mathrm{Cl} \\ & 4 \mathrm{H} \\ & -1+1 \end{aligned}$ |
| $\begin{array}{r} 11 \\ 12 \\ 13 \end{array}$ |  |  | $\leq$ | $\begin{aligned} & n y \\ & \gamma 0 \end{aligned}$ | $\begin{array}{lll} 3 & 3 & y \\ 1 & 5 & y \\ y & 2 & h \end{array}$ |
| $\begin{aligned} & 17 \\ & 34 \\ & 45 \end{aligned}$ | ノ) | $\ggg$ |  | $\left\lvert\, \begin{array}{lll} n & x & \\ < & 1 & x \\ y & & y \end{array}\right.$ | $\begin{array}{lll} n & p & h \\ n & j & s \\ x & H & H \end{array}$ |
| $\begin{aligned} & 46 \\ & 47 \\ & 48 \end{aligned}$ |  |  |  | $\begin{array}{ll} >H & \\ \gamma & 3 \\ H & b \end{array}$ | $\begin{array}{ll} h & 4 H \\ s & H i \\ h & y \end{array}$ |
| 50 51 52 |  | $+y^{<}$ | $\begin{array}{ll} \leqslant & n \\ +1 & x \\ \leftarrow & y \end{array}$ |  | $\begin{array}{ll} S & Y H \\ S & Y H \\ \leftarrow & 1 H \end{array}$ |
| 53 55 57 | $>9$ | $\begin{aligned} & H \\ & > \end{aligned}+7$ |  | $\begin{array}{\|rr\|} \hline & \text { Mn } \\ + & f \\ \mu & n \\ \hline \end{array}$ | HMH <br> $x x+$ $\triangle M H$ |
| $\begin{aligned} & 60 \\ & 61 \\ & 63 \\ & \hline \end{aligned}$ |  |  | $\begin{array}{lll} 4 & 4 \\ y & < & y \\ y & < & y \end{array}$ | $\begin{array}{ll} x & x \\ 4 & \pi \\ \pi & \sim \end{array}$ | $\begin{array}{lll} \hline & ) & 4 \\ 4 & 3 & H \\ M & 1 & h \end{array}$ |
| 65 67 7 | 7 | $<4$ | $\begin{array}{ll} y & 5 \\ & \leftarrow \\ \mu & \end{array}$ | $\begin{aligned} & 4 \\ & 1 \\ & 7 \\ & 1 \end{aligned}$ | $\begin{array}{lll} H & y & b \\ y & z & h \\ \lambda & y & b \end{array}$ |

Individual words are separated by a single space; the obverse and reverse of a coin by three spaces. For variation in character forms see Table III and references cited in catalogue.

## COINAGE OF THE DARAE IN CHORUSMIA

The coinage of the Dahae belongs to three distinct eroups that eucceeded one another during the time ( $c .330-0 \mathrm{BC}$ ) between the campaigns of Alexander the Great and of Heralos the Kushan. During each period of this colnage issues vere atruck in the name of the 'Dahaean Sakig' and thronghout the whole series the coine ehare much in coman regarding such featurea as their otyle, types and metrology. They are, for ingtance, diatingudahed from coing of the Sogdian aeries by their adherance to the Attic weight standard while they are also distinguished from Bactrian and Sogdian coins by uaing the dracha as their basic denomination, a feature that linke them vith coins of their southern neighbonr, Parthia. Style further separates the Choresmian aeries from those of Parthia, Bactria and Sogdiana; the manner in which the bearded busta of Dahacan kings are depicted is particularly characteristic.

The three chronological divisions of this colnage correspond to the major bistorical periods of the north Afghan plateau and are defined with reference to the acquiaition of Parthian and Bactrian independence $c .250 \mathrm{BC}$ and with reference to the nomad migration c. 130 BC . The early Dahaean coinage compriaes an uncommon series of drachas, hemidrachma and obols based on prototypes of Alexander the Great. These coins have a flat fabric and characteristic degraded style. The coins tend to be found locall $\frac{62}{}$ but only the obols provide a legend naming them as isбues of the Dahaean Sakas. The series vas iasued after 330 BC, the year that Alexand 63 reached north-eastern Iran, and before c. 250 BC when the next Dahaean series commenced.

The middle series of Dahaean coins was issued betveen c. 250 and $\mathrm{c} .130 \mathrm{BC} \mathrm{C}^{64}$ These coins derive their types from Seleucid issues and in particular from those of Antiochos Il (261-246 BC) ${ }_{6}^{65}$ As Seleucid influence in eastern Iran and Afghanistan ceased when Bactria and Parthia acquired independence about 250 BC one can infer that the early Dahaean coin series vas superceded by their middle period coinage within about two decades of 250 BC. From this point until the end of the Dahaean coinage about the time of Christ, Dahaean coins were struck in two parallel series issued frow two separate minte. For one series the reverse type is a horse head during this period and the forepart of a horse during thi next period, while for the second series the reverse shows an archer on coins of this period and a soldier on the late issues. The essential unity of both series is shown by the observations that both series were isaued in the name of the Dahaean Sakas and that individual rulers, Ata during this period and Artara during the gext period, struck their coins in both series. However, these two series also differ in significant features which indicate that each emanated from a different mint. During the present period early iagues in each series are comparable but later on, as the coins of both series become scyphate, it is only the issues in the horse series that lose both their inscriptions and their obverse type. Similarly, during the next period, early issues of Artara bear aramaic inscriptions in the horse series but Greek legends in the archer-soldier series. One can infer that the mint for the horse series was located in northern Choresmia where some middle period coins lost their obverse type vhile that for the archer-soldier series was situated in southern Choresmia, or at their capital, where Greek vas introduced by Artara. ${ }^{66}$

Within this middle period, c.250-130 BC, the Dahaean coinage of both the horse and the archer series can be aubdivided into an earlier and a later group. Coina of the earlier group have flat flans and a better style; this group also includea all horse coina with an aramaic legend and all archer coins with rudiments of the Greek Antiochos legend. By contrast coins of the later group have broad scyphate flans and a typlcal, though
somewhat degraded style. Those in the archer seriea nearly all have aramaic legends naming the king but the horse coins are anepigraphic though most of them have symbols of uncertain significance below the horse head. During the earlier part of this period King Ata (MaLKa ATa Ga; Ma ATa GA; MalKaT ATa) struck the earliest coins in both horse and archer series. The other issues do not name the king but two were, instead, struck in the name of the Sakas; 'King of the Sakas' (MA SAGA) for the horse head issue and 'Lord King of the Dahaean Sakas' (MaLKa MaLAKa Ga SAKA) for the archer issue.

The later group of coins struck during this middle period is somewhat commoner and contains a greater number of issues in each series. Archer coins were issued successively by two rulers of uncertain, though different, name followed by 'Atagart the Dahaean' (ATaGaRT Ga), 'Atala' (ATaLA) and 'Tavr'aka the Dahaean' (TaVR'AKa Ga; TaVR'A); this series ends with a group of rude coins. The horse head issues, which are all anonymous, evolve from scyphate coins that show an obverse type (bust) to similar coins with a plain convex obverse surface and, throughout both groups, comprise a number of issues when their reverse symbols are considered.

Before leaving the Dahaean coinage of c. 250-130 BC one should note another series of Seleucid imitations that are found much further south, in Carmania, and mast be excluded from the Dahean series. The Carmanian imitations in the British Museuf are as follows:a) Obv. Helmeted head right

Rev. Winged Nike walking r. crowning trophy of arms
Corrupt Antiochos legend commencing on left, eg. PAFIへE ANTIO^
AR attic drachms and hemidrachms 4.24, 4.02, 2.94, 2.18, 2.10, 2.10
b) sim. but no legend

AR attic obols $0.74,0.74$
c) Obv. Laur. bust right

Rev. mirror image of $b$ )
AR attic hemidrachm 1.84
d) Obv. Seleucid style laur. bust right

Rev. Apollo std. left on omphalos holding bow
Corrupt Antiochos legend commencing on left ego BAINI NPITI•
AR attic hemidrachm and obol $1.92,0.70,0.58,0.55$
e) sim. but legend commencing on right

AR attic obols $0.70,0.48$, also type d or e $0.84,0.58,0.55$
These Carmanian coins, unlike Dahaean coins, retain Seleucid reverse types as well as Seleucid legends and obverse types. In addition they never bear aramaic legends. Although coins only bear Antiochos legends their reverse types link them with prototypes of both Seleucos I (312-280 BC, a-c) and Antiochos I or II (293-246 BC, d-e). ${ }^{68}$ In terms of the political changes that affected the Seleucid Empire it appears likely that these Carmanian coins were struck around 250 BC . when the Seleucids lost eastern territories to Parthia and Bactria. The south-east Iranian frontier region may well have assumed independence about the time Parthia and Bactria broke away from the Seleucids. Tarn also reached this conclusion but from different evidence.

To return to the Dahae; the last period of their coinage extended from the nomad migration c. 130 BC to their conquest by Herai ${ }^{l} \mathrm{l}$ about the time of Christ. At the beginning of this period the Dahaean coinage shows a number of significant changes that can be linked with the nomad migration, or, in stricter terms, changes that suggest a migration of Greek engravers into the Dahaean kingdom and an increasing circulation of Dahaean coinage south of the Kara Kum desert? ${ }^{72}$ Immigration of Greek engravers and mint officials

flat flans and the atyle of their types is much improved; it is realiatic and Greek. The reverse types in each series are alightly modified; the horse head becomes the forepart of a horse and the archer becomes a soldier. Greak legends are introduced for all isauea in the soldier series but only appear at the end of the horse sequence. Coins of both series continue to be struck in the name of the Dahae and their king Artara struck the early issues in each series.

Artara's early isaues in the horse series name him in aramaic as 'Artara the Dahaean' (ARTARA GaUASa) whereas in the soldier beries his early coins game him in Greek as 'Artara the Dahaean Saka' (APAHEPOY YP KMAOY इAKAPOY) ${ }^{73}$ As these two beries progreas they assume anonymity. Subsequent isaues in the horse series name the Dahae in both aramaic and Greek (GaUaSa; KWD) and finally only name them in Greek ( $K W \Delta$ ) on both sides of the coin. In parallel with these changes in the horse series the issues in the soldier series retain the name of the Dahae on the obverse ( $M P K \omega \Delta O Y$, later $K \omega \Delta$ ) but the reverse legend becomes degenerate and on the latest coins all Greek legends are degenerate and the coins are rude and underweight for their denomination. The correlation between the Greek and aramaic legends was first recognised by Fuye who correlated his aramaic reading Kavat with Kod ${ }^{4}{ }^{\prime}$ and also noted that 'Yr' was a prefix to 'Kodoy' that could be either included or omitted from the legend. The correlations Artara - Ardhthroy and Gauasa - Kodoy Dahae do not appear to require further comment, particularly when they are considered in the context of the other Dahaean coinage.

Betveen the nomad migration c. 130 BC when the Dahae expanded and their conquest by Heraios c.O BC when the Dahae lost their independence the fortunes of this kingdom declined with the rise of Parthia. Despite numerous campaigns from c. 126 BC ${ }^{75}$ onwards against the Sakas who had migrated across northern Afghanistan to the west Afghan plateau the definitive Parthian occupation of Margiana and Aria does not appear to have occurred until the reign of Orodes I ( $87-77 \mathrm{BC})_{0}^{76}$ So far as the Dahae were concerned their brief period of prosperity under Artara when they were able to extend their influence south of the Kara Kum desert came to an end when Parthian control of these districts to the south of the desert was eatablished c. 80 BC. Subsequent restriction of Dahaean influence can probably be correlated with decline in the style and weight of their terminal coinage.

The Dahaean coinage may be catalogued as followe:-
A) EARLY PERIOD : c. $330-250 \mathrm{BC}$.

1. Anonymous

Obv. Bust r. of Hercules in lion skin
Rev. Zeus enthroned holding sceptre and eagle; no characters or symbola AR attic drachm BM. 4.20
2. 日im.

AR attic hemidrachms BM. 2.56, 1.96, 1.79, 1.55, 1.38, 1.35, 0.88
3. The Dahaean Sakas

Obv. Hercules stg. facing with club on l., lion skin on r., left SSaGA
Rev. Zeus enthroned holding sceptre and eagle; left GADA
AR attic obol BM. $0.70,0.69,0.61,0.57,0.57,0.56,0.54,0.54,0.50,0.48,0.46$, 0.45 Author 0.56 Fuye 770.85 (III, 10), not veighed (III, 11)

B -la) MIDDLE PERIOD : c. 250 - 130 BC. Archer aeriea early group
4. King Ata of the Dahae 78

Obv. Saka style laur. bust l; right Maika ATa Ga
Rev. Archer Stg. facing with bow on right, spear on left; right Greek K corrupt Antiochos legend eg. AइINOE CNIIOXV
AR drachm BM. 3.88, 3.27
5. sim. but obv. legend Ma ATa GA

AR drachm BM. 3.08, 3.07, 2.96, 2.91, 2.89
6. Anonymous

Obv. sim. but bust left in simpler style. To left large crescent
Rev. sim. but archer in aimpler style; Greek $K$ to $r$; traces of Greek legend on some coins where others retain only an $X$ in the left field
AR hemidrachm BM. $1.88,1.50,1.48,1.33,0.88,0.59$ Author 0.89
Fuye 1.55 ( $\mathrm{X}, 1$ ) , 1.70 ( $\mathrm{X}, 2$ )
7. Lord King of the Dahaean Sakas

Obv. Head left in beaded circle; around MaLKa MaLaKa ga SAKA
Rev. sim. archer in simple style without traces of Greek letter or legend AR obol BM. 0.46, 0.42

B - 1b) MIDDLE PERICD : c. 250 - 130 BC . Archer series late group
8. Uncertain king

Obv. Bust left with pointed beard
Rev. Archer stg. facing with bow on $r$., spear on 1 ; uncertain legend containing $A$ and $S$
AR flat hemidrachm BM. 2.11, 1.89
9. Anonymous
sim. but no legend
AR flat hemidrachm BM. 1.64 Author 1.65
10. Uncertain

Obv. sim. with uncertain legend different from succeeding
Rev. Archer as before, no legend
AR scyphate obol BM. 0.41
11. Atagart the Dahaean

Obv. sim; legend ATaGaRT Ga
Rev. sim.
AR scyphate hemidrachm BM. 1.33 Fuye $1.30(x, 6)$
12. Atala
sim. but legend ATaIA
AR scyphate obol BM. $0.37,0.37,0.37,0.35,0.33,0.31$ Author 0.35
13. Tavr'aka the Dahaean
sim. but legend TaVR'AKa GA
AR scyphate hemidrachm BM. 1.84, 1.71, 1.23, 1.21, 1.19, 0.84 Author 1.33 Fuye $1.55(x, 9), 1.80(x, 10), 1.12,1.10$, not weighed
14. sim. but legend TaVR'A

AR scyphate hemidrachm BM. 1.17, 0.97
15. sim. with legend TaVR'A

AR scyphate obol BM. 0.48
16. Anonymous
sim. but rude style and no legend
AR mildly scyphate or flat obol BM, $0.42,0.40,0.39,0.37,0.36,0.35,0.33,0.33$, $0.30,0.30,0.29,0.24,0.22$ Author 0.31

B - 2a) MIDDLE PERIOD : c. 250 - 130 BC . Horse series early group
17. King Ata

Obv. Saka style laur. bust left; to left Malkat ATa
Rev. Horse head left; to right Greek K
AR hemidrachm BM. 1.86, 1.29 Fuye 1.25 ( $\mathrm{X}, 5$ )
18. King of the Sakas

Obv. sim. but legend MA SAGA
Rev. sim. but horse head right and no letter
AR hemidrachm BM. 1.45, 1.05
19. Uncertain

Obv. sim. but legend .MA

Rev. sim.
AR hemidrachm BM. 1.45

B -2b) MIDDLE PERIOD : c. 250 - 130 BC. Horse Series later group
20 Anonymous
Obv. Seleucid syle laur. buat right
Rev. Horse head right; right inferior field $W$ MII $\mathbb{N}$
AR acyphate hemidrachm BM. 2.43
21. sim. but symbol VIN

AR acyphate hemidrachm BM. 2.83, 2.81, 2.43, 2.42, 1.57 Author 1.79
22. sim. but symbols $M N$

AR scyphate hemidrachm BM. 1.82
23. sim. but simple symbol $n$

AR scyphate hemidrachm $\operatorname{BM}$. 2.28, 1.76 Fuye (types 20-23) 2.45 ( $\mathrm{X}, 22$ ), 2.45 ( $\mathrm{X}, 23$ )
24. sim. but no aymbol

AR scyphate hemidrachm BM. 2.54, 2.02, $1.86,1.68,1.62,1.29,0.86$, Fuye 1.45 ( $\mathrm{x}, 21$ )
25. Obv. Seleucid style bust left

Rev. sim. with symbol $\ \mathbb{N}$
AR scyphate hemidrachm BM. 1.97
26. Obv. plain convex field

Rev. sim. with aimple symbol $n$
AR scjphate hemidrachm BM. 1.10 Author 2.54, 1.84
27. sim. but symbol $\Re$

AR scyphate hemidrachm BM. 1.45
28. sim. but aymbol $1 \wedge$

AR scyphate hemidrachm BM. 1.30
29. sim. but no symbol

AR scyphate hemidrachm BM. 1.16 Author 1.62

C -1) LATE PERIOD : c.130-OBC. Soldier aeries
30. Artara (Ardhthroy) the Dahaean Saka

Obv. Bearded laur, bust right; to left $Y P$ (or Yl) KwaOY
Rev. Soldier atg. facing with spear left and other hand on hip
Left APAH日POY Right $\approx A K A P O Y$
AR drachm BM. 3.17, 2.98, 2.89, 2.89, 2.85, 2.85, 2.84, .282, 2.80, 2.47, Fuye $3.80(\mathrm{x}, 13)$
31. Anonymous king of the Dahae

Obv. sim.
Rev. sim. but legend left $O \triangle H O A$ right OAKAPO
AR drachm BM. 3.32, 3.10, 2.91, 2.83, 2.76, 2.70, 2.68, 2.59, 2.56, 1.75, Fuye $2.00(x, 14)$
32. Obv. sim. but legend $K \omega \Delta$

Rev. sim. but legend left HON right OVKVO
AR reduced weight drachm BM. 1.94, 1.89, 1.76, 1.72, 1.68, 1.57, 1.57, 1.57, 1.49,
1.35, 1.34, 1.31, 1.29, 1.16, 1.14, 1.11, Author 1.26, 1.21
33. Anonymous
sim. but rude style and legends degraded or absent
AR reduced weight drachm BM. $1.23,1.18,1.17,1.14,1.01,0.95,0.89,0.65,0.64$, $0.60 \quad$ Author 1.04, 0.82, 0.80

C -2) LATE PERIOD: $\mathbf{C . 1 3 0 - 0 ~ B C . ~ h o r s e ~ s e r l e s ~}$

## 34. Artara the Dahean

Obv. Bearded laur. bust right; to left ARTARA
Rev. Forepart of horse right; above GaVASa.
AR diobol ${ }^{79}$ BM. $0.87,0.85,0.85,0.79,0.76,0.76,0.70,0.69^{80}$
35. Uncertain king of the Dahae

AR diobol BM. 0.92
36. Anonymous kfng of the Dahae

Obv. sim. but Greek legend KWA
Rev. sim. but aramaic legend GaDaSa
AR diobol BM. 0.70 Author 0.60
37. Obv. sim. but Greek legend YP KwaO

Rev. sim. but Greek legend IK K W
AR hemidrachm BM. $1.75^{81}$ Fuye not weighed 82
38. Obv. aim. but Greek legend KWロ

Rev. sim. but Greek legend YP KWA
AR hemidrachm BM. 2.61, 2.07, 1.76, 1.67, 1.67, 1.55, 1.55, 1.55. 1.53, 1.53. 1.50, $1.45,1.39,1.38$
39. Obv. sim. with Greek legend $K \omega \Delta$

Rev. sim. but Greek legend $K \omega \Delta$
AR diobol BM. $1.09,1.09,0.92,0.88,0.69$ Author 0.66

COINAGE OF THE SOGDIAN KINGDOM. c. 200-130 BC.

The kings of Sogdiana issued a series of tetradrachms struck on the Peraic weight standard between the time of Euthydemos I and the nomad migration. Sogdiana acquired an urban culture and economy as a satrapy of the Persian Empire from c. 540 to 328 BC and for the next century formed part of the Macedonian-Seleucid reain and part of the Greek kingdoin of Bactria-Sogdiana until the time of Euthydemos I who was ruling in $210-206 \mathrm{BC} 0_{0}^{84}$ The coinage of the Sogdian kingdom ia a continuation of the Bactro-Sogdian currency that circulated in and was, in part, probably struck in Sogdiana and initially only differa from previous Bactro-Sogdian coins by reverting from the Attic to the Persic weight standard. The coin types are the same and the same Greek monogram, R - K, occurs on Attic tetradrachms of Euthydemos I and on Persic tetradrachms which name him and initiate the coinage of the Sogdian kingdoll 85 Thereafter the Bactrian and Sogdian coin series diverge. Sogdian coins no longer have a greek monogram and their atyle deteriorates. They become an imitative series with corrupt Greek legends. Jse of the R-K monogram is transferred to the Bactrian series where it is subsequently used by Demetrios, Antimachos, Agathokles, Euthydemos II and Eucratides. The Attic coins of Euthydemos I with the R-K monogram appear to have been struck in a different mint from his other coins because their reverse type also differs from that on his other coins in a number of detail 8 ; succeeding Sogdian tetradrachms all derive their reverse type from the R-K attic issues of Euthydemos. One may infer that Greek moneyers in the mint of Maracanda, capital of Sogdiana, struck R-K coins for Euthydemos on the Attic standard and continued to strike the first isaues of the Sogdian kingdom on the Persic atandard. Emigration of these Greek moneyers to Bactria accounts both for the transfer of the R-K monogram to the Bactrian series and for loss of literate Greek from the Sogdian coinage and its associated atylistic decline. These Persic tetradrachms with intact or corrupt legends in Greek alone comprise the early coinage of the Sogdian kingdom.

During the period c. 200 to 130 BC the coinage of the Sogdian kingdom was issued in three distinct chronological groups. Coins without an aramaic legend form the early group while those with circumferential aramaic legends form the late group. During the middle part of this period the coins have an aramaic legend on either the left or the right side of the reverse and a corrupt Greek legend on the other side. Coins of this middle group introduce aramaic and initially bear the anonymous legend 'King of Sogdiana' (MaLKA SuG; MaLKAT SuG) or 'King of Kings' (MaLKaTsat MaiKa) but subsequently name two kinge, Kagaha (MaLKat Kagaila) and Hasa (MaLKAT HaSa). Coing of the late group amplify the king's titulature in their carcumferential legends. They commence during the reign of Hasa (MaLKATA HaSa; MaLKATHA HaSa) and continue through the reigne of his two successors,Kamasa (MalKata KaMeSa; MaHaTaH MaIKA KaMa; MaHAT MaLKa KaMaSa) and Malta (MaLHaKaTHa MaHata Malta).

Botr. groups of coins with aramaic legends were struck in two parallel series that apparently emanated from separate mints. In the main series aramaic legends, whether on one side only or circumferential, commence at 7 o'clock and show the characters base outwards. Issues of the minor series read the opposite direction; their legends commence at $5 o^{\prime}$ clock and show the characters base inwards. Both series were issued in parallel by the same rulers. Thus the main series was issued by an anonymous king of Sogdiana followed by the named kinge Kagaha, Hasa, Kamasa and Malta while the minor series was atruck by an anonymous Sogdian king followed by Kamasa and probably Malta. One may suggest that the main serles was emitted from the Sogdian capital at Maracanda while the minor series was struck, perhaps intermittently, in one of the Sogdian towns along the Jaxartes.

The last isaue of Malta, struck in the main series, comprises the only coins with corrupt aramaic legends. These coins also differ from Malta'e earlier coina in another respect, namely that they omit the crescent above the king's head; they appear to be the terminal Sogdian isaue atruck about the time of the nomad migration.

