Introduction: numismatic, literary and epigraphic evidence on chronology in Gandhara
Osmund Bopearachchi

The aim of this panel is to discuss the problems concerning chronology of Gandhara and neighbouring regions from the conquest of Alexander the Great until the end of Kushano-Sassanians, in the light of new archaeological, epigraphic and numismatic data. Scholars unanimously admit that the reconstruction of the history of the Indo-Greeks and their successors in Central Asia and North-West India, depends mainly on numismatic evidence. It is because, the literary sources, though important, secondary compared to the vast and rich information conveyed to us by coins. However their history cannot be written taking only one aspect of their culture into consideration. The other forms revealing their economic activities, modes of production, and their artistic tastes, such as architecture, ceramics, inscriptions, artefacts, etc. are equally important in this exercise.

The composition of hoards, overstrikes, monogram pattern along with the distribution of coin finds and all the aspects of numismatics give us indications about the chronology of each and every dynasty who ruled over the regions of Gandhāra. We have at our disposal more than 50 unpublished Sassanian and pre-Sassanian coin hoards discovered during the last fifteen years. The discovery of unprecedented number of inscriptions in Greek, Bactrian and very particularly in Gandhari enable us to solve if not at least to understand the fundamental questions regarding the history of Kushans and their predecessors. The new inscription referring to an Indo-Greek era published by Richard Salomon will be given a particular attention. Should we or should we not assume that the Azes era is equivalent to Vikrama era and then the Indo-Greek era to 186/5 B.C.? We also hope to discuss the questions raised regarding the genealogy of Kushan kings up to Kanishka I, as revealed by the Rabatak inscription. The coming of the Sassanians into Bactria and Gandhāra, and the end of Kushan power in India and the dating of the issues of Kushano-Sassanian rulers will also be given a special attention. All these contributions are closely linked with the controversy over the date of Kanishka. We may perhaps never know the absolute truth about the history and the chronology of these enigmatic rulers, yet what is important, is to come as close as possible to the truth.

A Note on the Vikrama Era

The Vikrama Era's start date fo 23rd February, 57 B.C. is based on the Hindu tables of the Surya Siddhanta, compiled during the 5th century A.D. and before that date difference systems of intercalation were in use. Two different starting dates are found with the Vikrama Era, a similar situation to that found with the Hellenistic Seleucid Era, established in 312-311 B.C. Both Hellenistic calendars are attested in historical inscriptions of South Asia and Afghanistan. Thus both could have been transmitted to the astronomers of medieval India through the scientific teachings of Indian centres, especially at Ujjain where
Graeco-Babylonian traditions of astronomy were long respected. The survival of this system might explain the double calendar of the Vikrama datings. Thus it appears that owing to our insufficient knowledge of the early mechanics of these calendars, it is unsafe to attempt exact conversion to the day of early datings in this era. For present purposes, and to avoid the errors of one year easily made in converting such dates, it is best to use the rule of thumb given by James Prinsep for these conversions:

To convert Samvat into Christian dates, subtract 57; unless they are less than 58, in which case deduct the amount from 58, and the result is the date B.C.

Evidence is presented to show that the era begins with the inauguration of the Saka king Azes I.

Links Between Coinage and the Greek Eras Used in Gandhara
Dr. David W. MacDowall

Recent discoveries have proffered new but conflicting evidence for the reference date of the Greek era used by the Kushans and their predecessors. The geographical distribution of the inscriptions and some coinages indicate the extent to which some rulers of the period emphasised continuity with their predecessors.

The double dating that Falk has recognised in the Yavana Jataka of Sphujiddhvaja quoting "a date Kusana elapsed plus 149 produces San elapsed" seems to establish an absolute date of AD 227 for the second century of the Kushan era and a date of AD 127 for the era of Kanishka. The Trilingual inscription from Dasht-i-Nawar dated in year 279, thought to give the name of Vima Kadphises, was interpreted by Bivar as the last year of Vima Kadphises and the first year of Kanishka. But the name on the unfinished inscription from Kanishka's Nikator sanctuary at Surkh Kotal has now been read as Vima Tak... ie Vima Takto. He is known from the Rabatak inscription to be the father of Vima Kadphises and grandfather of Kanishka. The last two digits of the date on the unfinished inscription are sketched roughly on the stone and the interpretation has been disputed. We can no longer accept Bivar's reading of 279. The alternatives, 299 proposed by Harmatta and 285 by Maricq would give reference dates of 171 BC or 157 BC for the Bactrian era.

However the triple dating of the inscription of Vijayamitra king of Apraca in his 27th regnal year in year 73 of Azes and year 201 Yona to be published by Salomon gives a different date of 187-186 BC for the Yona or Greek era.

