

PETER MATHEWS

Interviewed March 9, 2005 at the home of David and Elaine Schele, Austin, Texas

Australian archaeologist and epigrapher [Peter Mathews](#) has been involved in the Maya decipherment since the early 1970s, when as an undergraduate at the University of Calgary he was instrumental in significant advances in the understanding of the dynastic sequence and structure of



Palenque. He later did pioneering work in mapping dynastic sequences and site relationships throughout the Maya world. The recipient of a 1984 MacArthur Fellowship, Mathews has taught at Harvard and Calgary, and currently is a Senior Research Fellow at La Trobe University in Melbourne.

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Interview transcript

His introduction to Maya studies as a student of David Kelley

Q: Can you tell us how you first heard became aware of the Maya?

Peter Matthews: Well I think actually the first influence on me was reading Mike Coe's book *The Maya*, which was about the only book available to the general public in Australia where I grew up. I remember there was one illustration in particular that absolutely captivated me and still does, I must say. It's a very poignant illustration of a captive, carved on a bone from a royal tomb in Tikal. And that and other images of Maya culture just made me realize that I wanted to know more about that culture.

so I read as much as I could in Australia, which was about three books. And when I ended up going to Canada, I was very lucky that at the University of Calgary was David Kelly, who of course was an expert and still is, on Maya civilization. And finally at the end of my first year, I screwed up courage and asked him if I could register for his third-year class on Maya civilization, even though I was in my second year.

I should give a bit of background. In Australia you don't say 'boo' to professors. They're so high above that you don't dare approach them, and everyone in Calgary kept saying, "Oh go and see Dave Kelly if you're interested in the Maya". And so finally I did at the end of my first year – in retrospect, having wasted an entire year of missing out on Dave. And when I asked him about this and said I think I'm interested in the Maya, he said, "Oh well, come home for supper tonight!" <laughs>. And that was the beginning of a great relationship with Dave. And he really taught me so much in the next few years while I was at Calgary, where I learned more and more about the glyphs from him.

Q: Could you tell us how David got you involved in Maya cities? How he set you about learning?

Peter Matthews: Well the first thing that we really talked about was, I said I'd really like to learn the hieroglyphs, because they had also captivated me from a very early time in Australia, and the only thing I saw in Australia relating to hieroglyphs was actually Thompson's catalog of hieroglyphs, which when I first opened it – as I'm sure is the same experience for most people – it was just a meaningless babble of numbers and of occasional pictures of hieroglyphs. But of course that's what it was. It was a catalog of each hieroglyph that occurs in the corpus, reduced to numbers. And so I was aware of that, and knew roughly how that worked.

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Dave Kelly suggested that I work with the inscriptions of Palenque with him, as a way of learning the individuals signs. And it was a perfect strategy I must say, because what I did was, I went off, and each day and evening I would transcribe the images of the glyphs of Palenque to Thompson's system – but blind so to speak, without consulting Thompson's catalog apart from for checking the numbers. And then with Dave we would sit down together and compare my interpretation of which signs they were, with Thompson's. And Dave would say, "Well no, you're wrong, because even though this sign looks a bit like the one you've identified, it's not. This little line here makes it a different sign". And then occasionally he'd make my day by saying, "Well yes, I think you're right, and Thompson's wrong on this one"!

Gradually, over the months, I really got more and more familiar with the signs. And by that stage we were approaching the end of that school year. The following year Dave was about to go off to Cambridge for sabbatical, and so I was facing the prospect of a year without Dave Kelly, which was not terribly pleasing to me. So I in fact decided to go home to Australia for a year and take a break, so that I could get two more years with Dave during my undergraduate years. And I went back to Australia and applied for a job in marine archaeology, diving on old Dutch shipwrecks off Western Australia and things like that.

But in the meantime I got word that I'd won a small scholarship at Calgary. And so I telegraphed them – this was long before email and when it was still very expensive to telephone – so I telegraphed and said was there any possibility I could get this deferred. And they wrote back or telegraphed back saying "no, if you want this scholarship you're going to have to come back for the next school year in September." And so I pleaded with them in a couple more telegrams, but finally they said no, so ultimately I decided I'd go back. And I returned back in Calgary to be greeted at the Department with "What are you doing back here? Didn't you hear? They finally relented and deferred your scholarship!"

But by then I was back, so I stayed there for that year, and as it turned out, even though Dave Kelly wasn't there, it was probably the most important year of my life in many ways, certainly academically, because it was that year that the Mesa Redonda in Palenque was being held. This was 1973.

Q: Before we go further, could you talk a little bit about Dave Kelly? What kind of a guy he was and what did he bring to the decipherment? What was his approach? How did he work? What was the nature of his contribution?

Peter Matthews: Well, Dave Kelly is just one of the most wonderful guys you could ever wish to meet. He's outgoing, friendly, one of the most enthusiastic people I've ever

met in a field that is blessed with enthusiasts and people who are just so energetic and excited when any interest is shown in what they're doing. And Dave Kelly has worked really all over Mesoamerica, not just in the Maya area, but also especially in central Mexico, and he likes manuscripts of all kinds. So he's worked quite a bit with Miztec manuscripts and manuscripts in central Mexico.

One of his main interests in fact is genealogy, so he's worked a tremendous amount with all of the very complex and convoluted royal histories of the Miztec area. But he also got intrigued with the Maya, especially being influenced by Tatiana Proskouriakoff when he was at Harvard as a graduate student. And one of the first things that he did in fact in Maya studies was to follow up on Tania Proskouriakoff's great decipherment of historical individuals being recognized in the inscriptions. Dave tested that hypothesis out at the site of Quirigua. In 1962, he published a paper completely vindicating Proskouriakoff's method by elucidating a series of kings from the site of Quirigua.

The other side that Dave worked on, at around the same time, was to test out Yuri Knorosov's theory that there were phonetic signs in the script as well as word signs. Knorosov had established, I think to some people's satisfaction, but not many at this point, that syllabic signs did occur in the hieroglyphic script, and that they could be used to spell words themselves, or could attach to word signs to give phonetic complements and partial sound value to the words. Dave Kelly wrote a very important article called *Phoneticism in the Maya Script*, which completely supported what Knorosov was arguing, even though at this time, most western epigraphers, and especially Eric Thompson, had refused to accept it.

So right at the beginning of the great leap forward, so to speak, in Maya studies in the early 60s, Dave Kelly was very centrally involved in both of the two main forays in the decipherment process. And shortly after that, I believe, he started working on his big book, which was ultimately published over a decade later by the University of Texas Press, called *Deciphering the Maya Script*. And so I was also very fortunate to be at Calgary when that book was in its finishing phases, with Dave, and to be able to be looking at the manuscript copy of that, in some cases, while Dave was showing me and teaching me more and more about the glyphs.

The 1973 Mesa Redonda de Palenque

Q: Let's move forward then to when you got an invitation to attend the First Mesa Redonda. How did that come about?

Peter Matthews: Well, Dave Kelly went to Cambridge in England for a sabbatical for the 73/74 school year, and it must've been probably in the early fall of 73 that Merle Greene Robertson was getting the first Mesa Redonda together, and starting to organize it and invite people. And she invited Dave Kelly. And Dave, bless his heart, was already in Cambridge, but wrote back to Merle saying, "I'm sorry. I'm just not going to be able to get there, but I've got an undergraduate student who's been working pretty intensively on Palenque and maybe you'd like to consider him". So out of the blue came this letter to me from Merle Greene Robertson, who of course by this time I knew from her wonderful books on Maya rubbings, saying, "Would you like to come to a conference in Mexico at the end of the year?" And so I scrounged around, and did what college kids everywhere do, and wrote home and said was there any possibility of getting some money for an airfare down to Palenque? And my parents kindly came through and I got the airfare, and was off to the Maya area for the first time in my life.

I got off the plane in Villahermosa and immediately felt at home. It was like walking into an oven and I felt so lovely and warm, especially after Calgary which was freezing cold by then of course. I found my way to the bus station in Villahermosa and got on an old rickety second class bus, and trundled along to Palenque. Got off the bus as Palenque, followed directions to La Cañada, the little suburb of Palenque where Merle lived and where the Mesa Redonda was being held, and walked down the dirt road that is now paved and is now called "Merle Greene Street" in La Cañada, to be greeted by this exuberant woman who came out of a house off to my right hand side and greeted me with, "You must be Peter Matthews!", and I assumed it had to be Merle. So I said, "Oh are you Merle Robertson?" and she said "Hell no, I'm Linda Schele". And that was the beginning of a wonderful relationship.

Q: Could you talk about how you were met by the group at the first Mesa Redonda? What you found that group like, and how your interaction with Linda went during the conference week and the preceding days?

Peter Matthews: Well I suppose in some ways I'd been prepared for the first Mesa Redonda by having met Dave Kelly, and having someone who was so supportive and helpful and interested in a puny little undergraduate thinking that he'd like to do more with the glyphs. And effectively that's how the Mesa Redonda was as well. It was a very small group of people, but towering figures in the field. Michael Coe, Floyd Lounsbury, George Kubler from Yale, scholars from Tulane and other institutions as well, and of course Merle Greene.

I was very much in awe on the trip going down to Palenque, wondering how I was going to cope with all of these big names in the field, and how they would cope with me. I

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guess I basically just assumed I'd sit in the back somewhere, and be happy to be a part of it and listen in. But they immediately embraced me and Linda, and everyone else who was there, which did include some students. One of Merle's high school students were there, and a couple of Mike Coe's graduate students from Yale. So I felt at least I had some companions in my generation as opposed to theirs. But even that didn't matter, because they were so warm and welcoming.

I think for Linda and me, one of the things that made the biggest impression really of the first Mesa Redonda was how immediately we were embraced into the field and made to feel at home and made to feel an equal rather than a student that should be standing off on the side. I remember just being in awe of Floyd Lounsbury especially, who was the one of the group that I actually knew the least, because he hadn't published very much on the Maya at that stage. And of course Mike and Merle Greene had books out that I knew, and was very fond of, and knew from cover to cover by that point. So meeting all of them and being able to just talk with them in a casual way and hear them talk was just an absolute joy and a real honor.

Q: So what was the Mesa Redonda like? What happened or how did it proceed? Was it formal papers delivered?

Peter Matthews: It was formal papers delivered in an informal setting, I suppose would be the way to put the Mesa Redonda. We met in a *champa*, in a fairly small room with a thatched roof on top, and there were only around 20 or 25 of us as I recall. So it was all very cozy and intimate. But people would give formal presentations. Of course I wasn't among that crowd. And then at the end there would be discussion. So in the sense of a conference, it was a fairly normal conference. But of course, the setting being in Palenque and being in a thatched-roof building with cicadas going and spider monkeys just outside, and dogs, and people walking up the street outside and so on, it was all very different from what most academic conferences tend to be.

Q: Can you give some background? What do you feel you arrived at Palenque with? I'd also you to talk at some point about what Linda was like and what she arrived there with – what were the components that you guys brought to this?

Peter Mathews: Well, when I began to prepare what ultimately turned into three huge notebooks with Dave, the main aim of the exercise was simply to learn the 'glyphs' in terms of a visual recognition of the individual signs, of which there are several hundred. So that when I looked at inscriptions, I was able to transcribe them into Thompson numbers and ultimately, as we developed the decipherment process, to then read the individual signs as well, in ancient Maya, although that was a long way off at this point.