Coins struck in the kingdom of Sogdiana may be catalogued as followa：－
A）EARLY PERIOD ：c．200－180 BC．
40．Anonymous 89
Obv．Laur．Bust right of Euthydemos
Rev．Hercules atd．left on rectangular atool with rocks between its legs；his left hand reste on his left knee and right hand holds a club whose lower end reste on his right knee．Behind stool monogram（ $R-K$ ）$R$ Left BAEINEת工 Right EVOY $\triangle$ HMOY
AR Petrsic tetradrachm Author $10.80 \quad$ Fuye $12.40,12.20,11.90$（ $\mathrm{I}, 12 \mathrm{~F}$ ）
BMC． 12.05 （Euthydemos No．12）
41．sim．but titie BAENE $\cap \Sigma$
AR Persic tetradrachm Fuye 11.70 （ 1,13 ）
42．sim．but monogram omitted，style rude and legend－

AR Persic tetradrachm BM．11．62，11．04， 10.52 Fuje 11.10 （ 1,14 ）
43．sim．but ruder and legend very blundered
AR Persic tetradrachm BM．11．86，10．82， 9.35 Fuye 7.70

B－1）MIDDLE PERIOD ：c．180－150 BC．Aramaic legend on left
44．King of Sogdiana
Obv．laur．bust right
Rev．Hercules seated as before；stool rectangular，no monogram
Left MaLKA SuG Right corruption of BAइIヘEл乏 eg．$d>\varepsilon エ \wedge$
AR Persic tetradrachm Author 10.44
45．sim．but aramaic reads MaLKAT SuG
AR Persic tetradrachm BM．9．61， 9.48 Fuye 10．55（III，1），9．60（II，12F）
46．King Kagaha
sim．but aramaic legend on left MaLKaT KaGAHa
AR Persic tetradrachm BM． 9.21 （plated）， 9.16 Author 9.21
47．King Hasa
sim．but aramaic legend on left MaLKat HaSa
AR Persic tetradrachm BM．10．49， 10.40 （Fuye II，2B），10．25， 10.09

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Fuye 10.30 ( \(\mathrm{I}, 6\) ) , 10.20 (II, 3F), 9.90 ( \(\mathrm{I}, 10\) ) , 9.80 (II,7)
    \(9.50(\mathrm{II}, 4), 8.70(\mathrm{II}, 5), 7.70(\mathrm{II}, 11)\)
Author 8．61， 7.70
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Type 46 or 47．BM．9．41， 8.25 Author 8．15， 7.53 Fuye 8．70（II，8）

B－2）MIDDLE PERIOD ：c．180－150 BC．aramaic legend on right
48．King of kings
Obv．laur．bust right
Rev．Hercules seated as in group B－l
Left EVOVAHM Right（MaL）KbTbat MaLKKA
AR Persic tetradrachm BM． 11.30 （Fuye II，18）

C -1) LATE PERIOD : c.150-130 BC. aramaic legend commences on left
49. King Hasa

Obv. laur. bust right
Rev. Hercules seated as before but stool hemispherical
Legend from VII to V, characters base outwards; MaLKATA HaSa
AR Persic tetradrachm BM. 8.45 Author 6.0 (broken) 5. 50
50. sim. but legend MaLKATHA HaSa

AR Peraic tetradrachm Fuye 10.60 (III, 2), 8.90 (II,9)
51. King Kamasa; Great king Kamasa
sim. but. legend MaLKATA KAMaSa
AR Persic tetradrachm Author 8.32
52. sim. but legend MaHaTaH MaIKA KaMa

AR Persic tetradrachm Fuye 9.60 (III,3)
53. Great King Malta

Obv. sim. but crescent above head
Rev. aim, but crescent beneath Herculea' arm
Legend MaLHaKaTHa MaHaTA MaLita
AR Persic tetradrachm BM. 8.71 Fuye 10.0 (III,7B), 9.20 (III,5), 8.90 (III,4)
54. Obv. sim. but no crescent

Rev. sim. but script more angular and legend corrupt AR Persic tetradrachm BM. 8.78 Fuye 8.90 (III,6B), not weighed (IX,12)

C -2) LATE PKRIOD : c. 150-130 BC. aramaic legend commences on right
55. Great King Kamasa

Obv. laur. bust right
Rev. Hercules seated as in group C-l
Legend from V to VII, characters base inwards; Mallat MalKa KaMASa AR Persic tetradrachm Author 9.81
56. Great King Malta?
sim. but legend MaKa MaL.........Ta
AR Persic tetradrachm Fuye 8.70 (III, 8)

## THE NOMAD MIGRATION AND ITS AFTERMATH

The nomad migration of the 2nd century BC is recorded both in the coinage of this period and in the writinge of Chinese and Western historians. Relevant historical passages have recently been quoted and discussed by Naraln whose analysis of the early events need only be questioned in respect of certain details.

The nomad migration commenced when the Yueh Chi tribe of nomads was induced to migrate by pressure from the Hiong-nu. They left their territory in the Kan-bu region about 174 BC and reached the Opper Ili about 160 BC then continued westwards from this region around Lake Isayk Kul along the north of the Pamirs to cross the Jaxartes and settle in Sogdiana which they reached shortly before the Chinese ambassador Ch'ang Kien visited them there in 128 BC. In the course of this migration the Yueh Chi induced a number of Saka tribes living in their path to migrate elsewhere.

Although Chinese and Weatern historians implicate both the Saka and the Yueh Chi nomads in this migration it should be emphasised that both sources refer to different tribes of Sakas. Chinese historians refer only to Sakas who always lived east of the Jaxartes while Western historians refer only to Sakas who were living or migrated west of the Jaxartes. So far as the Chinese historians were concerned the Yueh Chi migration induced some Sak 92 to migrate from the trang-Jaxartes region southwards to the Swat valley and beyoin and others to migrate from the same area to the Kashgar region. For the effects of the Yueh Chi migration on weatern regions one has to rely mainly on the Western authors and particularly on Strabo's eclectic statements that frequently synthesise reports from different sources.

Concerning the nomad migration Stra $9{ }^{4}$ says:-
'The beat known of the nomads are those who took away Bactriana from the Greeks, I mean the Asil, Asiani, Tochari and Sacarauli (alternative version: Asil, Pasiani, Tocharl and Sacarauill) who originally came from the country on the other aide of the Jacartea river that adjoins that of the Sacae and the Sogdiani and was occupied by the Sacae'

Strabo was not familiar with the use of proper names he recorded in particular with the use of the terms Asian and Saka. Herodot 96 gave a concise definition of the term Saka when he said 'Saka is the name the Persians give to all the Scythian nomads' and, in practice, Saka and Scythian were synonymous terms. On the one hand the Peraians used the term Sak ${ }^{9}$ ? the Dahae called themselves Sakia as did the Scythians (Sacaraucig) who migrated south from the Jaxartes to Afghanistan in the present period and the Scythians who migrated south from the JaxarteB. The Scythians who migrated into Armenia in the 7 th century BC also called themselves Sak ${ }^{\text {lol }}$. On the other hand Greek authors, from Herodotue onwarde, normally referred to these and other nomads as Scythianis. For Herodotus and Arrian the Scythians were divided into various tribes of European Scythians who lived around the Black Sea and other tribes of Asian Scythians who lived around and beyond the Caspian.

Strabo's lack of familiarity with these terma la diaplayed in the sentence before his statement on the nomad midgration where he aays 'those who are aituated more to the east are named Massagetae and Sacae whereas all the reat are given the general name of Scythians.' The Massagetae were, however, a Scythian (ie. Saka) tribe. Strabo's ignorance of certain overlapping and eynonymous terms is shown here while his habit of eynthesising reports from different periods is demonstrated a few paragraphs later where he says 'belonging to the tribe of the Masaagetaéand the Sacae are also the Attasil and the Chorasmil, to whom Spltamenes fled from the country of the Bactriani and the Sogdiani.' Spitamenes fled from Alexander to take refuge among the Massagetae but this had nothing to do with the Choresmians, alias the Dahae. Herodotus had referred to the inhabitants
of the Choreanian satrapy by their territorial name, the Chorasmianc, but at the time of Alexander and subsequently the inhabitants of this ragion vere given their tribal name, the Dahae, and the term Choreandan was not used. Deapite the many terms he uses, Strabo'a actual evidence concerning the trans-Caspian region prior to the nomad algration adde virtually nothing to the descriptions found in Herodotus and Arrian but jumbles the reports of Herodotus and of Arrian's sources into an eclectic rationalisation which, as a summary, is Prequently untrue?

Strabo's etatement on the nomad migration auffers from the same defects as hie other statements concerning this region and only the aingle sentence quoted above appears to relate to this period. In thia sentence Strabo names four peoples, the Aeif, the Asiani (or Pasian1), the Tochari and the Sacaraull. If one takes the veraion with Aaiani, as seems more likely, then Strabo does in fact use four terms to name only two peoples because the first two terms include the last two terme. Asil and Asiand are only general terms, the Asiane, applied by the Greeke to trane-Caepian nomads. Strabo's other two terms are tribal names that specify two groups of Abians. His Tochari were the Yueh Chi of Chinese hiatori 1090 while the Sacarauli vere Asian Sakas who migrated acrose Sogdiana and nothern Afghaniatan to Aria where they vere implicated in asaiating Sinatruces to the Parthian throne some half a century lateli. The rest of Strabo's sentence says that these peoples came from Saka territory beyond the Jaxartes, territory adjacent to Sogdiana and to the Saka (Massagetaean) territory lying betwean the lawer Oxue and Lover Jexartel린 One may compare Strabo's aentence with another corrapt version of the mation given by Trogus. He referred the nomad migration to two Scythian tribea, the Sacarancae and the Asiani, and eubsequently implicated the Tochart? Trogus' chranology is yrong and he also differentiated two synonymous terms, Scythian and Astan, so that, Hike Stribz his text involved only the Sacaraucae (Asian Scjthians) and the Tochari (Yueh Chi).

Combining the Chinese and the Greek evidence one sees that the Yueh Chi reached and settled in Sogdiana aboat 130 BC and, in so doing, induced certain groups of Sakas to milgrate south and south-east from beyond the Jaxartes and induced the Sacaraucae tribe of Sakas to migrate vest from the east bank of the Jaxarten acroas Sogdiana, western Bactria and Margiana to Aria.

The subsequent history of the Sacaraucte on the vestern and southern Afghan platean has been discussed elsewhere and one need only note that the Sakas on the vest Afghan plateau vere in conflict vith the Parthians until effectively constituted into a vassal province of Parthia c. 80 BG while the Sakas on the south-east Afghan platean remained independent and organised themselves into a kingdom ruled by the Azes - Vonones dynasty.

Ch'ang Kien deacribed the aituation that existed in Bactria and Sogdiana when he Fisited the Yueh Chi in 128 BC : the situation when the Yueh Chi vere eatabliahed in Sogdiana and the migrant Sacaraucae had traversed parts of north Afghanistinn?'Ta Yueh Chi is situated two or three thousand L i vestwards of Ta-juth . It is to the north of the Wei-aillu. To the south is aituated Ta-haig; to the vest An-han? to the north K'ang-chu ..... Originally the Yueh Chi lived between Tun-huang and Ch'i-lient. When they were defeated by the Hsiung-nu, they moved far away. They passed ( Ta ) yoan and vent westward as far as Ta-hala, which they attacked and subjugated. Finally they settlad their imperial court north of the cane river ..... Ta-hala, situated to the south of the Quus river, is more than two thousand it to the south-veat of Ta-yuan. They are sedentary and have walled cities and houses, and the same eustoma as the Ta-yuan. They hate no great kings or chiefs, but some cities and town have installed small chiefs. Their soldiers were weak and feared fighting. They were skilful in trade. When the Ta-yueh Chi migrated westvard, they attacked and defeated them and subjugated all the Ta-halaz The
population ia approximately more than one million. Their capital is named Lan-shi Cheng. ' The Shih-chih was completed in 99 BC and the present passage wes based principally on the report of Ch'ang Kien. The description of $\mathrm{Ta}-\mathrm{hsia}$ is consistent with the aftermath of the Sacaraucae migration but requires some comment. In the first place the situation of Te-hsia, as described in the Shih-chih, wes neither restricted to Bactria nor did it apply to all of Bactria. The Shih-chih described a land of small city statea devoid of military power. This was a description of the territory through which the Sacaraucae had recently migrated and applied equally to Western Bactria, to Margiana and to Arian. Conversely there is strong numismatic evidence that Greek kings continued to rule a substantial portion of Eastern Bactria for about another century until the general period of Heraios the Kushan and Hermaeus the Indo-Greek. These Indo-Greek kings continued to strike Attic standard tetradrachms and other denominations and a large hoard of these Attic issues found at Khist Tepe between Qunduz and Balkh in the absence of any Saka or Yueh Chi ccins ${ }^{126}$ makes it virtually certain that the Greeks continued to control this region. A Greek kingdom restricted to Badakhshan would not have been viable and certainly would not have justified an individual currency on its own weight standard; it is unlikely that a viable Greek kingdom of Eastern Bactria which survived for a century would have had a frontier anywhere east of a line drawn through Qunduz and Bamiyan. The Qunduz hoard, just mentioned, contained ${ }^{127} 627$ Attic standard silver coins extending from the Seleucid period to Hermaeus. Among them the rulers best represented were Eucratides 1 (144 tetradrachms), Heliocles 1 (204 tet. \& 17 drachms) and Eucratides 11 ( 130 tet.).

Another point in Ch'ang Kien's report that may be questioned is his attribution of the sorry plight of Ta-hsia to the Yueh Chi. It has already been noted that the Chinese were not familiar with the Saka devastation of part of northern Afghanistan and it is, therefore, logical that Ch'ang Kien should have attributed the plight of Ta-hsia to the Yueh Chi. It is possible that the Yueh Chi made raids in Bactria from Sogdiana and that they exacted some form of tribute from parts of Bactria situated close to the Oxus but there is no reason to believe that the Yueh Chi conquered any territory south of the Orus during the period of their migration.

When one turns to Sogdiana it is apparent that the Shih-chih mentions both the Yueh Chi and the kingdom of Sogdiana (K'ang-chu). The Yueh Chi were established north of the Orus and thus lived in the territory known as Sogdiana but according to the Shin-chin the kingdom of the Sogdians was situated to the north of the Yueh Chi. The Shih-chih describes a situation in the aftermath of the migration when the Yueh Chi inhabited the previous Sogdian kingdom and the erstwhile king of Sogdiana and his court were obliged to move and established themselves in the inhospitable territory previously controlled by the Massagetae between the lower Jaxartes and the lower Oxus. In this respect the kingdom of the Sogdians was not abolished by settlement of the Yueh Chi but survived in previous Massagetaean territory ${ }^{128}$. Survival of the Sogdian kingdom ruled by this dynasty is also attested by the Hou Han Shou which records that the royal dynasty who ruled the later kingdom of Sogdiana (ie. the post-Yueh Chi kingdom) was formed about AD 80 by inter-marriage of the ruling families of the Yueh Chi and of the Sogdians ${ }^{129}$.

## ORGANISATION OF THE YUEH CHI

The organisation of the Yueh Chi is recalled in the Ch'ien Han Shou which takes the history of the Han dymasty to $A D 24^{130}:-$
"The kingdom of the $T a$ Yueh Chi has its capital at Kien-chi (walled cjty of Ch'ien-shi²) situated 11,600 li from Tchang-ngan (Ch'ang-an); it is not dependant on the governor general. it numbers 100,000 families, 400,000 inhabitants, an army of 100,000 men; to the east it is 4,740 li from the residence of the govemor general, to the west it is 49 days march from A-si ${ }^{132}$, it is bordered to the south by Ki-pin (Chi-piñ ${ }^{133}$ ).....The Yueh Chi moved far, passed beyond Ta-yuan ${ }^{134}$, beat the Ta-hsia ${ }^{135}$ in the west and overcame them; their chief then established his capital to the north of the river Ouei (Kuei ${ }^{136}$ )..... One part of them who were not able to move far with the rest placed themselves under the protection of the Khiang (Ch'iang) of the southern mountains ${ }^{137}$ and took the name of the Little Yueh Chi. Formerly the Ta-hsia had no king ${ }^{138}$.......when the Yueh Chi arrived they overcame them. Together they support
 ity of Hieou-mi (Hsiu-mi) having for sapital the town of Ho-mo (Ho-mo), at 2,84l li from the residence of the governor general and at 7802 li from Yang-kouan 141 . The second: the principality of Chouang-mo (Shuang-mi), capital: the town of the same name at 3,741 li from the residence of the governor general and at 7782 li from Yang-kouan. The third: the principality of Kouei-chouang (Kuei-shuang), capital: the town of Hou-tsao (Hu-tsao) at $5,940 \mathrm{li}$ from the residence of the governor general and at 7982 li from Yang-kouan. The fourth: the principality of Hi-thum (Hsi-tun), capital: the town of Po-mao (Po-man ${ }^{142}$ ) at 5,962 li from the residence of the governor general and at 8202 li from Yang-kouan. The fifth: the principality of Kao-f $\mathbf{1}^{43}$, capital: the town of the same name, at 6,041 li from the residence of the governor general and at $92 \theta 3 \mathrm{li}$ from Yang-kouan. These five principalities are all dependant on the Yueh Chi".

This report in the Ch'ien Han Shou should be considered in conjunction with that in the later Hou Han Shou ${ }^{144}$ :-
"The country of Ta Yueh Chi is situated at Ian-shih Ch'en $\frac{1}{8} 45$ which is at a distance of 49 days travel from An-hsi in the west, 6357 li from the residence of the governor general 146 in the eas $t^{47}$......When the Yueh Chi were defeated by the Hiong-nu (Hsiung-nu), they passed among the Ta-hsia, divided their kingdom ${ }^{14}$ into five principalities (Hsi-hou) which were Hieou-mi (Hsiu-mi ${ }^{\frac{1}{49}}$ ), Chouang-mo (Shuang-mi), Kouei-chouang (Kuei-shuang), Hi-thum (Hsi-tun) and Tou-mi (Tu-mi). About one hundred years later ${ }^{50}$ the prince (Hsi-hou) of Kouei-chouang (Kuei-shuang), Kieou-tsieou-khio (Ch'iu-chiu-ch'ueh ${ }^{151}$ ) attacked and subjugated the other four principalities (Hsi-hou) and created himself king of a kingdom that was named Kouei-chouang (Keui-shuang). This prince invaded the country of A-si, took their country of Kao-f $\mathrm{f}^{152}$, destroyed also Po-ta ( $P^{\prime} u-t^{153}$ ) and Ki-pin (Chi-piñ4) and became completely master of these countries. Kieou-tsieou-khio (Ch'iu-chiu-ch'ueh) died at about 80 years 155 , his son ${ }^{156}$ Yan-kao-tchin-toi (Yen-kao-chen) mounted the throne and conquered Thien-tchou (T'ien-chi ${ }^{157}$ ) and there eatablished general ${ }^{156}$ who governed in the name of the Kushans. Since that period this nation has been rich and powerful; all countries in speaking of the king call him king of the Kouei-chouang, the Han 159 following their established practice always call them the Ta Yueh Chi. The kingdom of Kao-f $\mathrm{f}^{160}$ is to the south-west of the Ta Yueh Chi, this country is very large, the customs of its inhabitants are the same as those of Thien-tchou (India), of Ki-pin (Gandhara) and of the A-si (Parthians ${ }^{161 \text { ). These three }}$ kingdoms, at the period of their greatness, conquered this country and they lost it at the period of their decadencel it is thus by mistake ${ }^{162}$ that the Book of the Han counted Kao-fu among the five prinoipalities of the Yueh Chiy this had never belonged to these last since it was already under the domination of the A-sf ${ }^{63}$, but when the Yueh Chi attacked the A-si they became possessors of Kao-fu in this manner."

The organisation of the Yueh Chi realm into five principalities took place at some date between 128 BC when Ch'ang Kien vas among them and AD 24 when the record of the Chifen Han Shou ende. These five principalities are recorded as follows:-

|  | Ch'ien Han Shou (Principality \& capital) | Hou Han Shou (Principality) | Distance from governor general (Ch'ien Han Shou) | Location |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Hieou-mi ( Ho -me) | Hieou-mi | $2,8411^{164}$ | East Sogdiana |
| 2. | Chouang-mo (Chouang-mo) | Chouang-mo | 3.74111 | Central Sogdiana |
| 3. | Kouel-chouang (Hou-teao) | Kouei-chouang | 5,940 11 | N.W. Sogdiana |
| 4. | EI-thum (Po-mao) | Hi-thum | 5,962 11 | S.E. Bactria |
| 5. a) | Kao-fu (Kao-fu) | - | 6,041 1i | Kabul valley |
| b) | - | Tou-mi | - | N.E. Bactria |
| Yueh Chi capital | Ch'ien-shi | - | 4,740 li | Central Sogdiana |
|  | - | Lan-shi | 6,357 li | Bactria (Balkh) |

The distances separating the various Yueh Chi principalities from the residence of the governor generay in the Turfan basin provide a basis for locating them. Although the distances are not absolute and depend, in part, on theroute used by Chinese travellers, two main features are outstanding. None of the principalities was more distant than Balkh; some of the principalitiea were closer than any part of Bactria. In other words all the principalities (except Kao-fu) should be sought in Eastern Bactria and Sogdiana. Insofar as these regions would have been reached by one of the three routes recorded in the wei-110 it is apparent that an East Bactrian principality attained by the central route and a West or North-west Sogdian principality attained by the northern route could have been equidistant from the residence of the governor general. The Ch'ien Han Shou deacribed the Yueh Chi at a time when they had conquered some East Bactrian territory but had not yet moved their capital from Sogdiann to Bactrifl. At this time the Yueh Chi domain was divided into the major diatricts named Hieou-mi, Chouang-mo, Kouei-chouang, Hi-thum and Kao-fu (Ch'ien Han Shou) or Tou-mi (Hou Han Shou). Although it has been averred that these districts, Kao-fu excepted, were all situated in Bactria, it is apparent that they were the districts of the Yueh Chi domain which included parts of both Bactria and Sogdiana at the period to which the Ch'ien Han Shou referred. Many Yueh Chi never left Sogdiana where intermarriage of the Sogdian and Yueh Chi ruling familiet created a new dynasty whose kingdom endured from about AD 80 to 480.

Of the five diatricte in Bactria and Sogdiana both Hieou-mi ( $2,841 \mathrm{li}$ ) and Chouang-mo ( $3,741 \mathrm{li}$ ) were aituated on a longitude well to the east of Bactria while Kouel-chouang ( $5,940 \mathrm{li}$ ), Hi-thum ( $5,962 \mathrm{li}$ ) and Kao-fu ( $6,041 \mathrm{li}$ ) were situated in the general longitude of the Kabul valley, east Bactria and vestern Sogdiana. From these diatances it is apparent that the dietrict of Heou-mi (Hsiu-mi) could only have been situated in eastern Sogdiana close to the Jaxartes where it was presumably organised around the focus of urbanisation that first arose in this region during the Achaemenid period. The district of Chouang-mo and the Yueh Chi capital at Ch'len-shi; although more distant than Hieou-mi, were still closer than eastern Bactria and presumably lay in the central part of Sogdiana. Fuyd correlated the Yueh Chi principalities of Chouang-mo and Kouei-chouang with the two major principalities of weatern Sogdiana during the Han period. Chouang-mo, the earlier district of Su-hiai, had a capital at the town of Chouang-mo which appears to have been the major Sogdian town of Kie-Chouang-na, a town whose name was later abbreviated to Che and whose location was to the south of Samarkand. During the Mohammedan period it was
known as Klas. On the other hand Kouel-chouang, the earlier district of Pu-me, had a capital at Hou-tsao which was the major Sogdian town of Ho and possessed the alternative name Koei-chouang-ni. This was the second major town of Sogdians before Samarkand again rose to dominance and was situated on the Zeravahan to the north of Samarkand. It became Koshania during the Mohammedan period.

These appear to be the three Yueh Chi principalities of Sogdiana; Hieou-wi on the Jacartes, Kouei-chouang in north-west Sogdiana and Chouang-mo in south-west Sogdiana. Their locations are consistent with their distances fron the aeat of the Chinese governor general and with independent Chinese evidence concerning Sogdiana.

The other two Yueh Chi principalities refer to Bactria. The district of Hi-thum with its capital of Po-man is noted in both the Ch'ien Han Shou and the Hou Han Shou. Po-man is normally equated with Bami $\frac{170}{9}$ and this is consistent with its distance from the seat of the governor general. The distance of Tu-mid, a diatrict noted in the later record, is not quoted ond neither is its capital. There are, however, reasons for believing that it was situated in north-east Bactria, probably the qunduz region. Kao-fu was the Chinese tera for the Kabul valley; in numismatic terms this region was conquered about the time of the Kushan ruler Kujula Kadphisel ${ }^{\prime}$ ? lost to the Indo-Parthians and definitively conquered by the Kushan king Soter Megas.

In respect of these districts that composed the Yueh Chi dominion one should differentiate between the three districts in Sogdiana that vere constituted soon after the establishment of the Yueh Chi c. 130 BC and the two regions of eastern Bactria that were not formed until after the Yueh Chi had conquered the Greek kingdow of eastern Bactria. As regards Bactria this situation is clear for the district of Hi-thum since ite correlation with Bamiyan places it in the territory of the late east Bactrian Greek kingdom and its distance from the seat of the Chinese governor general shows that Hi-thum was not situated west of this kingdom.