Recent research into some of the Graeco-Bactrian and Indo-Greek coinages and their distribution suggests that the contexts of 187-186 BC for an era of Demetrios I and of 171 BC for an era of Eucratides I are actually the reference dates for two eras – one Indo-Greek and the other Graeco-Bactrian.

Epigraphic and Numismatic Evidence on the Chronology of Gandhara
Bob Senior

The chronology of Gandhara during the Indo-Greek and Indo-Scythian periods has been a matter of contention for well over a century but the publication of recently discovered inscriptions and of vastly greater numbers of coins has perhaps allowed a
Another inscribed reliquary vase from Wardak, Afghanistan
Prof. Harry Falk: Institut für Indische Philologie und Kunstgeschichte Freie Universität Berlin

In 1833 Charles Masson found an inscribed metal reliquary at Wardak, east of Kabul, now on display in the British Museum. Its inscription speaks of Vaga Marega, founding a stupa in the time of Huviska. A very similar vase was seen recently. Its inscription shows that it was donated on the very same occasion by the little daughter of Vaga Marega. Fortunately, this time all the contents of the vase have been preserved. Apart from some relics, they include the donations of the girl and her little friends, they also show that the reliquary was donated - but not destroyed - about 300 years later, when the Huns were ruling in Kabul. This second vase proves that a ruling family prepared for the installation of a sacred Buddhist area by planning from the outset to erect several stupas at once. The differences in the two dedicatory texts can easily be explained along these lines. The contents of the vase can be used to illustrate the ceremony of filling and sanctifying the reliquaries before they were given to the stupa.

From the Rabatak Inscription to the Sasanian rock relief of Rag-i Bibi: problems of chronology in the history of greater Gandhara
Michael Alram: Kunsthistorisches Museum, Vienna

For the symposium, Coins, Art and Chronology, held in Vienna in 1996, scholars were invited to discuss critically problems of chronology in the pre-Islamic history of the Indo-Iranian borderlands. In these discussions, the long standing problem of the date of Kanishka was a major topic stimulated by the then recent landmark discovery of the Rabatak inscription. Since that time, new discoveries and hypotheses have been made: we have learned more about the contents of the Bactrian documents from Nicholas Sims-Williams; Harry Falk has brought an important passage in the Yavanajataka (an astronomical text, written in 269 A.D.) to our attention which links the Kushana era with the Shaka era. The identification of Vima Takto with Soter Megas has been questioned by Osmund Bopearachchi, and Nikolaus Schindel has published the third volume of the Syllogia Nummorum Sasanidarum (Shapur II – Kawad I) which provides an important new basis for understanding the development and organizational structures of Sasanian coinage. Finally, the extraordinary newly discovered Sasanian rock relief at Rag-i Bibi in Afghanistan presented by Jonathan Lee and Frantz Grenet at the conference “After Alexander: Central Asia before Islam”, in London last year, may also provoke new ideas for Kushan chronology. It should be stated that the aim of my paper is not to prove or disprove chronological dates and hypotheses developed by different scholars on the basis of the aforementioned evidence, but simply to present a critical summary of what has happened during the last ten years in our research.

The chronology of the Sasanian Kushanshahs
Nikolaus Schindel: Numismatic Commission, Austrian Academy of Sciences, Vienna
The importance of the Kushano-Sasanian coin series for establishing the date of Year One of the Kushan King Kanishka I has been recognised for quite some time now. Despite earlier attempts of comparing Sasanian and Kushano-Sasanian issues, however, the dating of the Kushan-Sasanian rulers themselves still is subject to considerable debate.

This paper tries to establish a reliable chronological frame for these coins by comparing various pictorial elements of their obverses and reverses with Sasanian imperial issues. The basic assumption is that if the same variants can be found on Imperial Sasanian and on Kushano-Sasanian coins, they should have been produced more or less contemporarily. Of great importance in this respect is on one hand the comparison with earlier and later depictions in the Sasanian coinage for establishing general patterns, on the other hand the cumulative evidence of the typological analysis, that is to say, whether an accumulation of congruence can be found. Being a numismatic contribution, the paper fully concentrates on the numismatic material.

The result of this comparison is that the entire Kushano-Sasanian coin series cannot be earlier than the last years of the Sasanian king Wahram II (276-293), and that most issues cannot be later than the early period of the reign of Shapur II (309-379), an approximate end date being c.325 AD. Thus, the numismatic comparison between Sasanian and Kushano-Sasanian coins places the latter in the reigns of Narseh (293-303), Ohrmazd II (303-309) and Shapur II, with the actual start being maybe as late as the ascension to the throne of Ohrmazd II.

Under this assumption, and when taking into account the various overstrikes of Late Kushan copper coins on Kushan-Sasanian issues and vice versa which have been published by Cribb, the most likely date range for Year One of Kanishka I appears to be the 2nd century AD.