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Dave suggested that I work with Palenque mainly because they had long and very clear, unbroken and unweathered inscriptions. So, it was the easiest site to work with in that sense, but also it was bound to be the most productive site, as it really turned out to be. I also wanted to learn the calendar and everything else I could about the Maya inscriptions, so one of the things that I started doing early on was trying to decipher the dates. And one of the three, big blue binders that I took down to Palenque was both listing everyone else's ideas on the dates, and then starting to work through the dates myself, to try and sort out which of the various possibilities I favored and why, for which reasons.

So, basically by the end of that process— and this was, you know, about six months, or one semester of work in Calgary with Dave – I had three huge notebooks filled up with transcriptions, in Thompson's wretched T-numbers, of all the signs of every single inscription from Palenque, as well as dates for each one of those monuments that I could work out. And as I worked through that, and basically picked up the visual recognition of the signs through the help and support of Dave Kelley, saying to me which were the critical elements— you know, saying again, "No, I don't think it's that sign because that one extra line in this one makes it not that number that you thought it was, but rather one of Thompson's other signs". So, gradually I was able to pick up both the stylistic variation that can go on and does go on in hieroglyphic signs, and also how different one has to get to be another sign, and obviously the context is a major component of that.

So, along the way, I was also learning the structural patterns, and the structural decipherment in a way, of Maya texts. It was a brilliant technique for Dave to use on a greenhorn like me, because it got me a visual acuity with the glyphs, where I could pick up visual recognition of the signs very well. It also taught me the structural patterning of the glyphs, so that I could recognize which signs could substitute with one another to make up the same word or, you know, different spellings of the same word or the same name. Of course, all of this was embryonic at this stage in my development, but it was starting to pick up.

By the time I went to Palenque with these three huge, fat blue notebooks, that almost had my suitcases excess baggage – I arrived at Palenque. And when I went and saw the inscriptions for the first time in the living stone, it was as magic, because I all of a sudden saw all of these signs that – I knew the Thompson numbers to these! And I knew the patterns, and where this sign occurred elsewhere in other texts, and so on. And I even knew the dates that I could remember, of some of these.

So, when I got to Palenque, I think Linda probably showed me around the site, certainly more than anyone else, and every spare minute from the conference, we would go up and explore the ruins together. And over those few days of the conference, apart from

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listening to the papers and talking with all of these great scholars who were in attendance, Linda and I gained a kind of rapport over the inscriptions. And just enjoyed standing in front of them and talking about them. And Linda would use her burgeoning experience of the site and the monuments and the art, especially, and the architecture. And I would talk a little bit about the glyphs. And so by the end of the conference, we were already, just in a very natural way, starting to put all of these various components together, and build up in our own minds a slightly more cohesive picture of ancient Palenque.

Q: So, what happened on that last day of the conference?

Peter Mathews: Well, as I recall, on the last day of the conference, the morning was free. And quite a few of the participants actually headed off to look at other sites. As I recall, Mike Coe headed off with a party to explore the ruins of Tortuguero, lying some 50, 60 kilometers to the west of Palenque. And I remember momentarily feeling rather aggrieved that I wasn't heading off with one of them, but Linda stayed behind, too. And we decided that we would start putting all of this stuff together that we'd been working on over the previous few days.

We made up a series of charts – sheets of paper, draped over a blackboard. And the strategy we used was to try and identify what we thought were names, and what had been identified as names by the great German–Mexican epigrapher Heinrich Berlin, a few years before. So, we started with names, which were really almost nicknames at that point. And then I had the dates in one of my blue notebooks, so every time we saw that particular name in the inscription, I'd work out what the date was and we wrote the date down on this big sheet of paper, and then we organized them in chronological order.

Q: Can you go back and give us some background on what was known about the kings at Palenque at that point, about what Berlin had already done? What did you guys about, what was known when you started that day?

Peter Mathews: Well, of course the 60s and early 70s were a period of great discoveries in the Maya era, based on the work of both Heinrich Berlin, the great Mexican epigrapher, and Tatiana Proskouriakoff, who had breakthroughs in the late 50s and 1960, on the historical content in the inscriptions. Proskouriakoff mainly worked with the site of Piedras Negras, for her great discoveries, but Heinrich Berlin worked on the site of Palenque, where he had excavated over several decades with Mexican archeologists. And Heinrich Berlin had in fact begun this great breakthrough by 1958, proposing that there were things called 'Emblem Glyphs' in the Maya inscriptions, which we now know are royal titles– but which refer to the name of the kingdom that the king ruled over. And so that was the first kind of mundane, non–esoteric hieroglyph that was isolated in the inscriptions. Up until that point, the consensus in the field was that the hieroglyphs were

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in fact, quite literally sacred writings that were used to look at the passage of time and all of the intricacies of the supernatural world, but not the natural world. And indeed that it would've been quite sacrilegious to have made mention of individuals, and local history, and places, and so on.

The year after that discovery of place names, Heinrich Berlin identified individuals that he argued were portrayed on the sides of the great tomb in Palenque, beneath the Temple of the Inscriptions. And again, this article was published in a rather obscure Guatemalan publication, but it was an immediate item of huge interest in the field, because it was really turning this previous understanding of the content of the hieroglyphs on its head, because he was for the first time arguing that historical individuals were there; we have them portrayed; we have them named. And obviously Proskouriakoff, the following year, extended that and broke it really wide open by showing that not only are these names there, but we can recognize patterns of rulers, one after the other, at sites like Piedras Negras and other sites in the Maya area.

Using that as base, scholars such as Dave Kelley worked with inscriptions at Quirigua, Heinrich Berlin did more work on the inscriptions at Palenque, and other scholars were working at other sites, as well. Berlin published, in 1968, an article where he proposed that there was a succession of kings in the later history for Palenque. I think he called them "Subject A" and "Subject B", as I recall, because this was in the days before we could actually read any of the glyphs. And so they were given these nicknames, which were generally rather kind of scientific and not terribly eloquent names perhaps, but it was the best people could do. And Berlin, following along with Proskouriakoff's leads and her decipherments of particular verbs for birth and accession and so on, came up with a fragmentary, but still reasonably detailed sequence of these late classic rulers for Palenque.

What Linda and I did was we built on that, and the work that George Kubler and others had done as well, for Palenque. And on that last day of the conference, we basically wrote down all of the dates that we could find for these individuals and then put them in chronological order. And when we did, we had a pattern of dates rather like the dates that Proskouriakoff came up with for the site of Piedras Negras, where we had for the first of these great kings, the king we now call— we nickname him Pakal, but his proper name is Hanab Pakal the First, of Palenque. We worked out that in no uncertain terms, it seemed to us, he must've lived to be about 80 years old, because his birth date equates to 603 AD, in the Christian calendar, and his death date was 683 AD. And then a couple of months after that, his older son succeeded to the throne. We didn't know he was the son at the time, but the next ruler acceded to the throne at Palenque, he ruled for about 20 years. And then just after his death, another ruler picked up and so on.

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Q: How were you identifying those? What was it that allowed you to identify something as a ruler's name?

Peter Mathews: Well, again, partly what Dave Kelley had been teaching me the previous semester, in terms of recognizing signs and glyphs, and how one glyph could vary and yet still be the same, because of different spellings or different signs with the same spelling being used. I was gaining a visual recognition of various of the important glyphs in Palenque. And because these are predominantly historical inscriptions, the kings get named in almost every sentence, so that it's not too difficult, in fact, to recognize these names.

Q: Okay. Go ahead.

Peter Mathews: Because these are historical inscriptions, for the most part, and the rulers are very important in those historical inscriptions, in fact you get these names just repeated over and over and over again. And sometimes there are variant spellings, but you can pick those up and recognize the patterns fairly easily. The most rudimentary Maya sentence is going to have a date and a verb and then the name of the person who is the subject, grammatically, of the verb. And you can get more elaborate sentences, of course, that include an object, which grammatically in Maya would come between the verb and the subject. But, nevertheless, you can pick up the patterns in these sentences fairly easily. And what generally repeats in almost every one of these sentences is the name of the king, because he is the subject of almost every one of these sentences. So you can start looking by knowing what the syntax, what the word order, in Maya sentences is, and look for the name of the king towards the end of these sentences.

But that's not all, either, because often these ruler names at Palenque are preceded by an honorific prefix, which we now read as the word *Kinich*, meaning "great sun" –the two signs that make that up are actually very common in the inscriptions, as well – attached at the front end of his name. So, with all of that as background, it was fairly easy to pick up these names, and that's what Linda and I proceeded to do on the last day of the conference. And then I would consult the blue notebook that I had, with all these dates, and we would write down the dates. And then we sorted them into chronological order and wrote all of those down on these big sheets of paper, for one ruler after the other.

Q: Were you able as you were doing this– were you were just getting dates in relation to kings, or were you able to identify that these were actually particular events? Were you just accumulating more dates?

Peter Mathews: We were largely matching names with dates, and putting them in chronological order. But, of course, we knew Proskouriakoff's decipherment of the

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‘birth glyph’ and her and Berlin’s decipherment of two different accession compounds, and we were debating, even though it hadn’t really been deciphered at that point— for sure, anyway— the death dates as well, obviously, the very last date. If that date was the very last date for an individual ruler, and if that date was shortly before the accession of the next ruler, then it was pretty clear that that was likely to be the death date. So, we were feeling our way towards that, as well.

Looking at other events was really impossible at that point, but of course many of the events were what we still call ‘period ending’ events, when the rulers would celebrate the end of one of their 20–year periods, or quarter intervals of that, every five years. And they like to – elsewhere in the Maya area – erect monuments on those time periods, and talk about major bloodletting ceremonies and other ceremonies that they would enact and celebrate on those times. So, some of the events, in other words, we were able to follow along with, but of course there were a whole bunch of events on odd dates that we still really had no idea, at that stage, what they signified.

Q: So, you were starting to tell me about the end of the day.

Peter Mathews: Well, when the participants who had traveled off to other sites came back to the Mesa Redonda, the last afternoon of the conference, Linda and I had all of these sheets with rulers and dates all listed in chronological order. And my recollection of the event is that Merle Greene said, “Well, what should we talk about now?” because the conference was essentially winding up. And my recollection is that Mike Coe pointed to the sheets and said, “Let’s talk about that.”

So, Linda and I pulled the blackboard on which these sheets were pasted out in front of the group, and then Linda and I gave our first presentation at a conference on Maya things. And we basically took people through how we’d collected all the dates, and that it seemed to us a really clear pattern of individual lives and reign spans going through late classic Palenque. Having done that, there ended up being a huge debate. I mean everyone seemed really interested and keen, and Mike was absolutely bubbling with enthusiasm over all of this. But once that was over, I remember there was a big debate on what are we gonna name these guys, because we had written things like ‘Lord Shield’ and ‘Lord Toothache’ and names like that, using nicknames for the glyphs, that were in usage from Thompson’s glyph catalogue and other things. But, not even attempting, for the most part to read Maya names into them.

We did have a couple of Maya names. We called one of them tentatively either Chimal or Pakal, Chimal is the Aztec word for shield and Pakal was a hieroglyph that Dave Kelley had in fact read at the site of Chichen Itza and which had the same three constituent signs as part of the name of the great king of Palenque. So, we had some

clues as to how to read these names, but we didn't really feel confident enough to propose them at that meeting. But, what ensued at the kind of final part of our presentation was a big debate as to what we were gonna name these characters. And Moises Morales, in whose compound the conference was taking place in La Cañada in Palenque, said he really felt strongly that because Palenque was a Chol Maya site, that we should be seeking Chol Maya names for these characters.