## RE-ESTABLISIIMENT OF THE KINGDOM OF SOGDIANA

The urbanised kingdom of Sogdiana that acquired independence from Bactria about 200 BC was destroyed by the Yueh Chi when they settled in Sogdiana about 130 BC . This Sogdian kingdom did not, however, disappear but persisted to the north of the Yueh Chi in the region between the lower Jaxartes and the lower Oxus that was previously the domain of the Massagetae; there the later Sogdians were noted by Ch'ang Kien. Meanwhile the Yueh Chi consolidated their occupation of Sogdiana, placed their capital of this kingdom at Ch'ienshi and divided the kingdom into three principalities that were situated at Hieou-mi in the east, at Kouei-chouang in the north-west and at Chouang-mo in the south-west. Later, the Yueh Chi expanded across the Oxus, established two more principalities in eastern Bactria and finally moved their capital southwards to Balkh in Bactria.

After the Yueh Chi capital had been moved south of the Oxus the two Yueh Chi regions, Bactria and Sogdiana, evolved along separate paths and became two separate kingdoms. The southern Yueh Chi established their Kushan kingdom about the time of Chriat from which the northern Yueh Chi separated about AD 80 and founded their independent kingdom of Sogdiana.

Pan Chao refers in the Hou Han Shou to the Yueh Chi and the K'ang-kiu (Sogdians) as separate states in $A D 78$ where he not $73 \frac{3}{3}$ the countries of .... the Yueh Chi, the Wu- $\frac{174}{4}$ and the $K$ 'ang-kiu.' This does not indicate re-establishment of the Sogdian kingdom since Ch'ang Kien has already shown that remants of the earlier Sogdian kingdom persisted to the north of the Yueh Chi and in the context of Pan Chao's report the particular Yueh Chi referred to were living in Bogdiang. These K'ang-kiu and Yueh Chi both lived between the Jaxartes and the Oxus and were the two constituents of the new Sogdian kingdom that arose shortly afterwards.

Chinese authors place the foundation of the new Sogdian kingdom during the next six years (ie. c. 80 AD ). The establishment of this new kingdom had as its fundamental event the creation of a new Sogdian-Yueh Chi royal family who continued to rule the kingdom of Sogdiant until the Hephthalite conquest about AD 480.

The Hou Han Shou records for the year AD 84 that'at this period there had recently taken place a marriage between the sovereign families of the Yueh Chi and the K'ang-kiu and thus these countril $7_{8}^{8}$ found themselves allied.' The continued prosperity of this new ruling family is recorded for the fifth century in the Wei-chof 179 which says that 'since the time of the Han an uninterrupted succession of the Princes of this family have succeeded one another in this region (ie. K'ang; Samarkand); the family name of the Princes is Wen, they are of the Yueh Chi who formerly inhabited the town of Tchao-ou, to the north of K'ilien; in memory of their ancient homeland they name themselves as belonging to the race of the Tchao-ou.'

At this period the kingdom of Sogdiana comprised nine principalities ruled by the 'principality' of Samarkand and all individually governed by Princes of the Tchao-ou race. The organisation of this Sogdian kingdom is again recorded in the history of the T'ang dynasty which describes the principal state, K'ang (Sa-mo-kien; Samarkand) and adds a $1 \frac{1}{18} 8 \mathrm{~A}$ of 'the principalities that detached themselves from this (ie. Samarkand) like branches .... one names them commonly the nine families; all are of the Tchao-ou family.'

This Sogdian kingdom met its end at the hands of the Hephthalites about AD 480. Enoki suggested that date from his observation that the kingdom of Sogdiana continued to send embassies to the Chinese court until AD 479. Their capital city, Samarkand, did not cease sending embassies until 509; a difference which suggests that Hephthalite expansion northwards from Bactria, where they were established in the middle of the previous century, was a progressive erosion of Sogdian frontiers rather than a sudden conquest.

## bactria unitl the establishmant or tie kushan yueh chi

Around 128 BC , in the aftermath of the nomad migration, northern Afghanistan was divided into two dietinct regions. Eastern Bactria was a Greek kingdow while Weatern Bactria and Margiana compriaed a number of rather impotent city atates that remained after the Sacaraucae Sakas had migrated through the region to settle in Aria and beyond.

During the noxt century and a third all these regions were progressively incorporated within the kingdoms of Parthia and of the Yueh Chi. Parthia incorporated Aria and Margiana about 80 BC and later the Yueh Chi conquered Eastern Bactria from the Greek king Hermaeus following which Heraioe established Kushan hegemony over all Bactria,Choresma \& Sogdiana

The chronology of the Yueh Chf expansion across the Orus into Bactria can be assessed both from the numismatic and frow the literary evidence. Nartin conceived a bingle Yueh Chi migration that took place c. 100 BC and based this concluaion on the Chinese reports. However, Chinese historians tend to report short summaries that become further eumarised in subsequent reports and since Chinese verbs have no teritif it is often unclear whether recorded events occurred aimultaneously or were separated in time. The Chinese reports do, however, ahow that the Yueh Chi expanded, rather than migrated, into Bactria and that this expansion occurred in two phases. At the time when the Yueh Chi vere described in the Ch'ien Han Shou they possessed three Sogdian principalities and a Sogdian capital; by this time they had also occupied part of Eastern Bactria and eatablished one of their principalities at Hi-Thum in territory occupied from the Greeks (ie. from Hermaeus). By the time that the report in the Hou Han Shou had been recorded the Yueh Chi prince of Kouel-chouang in Sogdians had established his hegemony over the other principalities in Sogdiana and Bactria and had founded the Kushan kingdom which was now based on a Bactrian capital situated at Balkh. The Chinese do not provide any chronology for the evente, other than noting the century or so that elapsed before the establishment of Kushan hegemony, and from them one can only infer that the report in the Ch'ien han Shou refers to the period before AD 24 when its recorded history ended.

The question of Kao-fu is interesting because the reporte of the Ch'ien Man Shou and the Hou Han Shou differ in respect of this district and each report is conaistent vith the numismatic evidence. The earlier report describes Kao-fu as a Yueh Chi principality but the Hou Han Shou criticises this on the ground that the Kushans conquered Kao-fu from the Parthians (ie. Indo-Parthians). The numismatic evidence shows that the Kushans conquered both the Kabul valley (Kao-fu) and Northern Pakistan (Ki-pin) on two separate occasions. Kujula Kadphises acquired the Kabul valley from Hermaeus and Northern Pakistan from Azes II but subsequently lost these regions to the Indo-Parthian Gondophares. The definitive Kushan occupation was left to Soter Megab who reconquered the Kabul valley and Northern Pakistan from Abdagases, the nephew and successor of Gondophares. In this respect it is quite reasonable for the Ch'ien Han Shou to say that Kao-fu was a Yueh Chi province at the time of Kujula Kadphises and for the Hou Han Shou to retort that the (definitive) Kushan occupation was a labour of Soter Megas who conquered this region from the Indo-Parthians. This chronology implies that the report on the Yueh Chi written in the Ch'ien Han Shou refers to the period up to and including a decade or two before AD 24 and that it is not restricted to the early first centory $B C$.

Numismatic evidence concerning the Yueh Chi occupation of Bactria concurs with the Chinese history provided one bears in mind that the tense of Chinese verbs is frequently not expressed. In numismatic terms the Greek kingdom of Eastern Bactria persisted until the reign of Hermaeus. Monolingual attic silver coins were issued by Eucratides II, Lysias Antialcidas, Theophilus, Philoxenus, Amyntas, Archebios and Hermaeus and such coins of all these kings were found, in the absence of any Yueh Chi coins, in the quaduz hoard from

North-east Bactria. All these kings also ruled in the Kabul valley and isaued bi-lingual silver coins on the Indo-Greek veight standard for that province? Greak control of Eastern Bactria ended when the Yueh Chi establiahed one of their principalities in the South-east Bactrian diatrict of Bamiy $y^{\frac{1}{a n}}$; at this time they also appear to have established another principality at Tou-mi.

In numiamatic terme the Yueh Chi succeeded the Greeks in Eastern Bactria when the Attic silver issues of Hermaeus the Greek were replaced by the Attic silver issues from two separate mints struck by Sapadbizes and Pseigacharis, two Yueh Chi princes. Shortly after this Heraios, the Yueh Chi ruler of Kouei-chouang in Sogdiana, extended Kushan (Kouei-chouang) hegemony over the Yueh Chi Princes of Eastern Bactria and continued to strike Attic silver coins in the two regional series Initiated by Sapadbizes and Paeigacharis.

A second numismatic aspect of Yueh Chi expansion into Bactria concerns the change in metrology of the ailver coinage at this period. Yueh Chi occupation of South-east Afghanistan interrupted the flow of silver from mines concentrated around the Panshir valley and was followed by debasement of the silver coinage in Bactria, the Kabul valley and Northern Pakistan. In Northern Pakistan and the Kabul valley this debasement occurred a short while before these regions were occupied by the Kushan Kujula Kadphises and was a major feature in the coinage of AzeB ${ }^{189}$ II and Hermaet 190 from both of whom Kujula acquired these territories. Although the ultimate cause of this debasement was Hermaeus' loss of the Bamiyan region to Pseigachar $\frac{1}{1} 1 \mathrm{l}$ both Pseigacharis and his successor Heraios were able to maintain a restricted silver currency, though they were the last rulers to strike silver coins north of the Hindu Kush.

These two sources of evidence, the coin types and the debasement of the ailver issuea, place both the Yueh Chi expansion into Bactria and the succeeding establishment of Kushan Hegemony during the period when Hermaeus and Azes II were reigning further south. This conclusion is consistent with the Chinese evidence and may be examined in more detail.

Kujula Kadphises was a Kushan of Tchao-ou race, as he says on his coing?. He was a Kushan ruler of the Kabul valley and of Northern Pakistan and isaued all his coins in the sequences of these regiong. In the Kabul valley he continued the sequence of Hermaeus and issued copper tetradrachms, didrachms and drachms; each denomination with individual coin types; on the Indo-Greek weight atandard and in succession to the copper tetradrachms and drachms that Hermaeus iseued towards the end of his reign. In Northern Pakistan Kujula issued a number of other series in succession to the coinage of Azes II and his satraps. These series have been discussed elsewhere and need only be summarised here:-

| Locality | Azes II | Satrape of Azeb II | Kujula | Indo-Parthians |
| :---: | :---: | :---: | :---: | :---: |
| Tardla | Tet. Zeus Nikephorus <br> AE cross legged king/Hermes | Rajuvala <br> Dr. Zeus Nikephorus | AE cross legged king/Zeus | a) Gondophares <br> Abdagages <br> Tet. Zeus sceptred <br> b) Sasan Abdagasea <br> Tet. Zeus Nikephorue |
| Mint A 2Swat valley | - | Zeionises AE bull/lion | AE bull/camel | - |
| Mint B N.Pakistan | Tet. City AE horseman/lion | Kharahostes <br> AE horseman/lion | AE Roman type | - |
| Gandhara | Tet. Pallab AE bull/lion | Indravarma <br> Aapavarma <br> Tet. Pallas | AE soldier type | Aspavarma <br> Saban <br> Abdagabes <br> Tet. Zeus eceptred |
| Mathura | - | Rajuvala <br> Dr. Pallas | Dr. Pallas | Gondophares <br> Dr. Pallas |

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In northern Pakistan the coinage of Kujula Kadphises is sandwiched between that of Azes II and that of Gondophares. Kujula struck copper coine in most and probably all the four mints of Northern Pakistan used by Azes II and his satraps. On the other hand when the Indo-Parthians conquered this region from Kujula they only struck coins in its major mints and based their currency on debased tetradrachms instead of on copper denominations. The Indo-Parthian coins continue the typological and control mark sequences of Azes II vith minor modifications and in ao doing suggest that the incuraion of Kujula vas an ephemeral occupation.

Kujula's coinage postdates by a short period the debasement of the silver currency that occurred under Hermaeus and Azég II. His conquest over Azes II can be dated to vithin about a decade of AD 20 and his occupation of the Kabul valley from Hermaeus can be placed close to AD 10. These dates are suggested by a number of sources of evidence. In particular one may note that Kujula's Roman type coinage cannot have commenced earlfer than about AD 20 while the reference to his occupation of the Kabul valley in the Ch'ien Han Shou cannot be placed much later than AD 10. Similarly the occupation of Northern Pakistan by Gondophares at the end of Kujula's reign cannot be placed later than about $A D \quad 35$ when one considers either the chronology of Gondophares' succession in Aria viz-a-viz the dating of the Parthian and Arian Saka coinage or the links between his coinage and that of Ares II and Rajuvala. ${ }^{198}$

Despite Kujula's impressive record south of the Hindu Kush all this region was, at this period, only a peripheral and temporary conquest of the Kushans. Kujula was not the Kushan ruler Ch'iu-chiu-ch' $\frac{19}{4}{ }^{\prime}$, who united the various Yueh Chi principalities and there is no evidence that he ever ruled any territory north of the Hindu Kush. He did not even give himself an official position until he was ruling part of Northern Pakiatañ

Meanwhile the Bactrian Kushan coinage was issued successively by Heraios and Soter Megas. Heraios commenced coining in Bactria before Kujula coined in the Kabul valíl and his auccessor Soter Megas continued atriking coins long after the period of Kujula. The early Yueh Chi coins of Bactria all postdate the early reign of Hermaeus and were atruck in silver by Sapadbizes and Pseigacharis. Each ruler struck monolingual Attic silver hemidrachms in one of the two East Bactrian Yueh Chi principalities where their isaues vere succeeded by those struck by Heraios in each principality. Pseigacharis' coins can be attributed to the southern principality, Hi-thum in the Bamiyan region, for two reasons. In the first place, Paeigacharis used a standing Hercules reverse type that was sebsequently copied by Kujula for much of his coinage in the neighbouring Kabul valley while, in the second place, Pseigacharis acquired the use of square Greek letter forms from the Kabul valley coinage of Hermaeus. Square Greak letter forigs were not used north of the Hindu Kush until the time of Pseigacharis and only reach the Kabul valley for the late silver issues of Hermaeus. Heraios struck tetradrachms and obols in succession to Pseigacharis and retained the aquare letter forms used in the Bamiyan mint. Meanwhile Sapadbizes and another Yueh Chi ruler of uncertain name issued hemidrachms with round Greek letter forms from the other East Bactrian Yueh Chi principality where they too vere followed by Heraios who retained round letter forms for his obols struck at this mint, probably situated at or near qunduz. Sapadbizes' coins retain not only round letter forms used by the Greek kings of Eastern Bactria but also retain their obverse type. A profile helmeted bust was the commonest obverse type used by these Greek kings and, among the coins of the quaduz hoard, was last used by Amyntas and Archebios. This helmeted bust type was used by Sapadbizes and the other Yueh Chi ruler whose coins are very similar to those of Sapadbizes.

The reigns of Kujula, Azee II and Hermaeus provide the chronology for the Bactrian
issues of Sapadizes, Pseigacharis and Heraios. On the basis that Kujula succeeded Ages II c. AD 20 it has been inferred that he succeeded Hermaeus c. AD 10. One can further infer that the debasement of the Aces-Hermaeus silver coinage which occurred during the middle portion of their reigns commenced around 10 BC . Since the creation of the Hi-thum principality by the Yueh Chi, at the expense of Hermaeus, was the cause of this debasement one can place the occupation of Eastern Bactria by the Yueh Chi between the accession of Hermaeus c. 25 BC and the debasement of the Hermaeus-Azes coinage around 10 BC . Taking these factors into account one can suggeat that the Yueh Chi principality of Hi-thum (Bamiyan) was ruled by Peeigacharis and endured from c. 20 to O BC while the Yueh Chi principality of Tu-mi (Qunduz region), ruled by Sapadbizes and another prince, also lasted from c. 20 to 0 BC. Both Yueh Chi principalities lost their independence when Kushan hegemony was established at a date, c.O BC, ahortly before Kujula commenced his Kabul valley coinage in succession to Hermaeus (c. AD 10). The inter-relationships of these rulers may be summarised as follows:-


Heraios was the Kushan ruler, as he informs us on his coins, of the Yueh Chi principality of Kuoei-chouang in Sogdiana. He conquered the two Yueh Chi principalities of Esstern Bactria, issued two series of coins there and was also implicated in the Kushan conquest of the Kabul valley where Kujula issued the bulk of the early Kushan coinage. However, these regions did not comprise the entire kingdom of Heraios because he was also ruler of Western Bactria and Choresmia.

In the aftermath of the nomad migration Western Bactria and adjacent Margiana were composed of the petty city states described by Ch'ang Kien. These Graeco-Saka states appear to have owed some form of allegiance to more powerful neighbouring atates but were not incorporated by them and later acquired somewhat better military organisation than they had at the time of Ch'ang Kien. There is numismatic evidence that the Dahae of Choresmia acquired a transiant increased prosperity at the expense of adjacent Graeco-Saka statef and Ch'ang Kien implies that others situated nearer to the Oxus owed some form of allegiance of the Yueh chil. Increasing military power of these Graeco-Saka states is shown by their repeated conflicts with the Parthians and the inability of Parthia to occupy Margiana until about 80 BC . So far as Western Bactria is concerned the numiamatic evidence shows that the Graeco-Saka states in this region remained independent until the time of Herajos.

The Graeco-Saka coinage compriaes two major series that were probably emitted from the mints of two major states situated at Merv (Margiana) and Balkh (Bactria). Both aeries are imitative and rude. The western series, probably struck at Merv, comprises tetradrachms and obols which imitate those of Eucratides and bear corrupt Greek legends. These rare
coins are all made of ailver and when compared with the other Graeco-Saka series their lack of debasement and rarity auggests that the aeries vas both early and short. Thie is consistent with the Eucratides imitations having been issued from Merv between the period of the Saka migration, c. 130 BC , and 80 BC when this region was incorporated by Parthia. The second Oraeco-Saka series comprises a pair of integrated coin sequences whose types imitate those of Heliocles. These coins are tetradrachms and drachma which commence as a silver sories but whose later issues, comprising the major part of the series, are debased. The sequence is analysad in the catalogue below and one need oniy note here that tetradrachme and drachme with both the Zeus and the horse reverse types all pass through a subatantial number of the same successive stages in the degradation of their fossiliaed coin types. The series ends about the time vhen Heraios conquered this region and established the Kushan capital at Bajkh. As the coins are, in effect, anonymous the end point of the series cannot be defined absolutely though one can aay that these coine ware current when Soter Megas, the Bactrian successor of Heraios, used them as prototypee for his early Balkh coinage.

Soter Megas issued a number of local coin series before introducing a general colnage throughout his empire. To the east his coinage in Northern Pakistan, probably struck at the Taxila mint, continued the Horseman/Zeus types of Abdagases and vas issued as bilingual debased tetradrachms and drachms on the Indo-Greek weight standard of that region. In Eastern Bactria Soter Megas atruck another series of debased tetradrachms but in thia case with Attic types and struck on the reduced Attic weight standard. These coins use the helmeted bust type of Sapadbizes and preceding Greek rulers of that territory and have monolingual legends like those other Attic issues. Their Attic type and round letter forme place Soter Megas' helmeted bust coins in succession to the issues of Sapadbizes and Heraios struck in the mint of the Tou-mi Principality (Qundư) while their denomination places them as successors to Heraios' tetradrachms. Heraios' silver tetradrachas decline in weight from 15.5 to 12 grammes and terminate Bactrian silver coinage; Soter Megas' debased tetradrachms retain this reduced Attic weight and average 12.5 grammen.

A third local coin series issued by Soter Megas comprises debased Hellocles type Attic drachms which continue the Graeco-Saka series that was probably minted at Balkh. Soter Megas' coins all have the Standing Zous reverse type and copy such details as the
 prototypes. The Graeco-Saka drachms tend to weigh around 3 to 3.5 grammes while those of Soter Megas are closer to 4 grammes. These debased Attic drachms of Soter Megas bucceed the Graeco-Saka Balkh series and thus appear to be the regional series struck at his capital, Balkh. Cunninghan, however, reported that these coins of Soter Megas were commonly found in Mathura and although Cunningham's coins may well have come from a aingle hoard his attribution has been followed by Vincent Smith, Whitehead and MacDolakill. These coing belong to the Bactrian seriegand their occurrence on the Mathura frontier region of Soter Megas' kingdom is not unexpected. Soter Megas commenced striking hia local Bactrian coin series when he ruled a kingdom centred on Balkh whose southern frontier was the Hindu Kush. He expanded this kingdom, at the expense of the Indo-Parthians, to a aouth-east frontier in the Mathura region and many of the troopa atationed on this frontier would have coue from Bactria and would have brought with them Bactrian artefacts, including money.

The emphasis that Soter Megas placed on expanding his conquests south of the Hindikush gained prosperity for the Kushans as the Hou Han Shou teatifies, but was associated with loss of Kushan control over Choresmia and Sogdiana, both of which became independent during his reign. It has already been noted that Sogdiana became an independent kingdom about $A D$ 80. Insofar as Soter Megas is conccraed the evidence that Heraios conquered this district
is both numismatic and literary. In numiamatic terme the coinage of Choresmin changes at this period from soldier and horse type Attic drachms and lower denominations struck by the Dahae to tetradrachms whose types derive from those of Heraios. The Choresman silver tetradrachms have a reel and pellet border around the obverse bust and their reverse type is a horseman aurmounted by a corrupt Greek legend and surmounting an intact aramaic legend naming the issuer as the 'Lord King'. Nearly all these tetradrachma have been found in Choresmian excavations and they form the early part of a series whose later isbues bear a similar circumferential aramaic reverse legend that includes the name Choresifla (Harazm). The numismatic evidence suggeste both that Heraios conquered Choreamia and that the Kushans lost control of this region shortly after the end of his reign. The Chinese annals appear to record Heraios' conquest in two passages. The Hou Han Shou records that Ch'iu-chiu-ch'ueh (Heraioy) established Kushan hegemony and included P'u-ta among his many conquests. This name appears to indicate the Danaean kingdom of Choresmia that is termed Gawasa or Kodoy on their coins. At a later date the history of Sogdiana recorded in the annals of the T'ang dynasty includes Ho-si-ma among the districta ruled by Princes of Tchao-ou descent. If Ho-si-ma was the T'ang version of Harazm (Choresma), as Fuye suggested, then this passage can only refer to the conquest of Choresmia by Heraios because no other Yueh Chi ruler with a Sogdian capital could have conquered Choresmia.

When one considers the relationship between Heraios, Soter Megas and Kujula Kadphises it is apparent that, in numismatic terms, Heraios established the Kushan kingdom, centred it on Bactria and was succeeded by Soter Megas. Kujula, on the other hand, never ruled Bactria but was the Kushan deputed to rule Heraios' possessions south of the Hindu Kush. Although Kujula conquered Northern Pakistan on his own account it is probable that he was only placed in control of the Kabul valley after it had first been conquered by Heraios and after Heraios had issued its first Kushan coins.

Conclusions regarding the establishment of the Kushan may be summarised:-

Fstabllahment of the Kushan realm and associated changes in coin metrology and weight atandarde 222

| Date | Sogdiana | Choresmia | Margiana | West Bactria | East Bactria | Kabul valley North Pakistan |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| c. 130 BC | Yueh Chi (AR Porale) | Dahae <br> (AR Attic) | Graeco-Saka <br> (AR Attic) | Graeco-Saka <br> (AR Attic) | Greeks <br> (AR Attic) | Greeks and Azes dynasty (AR Indo Greek) |
| $\begin{aligned} & \text { c. } 80 \mathrm{BC} \\ & \text { c. } 20 \mathrm{BC} \end{aligned}$ | " | 11 | Parthians | Graeco-Saka <br> (Bl. reduced Attic) <br> " | $\begin{aligned} & 11 \\ & 11 \end{aligned}$ | " |
|  | " | " | " |  | Yueh Chd <br> a. Sapadbizea <br> b. Pseigacharis <br> (AR_Attic) | " (B1. Indo-Greek) |
| c. O BC | KUSHAN <br> Heraios (AR Persic) | KOSHAN <br> Heraios | " | KUSHAN <br> Heraios | KUSHAN <br> Heraios <br> (AR reduced Attic) | $\begin{aligned} & \text { KJSHAN } \\ & \text { Heraios (Kujula) } \\ & \text { (Bl., AE Indo-Greek) } \end{aligned}$ |
|  |  |  |  |  |  | Indo-Parthians <br> (B1. Indo-Greek) |
| c. 40 AD | Soter Megas (AR Persic) | Autonomous (AR reduced Attic) | " | Soter Megas (AE Attic) | Soter Megas (AE Attic) |  |
|  |  |  |  |  | (AE Indo-Greek) | KDSHAN <br> Soter Megas <br> (Blo, AE Indo-Greek) |
| c. 80 AD | Autonomous (AR,AE Persic) | " | " | " | " | " |

## COINAGE OF SOCDIANA c. 130 BC to AD 500

These coing of Sogdiana comprise three distinct coneecutive series that were atruck by three different dynasties. During the Yueh Chi period which extended from c. 130 BC until AD 80 Sogdiana was part of the Yueh Chi and eubsequently of the Kushan dominion and until the time of Christ the Yueh Chi capital, Ch'ien-shi, was aituated in Sogdiana which itself comprised the three principalities of Kouei-chouang in the north-west, Chouang-chouang in the eouth-west and Hieou-mi in the east. Then Heraios, Prince of Kouei-chouang, united the Yueh Chi principalities, extended Kushan (Kouei-chouang) dominion further afield and moved his capital south to Balkh. From this time Sogdiana was a northern province of the Kushan kingdom ruled by Heraloe and his eucceabor Soter Megas, a kingdom whose political centre now lay south of Sogdiana. This situation ended c. AD 80 when Sogdiana separated from the Kushan kingdon and became an independent kingdom of Sogdiana.

The coinage of Sogdiana during the Yueh Chi period comprised a uniform aeries of silver tetradrachms struck to the reduced Persic weight standard that was previously used in this region? These coins retain the Bust/seated Hercules types used previously but differ from earlier coins in many respects including their fabric, style, metrology and legends. Coins now have broader and thinner flans with a design that is deeply engraved using thick strokes whereas previous coins tended to show much more detail engraved in ahallower relief and with substantially thinner strokes. The quality of the wetal improves and most coins are now made of good quality silver. Their style is both different and ruder ; the bust acquires an elaborately engraved head of hair that hangs in locks; it is now radiate. In contrast to the realistic proportions of the face on the obverse, the seated Hercules on the reverse is rudely engraved and usually has a matchstick form. Style and the manner of engraving give these coins a characterlatic appearance.

The alteration in the coin legend is significant. It no longer gives the name and titles of a king but is shortened to two words that do not include a personal name. The first word is 'MaLHAT' (Great) and the second vord can be transliterated as either 'SUG' (Sogdiana) or 'YaVUG' (Tchao-ou race) with equal validity. Fuye read the legend 'Mahat Yavig, and proposed that Yavug be equated with the Yueh Chi ethnic title Tchao-ou that was also used on coins of Kujula Kadphises and of the post-Kushan kings of Sogdiana. In the name $Y a V O G / S U G$ the last two characters are clearly an arcuate ' $U$ ' and an angular 'G'. The first character is an ' $S$ ' with its normal form, double arcuate strokes, on some coins but the two strokes are separated on other coins and Fuye's attribution to them of a 'U-Y-V' value is appropriate. Each transliteration, 'MaLHAT SUG' and 'MaLHAT YaVUG,' is appropriate for particular epecimens of this coinage but these are not different legends because the variation is random and one can observe all gradations in character form from 'S' for 'SUG' to 'YaV' for 'YaVUG.' Each reading ia equally logical since the Yueh Chi were of the Tchao-ou race (YaVUG) and they were the rulers of Sogdiana (SUG). One may suggest that this particular coin legend was selected because it could be read in either of two equally appropriate ways.

The coins in this series are distributed among three well defined groups that can be characteriaed by the form of Herculea' atool. The ragge of variation within each group suggests that they were not issued consecutively but rather that the three groups were the products of three mints located in the three Sogdian principalities of Koueichouang, Chouang-chouang and Hieou-ití.

The second period in the history of Sogdiana extended from c.AD 80 to 480 and covered the time when Sogdiana was an independent kingdom ruled by kings of the Tchao-ou
race, a dynasty created by intermarriaga of the ruling Sogdian and Yueh Chi families about $A D 80$.

Coins atruck by successive kinge of Sogdiana still conform to the reduced Persic weight standard but dipfer in many respects from earlier issues. The denominations are now drachms and hemidrachms instead of tetradrachms and coins are nearly alvays debased. Silver coins are restricted to some eariy hemidrachms; other issues are debased drachms that normally weigh around 2 grammes? These debased drachms are nearly alvays frank copper coins but Fuye noted that a number of his apecimens retained ailver plating and the same applies to one of the British Museum coins.

The coins all bear a bust on the obverse that is engraved in realiatic and characteristic style. Details of the bust vary for different issues and it is occasionally shown three-quarter facing. The reverse types are new and show a tendancy to revert to the classical Achaemenid culture of thia region. This tendancy is particularly marked in the King - fighting - lion type that vas earlier a common motif for Achaemenid sculptures and was also used on Achaemenid period coins struck at Sidon in Phoenicia. The other two reverse types show a fire altar or an altar surmounted by a sunface. Both are Iranian in conception. The winged sunface was a common detail on Assyrian and Acheemenid aculptures where if symbolised the Mazdaean religion according to which the Deity vas vorahipped in the form of the sun or of fire. The fire altar had a similar aignificance and was depicted, in the form of either a fire temple or a fire altar on coins of Persis and as a fire altar by their Sassanian successors both when the Sabsanian religion was Mazdaeiam and when it was Manichaeism. So far as Sogdiana is concerned the coin typea suggest that Mazdaeism persisted from the Achemenid period and now became the State religion.

The legends on these coins demonstrate a distinct stage in the evolution of Sogdian aramaic script and the forms of 'A' and ' $K$ ', for instance, are particularly characteristic of this period. The context of the legends also changes. One group of coins was struck by the 'Great ruler of Tchao-ou Race' (MaLHA YaKuB) but the others were issued by the 'King of Samarkand' (MaLKA SaMUAKa; MaIKA SaKAKa). The calligraphy differs on coins of the Tchao-ou king from that on other coins by adopting a more cursive form in which ' $H$ ' and 'A' are conjoined. The title 'Yakug' appears to be intermediate in both form and neaning between 'Yavag' and 'Hub.' Originally the term 'Tchao-ou : Yavug : Yavigasa' was an ethnic title denoting the Yueh Chi lineage of the king. This term Tchaomou continued to be the title of the Sogdian king but appears to have been contracted from 'Yavug' to 'Yakub' on the coins. During the course of time the title acquired a meaning synonymous with king (Malka) and was retained by the Hephthalites whose Sogdian coins were struck by the 'Lord Hub of Bokhara.' The other two legends, 'MaLKA SaMUAKa' and MaLKA SaKAKa' are written with isolated characters of fairly constant form. The legend always reads circumferentially on the reverbe and the characters ' $L$ ' and ' $U$ ' retain their simple form while 'M' and 'S' are little altered from previous periods. The character 'A' shows a range of variation from a form similar to that used on earlier coins. Samarkand was the capital of the Sogdian kingdom according to Chinese authors and is named in both legen $\mathrm{I}_{5}^{2}$ ? The practice of naming a Regal colnage by the capital of the Kingdom is an innovation that was continued during the next period by the Hephthalites who issued their coins in the name of the Lord King of Bokhara.

Prolonged circulation of coins with the fire altar reverse type is attested not only by their relative abundance and range of variati 233 but also by the observation that they were still current when their reverse type was used as a countermark on early Bokhara drachms of the Hephthalite period (type 65a).

The third period of the Sogdian coinage is represented by issues of the Hephthalite kingdom that held away from about 480 until the Arab conquest. Their coins are all flat silver drachms that weigh around 3.1 grammes and were atruck on the Sassandan derivative of the Attic weight standard. The coin types are aimilar for all issues and are derived from those of the Sassanian king Bahram V (420-438). Until the Arab conquest coins were all struck in the name of the 'Lord King of Bokhara.' This legend, which is written in a slightly later form of Sogdian aramaic, was elucidated by Henning and reads 'BOH'AR HOB K'AY. ${ }^{235}$ Henning and Frye justified the transliteration with reference to character forms on contemporary Sogdian documents and with regard to the slightly erroneous transliteration of this legend proposed by the tenth century Arab historian Narshakhi. It only remains to discuss this legend with regard to the character forms used on earlier Sogdian coins. The character forms are shown in Table III where it will be seen that they are consistent with Henning's tranaliteration. The 'B' has a normal form when its poaition is medial but is modified by closure of its upper strokes when in initial position. Similarly the character 'U-V' has its standard arcuate form in medial position but isslightly modified in final position. The ' H ' and ' K ' require no comment but ' R ' is new to the Sogdian coinage, has its Achaemenid form and can only be separated from ' $K$ ' by its context. The ' $A$ ' is also new to Sogdian coins but was earlier used on Choresmian coins and can be assimilated? As this series has recently been discussed by Walker and by Frye only the earliest coins are noted and this for the purpose of integrating the Bokhara drachm series with the preceding Sogdian coinage. The essential links between the Hephthalite and the pre-Hephthalite series have already been discussed; these are, firstly the use of comparable Sogdian script, secondly use of the Sogdian title 'Yavag - Yakub Hub,' thirdly the practice of identifying a regal coinage by naming the capital city (Samarkand; Bokhara) and fourthly use of the Samarkand form of altar as a countermark on ensuing Bokhara drachms.

The Sogdian coinage of c. 130 BC to AD 500 may be catalogued as follova:YUEH CHI PERIOD : c. 130 BC to AD 80
57. The Great Ruler of Sogdiana, of the Tchao-ou Race.

Obv. radiate bust right; elaborate hair style with long locks.
Rev. Hercules std. left on rectangular stool containing 3 dota. Usually depicted in matchatick form. Circumferential aramaic legend commencing at $V$ rith characters base inwarda : MaLHAT YaVUG, alternatively MalHAT SOG
AR reduced Persic tetradrachm BM. 9.25, 7.63 Author 8.81
Fuye 9.70 (IV,9), 9.60 (IV,10), 9.25 (IV,3), 9.20 (IV,12), 9.20 (IV,1). 9.20 (IX,9), 8.88 (IV,2) , 8.50(TV,11), 8.15 (IX, 1), 7.90 (IX,2)
58. sim. but throne a truncated cone containing 3 dots

BM. 9.18, 8.99, 8.89, 8.51 Author 9.46
Fuye 9.30, (IV ,6), 8.90 (IX,10), 8.90 (IV,4), 8.70 (IV .5), 8.10 (IV,7)
59. sim. but hemiepherical throne containing 3 dots

BM. 9.50, 8.99, 8.73 (Fuye III,14B), 7.80 Author 9.32
Fuye 9.00 (IX,11), 8.70 (IV,3), 8.30 (IV,8), 8.20 (IX,7), 8.00 (IX,5), 8.00 (IX,8), $7.80(I X, 4), 7.80(I X, 6)$
B) KINGDOM OF SOGDIANA : c. AD 80 to 480
60. The Great Ruler of Tchao-ou Race.

Obv. beardless bust left with long hair. Aramaic legend on left vith characters base outwards. : MaLHA YaKuB
Rev. man on left with aword at side fighting lion stg. on its hind legs AR reduced Peraic drachm BM. 2.63, 2.40, 2.18, 2.17. Fiyye 9 coine not veighed.
61. King of Samarkand

Obv. bearded laur. bust right
Rev. Mazdaean fire altar with 4 or 5 curvilinear flames above. Circumferential aramaic legend commencing II, characters base outwards : MaLKA SaMOAKA AR reduced Persic hemidrachm BM. $0.77,0.64,0.52,0.51$. Finje two coins not weighed
sim. but rev. fire altar surmounted by sunface instead of flames; no legend AE reduced Persic drachm BM. 1.38, 1.34, 1.23, 0.74
63. Obv. beardless laur. bust right in similar style

Rev. fire altar of new style surmounted by 4 to 6 atraight or curvilinear flames. Circumferential aramaic legend commencing II, characters base outwards: MaLka Sakaka

AE reduced Persic drachm BM. 2.18, 2.12, 2.09, 2.09, 2.08, 2.04, 2.03, 1.99, 1.93, $1.90,1.87,1.83,1.80,1.79,1.78,1.77,1.73,1.70,1.70,1.63,1.58,1.53$, $1.50,1.46,1.40,1.22,1.10,0.92$.
Author $2.07,1.88,1.82,1.81,1.68,1.65,1.62,1.62,1.61,1.56$
Fuye 37 coins not veighed
64. Obv. sim. but bust quarter right and uncertain legend around

Rev. ilm.
AE reduced Peraic drachm ${ }^{24}{ }^{2}$ h $2.10,2.04$ Rhodes 1 coin not weighed
C) HEPHTHALITE KINGDOM OF SOGDIANA : c. AD 480 onvards
65. The Lord King of Bakhara

Obv. Bust right imitated from Bahram V (420-438)
Right in Sogdian aramaic BUH'AR HUB K'AY
Rev. Fire altar and attendants imitated from Bahram $V$
AR Sasbanian weight drachm BM. (BMC. XOXIII) 3.29, 3.17, 3.10, 2.36 Author 2.85
Type 65 comprises broad, thin fabric coins; for later thicker coins see BMC.
65a same type countermarked on obv. margin with altar of typee 63 and 64
AR drachm BM. (BMC. XXVIII,bl) 3.17 Fuye (RN. 1926 p.148) not weighed
IMC ${ }^{243}$ (XOCT, 10) 3.63

COINAGE OF TIE CHORESMIAN KINGDOM : c. 80 bC to AD 800
The general period of Heraios marked a major change in the political organiaation of Choresmia: the old Choreamian kingdom of the Dahae, centred on the Caspian coast of western Choresmia, was replaced by the later Choresmian kingdom centred on the lower Oxus in eastern Choresmia. However, the change was not sudden; on the one hand origins of the later Choreamian kingdom can be traced back to the early first century BC while, on the other hand, decline of the Dahaean kingdom, demonstable in the inferior coinage of Artars's successors, commenced well before the time of Heraios.

Evidence concerning the later Choresmian kingdom is both archaeological and numismatic. Archaeological remains show the towns, the most important of which was Toprak-kala, to have been centred on the lower Oxus between the Kizyl Kum and the Kara Kum deserts and show them to date from the post-Christian era. Numismatic evidence shows the Choresmian coinage to have been inspired both by the Bactrian tetradrachms of Heraios and by the Graeco-Saka Eucratides imitations attributed to Margiana.

It will be recalled that during the Macedonian period the lower Oxus was part of the region inhabited by the Massagetae who were then a poor nomad people without settled habitation. Subsequent rise of an urbanised kingdom in this region appears to have been a sequel to three major events; the nomad migration, the Parthian conquest of Margiana and the Kushan expansion under Heraios. Settlement of the Yueh Chi in Sogdiana c. 130 BC induced migration northwards of the Sogdians who re-established their kingdom and eventually formed a marriage alliance with the Yueh Chi c.AD 80. The Parthian conquest of Margiana c.80 BC terminated the Graeco -Saka kingdom whose coinage had been based on that of Eucratides and caused a new ingress of migrants to the lower Oxus region. These immigrants inaugurated the Choresmian coinage of the Oxus regionas an offshoot from their own coin series. A specimen from the Hermitage Museum published by Tols 245 is, as regards types and metrology, a Graeco-Saka tetradrachm of the Eucratides imitation series linked with Margiana and bears a corrupt legend virtually the same as that on Margiana coins. However, the Choresmian symbol on Tolstov's coin clearly places it at the beginning of the Choresmian coin series.

Although Choresmian coinage can be traced back to the firat century BC the bulk of the archaeological and numismatic remains date from the post-Christian era. The postKushan Choresmian coinage is divisible into two distinct consecutive periode comparable with those of the contemporary coinage struck in the adjacent Sogdian kingdom. In both regions the early coinage was struck on a reduction of the pre-existing local weight standard and bore an aramaic legend whose character forms were intermediate between those of previous and of subsequent series. Around the end of the fifth century the coinage of both regions changed to isaues of Sassanian weight and fabric that persisted until the last issues were struck under the suzerainty of the Abbasid caliphs; these final isaues bear arabic legends that either replace or add to those in the local aramaic script. The chronology of the Sogdian aeries is more clearly established that that of the Choresmian series since it can be shown that in Sogdiana the early and late periods commenced close to $A D 80$ and $A D 480$.

The beginning and end of the post-Kushan Choresmian series can be dated with reasonable accuracy. Its commencement in the middle first century $A D$ is implied both by use of Heraios tetradrachms as prototype for the coin type and denomination and apparently also for the coin weight and fabric and also because it appears unreasonable to postulate a longer time lapse between the Choresmian Eucratides' imitation of the first century BC and the subsequent post-Heraios Choresminan coinage. In all these respects the slightly later Kushan coins of Soter Megas were not prototypes for the Choresmian series 250 . The end
of the series c.AD 800 can be inferred if one accepte Tolerff's oorrelation that late silver isauea with the Arabic name Al-Fadl were struck by Al-Fadl ibn Yahya al-Barmuki the Abbasid governor from 787 to 795 . However, the date when the early series gave way to the late series is auch less certain though one can auggest that this occurred about AD sof?

The early period (c.AD 50-500) coinage of the post-Kuehan Choresman kingdom comprises silver tetradrachms and amall copper coins whose types are a profile bust and a horseman, together with Kushan coins of Kanishka, Huvishka and Vasu Deva countermarked on the obverse and the reverse with the Choresmian aymol. On coins with local types the buat wears an elaborate headdress that varies on different issues and appears, in some cases, to be derived from forms of headdress used by Sassanian and Kushano-sassanian kinge. The obverse type, which is anepigraphic, evolves insofar as the reel and pellet border used by Heraios and by early Choresmian rulers becomes a pellet border on later vetrairachmand succeeding Sassanian Pabric drachme. On the reverse the horseman is aurmounted by a corrupt Greek legend, bears the Choresmian symbol on its left and, on all but the first issue, has an aramaic legend beneath. This legend is the same on all coins and is written in early Choresmian aramaic whose character forms are nearly the same as those on late Dainaean coins. Tolstov read the name Afrigh but there is little doubt that the correct transliteration ia MaMa Malka. The term MaAKa was previously used to qualify Malka in a Dahaean coin legend and appears to have the same aignificance as MaRA in the legend Mara MaLKa HARaZM used on later Choresmian coins. Both terms appear to mean Lord and provide the transliteration 'The Lord King' for the early Choresmian coin legend.

Coins of the later period (c.AD 500 to 800 ) comprise silver and copper issues with similar Bust/Horseman types together with copper coins whose reverse type is a trident-like symbol. The aramaic reverse legend is now circumferential and reads from above the Choresmian symbol ( 10 o'clock) to below this symbol ( $8 o^{\prime}$ clock). The same legend appears on all silver coins with little variation and the script assumes a cursive form in which characters are conjoined to a variable extent. This legend appears to read 'Mara Malka HaRaZM' on coins published by Markoff with the alternative forms 'HaRaM' and 'HARa' and appears the same on the British Museum coins and on those illustrated by Tolatof. He read the legend 'MR'A MLK' KhWRZM' but FTYe suggested that Malka was the only certain word. Tolstov's transliteration MaR'A also appears almost correct as does the transliteration $R$ for the character in the middle of Harazm. In effect Tolstov's transliteration can only be criticised on the ground that the last part of the final word is variable and that the first part of this word, also variable, begins $H$ and not ${ }^{260}$. In addition to the constant legend naming the Lord King of Choresmia most silver coins also bear an additional name written in aramaic or Arabic and placed either before the bust or behind the horseman. Tolstov's attribution of the Al-Fadl coins to the Abbasid governor of this name has already keen noted. His transliteration of the aramaic names appears to rest sub iudice.

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The major Choreamian coin types may be surveyed as follows:-
A) PRE-KDSEAN PERICD : c. 80 to 0 BC.
66. Anonymous

Obs. Imitation of the helmeted bust type of Eucratides; reel and pellet border. Rev. Imitation of the Dioscuri type of Eucratides; Choresmian symbol on left. $\begin{array}{lll}\text { PAEIACNC MERAAY } & \text { EVKIATIAT } & \text { ? }\end{array}$
AR Attic tetradrachm Tolstoy 2625.64
B) POST-KUSHAN KINGDCM : EARLY PERIOD : cAD 50 to 500

66a. Anonymous
ObJ. bust right wearing cap-like headdress with posterior flap; reel and pellet border
Rev. Horseman right; Choresmian symbol on left $\mathcal{S}$ Corrupt Greek legend. AR reduced Attic tetradrachm Tolstoy 263 coins
66b. The Lord King
Obv. bust right wearing rectangular headdress with a flap depending over back of neck; reel and pellet border
Rev. Horseman right; Choresmian symbol on left


Above: corrupt Greek legend Below: MarKa MarKA
AR reduced Attic tetradrachw Tolstoy ${ }^{264}$, 5
67. sim. but low headdress with lion head at front; reel and pellet border

AR reduced Attic tetradrachm BM. 8.63 Tolstoy I, 1 and 7 I, 4
68. sim. but headdress with dotted decoration bearing at front crescent containing three dote; border of pellets only
69. sim. but cap-like headdress with large ear flap; pellet border

AR reduced Attic tetradrachm Tolstov I, 6
70. Obv. bust right wearing headdress of uncertain form

Rev. horseman right
AE small Tolstov $I, 7$ to 10
C) POST-KUSHAN KINGDOM : LATE PERIOD : cAD 500 to 800
71. The Lord King of Ghoresmila

Obv. bust right wearing ornate rectangular headdress
Rev. Horseman right; Choresmian symbol on left as before Around MaRA MarKa haraZM (var. Han for han; Ra or RaM for RaZM)
varieties: ruler named in aramaic or arabic before bust or behind horseman
a) no added name
b) 72 Shapur; 27 Sbawash and 27 Abduliah
c) Al-Fadl (7Abbasid governor of 787-795)

AR Sassanian weight drachma Tolstoy II (all)
Mark of? 4.77, 4.35
eg. BM. 4.73
eg. BM. 2.18
eg. BM. 2.26
BM. 4.73, 2.26, 2.18
Rap日02 ${ }^{268}$ 4.77, 4.47, 4.35
72. Obv. bust right with or without headdress

Rev. horseman right with or without legend
AE variable size Tolstoy III, 1-8
73. Obv. sim.

Rev. symbol 4 with legend around
AE variable size Tolstoy III, 9-11 and 2 12-13

COINAGE GF THE GRABCO-SAKA STATES : c. 130 to O BC
The states that arose in the wake of the Saka migration across northern Afghanietan issued the two coin series discussed in this section. These Graeco-Saka atates arose in Western Bactria and Margiana about 130 BC and, though independent, ware aubject to influence from their neighbours, the Greek kingdom of Eastern Bactria, the Yueh Chi of Sogdiana, the Dahae of Choresmia and the Parthians.

The early Graeco-Saka coina are silver tetradrachms and obols struck on a full or slightly reduced Attic weight standard. They are all effectively anonymous since their legends are merely corrupt versions of those used on their Bactrian prototypes. The Eucratides imitations all belong to this early period and appear to have been issuef in Margiana prior to the Parthian conquest of this district c. 80 BC . On the other hand the majority of Ileliocles imitations belong to the later period when debased tetradrachms and drachms were struck on a substantially reduced Attic weight standard. They appear to have been issued by a single Graeco-Saka state during the period c. 130 to 0 BC .

The Eucratides imitations form a coherent group insofar as they all copy his helmeted bust portrait and the obols all imitate the same reverse control mark, but beyond this the obols bear varied forms of corrupt legend and do not conform to a sequence of issues. Corrupt coin legends on the. obols differ for each die but have been transcribed because Cunninghan attempted to read sense into one of them. His coins, two struck and one probably cast, are all from the same pair of dies and only give one of many nonsense legends written in malformed letters.

The Helioclea imitations, on the other hand, form a much longer series whose isaues do conform to a sequence through which the fossilised coin types slowly evolve. The series was issued as two parallel sequences with different reverse types and although the majority of coins are debased tetradrachms and drachms weighing 12 to 15 and 3 to 3.5 grammes the series commenced with tetradrachms struck in silver and to the full Attic weight. The sequence with the standing Zeus reverse type was continuous from the prototypes of Heliocles until a couple of issues before the end of the series but that with the horse reverse only commenced about the time when debasement occurred and was the only sequence represented in the last issues. The succession of issues in both the Zeus and the Horse sequences is most easily defined by considering the progressively more degraded representation of the King's hair. On silver issues the hair is shown as realistic curls arranged more or less randomly and the same treatment, in simplified form, is given on early debased coins. Thereafter the hair is portrayed in a progressively more stereotyped and then simplified manner so that on the latest coins it resembles a cap. Along with these changes the king's features become coarser and grosser and the bust develops a hook at its anterior end that is retained on succeeding coins of Soter Megant. Throughout the debased period the corrupt coin legend never changes and the same fossilised reverse control mark is copied.