So, that's what we did. We came up with as many names in Chol Maya as we possibly could for these characters. And the second of the great kings that we talked about, who has a name glyph that conflates or combines the elements of both the snake and the jaguar, we had just called him Snake/Jaguar at one point, and I think we toyed with the possibility of calling him Kan Balam, which are the Yucatec terms for snake and jaguar, respectively. But, in fact a Spanish priest who lived at Tumbala in Chol country, not too far from Palenque, was also in attendance at the conference. And he had told us that the word Chan Bahlum in Chol Maya means any big fierce animal. And of course, Chan Bahlum in Chol Maya derives from the same word for snake and jaguar, cognate to Kan Balam in Yucatec. And so, we thought that was wonderful and might even be the rationale for this name. So, we embraced that one and that was proposed and formally accepted at the end of the conference, for the reading of this particular ruler. And so, for the longest time he was in fact called Chan Bahlum in the literature.

Later on ironically, we realized that because his name has a *ka* prefix to it – this is all a bit technical. But, the *ka* sign is never a *cha* sign, and therefore indicates that the first part of that word should be *ka* and not *cha*; in other words that the correct reading is Kan Balam or Kan Bahlum, rather than Chan Bahlum. And the Maya, in other words, at Palenque was signaling that that was a *Yucatec* spelling of the word, rather than the normal Cholan spelling that the reader could expect.

So, over time these names have all changed, unfortunately– unfortunately in one sense, but of course, it just shows the evolution in our understanding of the hieroglyphs to the point where the great king Hanab Pakal probably has over 20 different names for him in the literature, everything from Subject A, to Shield, and Sun Shield, and Pakal, and what not.

Q: Tell me a bit about who Moises was, and what was his role in this. And when he proposed that, was that sort of immediately accepted? As I recall, you were the one who mostly objected to the process ...

Peter Mathews: Yeah, well, Moises Morales was really the catalyst, in many ways, for the conference. Merle Green was the key figure in the conference, because she had a house in Palenque that scholars would visit when they were passing through, and I

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believe it was Gillett Griffin and Mike Coe and Linda and Merle that all kind of came up with the idea of holding a conference there, in the first place. But, this couldn't really have been done without Moises Morales, who was one of the three Morales brothers who basically owned this little suburb in Palenque called 'La Cañada'. They had rooms for rent and small hotels and a restaurant, and really had created a kind of a haven for tourists in Palenque.

Moises also was the great 'sabio', the great expert on the site of Palenque, because he had spent many years by this point, guiding people around the site, and not just around the part that's visible to tourists even today, but if you were a special person, as Moises picked you up, he would take you off into the forest and show you ruined structures that are lying still completely unexcavated in the forest, and even show you ceramics that are eroding out of banks and things like that. And show you the site in a truly special way. Moises knew more about the site and its layout and configuration than anyone alive. And he was a wonderful character to have there, as both a facilitator to the conference in the logistical sense, but also as a fount of knowledge for Palenque.

Now, at the end of the conference, Moises felt very strongly that the names should be Maya names; that it was really not appropriate and almost insulting, in fact, to name these rulers with English names or even with Spanish names because they were *Maya* – they were great Maya kings and should be recognized as such. Now, I guess in this process, I was perhaps the arch-conservative – not because I didn't embrace the sentiment that Moises was expressing, but simply because I really felt it was just too premature, and I rather thought that giving a Maya name that we were almost guessing at in most cases, at that time, was gonna cause confusion because the name would inevitably change as we were able to read the glyphs more precisely.

And I suppose, in fact, that has happened, but I'm still very pleased, I must say, that I was outvoted. I was a minority of one, as I recall in that particular argument. And by the end of the conference, the consensus was that yes, we should be giving Maya names to these rulers, even if we were recognizing that these were really Maya nicknames, at that point, rather than their official, literal readings.

But, we are now, in fact, at the stage where I think we finally have secure readings for the majority of the kings, not just of Palenque, but of other Maya sites, as well.

Q: At the Mesa Redonda, you had both Knorosov's phoneticism and Proskouriakoff's structural approach. That was where things began to come together– in other words it was the beginning of a period of collaboration, but also in terms of substance – do you think that was a turning point and if so, in what way?

Peter Mathews: Well, there was obviously huge personal impact for me, because firstly, I made a lot of friends in that Mesa Redonda, most especially of course, Linda, but also Floyd Lounsbury and Michael Coe. I think the key thing intellectually to come out of the conference was the fact that we did learn the value of collaboration. And obviously people collaborate anyway, so that was perhaps going to happen, but it also brought together the right chemistry for that, because really over the next two decades, especially Floyd and Linda and Dave Kelley and I would get together whenever we could, pretty well every year, for what we called a mini-conference. And it was one of my great delights really, that even right at the end of their lives, Floyd Lounsbury and Linda and Dave and I were still generating the same electricity and the same magic that we had, back in that first Mesa Redonda, and at the very first mini-conference that was held in Dumbarton Oaks, the following year.

The 1974 Dumbarton Oaks Mini-Conference

Q: Let's go back to how that first mini-conference came about. What was the origin of that and how did you end up there? What was the dynamic- what happened there?

Peter Mathews: Well, one of the immediate results of the first Mesa Redonda was the fact that Mike Coe, I think, was primarily responsible for suggesting to Betty Benson, who was the Director of the Pre-Columbian section of the Dumbarton Oaks, that it would be really nice to have a mini-conference, and try and keep that electricity going. And Betty agreed, and invited several people, not just Floyd and Linda and Mike and me and Dave Kelley and Merle, who in some ways were the core, but she also invited several other scholars, including Tania Proskouriakoff, so that was the first time that I met Tania. And George Kubler, who was at the first Mesa Redonda, was there as well; and Joyce Marcus, so it was a maxi-conference, in some ways, a larger than mini-conference, as they ended up being. And we all got together, and Linda and I talked about some of what we were doing at Palenque.

I remember Tania did not seem, anyway, particularly impressed, and was her delightfully belligerent self. She enjoyed arguing no end, and she did. So, when we said we think this particular ruler spans these particular dates, she would say, "Well, why do you think that? I'm not so sure." And at one point, she even said, "Why do you think these are historical individuals?" which was quite rich coming from her, who was the first to really prove that there *were* historical individuals! We all had a very good time, but I've got to say I think Betty, in particular, probably didn't feel the same electricity was being generated. So, it was a good conference, but as it ended and people started melting away, I suspect Betty was rather disappointed by it, and Mike as well.

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Q: Talk a little bit more detail about what the dynamic there was? I think there was a thing between Linda and Tania?

Peter Mathews: Okay. One of the sadder elements of that mini-conference, I think for Linda and me, was that we didn't really feel we hit it off terribly well with Tania Proskouriakoff, in particular, who was of course one of the deities in our field. We looked up to Mike and Floyd and Dave Kelley and George Kubler and so on, but Tania was 'the person' who had created the major breakthrough. And we were really, I'm sure, going to that hoping that we were going to be finding her blessing and encouragement and agreement and so on. And I think we probably felt we didn't really get it, and my sense is – especially after knowing Tania very well, in later years and getting to be, I think quite a good friend of hers – my feeling is that it was possibly the exuberance of it all coming from Linda especially and from me, that rubbed her the wrong way.

She reacted, I think, and certainly was skeptical as she always was in her argumentation, but also I think was giving the aura that she didn't really buy it, and I think Linda, especially, probably went away from the meeting feeling that she was considered almost an upstart and an outsider who should know her place. And I felt that to a degree, as well, but not I think as much as Linda. Later on, when I got to know Tania much better, when I was at Harvard, we became very good friends, I think, and I would go over and she'd cook me lunch sometimes, or we'd go out occasionally and have lunch together and have other chats. And she was working on her last book at that time–

Q: Let's come to that later–

Peter Mathews: Okay. Back to the mini-conference? Okay. But I would like to get back to that actually, 'cause it would put it in context – Okay. Well, what I was going on to say about the mini-conference is when Tania and most of the others, including even Mike Coe left, on the afternoon of the second day, because they were booked to go back home, the rest of us who were left there, which was Merle, Dave Kelley, Linda, and Floyd and me, as well as Betty Benson, of course, were kind of sitting around, I suspect initially a little deflated at the lack of the electricity that had occurred, or rather not occurred.

And we started pulling out some books from the wonderful library at Dumbarton Oaks, and as I recall, Merle Greene's rubbings of the sarcophagus lid happen to be there. And we put them down on the floor of the library, and rolled it out and started looking at the glyphs. And instantly that electricity that we had at the Mesa Redonda in Palenque came back, and we all started talking about the glyphs and all I can remember is real excitement, kind of electric excitement in the air as we were talking about this, reminiscent of Palenque. And occasional hands coming around the door, giving us drinks

and snacks and so on, because we worked well into the evening. And the hand was from Betty Benson, kind of making sure we were getting sustenance as we were kind of talking about all of this stuff and just discussing new ideas and whatnot. And so, in a way the mini-conferences were really born out of that phase of the first mini-conference at Dumbarton Oaks, rather than the earlier phase. And I suppose what it taught us was that obviously we needed to listen to all of the other scholars in the field, but we also needed to form our own group where the electricity could flow the easiest. And that group ended up really being Dave Kelley, Linda Schele, Floyd and me as the core, and then occasionally Merle Greene and Mike Coe, and they could sit in on it, as well.

Q: My understanding is that at Palenque, you'd been dealing with the last sequence of 200 years; at Dumbarton Oaks, on the sarcophagus lid, that text dealt with the first 200 years. Was that what was going on that evening? Could you talk about what kind of breakthroughs were you having that evening? And also what dynamic that the different people in that group brought to it? Floyd, yourself, Linda, Dave Kelley— in that mini-conference and in the others— how did that work as a chemistry?

Peter Mathews: Yeah, well the chemistry was interesting in the group, because I think if you looked back— if in those years you looked at each of us individually, you might find it quite strange that we in fact got together. Because I suppose in terms of pairings, Floyd and I were temperamentally closer to one another than either of us was to Dave and Linda. Dave and Linda are outgoing, exuberant, enthusiastic and would just start whooping and hollering as a discovery would be made. Whereas Floyd and I tended to be, I think, probably a bit quieter and more subdued.

But, as with many partnerships, that kind of chemistry works very well, because it takes perhaps one person to have a slightly more level head, even whereas the other one is going off in tangents and saying, “Well, let’s explore this,” and not feeling held back at trying new ideas and flying off at the boundaries of their knowledge. And in particular, that was the chemistry that Linda and I had. One of the joys in my life is that that really persisted and continued all the way up until Linda’s death. I mean, when we would get together, 25 years after that first Mesa Redonda, Linda and I still just immediately had that same chemistry. As soon as we would start talking about things, we would start discovering things, and working together would make far greater discoveries than either of us, I think, could’ve on our own.

Floyd, as I said, was temperamentally more similar to me, I suppose, and much more cautious, and I think worked probably better as a solitary scholar than any of the rest of us, but also of course could take part in this wonderful chemistry as it would explode every time we got together. And Dave also was kind of often flying off on tangents and

using his exhaustive knowledge of other areas of Mesoamerica to kind of bring us back to looking at how we could tie in what we were discovering with the Maya area, in terms of patterns that existed elsewhere in Mesoamerica. So, we all brought different things to bear on this.

Q: What was Floyd like as a person? What was his area of strength?

Peter Mathews: Well, Floyd, I remember the first time I met him, just being really overawed by him – not because of his persona, not feeling I couldn't approach him. It wasn't that kind of awe that he exuded, but just the sheer cerebral awe that he exuded was immense. You could immediately see that this was an incredibly intelligent man. The way I felt when I first saw him was this is someone who knows more than I could ever hope to gain in five lifetimes. And I went through our relationship continually feeling that.