The early silver issues in this imitative series are much rarer than their debased successors. Wilsbn recorded silver tetradrachme of Heliocles type with a corrupt legend and another specimen, from the author's collection, is catalogued below but these silver coins with corrupt legends appear to have been preceded by a group of imitations, mainly from the Qunduz hoard, which have an intact Greek legend. All these silver tetradrachms have a moderately degraded style and are of full or slightly reduced Attic weight. Initially they retain one of Heliocles standard control marks but subsequently introduce new corrupted control marks and then have no control mark.

The attribution of the Heliocles imitations to the Balkh mint rests on the intrinsic evidence that this Graeco-Saka series was emitted as a pair of sequences struck at a
single mint and on the extrinsic evidence that links the beginning of the series with the adjacent Greek kingdom of Eastern Bactria and its end with the Bactrian coinage of Soter Megas. In the historical discussion it was concluded that the contemporary Greek kingdom of Eastern Bactria had a vestern frontier in the (uunduz-Bamiyan region to the west of Balkh so that this Graeco-Saka series was struck in the western part of Bactria between Margiana (Parthian) and Qunduz (Greek). Balkh was the major town of this region, a town that retainad its importance and was selected as the Kushan capital by Heraios.*

[^0]The Graeco-Saka coinage may be catalogued as followe:-
A) EUCRATIDES IMITATIONS : MARGIANA : e. 130 to 80 BC .
74. Obv. rude helmeted bust right; reel and prilet border

Rev. Diobcuri on horseback right; InEIAENE nernoy EyKiatat
 Glendining 15.03 Pri 2759 not weighed
75. Oov. sim. but dotted border

Rev. Plumes of Dioscuri; control mark $\triangle$
AR thin Pabric obol
Corrupt legend
a) $I \cap E \cap$
[II/ HTAV BM. 0.57
b) resembles a

BM. 0.55
c) $3 \Delta I \Delta E \cap$

EYTOTOTLE
BM. 0.56
d) $B \Delta K \wedge \square \Sigma$

KYET $\triangle T I D Y$
BM. 0.42
e) $c \Delta \mathbb{I} \cap$
f) око

EVIIATA
BM. 0.57
0\}OYへ・
BM. $0.55,0.47$ and cast 0.45 ; all from same die palt
g) IZA

VoT OIV
BM. 0.54
76. Obv. sim. but bust left

Rev, sim. ヨINC VIDU
AR thin fabric obol BM? 0.40
77. Obv. sim. but bust right

Rev. sim. but atyle ruder and legends illegible AR thick fabric obol BM. 0.51, $0.51,0.49$

B -la) HBTIOCLES IMITATIONS : WESTERN BACIRIA: Zeus sequence bilver c. 130 to 80 BC
78. Obv. Laur. bust right; reel and pellet border. Style moderately degraded

Rev. Zeus stg. facing holding thunderbolt on left, aceptre on right Control mark below thunderbolt KP
Right BAEIAENE Left HAIOKAEOY E Below $\triangle$ IKAIOY
AR Attic tetradrachm Qunafie 16.63 (472) PMC. 16.72 (134)
79. sim. but control mark $M$

AR Attic tetradrachm Qunduz $15.81,15.25$ (582-3; on latter $\Delta I \geqslant A I O V)$
80. sim. but control mark $\vdots$ - or absent

AR Attic tetradrachm quaduz 16.81 (592), 16.29 (593; no mark)
81. sim. but control mark $N$ or $\sqrt{\mathrm{N}}$ and reading $\triangle I K \wedge I \cdot V$

AR Attic tetradrachm Author 16.24 (lat mark), 13.77 (reads HAI•I•KAEVC)
82. sim. but control mark not apparent and legend BALIAENE HAI•KAEE $\triangle I F A I \cdot V$

AR Attic tetradrachm Author 16.11 (same obv. die as type 81, 13.77 gm )
B -lb) HELIOCLES IMITATIONS : WESTERN BACTRIA : Zeus sequence debased c. 80 to 0 BC .
83. Obv. sim. with hair style aimple but still realistic

Rev. sim; control mark it ; legend bacIAEnc HAII^EVC $\Delta I I \Delta I V$
Bl. Reduced Attic tetradrachm BM. 14.26, 10.36 Author 12.39
84. sim.

B1. Reduced Attic drachm BM. 3.04
85. sim. but face gross; hair in lower row of 10 uprights plus upper double row of three horizontal curls
B1. tetradrachm BM. 15.09, 13.95, 12.30
86. sim. but aimpler hair ( 5 lopped uprights; 3 horizontal pairs)

B1. tetradrachms BM. 14.16, 13.69 Author 12.96
87. aim.

B1. drachm BM. 3.32, 2.23
88. sim. but hair simple ( 5 looped uprighte; 3 single horizontals)

B1. tetradrachms BM. 13.57 Author 21.79

B - 2) HELIOCLES IMITATIONS : WESTERN BACTRIA : Horse sequence debased $c .80$ to 0 BC .
89. Obv. as type 85 (hair 10 uprights; 3 horizontal pairs)

Rev. Horse stg. left with foreleg raised; legend as type 83
Bl. reduced Attic tetradrachm Author 13.35
89a sim.
B1. reduced Attic drachm BM. 3.06, 3.03
90. aim. but obv. as type 86 ( 5 looped uprights; 3 horizontal pairs)

Bl. tetradrachm BM. 15.56, $14.74,14.72,12.08$ Author 13.19, 10.89
91. sim. but obv. as type 88 ( 5 looped uprights; 3 single horizontals)

Bl. tetradrachms BM. $14.62,12.59,13.57$ (overstruck on type 87)
9la. Bim.
B1. drachm Author 3.80
92. sim. but hair comprises 5 looped uprights only

B1. drachm BM. 3.69, 3.41 Author 3.17
93. sim. but hair comprises 4 looped uprights only

Bl. drachm BM. 6.21, 3.73, 3.35 Author 3.20, 3.18, 2.76, 2.67
93a. variant type 93 with square reverse die
Bl. drachm Auther 2.10

Evolution of the hair style on Heliocles imitations

Type: Zeus


Horse
85
86-7
88
89
90
91-91a
92
93


YUEH CHI AND EARLY KUSHAN COINAGE IN BACTRIA : c. 20 BC to AD 80/90
This period commenced when the Yueh Chi, already eatablished in Sogiliana, conquered the Greek kingdom of Eastern Bactria from Hermaeus c. 20 BC and established their principalities of Tu-mil (Qunduz region) and Hi-Thum (Bamiyan region) in its territory. Their advent created a shortage of ailver and induced debasement that affected the Kabul valley about the middle of Hermaeus' reign and Northern Pakistan soon after the comencement of Azes II's reign. The Yueh Chi principalities in Bactria and Sogdiana were united by Heraion, Prince of Kouei-chouang in Sogdiana, who went on to conquer Bactria about OBC. He then conquered the Kabul valley from Hermaeus about AD 10 and placed his kinaman Kujula in control of that region; the latter defeated Azes II about ten years later. Arownd AD 45/50 Heraios was succeeded as King of the Kushans by his son Soter Megas.

The Bactrian coinage of this period can be divided into the isaues of three dints; Tu-mi (Qundur), Hi-thum (Bamiyan) and Balkh. The Qunduz series was struck by Sapadbiees, a ruler of uncertain name, Heraios and Soter Megas, the Bamijan seriea by Pselgacharis and Heraios and the Balkh series by Soter Megas in succesaion to the Graeco-Saka series of Hellocles initations. As these series and their chronology have already bean diacussed in some detail only certain more strictly numismatic aspects will be discussed here.

The first aspect concerns the legends on Bactrian coins of Heraios. His coins vere issued in two distinct series; obols with un-corrupt legende in round letter forizh that follow Sapadbizes' hemidraches and precede Soter Megas' tetradrachme and both obols and tetradrachms with slightly corrupt legends in square letter for ${ }^{280}$ that follow Paeigacharis, hemidrachms and apparently terminate the coinage of the Bamiyan mint. Herajos' legends in square letters are corrupt to the extent that letters are frequently omitted or reversed. That on the tetradrachms reads 'Tyrannoyntos Hraoy Koananoy' and is amplified by insertion between the horseman's lega of the word 'Sakis' in a thin script of different calligraphy. Insofar as all tetradrachms both show this addition and jet vere all struck by different dies it is apparent that the term Saka was not re-engraved onto each die. The most likely explanation both for the slightly corrupt legends and for the different calligraphy of Saka is that the original dies were engraved by a Greek artiat at a time When Heraios had conquered the two Yueh Chi principalities of Eastern Bactria and that the term Saka was added when he had conquered the Graeco-Saka kingdom of Western Bactria. Later dies were apparently copies, by nonagreak angravers, of the original modified dies and such imitative dies with their minor faults appear to have struck all the known Attic tetradrachms.

The second feature that should be discussed concerns the general coinage of Soter Megas. Commencing his reign as the Kushan king of Bactria, Choresmia and Sogdiana, Soter Megas retained the pre-existing coinage of hie Sogdian provincte and iseued regional Bactrian coinage in auccession to the Sapadbizes-Heraios iseues of the qundur (Tu-mi) mint and in succession to the Graeco-Saka series of the Balkh mint where his capital vas situated. During his reign Soter Megas sav the emergence of Sogdiana and Choresmia as independent kingdoms and himeelf expanded the Kushan kingdow southwards by his conquest of the Kabul valley and Northern Pakistan from the Indo-Parthians. He issued other local coinages in these new provinces, struck at the Taxila and the Kabul valley (Kapisa) mints, and then abolished his various regional coin series and replaced them by a general coinage of uniform weight and type that comprised copper tetradrachms ( 8.3 grammes) and drachms conforming to the fabric and reduced Indo-Greek weight standard then current south of the Hindu Kush but with the Attic types used in Bactria. His general coinage, whose types are an obverse bust and a horseman enclosed by Greek legend on the reverse, is divisble into three major serieg?-
a) Round letter forms and three-pronged symbol

Number of rays around king's head : 15, $13,12,11,10,9,8,7,6$, or 5
b) Square letter forms and three-pronged symbol

Number of rays around king's hasd : 14, 11, 10, 9, 8 or 7
c) Square letter forms and four-pronged eymbol

Number of rays around king's head : 14, 13, 12, 11, 10, 7 or 6

Changes in the number of rays around the king's head are associated with alterations in style which indicate that the number of rays was progressively reduced through a sequence of issues. These changes are most clearly seen in sequence 'a' where coins with 11 to 15 rays show a small neat bust with the hair depicted in detail while coins with 7 to 10 rays show a larger bust with a fat face and depict the hair in less detail. Coins with 5 or 6 raye bear a tall buat rith a long thin neck and again depict less detail in the haif 28 These three sequences vare prosumably issued from ming in the three main regions of his later kingdom; Bactria with a mint at his capital Balkh, the Kabul valley vith a mint at its chief tow Kaplaa and Northarn Pakiatan with a mint probably aituated at Tagila. One is probably justified in inferring that the typologically intermediate sequence 79 was struck in the geographically intermediate mint of Kapisa. Sequence 'c' is linked vith Balkh both by ita square letter forms that place it in auccesaion to Soter Megas' local post-Graeco-Saka coins and by the leaser variety and greater acarcity of these coins. Sequence ' $a$ ' on the other hand is linked with Taxila both by its round letter forms and by the larger number of varieties and abundance of its coins. It may be
 terms of both the numbers of iasues and of their abundance is many times greater than that of all the Bactrian minte combined.

The Yueh Chi and arly Kuahan coins struck in Bactria may be catalogued as follows：－

A－1）TOEH CHI PRINCIPALITY OF RI－THUM（BANITAN）：c． 20 to 0 bC．
94．Pseigacharis
Obv．bearded buat right；reel and pellet border
Rev．Hercules stg．facing holding club on left and lion akin on right
Right 中［EITA．Left MAPIC Square letter forms
AR Attic hemidrachms BM．2．55，2．41，2．38，2．36，1．74，1．53 PHC．（XVI，129） 2.59

A－2）TUEA CHII PRINCIPALITTY OF TJJMI（QUNDOZ）：$c .20$ to 0 BC．
95．Sapadbizes
Obv．helmeted bust right；helmet decorated with laurel
Left CAMAABIZHC Round letter forms
Rev．Lion stg．right；above $\underset{A}{ }$ left and right NANAIA
AR Attic hemidrachme BM．2．28，2．02，1．88，1．88，1．86，1．76，1．74，1．73，1．71，1．69， 1．57， $1.44,1.30$ Author $1.60,1.58$
96．Agesiles（probable reading）
aim．but name on obv．A「ECIA $H$ 人
AT Attic hemidrachm BM． 1.62 Author 1.72

96a Jncertain name
sim．but name on obv．before face：reading uncertain
$A R$ Attic obol AHB 0.50 （cfr．note on p．52）

B－1）KUSHAN KINGDOM OF HRRAIOS ：c．AD 0 to 45／50 ：Square letter mint（Baniyan）
97．Horaios，Tyrannoyntos of the Kushans and the Sakas
Obv．bearded laur．bust right with coarse features；reel and pellet border
Rev．horseman right surmounted by flying Nike crowning him with wreath
Legend：IX to III o＇clatk TVPANNDINTDC HPADV
beneath horseman KロMANQV
between horseman＇s lege（thin acript）［AKA O
AR Attic and reduced Attic tetradrac 293 PMC．（XVI，115） 12.70
BM． $15.98,15.59,15.13,13.24,12.78,12.21$（pierced）， 11.84
9B．Obv．sim．but dotted border
Rev．Soldier atg．right holding wreath．Right $\quad$ PPADV Left $K \square M A N D V$
AR obol BM． $0.67,0.64,0.63,0.60,0.57,0.56,0.54,0.49,0.43,0.43,0.40$ PMC．（116）0．7 Author 0．62，0．41， 0.26

B－2）KJSBAN KINGDOM OF horaios ：c．AD 0 to $45 / 50$ ：Round letter aint（quadus）
99．Heraios the Kushan
Obv．bearded laur．bust right with thinner face and finer style；dotted border
Rev．soldier atg．right holding wreath．Right HPALOY Left KOPP ANOY
AR obol BM． $0.71,0.49$ Author 0.65 PMC．（XVI，117） 0.71

C -1) KJSHAN KINGDOM OF SOTER MEGAS : c.AD 45/50 to 80/90 : Round letter mint (Qundue)
100. King of Kings, the Great Saviour
of\%t helmeted bust left holding apear in left hand; to right \%
to left Karoathi 'Vi'; reel and pellet border
Rev. horseman right bolding whip; to right 'f $^{\prime}$
around bacinev bacinevun cuthp merac
AR reduced Attic tetradrach. $295.12 .61,12.57,12.51,11.87,11.84,11.09$ Author 11.53

100a sim. but no obv. aymbole
AE reduced Attic tetradrachm PMC. (XVI, 94) 12.38

C -2) KOSHAN KINGDOM OF SOTER MEGAS : c.AD 45/50 to 80/90 : Graeco-Saka mint (Balkh)
101. King of Kings, the Great Saviour

Obv. laur. bust right with hook at front of bust; to right

## $\Psi$

Rev. Zeus atg. facing holding thunderbolt on left, sceptre on right
Below thunderbolt ith Around BACIAEV BACIAEWN cwTHP METAC
AR Attic drachm ${ }^{29} \mathrm{~m}_{6}^{6}$. $4.36,4.34,4.27,4.25,4.14,4.20,4.16,4.05,3.93$, $3.86,3.85,3.71,3.56,3.53,3.37$
D) KUSHAN KINGDOM OF SOTER MEGAS : c.AD 45/50 to BO/90 : General coinage, Balkh series General type: King of Kings, the Great Saviour Obv. laur. bust right, radiate and holding aceptre in right hand to left Pellet border Rev. horseman right holding whip; to right around bacinev bacinewn ruthp herac AE reduced Indo-Greek tetradrachms and drachms (4-pronged aymbol, aquare letter forma)


## EARLI KUSBAN COINAGE IN THE KABOL VALLET

The Kushan occupation of the Kabul valley was a sequel to Heraios' conquest of Bactria. When the Yueh Chi conquered the Greek hingdow of Eastern Bactria from Hermaeus about 20 BC Pseigacharis established his principality of Hi-tham in the Bamiyan region. One result of this conquest was a scarcity of ailver that caused Hermaeus and Azes II to debase their coinage in the Kabul valley and Northern Pakistan respectively. About the time of Christ Heraios expanded his Sogdian principality of Kouei-chouang to include the other Yueh Chi principalities in Sogdiana and in Eastern Bactria. He then conquered the Kabul valley, so terminating the reign of Harmaeus about $A D 10$ and also conquered the Graeco-Saka state of Veatern Bactria in whose territory he eatablished his new capital at Balkh. Heraios' coinage and his direct rule vere virtually restricted to his exteneive conqueste north of the Hindu Kush; Sogdiana, Bactria and Choresmia. In the Kabul velley Heraios appears to have struck a scanty isaue of his ovn coine but thereafter Kujula Kaphises was responsible for both the Kushan coinage and the future expansion of the Kushan realm in thice region south of the Hindu Kush.

The Kabul valley coins of Heraios are billon tetradrachms struck on the Indo-areek veight standard that was not used north of the Hindu Kush. These coins have a reverse legend, type and letter form that were only used by Heraiog. They vere atruck by 'Tyra
 Koshanoy make it virtually certain that they were issued by Heraios, as Cunningham originally suggest ${ }^{390}$, although his name cannot be read on the two British Museum specimens. These coins, like all Kabul valley issues, have a legend on both aides of the coin but in the present case both legends are in Greek.

The remaining Kabul valley coins of this period were struck by Kujula, a hinaman of Heraios, who de日cribed himself as 'a Kushan of Tchao-ou raee.' Kujula's Kabul valley coinage passed through two distinct periods and was followed by rude imitations. Fis early coins have intact Greek and Karosthi legends and were struck in three denominations.
 the obverse a modified bust of Hermaeus and a Greek legend that either names 'Kujula Kadphises the Kushan' or reads 'King $\Sigma T H P \square \Sigma \Sigma V$ Hermaeus' instead of 'King Saviour ( $\Sigma \Omega$ THPロI) Hermaeus' which appeared on the prototype tetradrachms of Hermaeus. All Kujula's didrachms belong to this first pariod and retain the Bust/kinthroned Zeus types used on tetradrachms and drachms of Hermaerf. Their obverse bears the same modified Hermaeus legend that appears on some of Kujula's tetradrachms and their reverse also bears a modified Hermaeus legend which reads 'Great king Hermaeus' instead of 'Saviour king Hermaeus.' Drachms of this period introduce the Walking Nike reverse type but bear similar Greek and Karosthi legenda modified from those of Hermaeus. Didrachme and drachms share both Karosthi and rectangular control marks with one another but the Karosthi control marks on tetradrachme are different. These didrachms and drachme were first attributed to Kujula by Cunningh ${ }^{305}$. The tetradrachms show that the modified Hermaeus legend was introduced by Kujula and the sequence of issues shows that the drachms passed through the same auccessive phases of degradation as the tetradrachms and places them as a minor denomination struck in parallel.

During the later period of Kujula'a reign the coins cease to bear Karosthi control marks and their rectangular control mark remains as a fossilised part of the coin type. The Greek legend now becomes corrupt but the Karosthi legend remains intact. This feature, one intact and one corrupt legend, characterises Kujala's later coine which can be further characterisd by progressive weight reduction of some 40\%. Loss of literate Greek legends is not peculiar to coins of Kujula but is typical of this period and occurred not only on

- 60 -
coing of Heraifig and Kujula but also on the various issues of Azes II and of his astrap 308 . It has been suggested that the original dies for Heralos' tetradrachms were engraved by a Greek artiat and aubsequent copies of these dies by local engravers introduced corruption to the Greek legend. The asme process appears to have taken place in the Kabul valley. Early Kujula coins engraved by the Greek artists of Hermaeus have intact Greek legende but during the later part of Kujula's reign dies were apparently prepared by local artists conversant with Karosthi but not with Greek.

The late Kabul valley coinage of this series comprises dograded imitations of the Tetradrachms and drachms struck by Kujula. These coins belong to the period after Kujula had been expelled from Northern Pakistan by the Indo-Parthians and before Soter Megas regained these regions from Abdagases. During this period c.AD $355_{0}^{30} 70$ the Indo-Parthians Gondophares and Abdagases appear to have controlled the Kabul valley and the Chinese record that Soter Megas (re-) conquered the Kabul valley from the (Indo-) Parthians. However, the Indo-Parthians are unlikely to have struck their own coins in the Kabul valley since all their coinage appears to have been struck in the mint sequences of Mathura, Taxila, Gandhara, Middle Indus (3Multan), North Arachosia (Ghazni region), South Arachosia (Kandahar region), South Aria (Farah region) and North Aria (He 310 ). Ineofar as the Kujula imitations appear to have been struck both in the Kabul valley and during the Indo-Parthian period one may infer that they formed the local coinage of thia region during the occupation of Gondophares and Abdagases.

When Soter Megas expanded his Northern kingdom by crossing the Hindu Kueh and conquering the Kabul valley and Northern Pakistan he issued local coin series from mints in each of these regions. His Kabul valley coins are anepigraphic copper drachms struck on the Indo-Greek weight standard used south of the Hindu Kush. These coins have been attributed to Soter Megitis because they bear his three-pronged symbol and also the Karosthi 'Vi' that appears on two of his other local series. These copper drachms, placed south of the Hindu Kueh by their weight atandard, are linked with the Kabul valley by their hybrid deity who bears the trident of Siva and the lion akin of Hercules. This deity links the anepigraphic Soter Megas drachms with Kujula's Kabul valley iseues. Soter Megas' anepigraphic drachme are also excluded from the Taxila mint where he struck a different local series of tetradrachma and drach 312.

Early Kushan coinage in the Kabul velley may be catalogued an follovas－
A－1）EARLY PERIOD ：tetradrachms with uncorrupt Greak and Karoathi legends：c．AD 10 to 25 114．Heraios，tyrannoyntos of the Kushans

Obv．laur．bust right；Creak legend around ．．．．．．．nas ata ．．．．．．
Rev．horseman right crowned by flying Nike

| Legend ： | IX to III o＇clock | TYPA ．．．．．．．．．．（nnoyntos Hrsoy） |
| ---: | :--- | ---: | :--- |
|  | ：below horseman | KO PP AN ．．．．（oy） |

B1．Indo－Greek tetradrachms Blal $_{3}^{3} 10.40,9.76$
115．Kujula Kadphises，the Kuahan of Tchao－ou race．
Obv．laur．bust right of Hormaeus；around bacinenc ithpacci epmarav
Rev．Hercules stg．facing with head left，holding club on left，lion akin on Fight．
Legend（Karosthi）atarting XII：Kujula Kasasa Kushana Yavugasa Dhramathidasa．
AE Indo－Greek tetradrachm 3 Bh．$^{4} 9.54,8.78,8.47,8.36,8.31,7.61,7.54,7.36$ ，
6．98，6．65 Author 8．55，7．45，7．39，6．93，6．42．
116．Obv．sim．but legend：KロZQVAD KAD中IZロV KロPCTND
Rev．sim．but Hercules＇head right；control marks left 3 Right $y$
AE Indo－Greek tetradrachm BM．9．06，8．92， 8.86
117．sim．but control mark on left only 3
AE Indo－Greek tetradrachm BM． 9.00
118．sim．but Hercules＇head left；control mark on left 3
AE Indo－Greek tetradrachm BM．9．31，9．26，9．12，9．11，7．50 Author 8．88，8．68
119．sim．but control marks Left 7 Right 4
AE Indo－Greek tetradrachms BM． 9.82
120．sim．but no control marks
AE Indo－Greek tetradrachm Author 8．94， 8.50

A－2）BARLY PERICD ：didrachme with uncorrupt Greek and Karosthi legends：c．AD 10 to 25 121．Kujula Kadphises using modified Hermaeus legends

Obv．laur．bust right of Hermaeus；around BAEIAENE ETHPDCCV EPMAICV
Rev．Zeus enthroned left；control marks Left $\mathbb{\square}$ Right $X$
Legend（Karosthi）Maharajasa mahatasa Heramayasa
Added control marks on right a）$L$（4．77）b）$\left(\begin{array}{c}\text {（5．25）c）} t \text {（5．84）}\end{array}\right.$
d）others uncertain．
AE Indo－Greek didrachin BM． $5.84,5.25,4.77,4.43,4.38,4.37,4.29,4.27,4.11,3.86$

A－3）EARLY PERIOD ：drachms with uncorrupt Greek and Karosthi legends ：c．AD 10 to 25
122．Kujula Kadphises using modified Hermaeus legends
Obv．laur．bust right of Hermaeus；around BACIAENC ETHPDCCV EPMAIDV
Rev．vinged Nike walking left；control mark Right $\boxtimes$
Legend（Karosthi）Maharajasa mahatasa Heramayasa
Added control marks on left a）$\stackrel{h}{\natural}$（1．97）b）t（2．92，2．05）
c）others uncertain．
AE Indo－Greek draching BM．3．18，3．13，3．02，2．92，2．80，2．78，2．72，2．48，2．44，2．38， $2.37,2.37,2.37,2.30,2.19,2.18,2.12,2.06,2.05,2.01,1.97,1.94,1.92,1.84$ ， $1.82,1.33$

B -1) LATE FKRICD : tetradrachms with only Karosthi legends uncorrupt : c.AD 25 to 35
123. Kujula Kadphiaes the Kushan of Tchao-ou Race

Obv. aim. bust right with corrupt Greek legend
Rev. Hercules as before; eame legend, no control marks
AE Indo-Greek and reduced Indo-Greek tetradrachm BM. 9.22, 9.19, 8.97, 8.67, 8.50, 8.10, 8.09, 7.77, 7.75, 7.69, 7.68, 7.64, 7.45, 6.97, 6.94, 6.91, 6.87, 6.83, 6.73, $6.30,5.96,5.84,5.18,4.75$
Author 9.66, 7.26, 7.00, 6.22, 4.92, 4.86
124. sim. but Karosthi legend commences at III o'clock

AE Indo-Greek tetradrachm BM. 9.31
125. sim. but Karosthi legend commencea at VII o'clock AE reduced Indo-Greek tetradrachm Author 6.09
126. Obv. sim.

Rev. sim. but with short Karoathi legend commencing XII o'clock
'Kujula Kasasasa Kushana Yavugasa'
AE reduced Indo-Greok tetradrachm Bid? 3.69
Author 4.87, 3.95, 3.76, 3.69, 3.39, 2.53

B -2) LATE PERIOD : Drachms with only Karosthi legende uncorrupt : c.AD 25 to 35
127. Kujula Kadphises using modified Hermaeus legends

Obv. sim. bust right with corrupt Greek legends
Rev. Hinged Nike walking right holding wreath. Same equare control mark right $\triangle$
no added control marks. Legend 'Maharajasa Mahatasa Heramayasa'
AE drachms BM. 1.54
128. sim. but bust left

AE drachm BM. 2.77, 2.46
129. sim. but both bust and Nike left

AE drachm BM. 1.97

C -1) INDO-PARTHIAN PERIOD : Tetradrachms with all legends corrupt : c.AD 35 to 65/70
130. Obv. rude bust right; remants of Greek legend

Rev. Hercules as before; corrupt Karosthi legend
AE reduced Indo-Greek tetradrathe BM. 3.06, 2.95, 1.75, 1.53
Author $4.19,3.56,3.04,2.45,1.80,1.23$

C -2) INDO-PARTHIAN PERIOD : Drachme with all legends corrupt : c.AD 35 to 65/70
131. Obv. rude bust right; traces of Greek legend

Rev. Nike walking left; corrupt Karosthi legend
AE Drachm BM. 0.97, $0.87,0.65$
132. sim. but both bust and Nike left

AE drachm BM. 0.99, 0.89

D）SOTMz heans ：c．AD 45／50 to 85 378 ：Local coinage（c．a 70 ）
133．Anepigraphic
Obv．Siva－Hercules atg．facing with trident on left，lion akin on right Left 重 R1ght Karosthi＇VI＇
Rev．atg．female delty right holding cornucopla．Left $\boldsymbol{\omega}_{\mathrm{O}}$ Right flover vase AE Indo－Greek dracha 敄O．1．83，1．66，1．65，1．61，1．56，1．56，1．55，1．51，1．50， $1.50,1.40,1.51,1.31,1.20,1.06$

E）SOTER MEGAS ：c．AD 45／50 to 85／90：Genaral colnage（c．ND 75 to 85／90）${ }^{321}$ Type：Obv．laur．buet right，radiate and holding aceptre in right hand Left 吉 pellet border
Rev．Horseman right holding whip；Right 敦 Legend around a）baciager baciaewn cmith berac
b）＂ 1 Lwitp
AE Indo－Greek tetradrachms（three－pronged aymbol，square letter forma）


BM． 7.00
134a＇b＇ 11 raya
вм． 8.37
135，＇a＇ 10 raye
BM． 9.09
136．＇b＇ 9 гаув
BM． 7.96
137．＇e＇ 8 rays
вн． 7.95
138．bl ray
BM． 8.17

Type sim．bat legend baciaky baciamen cmithp
AE Indo－Greek drachsa
140.

14 rays
BM． 1.91
141.

11 raga
BM．2．08， 1.92
141a
11 rage ；legand ands CwTHP H BM． 1.92
142.

142．
143.

10 raye
Author 2．07， 1.75
10 raje ；legend ends baci abvinnt huthor 2.01
144.

9 rays
вм．2．05， 1.78
．
8 rays
BM． 2.04

## SOME FARLI KOSHAN CODNS OF NORTH PAKISTAN

The Kuehans occupied North Pakcistan on two different occasions that were separated by the Indo-Parthian occupation of this region. Kujula Kadphiaes conquered North Pakiatan from Ases II about $A D 20$, atruck copper coins in guccession to the various mint bequences of Azee II and his satraps and then lost this region to the Indo-Parthian Gondophares about AD 35. Inter-relationships between the coin aequences struck by Azes II, Kujula and the Indo-Parthians have been eummarised above and discussed elseuhere. The definitive Kushan conquest of North Pakiatan was the work of Soter Megas who acquired this region from the Indo-Parthian Abadagases about AD 65/70. Soter Megas' local coinage for this region continued the Horseman/Zeus Sceptred series of the Indo-Parthians and was probably issued from the Taxila mint. It comprised bllingual billon or copper tetradrachmand drachms with round Greek letter forms etruck on the Indo-Greek velght atandard. The weight atandard and obverse types were subsequently adopted for his general coinage isaued from mints in each of the three main regions of his kingdom. The three sequences of Soter Megas' general coinage have been defined abbve and, of these, the Taxila sequence retains the round Greek letter forms of its pricursor and comprises the major serles of the general coinage. The purpose of this section is to catalogue the Tarila coinage of Soter Megas so that it may be compared with he other aeries:-


Map I. The major geographical features.

| 1.600 foot contour | ...... |
| :--- | :--- |
| land above 6,500 feet |  |
| sea | $m \times x$ |
| desert |  |

B - Balkh
Bamian
Bokhara
C - Cyropolis
K - Kabul
M - Merv
s - Samarkand (Maracanda)


Map 3. c. 325 BC. The Empire of Alemander the Great.

Choresmia was now an independent kingdom.


Map 4. c. 240 BC . The aituation a few years after the Kingdoms of Bactro-Sogdiana and of Parthia asaumed independence from the Seleucids.


Map 5. c. 180 BC. The Kingdom of Sogdiana was now independent of the Greek kinge in Bactria.


Map 6. c. 100 BC . Aftermath of the nomad migration.
The Yueh Chi reached and settled Sogdiana c. 130 BC., Other nomada ware pushed before them across N. Afghanistan (Scythian Sacaraucae).

Principalities: H - Hieou-mi, C - Chouang-mo, K - Kouei-chouang (Kuahan).


Map 7. c. 70 BC . The Parthian conquest of Margiana.
The old Choresmian kingdom of the Dahae persisted east of the Caspian and the later, unrelated, Kingdom of Choresmia along the lower Oxus took origin.
The Indo-Greek kings of E. Bactria also ruled the Kabul valley.


Map 8. c. 10 BC. Yueh Chi expansion.
About 20 BC the Yueh Chi conquered E. Bactria and establiahed two principalities;
Tou-mi in the Qunduz region (Q) and Hi -thum in the Bamiyan region (B).


Map 9. c.10 AD. Rise of the Kushans.
Heraios (c.0-45/50 AD), Yueh Chi prince of Kouei-chouang, conquered the other four principalities and also Choresmia, Balkh and the Kabul valley (his kinsman Kujula)。


Map 10. c. 60 AD . Re-orientation of the Kushan kingdom.
Choreamia had been lost to the Kushans but from his Bactro-Sogdian base Soter Megan conquered a vast area below the Hindu Kush.


Map 11. c. 100 AD . Re-assertion of Sogdian independence.
Teh new Sogdian kingdom founded $c$. AD 80 was centred on Samarkand.


Map 12. c. 250 AD . Early Saseanian expansion.
Founded by Ardeshir I (226-240) the Sassanians soon controlled all Afghanistan wherein Kushanshahr, formerly the Kushan districts of Bactria and the Kabul valley, retained some autonony under a line of vassal kings - the Kushano-Sassanian dynasty.


Map 13. c. 400 AD . Rise of the Hephthalites.
The Hephthalites rose to power in Bactria in the mid 4 th century.


Map 14. c. 500 AD . Hephthalite expansion.
During the 5 th century the Hephthalites expanded north and south conquering Choresma and Sogdiana in the last decades of the century, having already acquired the Kabul valley and northern Pakiatan.



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Large rivers traversing flat terrain and subjected to subatantial seasonal variations in flow of ten alter their courses. This phenomenon, well known in the Indus river system, is exemplified at Ders Isma'il Khan where recession of the annual monsoon spate uavally sees the main course of the Indus some distance from its previous site. Thus the 1963 monsoon left the Indus flowing beside the tow walla through land cultivated during the previous year, then the Indus was flowing half a mile to the east.

A comparable aituation in the lower Oxus region has produced controveray as to whether the Oxus flowed into the Aral sea or the Cospian sea during the classical period. The course of the Oxus is stable above Urgany (Jurjaniyah) which lies a few miles south of the Aral sea. The river now flows past Organj into the Aral sea and followed the sams course in the 10 th. century but from the 13 th. to the 16 th. century the 0 orus turned at Urganj to flow south-west reaching the Caspian coast at Balkan. Contemporary reporta describing the river's course before, during and after this period when it reached the Caspian have been discussed by le Strange ( 455 ff ). The Oxus also flowed into the Caspian at an earlier date for in the loth. century Mukaddasi deacribed the orus as flowing into the Aral sea and recorded that its former course to the Caspian could still be traced.

Evidence relating to the classical period has been discussed by Tarn but is less reliable. The course of the lower 0xus, whichever route it was following, lay outaide the limits of the Greek world and the Greeks knew nothing of the Aral sea. For these two reasons the mere fact that the Greeks conceived the Oxus as draining into the Caspian cannot necessarily be accepted at face value. However, a passage in Strabo (11.9.2) merits further comment :' and Arsaces, with some of the Dahne - I mean the Aparnians, as they are called, nomads who lived along the Oxus -, invaded Parthia'. In numerous pasages already cited both Strabo and Arrian placed the Dahae as living along the eastern shore of the lower Caspian yet in this passage Strabo also places them as living along the Oxus. If the Oxus were following ite course to the Caspian then the Dahae of the east Caspian coast would indeed have been living along the lower oxus but if the oxus had been flowing into the Aral sea at this period then the Dahae would have been separated from the Oxus by the Kara Kum deaert. On balance there are reasons for believing that the oxus did flow into the Caspian during the last few centuries before Christ.

When the Oxus was flowing to the Caspian it provided an extensive tract of fertile land in what was at other times desert (Le Strange). It may well be that the political re-organisation of Choresmia about the time of Christ (vide supra) was based, in large part, on economic changes wrought by the Oxus. If one accepts that Greek statements on the oxus were correct then the Dahaean kingdom may have foundered and been replaced by the New Choresmian kingdom when the Oxus began flowing into the Aral sea. A Dahaean kingdom centred on the Caspian coast around Balkan and along the lower Oxus from the Organj region to ita Caspian mouth at Belkan foundered when much of its land was deprived of water. The eastern remnant of the Dahaean state expanded from the Organj region along higher reaches of the 0 rus to become the new Choresmian kingdom. This view is attractive and fits the evidence discussed in previous sections but until more evidence is forthcoming it must remain only a hypothesis and as such it has been relegated to an appendix.


PLATE I. THE DAHAE IN CHORESMIA
Early period : c.330-250 BC.
1 to 3
Middle period : c. 250 - 130 BC.: Archer series
4 to 16
4-5: Ata 7: Lord king of the Dahaean Sakas 11: Atagart 12: Atala 13-15: Tavr'aka


PLATE II. THE DAHAE IN CHORESMIA
Middle period : c.250-130 BC.: Horse series


PLATE III. THE DAHAE IN CHORESMIA
Late period : c. 130 - 0 BC.: Soldier series $\quad 30$ to 33
30: Artara the Dahaean Saka 31-32: the Dahaean
Late period : c. 130 - 0 BC.: Horse series
34 to 39


PLATE IV. KINGDOM OF SOGDIANA
Early period : c. 200 - 180 BC. 40 to 43

Middle period : c. 180-150 BC.: Aramaic legend on left 44 to 47 44-45: King of Sogdiana 46: Kagaha 47: Hasa


PLATE V. KINGDOM OF SOGDIANA
Middle period : c. 180 - $150 \mathrm{BC} .:$ Aramaic legend on right 48: King of kings
Late period : c. 150-130 BC.: Aramaic legend starts on left 49 to 54 49: Hasa 51: Kamasa 53-54: Malta
Late period : c. 150-130 BC.: Aramaic legend starts on right 55 to 56 55: Kamasa


57


57


58


59


59

PLATE VI. YUEH CHI PRINCIPALITIES OF SOGDIANA

$$
\text { c. } 130 \mathrm{BC} \text {. to AD. } 80
$$

57-59: Great ruler of Sogdiana, of the Tchao-ou race


61


63


63

$65 a$

PLATE VII. KINGDOM OF SOGDIANA
c.AD. 80 to 480

60 to 64
60: Great ruler of Tchao-ou race 61,63: King of Samarkand HEPHTHALITE KINGDOM OF SOGDIANA c. 480 Onwards 65
65a: Lord king of Bokhara


71c

PLATE VIII. KINGDOM OF CHORESMIA
Early period : c.AD. 50-500
67: the Lord king
Late period : c. 500-800
71 to 73
71: Lord king of Choresmia 7la: ibid. + Al Fadl




81


82

PLATE IX. GRAECO - SAKA KINGDOMS
(Silver) Margiana : c.130-80 BC.: Eucratides imitations

Western Bactria : c. 130 - $80 \mathrm{BC} .:$ Early Heliocles


PLATE X. GRAECO - SAKA KINGDOMS
(Debased) Western Bactria : c. 80 - 0 BC.: Late Heliocles imitations 83 to 93

84-88: Zeus sequence 89-93: Horse sequence


PLATE XI. YUEH CHI PRTNCIPALITY OF HI-THUM (BAMIYAN)c. $20-0 \mathrm{BC}$ 94: Pseigacharis 94

YUEH CHI PRINCIPALITY OF TU-MI (QUNDUZ) c.20-0 BC
95: Sapadbizes 96: Agesiles 96a: uncertain KUSHAN KINGDOM OF HERAIOS 95 to 96 a 97-98: Bamiyan mint 99: Qunduz mint

$$
\begin{gathered}
\text { C.AD. } 0-45 / 50 \\
97 \text { to } 99
\end{gathered}
$$


$105 a$


106


PLATE XII. KUSHAN COINAGE OF SOTER MEGAS IN BACTRIA

$$
\text { c.AD. } 45 / 50-80 / 90
$$

$$
100 \text { to } 113
$$

Local coinage 100: Qunduz mint 101: Balkh mint
General coinage 102-113: Balkh mint


$134 a$


137


138


139

PLATE XIII. EARLY KUSHAN COINAGE IN THE KABUL VALLEY

$$
\text { c.AD. } 10-35 \text { and } 65 / 70-80 / 90
$$

Heraios (c.AD.10) ..... 114Kujula Kadphises under Heraios (c.10-35) 115 to 129Kujula imitations (c.35-65/70)130 to 132
Soter Megas (c.65/70-80/90): local ..... 133
general ..... 134 to 144



152


155


151


154


356

PLATE XIV. EARLY KUSHAN COINAGE IN N. PAKISTAN

$$
\text { c.AD. } 70-80 / 90
$$

| Soter Megas : local coinage | 145 to 146 |
| :---: | :--- |
|  | general coinage |
| 147 | to 161 |

## notes - 1

1. The Seleucide separated the Murghab valley from Bactria to ereate Margiana.
2. III, 117 ff. and I, 200 ff.
3. Achaemenid Parthia included Hyrcania; Drangiana vas termed Zaranka (Sarangians) and Satagydia was termed alternatively Sattagu or Thatagas (Thamaneaana).
4. Sogdiana became a Persian aatrapy where later Alexander conquered Cyropolia.
5. Herodotus I, 200 ff. Compare with Arrian's description (infra) of their later atate and with Strabo's confused account largely aynthesieed from Herodotus and from Arrian's fourth century sources.
6. Arrian, III, 8, 3 and III, 23, 4.
7. Arrian, III, 20, 4 to III, 25, 5.
8. Arrian IV, 6, 6 (cfr. III, 25, 1 ff); Strabo XI, 10, 1 ff.
9. First mentioned by Strabo ( $X I, 10,1 \mathrm{ff}$ ) in the context of the Seleucid period. See al6o W.W. Tarn, The Greeks in Bactria and India, 1938, 88. Antiochos Soter (280-261) founded a city, Antiocheia, in Margiana. This was probably Merv, a city later Visited by Ardeshir I (226-240), see T. Noldeke, Tabari, 19 fo
10. Eastern provinces of Shapur I (240-270) were recorded in his Naqs-i-ruatam inecription as Margiana, Aria and all of Abarshahr, Carmania, Sakastan, Turan, Makuran, Paradene, Sind and Kushansahr from before Pshkbwr as far as the frontiers of Kashgar, Sogdiana and Tashkent' E. Honigmann and A. Maricq, Res Gestae Difi Saporia, 1953. Kushanshahr included Bactria.
11. Arrian III, 8, 3 ff . and III, 21, 1. For the limits of Drangiana aee Mitchiner, IndoParthian and related coins. (In preparation).
12. Strabo IX, 10, 1.
13. Discussed in Mitchiner, ibid.
14. Alexander created Proexes satrap (Arrian III, 28, 2) and later replaced him by Turiaspes, satrap in 'the country of the Parapamisidae and the rest as far as the River Cophen' (Arrian IV, 22, 5).
15. The evolution from Arachosia to Turan is discussed in Mitchiner, ibid. See also T. Noldeke, Tabari, 19 f. and Shapur's Naqe-i-rustam inscription.
16. The change apparently occurred between the writing of Strabo's passage (II, 5, 31-2) referring to the period after the nomad migration onto the South Afghan plateau when SW. Afghanistan was still part of Aria and the time of the Parthian survey reproduced by Isidore of Charax at the end of the lat century BC. Tarn (ibid. 344) dated this survey, which names Sakastan, to the early lat century BC. The view that any part of Afghanistan was named Sakastan before the 2nd century BC nomad migration is not consistent with the ovidence. Vide infra and M1tchiner, ibid.
17. Arrian II, 8, 6.
18. Herodotus III, 88 ff. The name India does not define a particular region and in a later context it was used by Shapur I to denote the Quetta region. In geographical terms the Indian Satrapy of Darius I could have been the Quetta or the Taxila region but in economic terms ite prosperity indicates the Taxila region.
19. It is only mentioned in the Naqs-i-rustam inscription on his tomb.
20. Discussed in Mitchiner, Origins of Indian Coinage, London, 1972.
21. Achaemenid Bactria included Margiana. Sogdiana lay east across the Kara Kum and Oxus from Choresmia.
22. Herodotus VII, 64 ff . Table I.
23. Arrian III, 8, 3 ff. and for Bessus also III, 25, 3; III, 28, 8 ff.
24. Arrian V, 12, 2 and III, 28, 8 ff. Note that the post-Kushan Choresmian kingdom was not geographically synonymous with this territory.
25. Arrian III, 28, 8 ff ; IV, 15, $7 \mathrm{ff} ; \mathrm{IV}, 17,1 \mathrm{ff}$.
26. Strabo IX, 9, 2 linke the Choresmian Dahae with the foundation of the Parthian kingdom c. 250 BC.
27. Strabo'a Xanthi and Parii (XI, 9, 3) alternatively Xanthi and Pissuri (XI, 8, 3); aee also XI, 7, 1 ff . His eclectic rationalisations from earlier authore sometimes confuse and for this region Strabo's frequent reliance on Herodotus introduced a nev tribe, the Choresmians. But Herodotus used Choresmian to denote the inhabitants of the Persian satrapy called Choresmia whereas later authors referred to the inhabitants of this region by their tribal name; the Dahae, the Aparnian Dahae or the Aparni.
28. Herodotus $I, 200$ ff。
29. Arrian IV, 3, 1 If; Strabo XI, 11, 4
30. Herodotus VII, 64 ff.
31. Arrian III, 8, 3 ff and III, 28, 8 ff.
32. Arrian III, 28 to IV, 22.
33. Arrian especially IV, 5 ff; $I V, 15 ; 7$; $\mathbf{I V}, 17,1$ ff.
34. Herodotus I, 200 ff.
35. Arrian IV, 17, 5.
36. Strabo IX, 8, 2. The migrating Sakas came from the territory beyond the Jaxartea that was inhabited by Sakas (ie. Sacaraucae) and was adjacent to the territory of the Sogdians and Sakas (ie. Massagetae); Vide infra.
37. Arrian IV, 18, 2 and IV, 21,1 ff.
38. Herodotus VII, 64 ff.
39. F.W. Thomas, JRAS., 1906, 181 ff placed the Saka aatrapy in S. Aria (ie. Sakastan after the 2nd century BC nomad migration) averring that the 'Drayah' crossed by Darius to reduce the Saka rebel Iskunka was located in Aria. Fuye, RN., 1910, 6 ff ahowed that this drayah could have been any 'Darya' (large river). It is more likely that Darius crossed the Orus Darya to combat Iskunka within the Saka satrapy of the Pamirs. J. de Morgan, Manuel de Numismatique Orientale, 1936, 30, also placed the Saka satrapy in the Pamirs.
40. Herodotus III, 88 ff .
41. Nush-i-Jan Hoard. A.D.H. Bivar, Iran, 1971, 97-111.
42. See Mitchiner, Origins of Indian Coinage, London, 1972.
43. Head, HN. $^{2}$, rocrvil.
44. See Mitchiner, ibid. for eastern and BMC. Peraia for western coinage.
45. Certain imitations of Athenian tetradrachms and lover denominations found in this region and NW. India have been attributed to these satrapies (eg. A.K. Narain, The Indo-Greeks, 4). The coins in question (BM. 1685, 16.71, 16.70, 16.52, 16.42, 16.07, $15.93,7.87,6.98,6.12,3.56,3.50,3.48,3.47,3.38,3.34,3.30,1.97$ grammes) were struck on the Attic, not the Persic, weight standard and do not belong to the Persian Empire. They have no local typological affinities and are more likely to have been struck in some such region as Thrace and transported to the Eastern aatrapies during the Macedonian period. Another drachm of this group was found in Seiatan (Rapeon, JRAS., 1904, 673 ff ). The tetradrachm of this series found in the Chaman-Hacouri hoard (D. Schlumberger, Memoires de la Délégation Archéologique Françaiae en Afghanistan, XIV, 1953, 36 coin $64,16.8 \mathrm{gm}$ ) does not suggest a pre-Macedonian date because Schlumberger dated this hoard too early (Mitchiner ibid). He ahowed its Greek coins to indicate a burial date after 390 BC but this part of the hoard was bullion effectively removed from circulation and in ita Afghan context one can only aay that the hoard was buried before c. 312 BC .
46. Referred to by Herodotus (I, 200 ff ). The Oxus treasure contained both siglol and jewellery of Achaemend and Gresk periods.
47. Earliest Attic tetradrachms veigh about 17.5 grammes (Head, ibid. and BMC).
48. Data from the 627 Attic ailver coins in the qunduz hoard; R. Curiel and G. Fuseman, Memoires de la Délégation Archéologique Françaige en Afghaniatan, XX, 1965.
49. Tetradrachme of Heralos weigh 12 to 15 grammes and those of Soter Megas around 12.5 grames, both belong to the East Bactrian series. Drachms of Soter Megas belonging to the Weat Bactrian series weigh around 4 grammes.
50. Muryan control as far west as Kandahar is shown by Ashoka's rock edicts in the Jalalabad and Kandahar regiona; R. Thaper, Ashoka, 1961, 228 ff ; 250 ff.
51. BMC. Ancient India clasa 2. Average 3.2 gm. , range c. 2.6 to 3.5 gm. See Mitchiner, ibid. P. L. Gupta, Andhra Pradesh Govt. Museum mgr 6, 1963 quotes 3.2-3.6 gll. as the weight of most Mauryan karshapanas in the 7,668 coin Amaravati hoard.
52. Often termed Indian weight standard. As it is neither Greek nor Indian but was created by the Indo-Greeks it is beat termed the Indo-Greek weight standard.
53. BMC. Conatant from ita introduction by or before Menander until the time of Aseb I and Arillass.
54. Vide infra and Mitchiner, Indo-Parthian and related coina.
55. In particular the city states of Phoenicia and Peraian aatrapa in Aaia Minor.
56. Allotte de la Fuye, RN., 1910, 281-333; RN., 1925, 26-50.
57. Types 40-56; 57-59.
58. 'B' is alao similar to ' $K$ ' and ' $R$ ' though its tail tende to be more curved. Note also that the character for ' $U$ ' which also transliterates ' $V$ ', ' $Y$ ' and ' $V$ ' resembles ' $G$ '.
59. 'SSaGA' and 'GAUA' on coins of the first period; 'SAKA' and 'GA' or variant on coins of the middle period; 'Sakaroy' and GaUASa' or 'Kodoy' on late coina.
60. Sogdian coins were of Persic weight. Bactrian and Sogdian coins were tetradrachms with lower denomiantions struck in Bactria only. Parthian coins were drachms with associated tetradrachms that were often underveight and debased.
61. This contrasts with the thick and usually scyphate fabric of Danubian copies of Alexander's coinage. Choresmian and Danubian copies also differ in other respecte. Danubian copies have a uuch ruder obverse type, frequently bear an imitation Greek legend and may show symbols in the field; their style is also very different.
62. EG. Fuye's and Cunningham's coins acquired in Russian Turkestan and N. Afghaniatan.
63. Arrian III, 22, 2.
64. Date of the nomad migration across N. Afghanistan. Vide infra for ite influence on the Dahae.
65. Coins have a corrupt Greek legend for BA乏IAE E $\mathcal{A}$ ANTIOXCY and could, in this reapect, derive from prototypes of Antiochos I after he became sole ruler in 280 or of AnthiochOB II. As reverse types on Dahaean coins are local, though in Seleucid atyle, they provide no chronological information. The obverse busts on the earliest Dahaean coins are Saka and do not assist dating. One may conclude that Seleucid prototypes for Dahaean coins of this period were struck between 280 and 246 BC.
66. See discussion of late period Dahean colns and of the nomad migration.
67. Rapson's coins from Koh-i-Taftan, NC., 1904, 311 ff; Type a) XVII, 1-5, b) XVII, 6-7, c) XVII, $8 \mathrm{~d}-\mathrm{e}$ ) XVII, $11-18$. See also Tarn, ibid., 481 ff . For a Macedonian imitation from this region, see E. Rapson, JRAS., 1904, 673-80, coin 2.
68. BMC. Seleucos I coins 36-40, Antiochos I coins 3-22 and Antiochos II coins 1-7.
69. Eastern and Southern Afghanigtan were already part of the Mauryan Empire; vide supra.
70. W.W. Tarn, The Greeks in Bactria and India, 1938, 481-5.
71. vide infra.
72. Dahaean coins of this period are much more coumonly found in Northern Afghanistan than those of previous periods. This could indicate that a greater proportion of the Dahaean currency circulated south of the Kara Kum or conversely that the striking of late Dahaean coins was much more prolific than that of earlier coins. In either cese there vas an expansion of the Dahaean currency. A.R. Hoernle, JASB., 1899, 23, also recorded late Dahaean coins from the Samarkand - Tashkent region.
73. Saka has been read 'Sakaroy' (eg. R. Ghirahman, Memoires de la Délégation Archéologique Française en Afghanistan, XII, 1946) or 'Makaroy' (eg. BMC and A de la Fuye, RN., 1925 , 143 ff ). In epigraphic terms the first letter is 'M' but in the Saka state where these coins were struck the corruption whereby ' $S$ ' was turned on its side to become 'M' is not unlikely. On the same coins the ' R ' in $\mathrm{Y}_{\mathrm{r}-\mathrm{Kodoy}}$ is often corrupt. Sakaroy is meaningful and consiatent with other Dahaean legends whereas Makaroy is meaningless.
74. RN., 1925, 143 ff . Comparison with aramaic character forms on other Choresmian and Sogdian coins shows that the tribal name is 'Gauasa' rather than Fuye's Kawat. As the same aramaic character stands for $U, V$ and $W$ the middle character can be expressed as any of these alternatives. Similar comparison shows the ruler's name to be 'Artara' rather than Fuye's Artawi; reversal of an A in terminal position is not confined to this period but also occurred during the previous period and modification of a character when in terminal or initial position also occurred with the initial $B$ and terminal Y of Hephthalite Bokhara drachms. Fuye suggested the 'YR' in Yr-Kodoy indicated sons of but this cannot be substantiated and its meaning remains doubtful. He failed to correlate his Artawi (for Artara) with Ardhthroy.
75. Phraates II and Artabanus II ( $128 / 7-123 \mathrm{BC}$ ) both died campaigning against Sakas (Narain, Ibid., 140 f ; Simonetta, East and West, 1958, 164).
76. The last major Parthian campaign appears to have been that of Orodes I, attested by his issues of coins bearing the names Aria, Margiana, Traxiana and Katastrateia (military campaign). For these coins see BMC. Parthia, 40; de Morgan, ibid., 155. Their attribution (BMC. Artabanus II, 87-77) to Orodes I ( $87-77$ BC) is that of Simonetta (East and West, 1958, 165). Sinatruces ( $80-70 \mathrm{BC}$ ) gained the Parthian throne with the assistance of the Sacaraucae (Saka tribe) settled in Aria and, from this time, the Sakes of Aria issued coins as a Parthian province (discussed in Mitchiner, ibid).
77. ie. Fuye, RN., 1910. Coins on plates discussed in RN., 1910, 1925 and 1926.