He was just an immensely knowledgeable person– very quiet, very self-effacing, but when he would talk, you would listen. And you would always learn things. So, he in many ways, I think, was the steady rock of the mini-conference group, that would always bring us back to where we needed to be, as a kind of a baseline, even though Linda, at the other extreme of the spectrum would always fly off and explore areas right on the edge. I mean she liked to call herself an 'edge-walker'. You know, walking quite literally on the edge of her frontiers of knowledge, and trying to peer over the edge and not fall off. If she did fall off, she didn't mind. But, either way, it was a medium for kind of pushing that frontier ever outwards.

Floyd did that too, but in a very different way. He was always much more anchored in the known part of the body of material that we were looking at. And I suppose on that same spectrum, I was closer to Floyd, but in between the two, and Dave was much closer to Linda, but in between the two of us. So, we settled out along that spectrum, and each brought their own perspective, but also our own kind of chemistry to the mix.

The Texas epigraphy workshops

Q: Let's talk about the beginning of the Maya Hieroglyphic Workshops in Austin. How that came about–

Peter Mathews: Well, I should preface my comments on the Hieroglyph Workshops at Texas with the comment that I wasn't here for the first few workshops because I couldn't get away from teaching, and I was overseas for a couple of years, and so on. But once I

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moved to Calvary, Linda invited me down to give a kind of introductory lecture to the workshops; something that George Stuart had been doing with wonderful performances over the previous few years.

I just couldn't believe the energy that was being created by these workshops when I first came down. And in fact, I remember the first one, which would've been '87, that I came down for. I left back to Calgary feeling quite depressed, because I really felt that so much had passed me by that I was so far behind. How am I ever gonna catch up? 'Cause all these new, young things that I hadn't really heard much about in previous years – people like Nikolai Grube and so on – were making these incredible discoveries and decipherments that I was really hearing for the first time. And so, I was blown away. I mean it was nice to see, of course, the energy continuing on, and the field evolving with all of the activity that was going on, with a whole bunch of new faces and new contributions.

But the idea of hieroglyph workshops was something that Linda and I had both done before. I had given several by that point, in different universities in the States. And one of the things that amazed me when I gave these, is how many people would come out of the woodwork to them. You know, I expected the first one I went to, to see a half a dozen people who were kind of generally scholars and had a very academic interest in this. And in fact, the people who came were interested amateurs, some of whom had traveled down to the Maya area. Others had just read a little bit and then they heard this conference was on, so they came along for the ride, so to speak.

Q: What was it like when you finally did get to the Texas conferences?

Peter Mathews: Well, the first of the Texas conferences that I went to was an incredibly electric experience, because there was a very large audience already, even in the early years of the Texas meetings. And most of the audience were interested amateurs in addition, really to scholars, so it wasn't just purely a scholarly thing. And the energy that was created by this interaction was stimulating to both sides, so to speak. I'd like not to think of them as sides, but we had very good questions from the floor that would be interjected in the proceedings. Some of them what we could characterize as dumb questions, but nevertheless, questions that would make us think often about issues that we were dealing with in very different ways from the structure that we had set up for ourselves. And of course, I think, given the number of interested amateurs that come back year after year to the Texas meetings, clearly we were doing something right, as well.

I think that one of the great features of the conferences and meetings and hieroglyph workshops that each of us in the field has given in various places is the way of engaging

and integrating the wider public, and a wider audience to them. I remember the first one I gave in Cleveland, for example. I really went to Cleveland thinking – not to insult Cleveland, but wondering if I was gonna get more than a half a dozen people show up. And I think there were over a hundred people there. And virtually all of them were just from the greater Cleveland area, and a little broader field. But almost all of them were interested amateurs, rather than scholars in the field. And they were all there for the interest and for learning something.

I think it's been very good on the part of Maya studies that we, on our part, have tried to engage the public in that way. But, I wouldn't want to take all the credit with ourselves and our own personalities; I think it's also the subject matter, and perhaps the process that's going on as well. The fact that the Maya material is so stunning to look at and so visually beautiful and complex, and also that we were really in those years, and still are, in the midst of a great quest, if you will, to decipher the inscriptions and to decipher the code of the art and the architecture of the Maya. And try and put it all together in an ever more meaningful package.

Q: In the early years of those conferences and also I think in the early years of your mini-conferences, there was a lot of concentration on the site of Palenque. Can you talk a little bit about why it makes sense to concentrate on a single site, rather than you know, sample inscriptions from a bunch of places? And then you began to move out from Palenque and look at other sites and moved into the area of seeing what was happening over space and time.

Peter Mathews: Sure.

Q: And looking at the site interaction.

Peter Mathews: Yeah. Well, one of the great things about Palenque is that its inscriptions are very long and because most of them were incorporated inside buildings, rather than carved on monuments that were setup in front of buildings, many of the inscriptions are very well preserved. So, we had long inscriptions, that is always one of the keys to decipherment of any unknown script. And we also had very clear inscriptions, especially in comparison to many other sites.

So initially we focused on the site of Palenque, partly because of the length of its inscriptions and the well-preserved inscriptions that occur at the site. And partly, I think just because it was easier at that stage to deal with a more constricted corpus, and not get smoke in our eyes, so to speak, from looking at obviously related inscriptions in terms of how they're composed. But, nevertheless, inscriptions that are put together in slightly different ways and which, to a degree, contain different information as well.

One of the curious things about Palenque is that it and Copan were probably the two sites that eluded Proskouriakoff's initial methodology the most. We now know that the main reason for that is that they have, generally speaking, a different syntax in the way that their sentences are put together. In Palenque's case, often the standard "date... verb... object... subject" sentence order that we get at most other sites was not always strictly adhered to. They would – because of rhetorical flourishes in the way they were writing their texts, and other factors – they would often be combining two passages in a very different way. So, that instead of saying, 'on this date so-and-so was born; 50 years later on this date that same person became king', they would say 'it was 50 years from the birth until the accession of that king'. Now, nowadays, that's very easy to understand and follow and so on, but it's a very unusual syntax, in terms of looking at inscriptions across the Maya area. And so it really caused all sorts of problems; not the least of which were deciphering the dates, for the longest period, at Palenque.

At Copan, we have a similar situation, but not quite identical. At Copan, there are a lot of dates that are simply *not* inserted, so sentences tend to run-on, one after the other, and you get a series of different passages that talk about what we now know are very different dates and different events; and yet, it was hard at Copan to work out where to separate these, and how exactly to put them all together in a historical narrative. So Copan actually was left to later by unspoken consensus, really.

The pattern that Proskouriakoff developed for Piedras Negras applied very well across the Peten, across the southern Maya lowlands, as I say really with the exception of Palenque and Copan. We focused on Palenque, obviously initially because of all sorts of historical accidents in a way, I mean, for Linda and Floyd and me, our first site was Palenque. And so it made a certain amount of sense, when that site had such beautiful, long inscriptions to continue working with that and we did, really, almost to the exclusion of other sites, until we really felt we had a good basis for understanding the details of Palenque's history.

His shift in focus from Palenque to other sites and inter-site interaction

And then, and we're probably talking really about the end of the 70s and the beginning of the 80s, we started branching out. I mean, which we had done from time to time, of course, but we started branching out systematically at that point, into other sites. And obviously the fact that Linda and I had both spent some time working at Copan made that an obvious candidate, and also because it was still largely unknown epigraphically, but also of course, we wanted to tie in what we'd found at Palenque to the broader history of what was happening elsewhere in the Maya area. And so, really a second very exciting

phase came about in the early 80s, as we started putting all of Maya history together in a bigger package, and looking at the broader perspectives of site relationships across the southern Maya lowlands, during the late classic period. And when we did that, of course, all sorts of other wonderful discoveries started falling out.

Q: You began doing a lot of work in relation to Emblem Glyphs. Talk a little bit about what Emblem Glyphs are; when they were discovered and what you began to do with them in relation–

Peter Mathews: Well, Emblem Glyphs in fact, go back to the beginning of the history of historical decipherment in the Maya inscriptions. Heinrich Berlin's first major breakthrough article in 1958 identified what he called Emblem Glyphs. And what he was looking for was a pattern across various signs, where towards the end of sentences a particular glyph tended to occur quite frequently. This glyph had the same overall shape, the same overall form to it, across all of these different signs. But, it's main component, what Thompson would've called the main sign – the largest, single sign in the overall glyph differed from site to site, and yet was consistent within that site. It's a rather complicated way of saying it, but in other words, Palenque had its own distinctive Emblem Glyph, which had the same form overall as other sites, but the main sign was distinctive to Palenque. Palenque's was a bone. In Copan, there was a bat head that was the distinctive sign in its Emblem Glyph. At Tikal there was what we now look at as some kind of hank of hair. At Yaxchilan was a sky sign with a split in it, and so on, all the way across the Maya lowlands, there were city after city with inscriptions that had this Emblem Glyph distinctive to it, but shared in general form across the Maya world.

Berlin called these Emblem Glyphs because he said they were *emblematic* of the site, but he wasn't sure in 1958 whether they referred to the patron god of the site, whether they referred to the ruling dynasty of the site, or whether they could be a geographical reference, referring to the site or the polity that the site was part of, or what have you. So, he used the very general term Emblem Glyph, and that name has stuck.

Now, over the ensuing years, several scholars started playing with Emblem Glyphs and looking at the geographical relationship that it had to the sites and to the regions that those sites were in. Thomas Barthel, in the late 60s, a German scholar, looked at a couple of inscriptions that listed four Emblem Glyphs in a row– in other words, which seemed to be talking about four different cities. One of these is on a monument from Copan, where Palenque is included, and Calakmul, and Copan itself and Tikal. And Barthel started looking at whether this was some Maya way of dividing their world up, and whether there was a quadripartite concept to the division of the Maya world. We know in pre-Colombian cosmology the concept of four cardinal points and a quadripartite cosmology

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is very strong. So Barthel was combining those two ideas and developing ideas as to whether the Maya world was formally broken up into different territories that were even associated with cardinal points.

Well, following on Thomas Barthel's lead, the American scholar, Joyce Marcus, developed a much more detailed view of effectively classic Maya political geography. And she also adopted this quadripartite view of the world, the Maya world, and she argued that there were four major polities, that eventually came to be known as "regional states" in her model, that dominated the ancient Maya world. And from time to time, other ones would come and go, but these were very large territorial units that would have sites in them like Tikal — or Calakmul was another one she proposed or Copan, which were capitols — and that under them would be other sites, and that even sites that had Emblem Glyphs could be subordinate sites to these broad regional capitols.

So she had a nesting kind of view of Maya political structure, where the smallest units of settlements wouldn't have Emblem Glyphs or inscriptions. The next one up in the political hierarchy would have inscriptions, but no Emblem Glyph. Above that would be sites that would have inscriptions with Emblem Glyphs referring to that particular site, but then above that would be superordinate sites that would have Emblem Glyphs as well, but to which would be subordinated all of these other levels. Now, it was a very appealing model in many ways, and she used statistics to back it up. She argued that some sites would refer to other sites far more than the opposite direction. And one of her hypotheses was that Tikal would not need to refer, for example, to the site of Naranjo because Tikal was the capitol. But Naranjo, which was the subordinate center in her view and did have its own Emblem Glyph, would be often referring to Tikal, simply because Tikal was its capitol. And so she looked at counts of foreign Emblem Glyphs at individual sites to bolster her model in that way.

I looked at the same information that she presented, and I must say I wasn't quite so happy with it because I thought that one thing that this was ignoring, in many ways, was a more detailed context of what those Emblem Glyphs were doing at foreign sites. For example, if Naranjo was including a Tikal Emblem Glyph in an inscription, because it was saying, "I captured the Tikal king," and the Tikal king had the Emblem Glyph in his name phrase, then obviously it would have been turning that model on her head. And at some sites, I did notice precisely that kind of information. So, my starting point on this was to say that we really needed to know the specific *context* of these references. And the more I worked through all of these references, I became convinced that, effectively, Emblem Glyphs were all talking about equals.

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Emblem Glyphs, to expand on them a little bit, were being worked out by this stage as being titles in the royal name phrase of kings. And they were titles that included the name of, or the title of, the king himself. In Maya, that word is *ahau*, which means lord. And the Emblem Glyphs would say, "So and so is the divine lord of such and such a place." So we now know that the Emblem Glyph is effectively overall functioning as a title. But it is saying that the individual who's named, immediately preceding the Emblem Glyph, is the lord of a particular place. And the place name that is referred to, the bone in the case of the Palenque, or the bat head in the case of Copan and so on, now seems to be referring to the name of the kingdom, the name of the polity that the king ruled over from his capitol city, rather than the name of the city itself. But the implication of these Emblem Glyphs is that, whenever they occur, they're effectively talking about political equals, or at least people who have the same political standing. So, my argument following on from that premise, was that it's, therefore, important to look at how these Emblem Glyphs function through time and space.

The methodology I came up with was to take katun ending periods when a lot of sites would erect these monuments, at the end of these 20-year periods that the Mayan's organized their history into, and look across the Maya world at who was erecting a monument at that time. And if one is being erected by the Tikal king, and in his name phrase he's saying, "I am the divine king of Tikal," and at the same date, the Palenque king, the same day in history, the Palenque king is saying, "I am the divine king of Palenque," and Copan is saying, "I am the divine king of Copan," that the implication of all of that is that all of those polities were functioning at that date. And in the absence of any kind of hierarchical relationships expressed between them in some reference or other, I think the assumption has to be made that they are equal, and therefore independent, autonomous polities.

So I rapidly came to a conclusion that was diametrically opposed to that of Joyce Marcus. And the model I built up was one of very small polities. They've sometimes been called city states or polises in the Greek sense of the word. And the view I have of these kingdoms is ones that generally aren't more than about 50 or 80 kilometers across, because you can simply draw the map up of the Maya Lowlands. And if you've got one center of Palenque, and the next one to the east is Piedras Negras, and then Yaxchilan, and in Bonampak, and then you move over to sites like Dos Pilas, and Tikal, and Naranjo, and each one of these sites has its own Emblem Glyph, and so if they're functioning at the same time, which we can document in many cases, the implication is they are autonomous.

Q: What happens to that model as as relationship terms of subordination were deciphered?

Peter Matthews: Well, the assumption at this point was that these are all politically equal. And as I said, unless there was some explicit reference to one or other of them being politically subordinate to another Emblem Glyph or a kingdom, then we have to assume that these were fully autonomous and independent small states.

What's happened in the years since is that we have found evidence of massive alliance patterns. And Nikolai Grube and Simon Martin have led the way in those discoveries. What they have determined and shown, I think, to pretty well everyone's satisfaction, is that two of these cities in particular — the huge cities of Tikal in northern Guatemala, and Calakmul in southern Campeche in Mexico — were firstly fierce enemies with one another, and secondly, amassed around them a series of allies, which were these independent or theoretically independent cities, each with their own Emblem Glyphs. And what happens in some cases is that these subordinate cities, pretty well had complete autonomy and yet were in an alliance with Tikal or Calakmul. So they really ran their own affairs. But they could take part together in wars against the common enemy. Obviously, they had much more trade and political connections with their ally than they did with their enemy or their enemy's own allies. And so what, in fact, has now emerged is a far more complex view of the political geography of the classic Maya Lowlands than either Joyce Marcus had originally, or I had slightly later on. And in some ways, it's a blending of the two. I mean, you could certainly look at the effective control that Tikal wielded in its periods of power, or Calakmul in its, as almost regional states are where they incorporated these other polities but in a rather loose knit confederation with a degree of political control – in some cases, direct political control, perhaps, but in other cases far more loose.

Q: And can you talk a little bit about the specific decipherments that help break that loop, help make that clear?

Peter Matthews: Yeah. The starting point certainly for me with the Emblem Glyphs was, I wanted to gain greater control over the usage in time and space. And the best way to do that was to try and look at contemporary references across the Maya world to cities that had Emblem Glyphs. So, I divided up the Maya history into slices of time, on these 20 year periods, and looked at which cities were functioning, according to their own inscriptions at that time. And I considered that to be a minimum, because obviously some sites might have erected monuments that have now been eroded or broken or looted. So obviously, there are probably many more kingdoms, as we've indeed found out in the years since, that were functioning. But also, the very complex history indicates that some of these kingdoms would come in and go out as functioning polities, as wars would engulf them and they'd regain their autonomy and so on. But the other factor to overlay all of these was the very complex political relationships between sites that we

were beginning to discern in the glyphs. And initially this was at a fairly basic level, but increasingly, we were able to gain more understanding of the actual nature of the relationships. So at first, we would look for Emblem Glyphs and for names of kings and queens as well, or princesses in particular, who would show up in foreign cities. Now, one of the nice things there is that Maya princesses, when they were married off, you know, into domestic marriage to another city, would generally keep their Emblem Glyph, their home-site Emblem Glyphs. So we would have a reference in Copan, for example, to a queen who was stated to be from Palenque, and that would give us a clue that, at a point just before that reference, presumably, a princess from Palenque moved physically from Palenque to Copan, married the prince, or the king, and became the queen of Copan. And then their oldest son, would be the subsequent ruler. And we know of all of this from his parentage statements, not from the marriage reference per se in most cases, but because the son, as did most kings, felt it important to document his genealogy to justify his right to rule. So he would say, "My father is the king of Copan, the preceding ruler of Copan, and my mother is a royal lady from Palenque." So, that kind of information was very important in not just showing the kinds of relationships that could occur between sites, but also to show or to indicate the various alliances and so on that were being developed in the Maya lowlands. And we've only got a glimpse into this. I'm sure there were many more that weren't reported, or that were reported but we no longer have records of them.

But there were two other kinds of references as well. There were what I called foreign visits, where rulers from one site would go and attend a ceremony that was being celebrated by the ruler of the site that he was visiting. And that also indicates a kind of an alliance pattern that was being discerned in those years, in the '80s, and has since been refined. And of course, the other kind of events, the war events, where we have references to one kingdom going in and talking about conquest, war taking place at another location, and that location is named by the main sign of the Emblem Glyph. So in other words, it's not saying, "War took place against the king of Palenque." It's saying, "War took place against Palenque, against the polity of Palenque." And we have parallel passages, related passages that say, "I, the king of such and such captured the king of Palenque." So we've got all of that range of material as well.

So we have all of these references crisscrossing the Maya lowlands, so to speak, during the classic period, some of which bellicose and indicate the enemy polities that were involved, and others of which are likely to have been more peaceful, and indicating the alliance patterns that were being developed.

Q: And then, other kinds of hierarchical relationships.

Peter Matthews: Yeah. Well, as I said, some of these foreign references to Emblem Glyphs, we could discern in very broad terms whether they were marriages or royal visits or warfare and so on. And some of the others where we just knew there was a reference at a particular site to a foreigner, we were later able to work out – largely through the agency of Simon Martin and Nikolai Grube, but Linda Schele and I and a whole host of people were involved in this, and in fact, one idea originates all the way back in the 60s, with Dave Kelly – but effectively, what we have in some references are relationships that we now know are hierarchical relationships, where we are told that an event was done or enacted by a king who is generally the local king, and then it goes on to say that the person who was causing it to be done or ordaining it, was the king of Tikal or Calakmul or some other site. And what those passages are indicating is that the king of Tikal is, in a way, calling the shots. The local ruler is the one celebrating the event, but he's doing it under the watchful eye – in some cases quite literally, because we also have glyphs that say the king of Tikal, for example, witnessed it, in other words, indicating that he physically went to the site and witnessed the event as a V.I.P. in attendance. So we have the statements that are indicating very hierarchical relationships, where the implication is almost that the local ruler at his site almost, in some cases, perhaps didn't even have the authority to do it without the ordaining of the high king. We also have reverse geographical situations where rulers of subordinate sites go to the capitol almost for the blessing of the high king, and take part in ceremonies that are enacted by the high king. And the rulers are describing themselves, generally in their own home inscriptions, with great pride as saying, "On this date, I traveled to Calakmul and I took part in the accession of the king of Calakmul." In other words, "I was one of the attendees to this conference of coronation of the high king because I'm showing my fealty, my acceptance of this king, as one of the subordinate states in the overall kind of broader political structure."

The conflict over the dating of the life of Pakal

Q: I want to go back to the point where you guys made the determination that Pakal lived for 80 years. This contradicted Ruz's hypothesis about that, and produced problems. And that was sort of the beginning of a kind of ongoing thing over the next 20 years or so, when there was a lot of stress between epigraphers and archaeologists, which I think has sort of by now begun to kind of resolve itself as the decipherment has become more accepted. Can you talk a little bit about that? How that happened with Ruz and the case of Pakal, how that played itself out within the archaeologists and epigraphers?

Peter Matthews: Yeah. Well, one of the things that came out of the first Mesa Redonda, when Linda and I were drawing up those charts of effectively lifespans of the various rulers of late classic Palenque, one of the things that came out of that was for the first great king that we dealt with, the man that we now call Kinich Hanab Pakal, we had a life span that ended up being 80 years. And we saw no reason to break that up into smaller units without really knowing what we'd come up with. We were really in complete accord with the foundations that Tanya Proskouriakoff had laid down for the rulers of Piedras Negras and other sites. So we had a birth glyph at the beginning in 603 A.D. and we had death dates at 683 A.D. And so we argued that this ruler lived to be 80.

I was certainly aware of the fact that the archaeologists, and particularly the great Mexican archaeologist who excavated the Temple of the Inscriptions and found Pakal's tomb, Alberto Ruz — I was particularly aware that he was arguing that the individual found in the tomb was probably only around 40 years of age. So there was clearly a problem here. And even in 1973, Linda and I were aware of that. And it's why I insisted that the article we wrote be subtitled "The Glyphic Evidence" because I wasn't aware just how much the argument would erupt. But I was aware that this was going to cause some problems and some debate.

Well, it sure did, because Alberto Ruz, I think, really became quite infuriated, actually, that two jumped-up young novices in the field would dispute the date that he gave to the individual buried in the tomb. And I should point out, this was an aging that was done on the *bones* in the tomb. Ruz was not primarily looking at the epigraphy and the dates. But, of course, he did look at those as well, in the report that he wrote in the inscriptions temple. And he played with the dates in a very different way, and one that, in short, Linda and I just didn't feel was a viable one. Maya dates repeat every 52 years. And the way that Ruz toyed with this was to effectively put all of the dates, in the long inscription on the sarcophagus lid down in the tomb, within one 52-year span. And when he did that, he got the birth and death dates being — I've forgotten the interval — but more like 30 years than 80. And he thought that was a much more likely solution to the problem, and that it fit it much better with the osteological evidence as it was then being made.