## notes - 4

78. See also Type 17 struck by Ata.
79. Attic weight standard fell progreseively through the course of Dahaean coinage, Table II.
80. Includes Fuye $\mathrm{X}, 18 \mathrm{~B}, 19 \mathrm{~B}$ and 20B.
81. Fuye, $X, 178$.
82. Quoted by Fuye but not weighed or illustrated.

82a Conquered by Cyrus and still a Persian satrapy at the time of Darius III from whom it was conquered by Alexander: vide supra.
83. Tarn and Narain agree but Narain, ibid., 28, incorrectly suggests that the Bactrians conquered Sogdiana. There is no evidence that they needed to conquer what was traditionally part of their territory. Strabo, XI, 11, 2 includes Sogdiana in the Bactrian kingdom.
84. At this period he was in conflict with the Seleucid Antiochos III; Narain, ibid.,18-2l.
85. See BMC.II, 4-6 for Euthydemos' coins and Types $40-1$ infra for early Sogdian issues.
86. All in BMC.
87. Fully analysed br Fuye in RN., 1910 and 1925. In general terms Hercules has a different posture and rests his club on his knee instead of on a pile of rocks.
88. Regarding provenance Wilson (Ariana Antiqua, 1841, 224-5) records both Euthydemos tetradrachms and their Sogdian derivatives from Bokhara. Iloernle (JASB., 1899, 23) records Sogdian coins of this period from the Samarkand-Tashkent region. Prinsep (Essays, 1888, vol.2, 30) records Sogdian tetradrachms of this period and of the Yueh Chi period from the ruins of Khoja-oban north-west of Bakhara.
89. These coins are distinguished from previous issues of Euthydemos bearing the R-K monogram by their weight.
90. Fuye, RN., 1910. These plates are discussed in RN., 1910 and 1925.
91. A.K. Narain, The Indo-Greeks, 128 ff .
92. Saka was rendered in Chinese as 'Sok;' a character now pronounced as 'Sai.' Communicated by K. Enoki to Narain who quotes; ibid., 135.
93. Narain, ibid., 134 ff . These Sakas probably gave rise to the kingdom of Maues in Northern Pakistan. Their migration is recalled in the Ch'ien Han Shou from which Narain, ibid., 130 quotes Enoki's translation of sections in books 96 a and 94 b .
94. Strabo XI, 8, 2.
95. Some scholars read Asiani and others Pasiani. Discussed by Narain, ibid., 132.
96. Herodotus VII, 64 ff .
97. Vide supra. eg. the Saka satrapy; Sakas with the army of Darius III.
98. cfr. the Dahaean coins.
99. They gave their name, Sakastan, to Southern Aria. Vide supra and Mitchiner, IndoParthian and related coins.
100. The Sakas named Sok by the Chinese historians.
101. They gave their name to the province of Sacasene in Armenia; Strabo XI, 8, 4.
102. For instance the Dahae were Scythians (Arrian V, 12, 2; Strabo XI, 8, 2-3), the Massagetae were Scythians (Arrian IV, 17) and the nomads across the Jaxartes were Scythians (Arrian IV, 3).
103. Strabo XI, 8, 2.
104. eg. Arrian IV, 5 to IV, 17. The Massagetaean Scyinians.
105. Strabo XI, 8, 8. Note that in XI, 8, 6 ff . Strabo locates the Massagetae in the general region they inhabited at the time of Alexander but gives them the prosperity and culture they no longer enjoyed. The latter is quoted from Herodotus and refers to the time of Cyrus.
106. Arrian IV, 5 and IV, 15.
107. Arrian wrote during the Roman Imperial period but his record relates only to the time of Alexander's campaign and is written from sources of that period. In addition to the references just cited Strabo does quote (XI, 7, 1; XI, 8, 2; XI, 9. 2) the tribal divisions of the Dahae and implicates this tribe in the establishment of the Parthian kingdom. These details are not found in Arrian; the latter event postdates Arrian's sources. Strabo also attributes a muddled passage (XI, 8, 8) to Eratosthenes in which the Arachosians are placed on the Oxus. He further refers to the Apasiacae in the
context of the Seleucid period. These 'water Sakes' were probably a group of Massagetae living on the coast of the Aral Sea (cfr. Tarn, ibid., 91).
108. ie. the Asian nomads (Asian Scythians; Aaian Sakas) as distinct from the Buropean Scythians. Although Strabo presumably intended to denote four tribes this appears to be a mis-quotation of his sources comparable to his separation of the Massagetasan Sakas into three peoples.
109. Tarn, ibid., 284 ff; Narain, ibid., 132 ff.
110. Discussed in Mitchiner, Indo-Parthian and related coins. Some Sacaraucae reached Southern Afghanistan.
111. Strabo's complex construction suggests that he did not fully comprehend what he was quoting. His statement is, however, trua and merely states the situation upon which the migration was imposed, a situation that had not changed radically eince the Macedonian period and whose persistence was indicated by the coinage of the Sogdian kingdom.
112. 'Reges Thocarorum Asiani interitusque Sacaracaurum.' cfr. Narain, ibid., 129 ff; Tarn, ibid., 306. Tarn suggested that the Tochari (Yueh Chi) destroyed the Sacaraucae later than the nomad migration. Insofar as the Yueh Chi occupied the trans-Jaxartes territory of the Sacaraucae and, in so doing, induced the Sacaraucae to migrate it is apparent that the Tochari (Asian nomads by definition) ipso facto brought devastation to the Sacaraucae during the course of the nomad migration and prior to the time of Ch'ang Kien.
113. The alternative version of Strabo's text - Asiani, Pasiani, Tochari, Sacarauli - names the Tochari and the Sacarauli (Asian Scythians) together with the Pasiani who could have been another trans-Jaxartes tribe or, modifying Tarn's view (ibid., 284, 292), could have been the Aparni, the southern branch of the Dahae in Choresmia who, as discussed above, profited from the nomad migration to extend their influence across the Kara Kum desert.
114. And any other groups of Sakas and Greeks who moved with them; vide Mitchiner, ibid.
115. Shih Chih, Book 123 quoted in Enoki's translation; cfr. Narain, ibid., 129; 139. E. Zurcher's (Papers on the date of Kanishka submitted to the 1960 conference, 1968, 346-90) translation only differs significantly in the tense of one verb.
116. Ferghana. cfr. Tarn, ibid., 307 ff and 474 if.
117. River Oxus.
118. Bactria or the Bactrian people. The Chinese noun can be read as either a geographical name (the ta-hsia place) or an ethnic name (the Ta-hsia people; the country inhabited by the Ta-hsia people). Tnoki usually translates such terms as place names, Specht usually translates them as referring to people. In some cases the difference is sigaificant (see text). For Ta-hsia see Tarn, ibid., 295 ff. and Narain, ibid., 131. In this context Ch'ang Kien is describing the situation of Western Bactria and Margiana after the Sakas had traversed the region; he is not describing the situation in the Greek kingdom of Eastern Bactria.
119. Parthia (Fnoki); the Parthians (Specht).
120. Sogdiana; the Sogdians; cfr. Tarn, ibid., 278 ff., 291 ff . In this case the two translations are not synonymous. The Yueh Chi settled in Sogdiana and the Kingdom of the Sogdians was, for a while, centred north of the Yueh Chi until c.AD 80 when intermarriage of Sogdian and Yueh Chi royal families once again centred a new Sogdian kingdom on the Zeravehin (capital Samarkand) region. See text.

## 121. Western Kansu.

122. Zurcher used the present tense (as quoted); Enoki used the past tense.
123. Vide infra. Ch'ang Kien was apparently unfamiliar with the Sacaraucae.
124. Walled city of Lan-shi (Balkh). Tarn, ibid., 115. Now Graeco-Saka capital, later Kushan capital.
125. All traversed by the Sacaraucae who finally settled in Aria and Arachosia, see Mitchiner, ibid.
126. It did contain five early Graeco-Saka silver colns from the Balkh series; types 78-81.
127. R. Curiel and G. Fusbman, Memoires de la Délégation Archéologique Française en Afghanistan, XX, 1965. Found in an earthenware Jar at Khist Tepe between quaduz and Balkh while digging foundations for a military garrison. Among other coins may be noted Lysias (4), Antlalcides (3), Theophilus (1), Philoxenus (1), Aryntas (5), Archebios (2), Hermaeus (1): all Attic totradrachms except the five Attic double dekadrachms of Amyntas. All kings also struck Indo-Greek standard silver in the Kabul valley series (cfr. BMC; PMC).
128. In this new location the Sogdians lived after the nomadic manner of the Masagetae rather than transferring their previous urban culture to the new location: 'Kang-chu is situated about 2,000 li north-west of Ta-Yuan (Ferghana). It is a nomadic state with much the same customs as Ta-Yueh Chi. It had 80,000 to 90,000 archers and borders upon Ta-yuan. The country is amall. Towards the south it is aubservient to the Yueh-Chi, towards the east it is subservient to the Hiung-ni' (Shi Chih, 123, 3b in Zurcher's translation). It apparently included Tashkent region.
129. Quoted below. This Sogdian royal family was that which had co-existed alongaide the Yueh Chi and deacended from the royalty of the pre-Yueh Chi Sogdian kingdom.
130. Ch'ien Han Shou book 96a, Specht's translation rendered in English. Narain, ibid., 130 gives Enoki's translation and Zurcher, ibid., has provided another. Differences between these three translations are minor but those of Specht and Zurcher conform more closely to Chinese syntax while Enoki's version, being more fluent prose, tends to introduce elements of interpretation where stricter translation is ambiguous. This is exemplified by the passage in the Hou Han Shou which Specht translates 'when the Yueh Chi....passed among the Te-hsia, divided their kingdom'. The kingdom divided could be either Yueh Chi or Ta-hsia. Enoki selects a specific kingdom and says 1.. Ta-hsia which they divided.' This specificity appears invalid and the passage in question is summarised from the Ch'ien Han Shou where the subjugation of the Ta-hsia and the division of the kingdom occur in separate contexts and show that the division applies to Yueh Chi and not to Ta-hsia. Moreover the rest of the original passage locates these divisions in both Bactria and Sogdiana and therein again apecifies them as divisions of all the Yueh Chi domain. One should note that Chinese verbs are not conjugated (unless qualified they do not indicate time) and from neither passage can it be inferred that Yueh Chi subjugation of Ta-hsia refers to the same period as the division of the Yueh Chi dominion. Both are independent statements and in the Ch'ien Han Shou the statement on Ta-hsia describes recent history while the divisions of the Yueh Chi describe an existing situation.
131. Here and subsequently place names in parentheses are those of Zurcher and are usually the same as thoge given by Narain from Enoki's translation.
132. Parthia.
133. In this context the kingdom of Northern Pakistan. Location is discussed in detail by Narain (ibid., 135 ff) and Tarn (ibid., 277; 472 ff). The latter placed Ki-pin in the Kabul valley, a location that is denied by this passage in the Ch'ien Han Shou which places the Kabul valley (Kao-fu) within the Yueh Chi realm and the kingdom of Northern Pakistan (Ki-pin) as an independent state on the southern border of Yueh Chi (cfr.also Hou Han Shou). This text appears to describe the situation when Heraios and his associate Kujula had incorporated the Kabul valley but had not yet acquired North Pakistan from Azes II (ie. the period c.AD 10 to 20); vide infra.

## 134. Ferghana

135. Summarised from the Shih Chih; West Bactria and Margiana; vide infra.
136. River Oxus.
137. Tibet. Described again in the 3rd century Wei Lio (E. Chavannas, T'oung Pao, 1905, 519 ff) Proto-Tibetan tribes of the Kara-nor region (Zurcher).
138. Summary from Shih Chih.
139. The sentence occurs in Zurcher.
140. Hsi-hou apparently meant both a grade of ruler and also the territory governed by that grade of ruler. Specht and Enoki gave the following list a territorial value (as quoted), Zurcher gave it a peraonal value (viz. the Yabgu of Hsiu-mi etc)。
141. The Yang Gate (Zurcher).
142. Bamiyan. cfr. Fuye, RN., 1910, 6-73.
143. Kabul valley, vide supra et infra.
144. Specht's translation rendered in English. Part of this was quoted by Narain (ibid., 131) in Enoki's translation and all was re-translated by Zurcher.
145. Balkh. Previously the capital of Ta-hsia.
146. The Governor general in the Turfan basin.
147. Then follows a summary from the Ch'ien Han Shou.
148. Specht aic., this clause is discussed in a previous footnote. Divided the whole Yueh Chi territory.
149. Zurcher's place names in parentheses (Enoki's are the same).
150. Zurcher and Narain say 'More than 100 years'
1.51. Heraios; vide infra.
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152. Kabul valley. The Chinese vere not familiar with both Kuahan conqueste of this region. Heraios conquered it from Hermaeus and placed Kujula in charge; Soter Megas later conquered it from the Indo-Parthtans (A-si).
153. Kingdom of the Dahae (Gavasa; Kodoy); ie. Choresmia; vide infra.
154. Northern Pakistan; cfr. footnote on Kao-fu. Heraios (Ch'iu-chiu-ch'ueh) conquered the kingdom of Azes II through the efforts of Kujula but it was Soter Megas who conquered the region from the Indo-Parthiane.
155. Zurcher and Narain aay 'more than 80 yeara.'

156, Narain does not say that Yen-kao-chen vas the son of Ch'lu-chiu-ch'ueh. Zurcher, like Specht, aays that he was.
157. India; presumably referring to the Jumas-Mathura region. 'The country of Trien-chu i...is low, humid and hot. This country lies on the bank of a large river. The inhabitants ride on elephants in warfare....they practice the waye of Buddha.' (Hou Han Shou, 118, 9b: Zurcher, ibid).
158. Zurcher and Narain uee the singular.
159. Narain translates this 'in China.'
160. Kabul valley.
161. Zurcher only quotes their customs as being the same as those of India and adds a sentence about their commerce.
162. The Ch'ien Han Shou and the Hou Han Shou deacribe different evente. The earlier record describes the period when Kujula, the Kushan, held the Kabul valley. The later record describes the Kushan re-conquest of the Kabul valley from the Indo-Parthians by Soter Megas.
163. ie. Indo-Parthian : Gondophares and Abdagases.
164. One li was about 0.4 Km .
165. Chinese quotations of short distances tend to be reasonably precise while long distances are leas so.
166. E. Chavannes, T'oung Pao, 1905, 519 ff., written in the 3rd century AD. The central route traversed Ferghana and the northern route passed north of the Pamirs.
167. Their capital, Ch'ien-shi, was in Sogdiana; it was situated too close to the residence of the Chinese governor general to have been in Bactria.
168. Bactria reached by the central route; Sogdiana reached by the northern route.
169. RN., 1910, 6-73.
270. Fuye, ibid.
171. Vide infra. The early Bactrian Yueh Chi coinage provides evidence of having been emitted from two East Bactrian mints in each of which it succeeded to coinage of the Greek kingdom and in each of which it was succeeded by the coinage of Heraios.
172. Vide supra et infra; conquered by Heraios who probably also struck its firat Kushan coins. He established Kujula as associate in territories south of the Hindu Kush.
173. Quoted by Ghirshman, Memoires de la Délégation Archéologique Française en Afghanistan, XII, 1946, 130.
174. Situated across the Jaxartea, east of Yueh Chi., efr. Narain, ibid., 130 ff .
175. Pan Chao refers to both K'ang-kilu and Yueh Chi as neighbours of Wh-sun; all three living in the general region of the Jaxartes. The later Sogdian kingdom comprised the K'ang-kiu and that group of Yueh Chi referred to by Pan Chao.
176. For discussion of the archaeological evidence see B. Staviskiy, Papers on the date of Kanishka submitted to the 1960 conference, 1968, 293-303. For a weatern reference to this new Sogdian kingdom see the Naqe-i-rustam in scription of Shapur I (240-70) in which he diatinguishes between conquered Kushan territory, Kushanshahr, and the kingdom of Sogdiana that lay immediately north of Kushanshahr. E. Honigmann and A. Maricq Rea Gestae Divi Saporis, 1953.
177. Specht's translation rendered in English. Zurcher's (ibid) translation agrees.
178. ie. Some Yueh Chi and the Sogdians who both lived between the Jaxartes and the Crus. The Yueh Chi and the K'ang-kiu referred to by Pan Chao (vide supra). Their location is further defined by the aites of their constituent principalities, dependencies of Samarkand (vide infra). Tashkent was included by the T'ang history but not by the earlier Wei-chou.
179. Hirth's translation of CII, 21 quoted from Fuye, RN., 1910, 54.
180. cfr. Shih Chih. The region from which the Hiong-nu originally induced the Yueh Chi to migrate.
181. The eight principalities subservient to Samarkand were Mi, Che (Kiss, one of the original Yueh Chi principalities), Ho (Kochania; another original Yueh Chi principality), Ngan (Bokhara), Siao-ngan (ie. Little Bokhara), Nasopa, Wu-mao and Mu. Chavannes' translation; identifications according to Fuye, RN., 1910, 6-73. Some of these eight principalities differ from those listed in the Wei-chou. Both reports list Ngan (Bokhara), Ho (Kochania), Che (Kish) and Mi.
182. K.K. Fnoki, East and West, VI, 231-7.
183. Enoki, ibid., presented a succinct analysis of the literary evidence and noted that according to the T'ung-tien of Tu-yu the Hephthalite kingdom was established 80 to 90 years before they sent an embassy to Wen-ch'eng (452-65) in 456. Establishment of the Hephthalite kingdom in Bactria was also noted by Ammianus Marcellinus, a soldier in the Roman army, who recalled that the Chionites (Hephthalites) lived on the most distant frontier of the Sassanian empire where they founded their own atate when they freed themselves of Persian overlordship and went on to say that Shapur II spent the winter of $356-7$ in the furthest limits of his kingdom on the borders of the Chionites and the Eusini (Kushans); vide M.F.C. Martin, JRASB., Num. Suppl. XIVII, 1937, 23-50. In fact Shapur spent this winter in Kabul as is attested by the Persepolis inscription of Slok, his High Judge of Kabul (Martin, ibid). Subsequently the Hephthalites appear to have made peace with Shapur and to have helped him attack Amida in 359 (Martin, ibid; Ghirshman, Les Chionites-Hephthalites, 1948).
184. Narain, ibid.
185. Time is indicated by such worde as 'formerly.'
186. Vide infra for the coinage of Kujula and Soter Megas. See also Mitchiner, ibid.
187. Curiel and Fussman, ibid. for the Qunduz hoard. BMC. and Narain, ibid. for bilingual coine of the same kinga.
188. Principality of Hi-thum with its capital Po-mao (Bamiyan).
189. Northern Pakistan. For his Gandhara, Taxila and other coin sequences and their links with those of Kujula see Mitchiner, Indo-Parthian and related coins.
190. After his kingdom became restricted to the Kabul valley; vide infra.
191. The Yueh Chi prince of Hi-thum; vide infra.
192. Conquest of Tu-mi and Hi-thum from Hermaeus by Sapadbizes and Pseigacharia.
193. His title 'Za日oy' in Greek, 'Yarugasa' in Karosthi is equivalent to the Chinese version 'Tchao-ou,' the title by which Yueh Chi rulers, particularly those of Sogdiana (also 'Yarug' and 'Yakub' on their coins), honoured their anceatry.
194. Certain obols in the Eucratides imitations series were attributed by Cunningham (NC., 1889, 268-311) to Liaka Kusulaka and have since been linked with Kujula. They belong to an earlier period than either and to a degraded series in which they are one (all three coins are from the same dies) of many iseues with corrupt legends in malformed characters; vide infra.
195. Types 112-126.
196. Mitchiner, ibid: TAXILA: beginning of Azes I - Azilibes - Azes II bequence attributed by provenance and coin types (cfr. G. Jenkins, JNSI., 1955, 1 ff), for Rajuvala see J. Marshall (Taxila, Pl.241, 1B2); Kujula linked with Azes II by coin typea; Gondophares-Abdagases and Sasan-Abdagases sequences linked with Azes II by coin types and control marks. MINT A: Zeioniseb linked with Azes II Gandhara issues by coin types but separated by control marks. MINT B: Azes II issues separated from his Taxila-Gandiara-Arachosia-Mint A issues by coin types, style and control marks; Kharahostes linked with Azes II by control marks. GANDHARA: beginning of Azes I Azilises - Azes II sequence attributed by provenance and coin types (cfr. Jenkins, ibid); Indravarma-Aspavarma linked with Azes II by coin types and control marks; Kujula not specifically linked with Azes II but excluded from other mints; later Aspavarma-Sasan-Abdagases issues linked with Azes II and with early Aspavarma isaues by control marks. MATHURA: Rajuvala, satrap of Azes II (cfr. Taxila) attributed to this mint by links with satraps of Mathura and with a late Indo-Greek drachm sequence: Kujula aimilar coin type, style and denomination and Gondophares also.
197. In terms of the numbers of different control mark combinations this debasement, which was progreasive rather than sudden, commenced about the middle of Hermaeus' reiga and about one third of the way through Azes II's reign.
198. Vide Mitchiner, ibid.
199. Hou Han Shou, quoted above.
200. He is simply the Kushan of Tchao-ou Race on his Kabul valley coins but takes the title Maharajasa on his Northern Pakiatan coinage.
201. Kujula, the Kushan, was only able to coin in the Kabul valley because Heraios had already expanded his Sogdian principality to include Eastern Bactria. It is also probable that Kujula's Kabul valley coinage vas preceded by a Kabul valley iseue of Heraios.
202. The two East Bactrian Yueh Chi principalities were conquered from Hermaeus who was the last Greek king to strike Attic silver coins; theae vere represented in the hoard found vest of Qunduz. The Yueh Chi principality of Hi-thum (Bamiyan region) was founded within the southern territory of this Greek kingdow.
203. Various letters are affected; see particularly ' 0 ' versus ' $口$.'
204. The Kushan conqueror of the Kabul valley was Heraios rather than Kujula. It is inferred that Heraios conquered the Kabul valley c.AD 10, atruck a small iseue of billon tetradrachms (Indo-Greek weight standard and form) in its wint and then placed his kinsman Kujula in control of Kushan territories south of the Hindu Kush.
205. The Kabul valley was occupied when Heraios was issuing his Bactrian coinage and the earliest Kushan Kabul valley coins were probably issued by Heraios (vide infra). The Hou Han Shou also refers the Kushan conquest of the Kabul valley to the ruier who extended Kushan hegemony over the other Yueh Chi principalitiea (ie. Heraios).
206. Not until c. 80 BC when Parthia incorporated Margiana.
207. At the time of Artara; vide supra.
208. Ch'eng Kien's appraisal, though true in part, should be treated with caution because he was apparently unaware of the Sacaraucae migration; vide supra.
209. Use of the Karosthi 'Vi' on these coins, as on most other local series of Soter Megas, is no help in attributing them. When the Indo-Parthians conquered the Kabul valley from Kujula a number of his mint officials are likely to have retired to Bactria and some may have moved south again with Soter Megas.
210. D.W. MacDowell, JNSI., 1968, l ff attributed these colns as a copper denomination (Attic hemiobol) to the Kabul valley. They are tetradrachms struck on the reduced Attic weight standard of Heraios. Their Attic weights and Attic coin types place them in Bactria, north of the Hindu Kush, not in the Kabul valley.
211. This was originally a control mark but by now only an imitated detail of the deaign.
212. Cunningham, NC., 1890, 157. See also MacDowall, ibid.
213. IMC., I, 61; PMC, I, 162; NSSI., 1968, 1 ff.