Now, Linda and I tried to kind of stay out of the hot side of this debate, holding resolutely to our view, based on the inscriptions, but not certainly wanting to impugn the credibility or the quality of the osteological evidence that was worked out by Ruz's physical anthropologists. And I guess, basically, we felt that there was certainly a good chance that the osteological evidence was incorrect, and that the aging of the bones could be revised. Especially because in those years, in the '50s, I don't think that the ability to age individuals was nearly as advanced as it was even in the '70s, but certainly by the '90s.

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Q: The way Ruz was doing it was going around the sarcophagus – making up a biography of a person would require jumping back and forth all over the place.

Peter Matthews: Exactly, yeah, yeah.

Q: Wouldn't that have been a problem for you?

Peter Matthews: Yeah, it was. I can get to that in a minute if you like.

I guess our view was that if Ruz absolutely could be proven right on the osteological evidence, then my fall back position would immediately have been to say, "Well, okay, even though this tomb was designed for Pakal, and all of the names and, you know, the evidence carved on the tomb indicated that it was his, for some reason, he wasn't buried in it in the end," but that our underlying view was really that, if the bones could be redated, that we might be vindicated. But of course, saying that explicitly to Alberto Ruz and his colleagues, and to any archaeologist, in fact, was simply impugning their methodology. So we kept quiet on that.

And basically the argument evolved over the next few years that Matthews and Schele were wrong, and the "true science" held sway on this matter, and that physical anthropology should always take command over epigraphic evidence. And in some ways, I think that view grew and broadened in the late '70s and early '80s in some quarters to where archeology in general was far more precise and far more detailed and far more accurate than epigraphic information could ever hope to be. I've heard arguments that the epigraphy was epi-phenomenal and that it was propaganda, and in other words, lies, and that we can't interpret it. And certainly, when you get to post-modern views on epigraphy, how could we ever hope to get inside the words and minds of ancient Maya who were writing these inscriptions and so on?

And I personally have found those arguments rather sad, because it basically throws out almost any endeavor dealing with *any* ancient culture as far as I'm concerned. And my view right from the start was that if we can indeed decipher more and more of these inscriptions, what we have is a day-by-day history of classic Maya times. And that fine-tuned resolution helps immensely with the archeological findings that we had, because archeology, in fact, can never hope to be as fine-tuned as that. If we can date things archeologically within 50 years or 20 years, we're normally quite delighted.

So in other words, this schism in some ways started to develop in the late '70s and early '80s, where archaeologists felt that – or some archaeologists, I should say, because many did see the value of epigraphic decipherments and worked with us, and I really consider myself an archaeologist as well, so I don't really want to set up two completely different

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camps – but certainly there were some archaeologists who I feel didn't consider the epigraphic material to be nearly reliable enough – and that was a fair comment in the late '70s in many ways – reliable enough to draw major conclusions about classic Maya history and relationships between sites and so on.

I think what happened, unfortunately, was that some of those continued and became confirmed in those views even as we were making more and more headway with the decipherment process, and even though, I think, by now it's largely a moot point. And most dirt archaeologists, to call them that, are really on side with the epigraphic material and accept and embrace the fact that the two can work together in a very productive way. We're, nevertheless, at a situation still where there are some people who are uncomfortable with that, and certainly some who feel that Maya hieroglyphs are not necessarily always telling the literal truth about day-to-day history. And that, of course, is something that we've never claimed. I mean, I suppose implicitly we have when we talk about this event signifying a war by Caracol against Tikal or what have you. But we, of course, accept that this is political propaganda in the truest sense. And it's like any history, whether it's modern or recent European history or the ancient history of other now long-lost cultures. Clearly, the people writing these have an agenda, and they're going to be putting their side forward against possibly counter views. And we have to take all of that into account. But after all, that's standard historical procedure that we have available to us, to deal with that.

And in many cases in the Maya area, we're fortunate enough to have – in a few I should say, perhaps not many – but in a few cases, we're fortunate enough to have the story written from both sides. We have a reference on one side to a particular event, and we also have that same reference at the home site or the conquering site, or what have you, so that we can start to work out what's going on more accurately. One detail, for example, is that at some sites we have references where that site is saying, "On this day, we were conquered." Now, this is not normally the kind thing you'd expect to hear from a kingdom that suffered a cataclysmic military defeat. But generally, they're recording that fact and stating it as a backdrop to a later revenge attack that they make on a particular city that got them in the first place. And so we have these tit-for-tat wars going back and forth and all sorts of kind of very intricate – in some cases, detail on exactly what's going on, and the underlying causes for those attacks.

<continuity break>

The 1986 Blood of Kings exhibit

Peter Matthews: Well, *The Blood of Kings* was just an absolutely incredible show that I think was truly revolutionary in the field, not just in Maya studies, but I think also in many ways of museum exhibits. Because Mary Miller and Linda Schele wrote a book to accompany the show, which had stunning pieces of Maya art collected together, really, for the first time. Their book involved several lengthy essays, I mean real book chapters, on different aspects of Maya culture. And then, the catalog part of it went into lengthy descriptions and explanations of what the objects were. So, I'm overgeneralizing here. But rather than the standard museum catalog of saying, "Maya culture A.D. 600–800 clay pot," kind of captions, it went into a full-blown discussion and description of exactly what you were seeing when you looked at that particular ceramic vessel with a painted text on it, and a painted scene below, and so on. And as such, I think that show really brought the ancient Maya to life in a way that simply had not been done before. I mean, obviously, there were books like Morley's *The Ancient Maya*, and Mike Coe's *The Maya* and so on, that started towards that, of trying to picture a Maya court, and Maya daily life, and so on. But, with the rich array of artifacts and objects and scenes and glyphic texts that Linda and Mary brought together at that show, it really just absolutely made the Maya come to life and was truly I think a catalyst for popularizing of the Maya in a way.

I must say, I was at the conference. I wasn't so aware of the difference of opinion between dirt archaeologists and epigraphers and iconographers at that stage perhaps as Mike Coe was. I guess in short, I felt that that had been growing over some years anyway, and perhaps the exhibit itself kind of brought things to a head to a point. But I guess I feel that process was already there. And basically my view was that, well, we had some homework to do, to convince our archaeologist colleagues that were still skeptical that indeed, we were on the right track with the decipherment. Because I think it's fair to say we were still feeling our way along many of these avenues of decipherment. And it was probably quite fair for outside onlookers to be skeptical of whether we really did have the right result or not. And part of this factor was really coming out of the original naming of the Palenque kings and that kind of process where we would have an original name that we proposed in the Mesa Redonda, and then a couple of years later, a new article would come out where we thought, no, that's not quite right, *this* is what the name is. And then a couple of years after that, a third name would be proposed, to decipher the same hieroglyph. And so some of the archaeologists and other skeptics would fix on that kind of process and say, "You see? You keep changing your mind all the time. So why should we believe you this time around?"

I think it was a fair comment. But I think what some of them perhaps lost sight of, temporarily at any rate, was that we were inching our way towards a greater

understanding of this. And after all, this was the scientific method as far as I'm concerned. This is what archaeologists do. We are entitled to change our mind. Archaeologists looking at ceramic phases might initially date a ceramic from 100 to 300 A.D., and then the next phase from 300 to 500 A.D. And then some more information will come along and they think, well, really this period in the middle is different enough. Let's call it another ceramic phase that we'll date from 200 to 400 A.D. And that kind of process is done all the time, and it's quite fit and proper that it is done, as more information comes to hand. And so that was also the process that we were using. But in fairness to them, I agree that we were probably very confusing to them with this array of slight changes and shifts in view, and new interpretations that, in some cases, quite radically changed what we had been arguing just a few years before. So, unless you were completely enveloped in the field, it would have been difficult to follow along. And I think that one of the processes that we developed, really almost more by osmosis than by deliberate plan, were things like the glyph workshops and conferences that did make this material more accessible to the general public and to which many archaeologists did come.

Name tagging and the *u tup* decipherment

Q: Moving to a different topic... Can we talk a little bit about your *u tup* decipherment and the beginning of looking at name tagging on objects and what impact that whole cycle of things had on the decipherment?

Peter Matthews: Well, one of the things that I was aware of from other writing systems was that it's quite common in writing systems all around the world, in often some of the earliest inscriptions, to say something like, "Chylius made this sword," or "This object belongs to so and so." And so I was kind of not surprised, perhaps would be the way to put it, at the thought that this might also occur in the Maya texts, especially once we'd worked out for absolute certainty that historical individuals were being named.

And I suppose that those two thoughts really came together when David Pendergast from the Royal Ontario Museum in Ontario sent Mike some objects that he'd recently excavated at the site of Altun Ha in Belize. Mike passed them on to me. They had inscriptions on them – not a lot, but there were a few inscriptions – and Mike said, "Can you do anything with this?" And one of the inscriptions was carved, incised, on two jade ear flares that belonged to one of the buried kings of Altun Ha. The first glyph on one of the ear flares read, *u tu pa*. And the *u* is a possessive prefix, meaning his or hers or its, and the *tu pa* spells the word *tup*, which means "ear flare" or "ear ornament," something that covers an ear. And so the decipherment of that was pretty clear-cut, really. It

clearly meant "his ear ornament." And given that this was incised on something that was quite ostensibly an ear flare worn in the ear, as a jade flower, so to speak, worn in the lower ear lobe, it was such a beautiful fit.

So I kind of jumped up and down and said to Mike, "This really looks like it's name tagging to me. It really looks as if this is a text that marks that object as belonging to that particular king whose name glyph comes in the following hieroglyphs." And then we started looking and found more inscriptions that had that kind of thing. And of course, we now know that there are bones that are possessed, there are ceramic vessels that are possessed, there are monuments that are possessed, and so on, all across the Maya world. So indeed, this pattern of naming objects and saying who it is that they belong to is a very common one in the Mayan world, and was a very nice discovery.

David Stuart's 1984 breakthrough on the redundancy of the phonetic signs

Q: One of the things that contributed to that breakthrough in the mid '80s was David Stuart's discovery that there was a huge number of glyphs that could represent the syllable *u*, the possessive, which was something that was so startling in a way. Thompson may have made his mistakes, but his paper on "The Fish as a Symbol for Counting" was regarded as something really solid and elegant. And David said he hardly believed it himself. What was your reaction? Did you hear his paper at the 1984, I believe it was Denver?

Peter Matthews: I didn't hear his paper because I wasn't at that conference. But obviously, I saw a copy of the paper very shortly afterwards. And I think all epigraphers have moments that they wish they could kind of forget about. And thank God in that case mine was a private one, because I read it with the previous interpretation of Thompson being so utterly entrenched. And it was such an elegant argument that Thompson had, in fact, made, that my initial reaction on reading Dave's article was, "No way. This cannot be right."

And then I read it a second time, and the patterns started falling out. And I read it a third time and said, "Yep, he's right," you know, "this is just an absolutely brilliant piece of work," and ironically, throwing out one of the major contributions really that Thompson had made to the field in the process. So, yes, that kind of pattern comes all the time. When some young tyke will come up and perhaps not start with the same premise that we had, and therefore, look at things with very fresh and new eyes. And it's been a wonderful way for the decipherment process to evolve, because they didn't have all of

that intellectual baggage, in every case, that we did, and therefore kind of was an intellectual block to going that one step further, and just taking a step back and saying, "Okay, let's start with a clean slate here and see what this pattern is and how we can best interpret it." And that's what Dave did with absolutely startling results and a brilliant piece of work.

Q: We're talking to various people about that particular moment. I kind of get the impression that that particular paper, -- which was delivered, wasn't even published until six years later -- it actually was maybe one of the major turning points in the decipherment after Knorosov and Proskouriakoff. You know, there was this long gap where Thompson said Knorosov's decipherment should produce this flood of readings. It was David's discovery of this redundancy that finally cuts this floodgate.

Peter Matthews: Well, the situation up until then had really been that we were still going full speed ahead with what I could call the nonlinguistic decipherment of Maya inscriptions. There was still enough in the structure of them and the historical connections of them to be able to draw very broad and in many cases very detailed historical reconstructions of the Maya world. But we had, up until that point, largely ignored what I'd call the linguistic decipherment, partly because there were still far too many signs that we just didn't have a secure reading for. And so reading a text was like sticking your finger in and out of your ear where you'd get one little bit of a word and then it would go silent, and then you'd get a bit more and a bit more and so on, but, in other words, where we couldn't string whole sentences together in the reading in ancient Maya words, and therefore, the translation couldn't be effected so well. But, certainly, by the end of the '70s and in the early years of the '80s, we were starting to do more and more decipherment of signs, and the major part of this was really syllabic signs, more and more of which were being successfully deciphered. There was a conference in Albany in the late '70s where that process got a big jump. And in fact, Knorosov was invited to that but wasn't able to leave the Soviet union and attend. So we kind of soldiered on in his absence. And gradually, that process was leading to a fuller linguistic reading of the texts.

But I think in many ways, that paper of Dave Stuart's was a catalyst to really giving that a huge jump start and pushing that process forward by many, many years in fact. One thing that it did was accentuate to us something which we'd really already known, but I don't think any of us had really worked with terribly productively until Dave reminded us of it. Dave Kelly was the one who had worked with it back in the '60s and '70s: namely, the whole pattern of linguistic substitution.

Floyd Lounsbury had taught Linda Schele that if you had a substitution pattern in the hieroglyphs where, let's say, you had a glyph that could be spelled two different ways, and yet clearly indicated the same thing because of the context that had repeatedly occurred, obviously that's a wonderful tool for the decipherment process. But the question is: Does the difference in spelling of that glyph indicating a *semantic* difference of meaning? In other words, perhaps synonyms are being used. Instead of saying, "I liked something," it was, "I loved something." Or was it saying, "I liked something," and simply *spelling* it in two different ways?

We now know that the vast majority of those contexts are the latter. They're different spellings of exactly the same word. But Floyd, I think, took the view that they were more likely semantic difference and meaning difference. And Linda and I basically followed along with that. And indeed, many of the early decipherments that we'd made were more along those lines, so it seemed a productive avenue to follow. But what Dave Stuart did was show us that, no, a lot of these substitutions are, in fact, purely phonetic substitutions that are spelling exactly the same word in slightly different ways. They're putting on more syllable signs, or they're spelling it completely syllabically instead of using word signs, or they're using combinations of the two different types of signs. But all of them are saying exactly the same word. And we, of course, were aware that that process existed, but we were, as I said, focusing more on the meaning difference rather than on the sound difference. And once Dave reminded us of the presence of these differences being purely phonetic and not necessarily differences in meaning, it seemed to have produced a major spurt in decipherment in the middle part of the '80s, especially where we then went back and revisited all those things we couldn't really do much more with, and took this fresh approach that maybe they're just spelling the same word in a different way. And bang, the pattern came out.

The clues used by epigraphers to attack an unread text

Q: Thank you. I'd like to talk a little bit more about the tools that an epigrapher uses when looking at a text and trying to get a handle on it. What do you look for in a text, trying to figure out what's going on? How do you take and rearrange it in your mind, or on a piece of paper or whatever, to begin to see the pattern?

Peter Matthews: Well, the main tool that has to be brought to bear when looking at a new text is, of course, your past history of knowledge of inscriptions and so on. I mean, I think all of us in epigraphy have a very good visual memory, which is really important, because when we look at a new inscription, we often tend to say, "Oh, yeah, that's the same glyph I've seen at Copan on such and such a monument." And so that immediately

brings in our head a particular context which this same glyph might also be operating under. That's one thing.

The second is that we look always to structural similarities in other inscriptions. And any decipherment process is certainly a process of pattern recognition. That's probably the single most important thing. If you look at undeciphered scripts around the world, sometimes they are undeciphered because the underlying language just isn't known and therefore, the structure of that language is very difficult to tease out – but in many cases, it's also because the inscriptions are too short and too fragmentary, or too few in number, to be able to get any clear cut patterns. I think Indus script is a good example of that.

Luckily, in the Maya case, we've got thousands of texts, and some of them very long texts in a whole variety of different context. And so we can bring all of them to bear on the decipherment of the particular sentence that we're looking at. And we'll, again, from our visual memory, and from our knowledge of how other inscriptions work, both in their structure and in their content, be able to tease out all sorts of clues in that new inscription. And so generally, now, in fact, the process is really quite simple when looking at a new text. The odds are very high that most new inscriptions that are found can almost instantly be deciphered, to the tune of about 90 percent these days.

Q: You talk about patterns. There are certain patterns in Maya story telling or Maya poetry, whatever you want to call it, that seem to persist; you find them in the ancient monuments, you find them in the Popol Vuh, you find them in contemporary Maya story telling. I'm thinking for example, coupleting, which Floyd Lounsbury found in the script? Katherine Josserand has found it in contemporary Maya storytelling. Can you talk about those kinds of semantic structures?

Peter Matthews: Uh–huh. Well, one of the things that we need to keep in mind with Maya inscriptions is that because of the accident of the environment in the Maya area, and the accident of preservation, we have the formal, in most cases, public monuments to deal with, and relatively rarely do we have any private inscriptions, so we don't have the counterpart, for example, to the letters of El Amarna in Egypt, where we have private thoughts of the Pharaoh, and records of taxes, and all of that kind of stuff. Rather, we have the kind of inscriptions that we would find carved across the top of Lincoln's Memorial or the State Department, and so on, and great public statements of the power of the king, and the great exploits that the king undertook.

Obviously, we've got a variety of other texts as well. But what that means is that, generally, we can assume formal speech being used. We don't have a lot of chatty inscriptions where they're putting things in the first person, for example. Most of these are third person, formal, rhetoric kinds of pronouncements. And we also however, have,

as a part of that formal speech, we have all sorts of other rhetorical flourishes that we can still pick up in modern Maya ritual speech, and formal rhetorical language. Floyd Lounsbury was really the first to pick this up with his deciphering of couplet constructions, where Maya would use two contrasting elements together in a couplet to embrace the whole so that, for the world, for example, he might talk about the earth and the sky, or even the earth and the ocean. And they would also use couplets in another sense where they would talk about two synonyms paired together, one after the other. So, for the world, again, they might say, “this land, this world”, to paraphrase in English. If I were to say that in casual conversation, you would probably think I was a bit up myself, and being a bit too pedantic in my speech, because we normally don't do that in everyday speech. But if we're writing poetry, or if we're making an important political speech, for example, we will often include flourishes like that. And apart from Floyd Lounsbury, there are scholars like Kathryn Josserand, and Barbara MacLeod who pick these up in the ancient Maya inscriptions, looking also at modern Mayan languages with which they were intimate and with which they were dealing, and noticed exactly the same patterns. So, it's been a very important part of the process.

Q: In terms of techniques also, one of the things that I believe maybe started with the Mesa Redonda, and that the Miniconference and Austin groups used, was kind of paraphrasing your way through a text trying to get your handle on an entire narratives. I think until then, with Proskouriakoff and Berlin and Thompson, it'd been more analytically looking at, you know, sort of one glyph at a time, rather than presuming to deal with the entire text. And I think you guys made a lot of progress by just sort of barreling your way through texts and sort of leaping over the parts that were fuzzy. Can you talk to me about that?

Peter Matthews: Yeah. Well, the process of decipherment that we found very productive was following along the guidelines of Dave Kelly's early work, and a technique that he taught me in Calgary when I was an undergraduate student with him. And that was really the structural breakdown of passages where, quite literally, we would cut and paste the broken-up glyph blocks into a kind of horizontal line to mirror our way of writing, as opposed to the Maya way of writing, which is in double columns of inscriptions from left to right and top to bottom.

The advantage of this kind of very tedious process is that when you put the passages along in a horizontal line from left to right, you can then, in the subsequent passages, line up the elements that are similar to one another. And it's a very good visual way of getting the patterns of these texts or sentences to fall out, so that you can find a verb and put all of those in one line, and the date in front of that, and the name of the person, and the Emblem Glyph, you can all put in one vertical line from one sentence to the other. And

that pattern was very important for two reasons: One, it made the main elements fall into very neat patterns, as I said, but the other is that it made us look at over all the sentences, rather than just kind of focusing on a Maya text as it's originally composed and picking out individual glyphs that we could recognize, kind of completely glossing over all of the others, because the process really forced us to look at the glyphs that we *didn't* understand as well as the ones we did understand, and at least make beginning deductions on what those glyphs could be, whether they could be other names, or whether it could be another part of the verb, or whether it could be an object or an adverb or an adjective and so on, and we made those attempts based on the context in the passage, based on where they were in the passage, and our understanding of Maya syntax or word order within sentences.

In the first article that Linda Schele and I published on the Palenque kings, we did a rudimentary version of that, where I'd record the name of the king but then also I listed other names and titles, which we thought were additional parts of his overall name phrase. And in most cases we were correct. But in some cases we included bits of verbs and objects and other things just because we didn't know any better.

Q: Thank you. Did Berlin use that same technique, when he was tackling the Tablet of the 96 glyphs? Did he lay them out like that?

Peter Matthews: Berlin had also dealt with this same procedure of laying them out in a very famous paper he wrote in 1968 on the Tablet of the 96 Glyphs at Palenque. Dave Kelly, I'm not sure whether Dave learned the technique from Berlin or not. But I think basically they'd both been doing the same technique at the same time. And Tanya Proskouriakoff, in her Piedras Negras paper, had also done a similar technique, although she hadn't done it quite as exhaustively in publication, although I think she had for her preliminary work for that paper.

It was an obvious way to work because we speakers of English and European scripts tend naturally to want to put any other script into our own format so that we can understand it better. So it's a natural procedure but one that, in fact, is also a very productive one, because of the visual patterns that we get out of it and also, as I say, because it forces us to look at every glyph in the string rather than just focusing on the ones we know better.

His 1974 encounter with Heinrich Berlin

Q: You and Linda at one point in Mexico City, met Heinrich Berlin, and had some discussion about your notions about Pakal. Can you tell us about that?

Peter Matthews: Linda Schele and I were in Mexico City in 1974. And by this point, Heinrich Berlin had seen our paper and knew what we had argued about the later kings of Palenque, and in fact, had really preceded us in many of our discoveries and so on. But the one thing that he had not been able to bring himself to accept was the age of Pakal. And so when we called him up with great fear and trepidation, he said, "Well, I'm pretty busy, but I can meet you for coffee. If you come to this coffee shop just below where I work, I'll meet you for a little while."

And we went there, and this very tall, daunting looking figure, I must say, greeted us and bade us sit down, and we ordered a cup of coffee each, and he made a big show of looking at his watch, and said "right, you've got 20 minutes, who wants to go first?" And I remember thinking— being the quieter one of the pair I remember thinking "well, gee, all I wanted to say was what an honor it is to meet you <laugh>, I don't know what to ask or talk about!" Of course meanwhile Linda had all ready kind of gone in and started talking about Palenque, and we immediately generated a big discussion on all things Palenque, and looking at discoveries that he had made, and things we'd thought of and so on, and the conversation gradually got around to Pakal ,and the whole issue of the ageing of Pakal.