213a Attic types, Attic weight, typological links with preceding Balkh coinage.
214. The current money in Bactria comprised debased tetradrachms and drachma among which these coins of Soter Megas were a significant part.
215. Kujula could not have succeeded Azes II much earlier than c.AD 20 (Roman type coins) nor could Kujula have succeeded Hermaeus much later than c.AD 10 (Ch'ien Han Shou). Similarly Gondophares could not have acceded in Aria at a date far removed from C.AD 20 (Arian Saka and Parthian coinage) and he reigned at least 26 years (Takt-i-Bahi inscr. of his 26th year). In these respects Soter Megas occupied Northern Pakistan from Abdagases close to AD 70 and not before AD 60. Conversely Kaniahka, who followed Soter Megas' successor Wima Kadphisea and established an era about a century before Vasu Deva (ruling in years 74 to 98 of Kanishka's era) lost Bactria to the Sassanian Ardeshir I (AD 226-240) must have acceded at a date not far removed from AD 130 . His accession date has been the subject of much discussion about which it will only be noted here that AD 78, a date still aupported by Sircar and others, is numismatically unacceptable while c.AD 128, a date gaining increasing acceptance, is coneistent with all the numismatic evidence. This means that, based on the numismatic evidence and accepting an accession date for Kanishka a few years prior to (or contemporary with) the creation of his era c.128, the reigns of Soter Megas and Wima Kadphises in Northern Pakistan extended from c.70 to c.125. Together with the independent evidence dating Heraios one can infer that Soter Megas succeeded Heraios in Bactria around AD 45/50.
216. The Dahaean and the post-Kushan Choresmian kingdoms were not co-territorial but were centred on the Caspian coast and lower Oxus respectively.
217. Attic obverse type whose reel and bellet border places the prototype earlier than Soter Megas. Reverse type of Heraios and Soter Megas. These Choresmian tetradrachms are heavier and have broader flans than those of Soter Megas; they are also made of silver like those of Heralos, whereas Soter Megas' are copper.
218. S.P. Tolstov, Vestnik Drevnei Istorii, 1938, 120~45. See also R.N. Frye, NMM., 113 , 1949, 16-23 and types catalogued below.
219. It is only in the context of Heraios that the term Choresmia is used to embrace all the territory between the Caspian and the lower Oxus. For the definition of Dahaean

Choresmia, the western part of this region, vide supra and for that of post-Kushan Choresmia, the eastern part of this region, vide infra. In numismatic terms the general period of Heraios marks the end of the Dahaean kingdom and the rise of the later kingdom. Contemporary Chineae sources refer to Heraios' conquest of the Dahaean kingdom ( $P^{\prime} u-t a$ ).
220. P'u-ta; Ga-ua (sa); Kodoy in Chinese, Aramaic and Greek. Chinese text quoted above.
222. Fundamentally the conclusions derived in this section differ from those of previous authors only by placing Yueh Chi expanaion into Bactria late, rather than early, in the lst century BC. Any other differences follow from this. Coing:- SOGDIANA: persic atandard and legends in Sogdian aramaic, anonymous BC.130-AD 80 (typea 60-4). CRORESMLA: Attic and reduced Attic standard and legends in Choresmian aramalc,Artara et al. (Dahae types 30-9) till c.BC 10 conquest by Heraios (no local iasues attributable to Heraios), after c.AD 40 anonymous (types 66-9). MARGIANA (Merv):Attic standard and corrupt Greek legends; Eucratides imitations till Parthian conqueat (types 74-7). WEST BACTRIA (Balkh): Attic and reduced Attic standard and corrupt Greek legends; Heliocles imitations (types 78-93) in silver till co80 BC. then copper till time of Heraios; modified types by Soter Megas c.AD 50 (type 101). EAST BACTRIA: Attic standard and intact Greek legends, Greek kinge (Qunduz hoard) till Yueh Chl occupation from Hermaeus by Sapadbizes ( $\mathrm{Tu}-\mathrm{mi}=$ Qunduz. Round letters; types $94-5$ ) and Peeigacharis (Hi-thum = Bamiyan. Square letters, type 96) c. 20 BC. Kushan occupation by Heraios c. 10 BC with isaues from both minta (types 97-9) till c.AD 45/50 and by Soter Megas from Qunduz(type 100). KABDL VALLEY and N.PAKISTAN: Indo-Greek standard and usually bi-lingual (Greek-Karosthi), Azes dynasty in silver then billon till Kushan conquest with issues by Heraios (type 114) and his subordinate Kujula (typea 115-29), conquered by Indo-Parthians (types 130-2; BMC., PMC) and re-conquered by Soter Megas (types 133, 145-6) who aubsequently established a general coinage on this veight atandard throughout Bactria, the Kabul valley and North Pakistan (typea 102-13; 134-44; 147-61).
223. Types 57-9 for this period; types 40-56 for previous issues.
224. The first character is conjoined 'Ma工' not 'Ma.' See Table III and Fuye's plates.
225. Tchao-ou denoting Yueh Chy descent from the original migrants expelled by the Hiong-nu (cfr. Wei Chou quoted above). Yaqugaaa (Karoathi)-Zaaoy (Greek) on coins of Kujula. Yakub on later Sogdian coins and subsequently Hub (by the Hephthalite period when these latest coins were etruck the, originally ethnic, title had become synoдymous with king).
226. These three districts were seats of principalities until the time of Heraios. As the three groups of coins are equally common and show comparable ranges of type variation it is likely that all three districts retained mints until the foundation of the Sogdian kingdom c.AD 80.
227. Tetradrachms of the Yueh Chi period weigh around 9 grammes. The debased drachms of this period would give a tetradrachm of 8 grammes. Coins of this group are linked by provenance with Bokhara, Oxus, Balkh region; Fuye, RN., 1926, 37 ff and 141 ff; also Prinsep's Essays, vol.2, 30.
228. Mani was first permitted to preach in Iran by Shapur I. See Honigman and Maricq, Res Gestae Divi Saporis, 1953, 21-38.
229. 'MaLHA YaKuB' appears the correct reading of the 13 available legends. The initial 'M' resembles ' $K$ ' (or 'B') in Fuye's transcriptions and on some coins but other coins auggest this is because the first part of the character is sometimes off the flan. Transliteration of the conjoined 'HA' appears certain when compared with character forms on preceding series. ' $K$ ' is normal but the terminal ' $B$ ' is modified and its transliteration probable. 'L' and 'U' have their atandard form and eacb can be read 'L,Z,U,V,Y or W.' Fuje's reading 'BUHMaZDAT' differs from 'MaLHA YaKuB' in respect of 'M' (for 'B'; part of character ubually off flan), 'L' (for 0 ; both valid), 'HA' (for 'HM'; almost certainly 'HA'), 'Y' (for $Z$; both valid), 'K' (for 'D'; $D$ not used in Sogdian cfr. Frye, ibid) and 'B' (for 'A'; probably 'B').
230. ie. Lord King of Bokhara. Frye, NNM., 113, 1949 discussed the translation.
231. Legend reads from 2 o'clock with characters base outwards. Fuye read 'L' as ' $Z$ ', both $^{\prime}$, characters have the same form at this period. ' $M$ ' is conjoined with ' $L$ ' (MaL) on silver but separate on copper coins. In ' $A$ ' the cross-stroke now traverses the other two strokes to produce atriangular character. The two arcuate strokes of ' $s$ ' are now conjoined superiorly; Fuye read this as ' $D$ ' but as Frye (ibid) noted ' $D$ ' was not used in Sogdian aramaic. Hence Fuye read MaZDA KoDAD instead of MaIKA SaKaKa.
232. Samuaka, of which Sakaka appears to be a variant, is close to the Arabic Samarkand and to the contemporary Chinese version Sa-mo-icien.
233. Progressive evolution of the character ' $K$ ' has been noted. The form of the flames above the altar shows comparable progressive changes.
234. The series continued after the Arab conquest until about AD.810; the later lasues bearing Arabic legende naming various caliphs and governors. See BMC for detaile.
235. Frye, NNM., 113, 1949. Henning's system of transliteration, adapted to transliterating Pehlf, differs from that used here. The transliteration given here is Henning's (ie. the aramaic value of each character is his) but its mode of expresaion in Roman letters is adapted to conform with other aramaic legende transliterated in thia papar.
236. For an analogy aee the Dahaean coinage where ' $A$ ' may be modified in final position, ' $U, V$ and $Y$ ' are the same character.
237. This Sogdian ' 'A' can be linked with the Achaemenid-Dabaean ' 'A' or with the Achaemenid-Dahaean-Sogdian 'A' (it would then be a reversed A). It ie unlike other characters.
238. Walker, BMC. Arab-Saseanian coins. Frye, ibid.
239. RN., 1926, 37 ff.
240. RN., 1926, 141 ff . One coin from the Hermitage and one from his own collection.
241. RN., 1926, 144 ff. Most coins from the Khodja-Oban find north-vest of Bokhara. One of his coins was overstruck on type 60 (cfr. p.149). For provenance see also E. Drouin, RN., 1896, 154-174.
242. Fuye's coin whose obverse is drawn in RN., 1926, 150 probably belongs to this type.
243. Also illustrated by R. Gobl, Documents zur Geschichte der Iranischen Hunnen, type 282, coin 3. This coin has the details of other early Bokhara drachme but its legend is not in Sogdian script and appears to be corrupt pehlfi.
244. S.P. Tolstov, Papers on the date of Kanishka submitted to the 1960 conference, 1968, 304-26. The main chronological evidence is derived from analysis of coin bearing strata. Tolstov also quotes radio-carbon dating but interprets assays too precisely since their intrinsic error is about a century. His earliest radio-carbon date, from a foundation deposit that preceded the flourishing of Choresmian culture was 140 BC (error 100 years) and apparently antedated the time of Heraios.
245. Tolstov, ibid., P1. VI, coln 2. Choreamia type 66 infra (compare vith Margiana type 74).
246. For this symbol see type 66. This issue wee apparently struck between c. 80 BC when the Parthians conquered Margiana and c.0 BC when Heraios conquered Choreamia.
247. Reduced Attic standard (cfr. Eucratides imitations of Margiana and Choresmia; Bactrian issues of Heraios) for Choresmia; reduced Persic standard (cfr. pre-Yueh Chi and Yueh Chi Sogdian colnage) for Sogdiana.
248. Data on coin weights and fabric are too acenty for a definitive statement.
249. Tolstov conceives that Choresmian silver coinage was interrupted from the first century BC until after the reign of Vasu Deva, the Kushan; so that during this period countermarked Kushan copper coins formed the sole indigenous currency of Choresma. Continuity of coin types and metrology render this unlikely and imply that countermarked Kushan copper coins circulated alongaide early Choresmian ailver coins. Choresmia was profoundly influenced by the Kushans as regarde both culture and importation of coins but there is no reason to believe that it ever formed part of the Kushan kingdom after the period of Heraios.
250. Different obverse border, different distribution of reverse legend, amaller coin flans, debased metal and lighter coin weight.
251. S.P. Tolstov, Vestnik Dremnei Istorii, 1938, 120-45. See also Frye, ibid.
252. By analogy with the Sogdian series. Tolstov suggests a later date but the preponderance of later period coins from his excavations favours the early date.
253. S.P. Tolstov, Papers on the date of Kanishka submitted to the 1960 conference, 1968, 304 ff , recorded 60 Kuehen copper coins recovered Prom Choresmia (Wima Kadphises 6, Kanishka 8, Huvishka 9, Vasu Deva 18, rest unclassified) of which 22 were from Toprak-kala (incl. $4,3,3,6$ or each reign). Most coins, excluding those of Wima, bore the Choresmian symbol countermarked on both obverse and reverse.
254. Discussed by Tolstov (both papers cited). Type 67 appears to be 4 th century insofar as the lion headdress derives from that of Hormil $z d$ Kushanshah (cfr.Gobl, ibid., II).
255. 'Ma' of normal Dahaean form and either isolate or conjoined as 'MaL.' ' $K$ ' and ' $A$ ' of Dahaean form. Terminal 'A' placed on a line with the rest of the legend or above the ' $K$ ' of Malka.
256. For 'Mara' see Frye, ibici.
257. A. Markoff, J. Russian Oriental Society, 1891, IV. The characters show less ligation than on most coins.
258. Tolstov, Vestnik Drevnei Istorii, 1938, II.
259. Frye, NNM., 113, 1949, 21.
260. 'MaRA' not 'MaR'A': the final character is only slightly modified from earlier forms of 'A' and bears no relation to earlier forms of 'A.' Final word ends 'RaZM,' 'Ra' or 'RaM' rather than always 'RaZM' and commences 'HaR' or 'HAR;' see Table III.
261. Not catalogued in detail aince one can add little to Tolstov's articles other than a re-appraisal of the legends.
262. Papers on the date of Kanishka submitted to the 1960 conference, 1968, VI, coin 2. Compare with type 74.
263. ibid., VI, coin 1 and another cited.
264. ie. Tolstov, Vestnik Drevnei Istorii, 1938.
265. Vide supra. Countermarked Kushan coins also current.
266. Uncertain names; vide supra and Frye, ibid.
267. J. Russian Oriental Society, 1891, IV.
268. NC., 1896, 246-53; perhaps the coins originally published by Markoff.
269. NC. , 1889, 268 ff.
270. H.H. Wilson, Ariana Antiqua, 1841, 311 noted a silver coin of the Horse series collected by Masson.
271. cfr. Type 101. The affinities were noted by MacDowall (JNSI., 1968, 1 ff).
272. ibid., 311.
273. Cunningham, NC., 1889, 268 ff . Compare with type 66 from Choresmia.
274. Ariana Antiqua, 1841, 239. From General Ventura's collection; different corrupt inscription.
275. Glendining eale 18, 1970 (Nov) lut 45, P1.II; weighed by author.

275a Prinsep's Essays on Indian Antiquities, ed. E. Thomas, London, 1888, vol.2, XIII, 5; legend PVEIAENE MEFへ $\wedge^{\circ} Y$ FVKPAT $\Delta^{\circ} Y$.
276. Gunningham, ibid., read this corrupt association of letters into a meaningful legend and his interpretation has persisted (eg. Narain, ibid., 69; 108).
277. From Carmania (Koh-i-Taftan). Rapson, NC., 1904, XVII, 26.
278. Curiel and Fussman, ibid.
279. All coins in this series have round letter forms (Sapadbizes, Heraiob, Soter Megas).
280. All coins have square letter forms in this series (Pbeigacharia, Heraios).
281. Legends on BM. coins have standard forms of all letters together with such corruptions as reduction of ' $R$ ' at both sites to a thin oblique stroke or its omission, reduction of 'Sh' (written Pf on coins of Heraios only) to one or two thin oblique strokes, reversal of ' $N$ ' (all sites), reduction of ' $Y$ ' to ' $V$ ', alteration of ' $K$ ' to a reversed ' $N$ ' (both sites).
282. ' $K$ ' may be reversed; the name is followed by a letter that resembles ' $B$ ' on some coins. For discussion of the legend see among others Cunningham, NC., 1890, III ff and more recently R. Ghirshman, Begram, 1946, 109 f 。
283. As Ghirehmen, ibid, averred.
284. His tetradrachms in the Kabul valley series have the same reverse but without addition of Saka. They appear to have been struck at this period, before Heraios had conquered the Graeco-Saka state of Western Bactria.
285. Vide types 57 to 59.
286. Viz. and anepigraphic obverse type showing a bust and a reverse marginal legend in Greek.
287. See also MacDowall, ibid.
288. Other changes occur. For instance, drachms in sequence ' $a$ ' bear a longer legend on coins with 14 or 12 rays than on other coins with 12 or fewer rays.
289. Balkh, the Kushan capital. One of the three Yueh Chi-Kushan mints situated north of the Hindu Kush and one of the two mints in the region that had previously struck a local series for Soter Megas. Kapisa; a mint for Hermaeus (the only mint for his later coins) and the main mint for Kujula; also mint for a local series of Soter Megas coins. Indo-Farthian coins were struck at two major mints in North Pakistan; Texila and a town in Gandhara. Of these Taxila was the major mint (cfr. Mitchiner, Indo-Parthian and related coins) and apparently also struck the local N. Pakistan series of Soter Megas which provided the prototype (cfr. metrology; horseman) for his general coinage.
290. Shares square letters with sequence ' $c$ ' and three-pronged symbol with sequence ' $a$ '.
291. The difference ia so marked as to outweigh bias due to Taxilan coina being more likely than Bactrian coins to enter western coin collections.
292. For variable omisaion and reversal of letters see text.
293. Cunningham, NC., 1890, XII, 1, 2a, and 2 illuatrate typee 97 to 99.
294. Karosthi 'Vi' occurs on 3 local beries of Soter Megas struck both where types and metrology were Attic and where they were Indo-Greek. Although preaumably a moneyer's symbol it was not mint specific. This appears to be the earliest uae of a Karosthi character on coine atruck north of the Hindu Kush and may have been a sequel to exodus of Karosthi speaking subjecta (including mint officiala) frow the Kabul valley to Bactria when Kujula lost that region to the Indo-Parthians. At this period Karosthi legends on Kabul valley coins became illiterate (Types 130-2).
295. BMC., XXIV, 6; Cunningham, NC., 1890, XII, 4.
296. BMC., XXXIV, 5; Cunningham, NC., 1890, xII, 7.
297. In respect of square letter forms and both types of symbol this issue and type 107 could alternatively end this or the Kabul valley sequence or might conceivably have been struck in a minor Afghan mint.
298. Flying Nike crowning horseman: this type was used by Gondophares (eg. PMC., XV, 43) but not by any Kushan other than Heraios. Only Heraios was termed Tyrannoyntes (of the Kushans). Transcription of 'Sh' as ' fP ' was also restricted to Heraios.
299. Note absence of Saka between horseman's legs. Discussed above.
300. NC., 1890, XII, 3.
301. The obverse legend around the bust is largely obliterated and its remant 'Padata' is too incomplete for interpretation.
302. cfr. Sogdian coinage and Chinese annals discussed above. Rendered Yavag, Yakub and Hub in Sogdian Aramaic, Yavugasa in Karosthi and Zasoy in Greek.
303. Hercules type copied from Pseigacharis.
304. The didrachm was a denomination introduced by Kujula.
305. NC.. 1892, IV, 1-2 (didr. and drachms) and $45 \mathrm{ff} ; 63 \mathrm{ff}$. Whitehead in PMC links them with Kujula but catalogues them under Hermaeus.
306. Drachms only.
307. Minor degrees of corruption on aquare letter coins.
308. The predecessors of Kujula in N. Pakistan; Azes II and his satraps Indravarma, Aspavarma, Kharahostes, Zeionises and Rajuvala (cfr. Mitchiner, ibid). Kujula's Bull/ Camel coins struck in succession to Zeionises' Bull/hion coins (with which they also share control marks) all have corrupt Greek and intact Karosthi legends.
309. Vide supra.
310. Mitchiner,ibid.
311. Attributed to Soter Megas by Cunningham (NC., 1890, XII, 8), Whitehead (PMC., 163) and MacDowall (JNSI., 1968, I ff).
312. MacDowall, ibid. also attributed the anepigraphic drachms to the Kabul valley whose mint he identified as Kapisa. For the local Taxila coinage see Types 145 f .
313. Cunningham, NC., 1890, XII, 3.
314. Cunningham, NC., 1892, IV, 3-4; BMC., XXV. 1-4. Discussed by numerous authers; recently by Narain, ibid., 159 ff.
315. Cunningham, NC., 1892, IV, 1.
316. Cunningham, NC., 1892, IV, 2; BMC., XXOCII, 8; FMC., IX, 682.
317. From their style and fabric these are late tetradrachms of reduced weight rather than early didrachms of nearly full weight.
318. A.S. Altekar, NSI., 1947, 6-10.
319. Struck after his conquest of the Kabul valley from Abdagases c.AD 65/70.
320. PMC., XVI, 113; MaeDowall, JNSI., 19681 ff .
321. For the other two sequences of his general coinage see Types 102-115 (Balkh) and 147-161 (Taxila).
322. Mitchiner, ibid.
323. Vide Balkh and Kabul valley.
324. Goins struck after his conquest from Abdagases c.AD 65/70.
325. Cunniagham, NC., 1890, XII, 5 and 5a (tetr. and drachm); BMC., XXCV, 1; PMC., XVI, 96. For linke with Taxila see MacDowall, ibid. and Mitchiner, ibid.


[^0]:    * Since this section was written the author has seen a group of about 12 Eucratides' imitation obols (type 75), the same number of Heraios obols (type 98), two hemidrachms of Sapadbizes (type 95) and an obol of ?Agesiles (type96a). All these coins (in the hands of two London dealers) came from Afghanistan in January 1973.