And Heinrich Berlin, who really had basically worked all of this out for himself but couldn't believe it, as we later realized, told us that he simply couldn't believe that Pakal lived to be 80 because Pakal – he said "the bones were just too good, you know, the skeleton was in good shape, there wasn't sign of any advanced age" and as the crowning glory in his argument he said "and the other thing is this skeleton had all of his teeth and they were in good shape" and he said "I don't have my teeth and I'm not *nearly* 80 yet", he was in his 60s, I think, at the time. Now, as he was saying that, he was holding his hand with a sugar dispenser physically over his coffee cup for what seemed to us about a minute and a half, I mean we couldn't believe any more sugar could fit in the coffee cup, and Linda and I looked at one another thinking "well, we can't really comment on this!" <laugh> but we both took it on board as part of our future arguments as to whether Maya rulers were imbibing huge amounts of coffee with sugar in them that could've been kind of eating their teeth away!

That aside, we had a wonderful meeting with Heinrich Berlin, and it was one of the really special moments of my life, I must say. He kept looking at his watch again as the 20 minutes came and went and said "Well, I've really got to go now, but let me just say this --" and he'd go off again, and we had a wonderful conversation for about three hours, as I recall, on all things Maya, and specially Palenque.

Q: Could you repeat the story about how the evidence of Pakal's scientific dating ended up?

Peter Mathews: Well, as I said earlier, the stand-off on this issue was really that we felt quite convinced that the hieroglyphic evidence was absolutely clear cut, and that Pakal lived to be slightly over 80. But there had been a couple of different osteological studies done fairly soon after the tomb was found in 1952, and those studies led to him being around 40, or between 30 and 40 in the case of one of the studies, and so really that's where things stood. We for our part felt that, gee, wouldn't it be nice if they did another ageing of the skeleton and could try and confirm it once and for all, especially once more and more sophisticated techniques came along to do that, and I'm sure our detractors were just utterly convinced in their minds as well that we were wrong and they were right.

But fairly recently there have in fact been studies done by a physical anthropologist called Vera Tiesler in Yucatan, and she and her team have come up with the results that indeed those particular bones date to be about 80 years old. And other findings more recently in other parts of the world have tended to kind of verify this as well. There was a very famous excavation at Spitalfields, which was a church in East London where the bodies had been put in coffins underneath the church. The local vicar I guess wanted to turn that basement into a goodwill area for his parishioners, and so they undertook this huge study to remove the coffins, to bury them in sanctified ground outside and so on, but in the meantime they contacted the living relatives of all of these people who died in the 18th and 19th centuries and got permission to study the bones. And they did, and did a series of blind tests.

Well, the physical anthropologists in some cases found that they had seriously under-aged the bones, and one of their conclusions was that once an individual becomes relatively mature, bones often tend not to age terribly much. They even talked about quote unquote 'young bones'; people –you probably know some people – who seem to be incredibly youthful for their age. And indeed the bones apparently reflect that on occasion.

So I think now that we do have the scientific ageing, obviously we feel on safer ground. But in general terms, I think skeletons can probably be aged far more successfully now than they could 20 or 30 years ago.

His relationship with Tania Proskouriakoff

Q: Thank you. Just jumping around a little bit – you mentioned that you got into a pretty close good relationship with Tania Proskouriakoff, could you tell us a little bit about that and about how in the course of your time with her you sort of tried to persuade her that the work you guys were doing on parentage statements really were solid?

Peter Mathews: Well, the time I got to know Tania Proskouriakoff really quite well was when I was at Harvard University working with Ian Graham on the Corpus of Maya Hieroglyphic Inscriptions project and Ian used to boast that he'd actually kind of ended up being a cuckoo in Tania's office, because he moved in years back when she very kindly offered him a corner of her office, and he kind of gradually spread into, ultimately, the Corpus Project there.

But he and Tania of course were very good friends, and when I arrived in Cambridge we became quite good friends as well. I would have lunch with her reasonably often, and go over to her house and talk with her some afternoons and so on. And I decided that I would set myself a task with Tania, because she was still quite intractable, really, on the issue of the Palenque inscriptions, and I knew that we were a fair distance away in what we believed, part of it stemming from that mini-conference in Dumbarton Oaks, but other parts just because, I think, the Palenque text didn't have the same patterns to the ones that she'd worked with in Piedras Negras.

So I set myself the task of seeing if I could convince her, through really applying her own structural methods to the inscriptions, that the Palenque text did say things along the lines of what Linda and I were arguing. I thought that probably the best structural thing to show her, in trying to convince her, was the patrilineage expressions that we had worked out, where you have in many inscriptions essentially three names in the same passage, and the first name is the name of the king, and then it goes on to say who his father and mother were. I thought that if I could show that the second and third person named in the passage were invariably one generation older than the first person named, and the male of that second pair is almost invariably the preceding king, and we know their dates because we have two kings one after the other – and all of this stuff really patterns out very nicely. So I thought well, that's what I'll set myself to do.

But the glyph – I should just interject — the glyph of relationship between the son and his father is a glyph that Thompson many years ago had read as *u ahau lil* [sp?] which means 'in the reign of' and that ended up in short being the stumbling block. I would kind of lead Tania down the garden path to a degree; I'd try and convince her of the initial steps, and then go one more step and say "So you see, Tania, if you accept this, then there is this implication, and then we can go on and say *this*", and so on and so forth, and

the stumbling block was invariably when we got to this *u ahau lil* glyph and she would say ‘but what’s that doing there?’ And I’d say ‘well that’s the glyph that’s structurally has to be the relationship between the child and his father’ and Tanya would say “But that means ‘in the reign of’, that’s Thompson’s *u ahau lil* glyph”, and I’d say “But in this context it *can’t* be ‘in the reign of’ because this guy’s dead, Tanya, you *know* this!” <laugh> and we’d kind of go round and round about that, and Tanya would generally end with some comment on ‘that Palenque group’ as she called Floyd Lounsbury and Linda Schele and Dave Kelley and me, and basically had respect for us as epigraphers in general but not for anything we’d done in Palenque. And I would feel honor bound to say “But Tanya, I’m really one of ‘that Palenque group’, as you put it” and Tanya would always say “Oh, Peter, you don’t really think like that” and mentally, in her mind, it just hid me off from the rest of the Palenque group as someone that was capable of better, more clear thoughts, I suppose... <laugh> and I never quite convinced her, unfortunately, of this. Her mind was starting to fade a little bit by the time I met her, it was in her final years and I clearly couldn’t go on for hours and hours and tire her out, so we generally got about an hour into it by which time we got to the *u ahau lil* glyph and then it ended in a road block.

Q: What was Tanya like, can you give us examples of how her mind worked.

Peter Mathews: Well I must say I thought she was absolutely delightful; she loved an argument and so did I, so we really got on very well, and luckily our arguments never came anywhere close to coming to blows. I mean, that was never going to be an issue for us. I feel very honored that I got a chance to meet someone who had contributed so much in so many different ways through her architectural drawings, and her study of Maya art, and of course her hieroglyphic decipherments – that I managed to meet her even when she was in her final years was a tremendous honor, and just to be able to talk to her about glyphs, which we did a lot, especially in the early years that I knew her, was just wonderful, because she was still such a fountain of knowledge and, as I say, she also loved to argue about it, so that she was a very good check on my more rash impulses, and would always kind of bring me back to earth in a way that I can’t say Linda ever did. With Linda we tend to fly further and further afield and sometimes come crash landing down and sometimes make really neat discoveries, but Tanya always brought me back to earth very quickly and insisted on rigor, I think, I think that was always a major part of her methodology; very rigorous, very detailed and very comprehensive in all of her studies, and I must say I have an affinity to that kind of working process. I think my own preference in investigating something is always to try and completely map it out before I then make conclusions. Which again is very different from the way Linda operated, but I think we had that affinity, Tanya and I, and so when I’d start on drawing a conclusion from data Tanya would invariably say ‘well, what’s your evidence for that?’ And thank

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god I was able to show her the evidence in most cases, and she would then either agree, more often than not, or disagree, based on that evidence, and the argument would then begin.

Q: In 1960, [when she published her paper on ‘A Pattern of Dates at Piedras Negras’] obviously there was rigor involved but there was also a great deal of daring – what would you say was the combination of qualities of mind that allowed her to make that great leap?

Peter Mathews: Well, I might start with a story, actually, because Tanya told me several times – she was starting to repeat herself a little bit and it was clearly one of her favorite stories, and I couldn’t hear it often enough, so I didn’t mind hearing it several times – about how she presented that paper to Thompson... because she was a solitary scholar, she didn’t really collaborate. I in fact asked her once if she collaborated very much with Heinrich Berlin, when they were both working on such momentous discoveries at the same time, and she said “No not really, we exchanged letters, and I’d tell him what I was doing, but we never really combined forces on anything,” and that was the way she developed the Piedras Negras paper, basically in a vacuum from what I can tell, in terms of working on it completely by herself and not really even telling other people what she was doing, partly perhaps because it was fairly contentious, and, if true, it was going to completely break the mold in Maya historical studies, but partly just because that was her methodology. As I say, she would rather work out all the data and then make her conclusions from it before really letting other people know, just so that she could develop her ideas fully.

The story she enjoyed telling was that she presented the paper to Eric Thompson one evening, as they were both leaving their offices in Cambridge to go home, and she told Eric Thompson as she handed him the paper what it was about, and Eric Thompson said “Oh. Tanya, you know that can’t possibly be true, there is no history in the inscriptions,” and she said that the next morning she came back to work to be greeted by Eric Thompson who said “You are absolutely right,” and she, I think, was very proud of that, and so she should be, because I think it says so much actually about both Thompson and Proskouriakoff. I mean, on her side, the power of her persuasion and knowledge and understanding of the inscriptions, and for his, some credit that’s not always given to him, I think, that he was open to being convinced of positions and stands that he in fact had been vehemently opposed to, for many years in that case.

Q: He wasn’t open to being convinced of phoneticism by Knorosov?

Peter Mathews: No, I think not. But in fact, if you look at some of his early papers, he came damn close to developing phoneticism himself, and then shied away from it at the

last minute. I think it was probably the context in which Knorosov's early papers were published, with these diatribes against the West – i.e., him, effectively, as the leader of the epigraphic field in the West – that really just created a barrier that couldn't be broken down. I'd like to think anyway that if he was younger, and had lived till say this time, that he would certainly see the power of the arguments. But to be fair, at the time he died in the mid 70s, the phonetic decipherment was well advanced as an underlining principle and he was wrong on that, there's no getting away from it. But in terms of the great mass of evidence of how it all worked, and the detailed reading of so many glyphs – that was really not so far advanced when he died, so perhaps it doesn't excuse his standpoint in an intellectual sense, but I think it makes it a bit more understandable.

Q: How do you see his role, overarchingly? Do you see him as a central figure? Mike sees him as sort of a giant stumbling block...

Peter Mathews: I have to say regarding Eric Thompson that he was a major contributor in so many different areas of Maya research; I mean if you just look at the range of articles that he published on everything from modern ethnography, to myth, to details of ancient culture, to archeology and epigraphy and linguistics and so on – linguistics being decidedly the weak link, but he did have a few dabbles in that as well – I think there's no getting away from the fact the he is a towering figure in the field, and deserves to be so.

But I think it's also probably quite fair to say that he held back his own special love in Maya studies, namely epigraphy, by quite a few years, I think, in terms of being so resistant to the phonetic decipherment in particular. And also really on the historical side, he never really did much with the decipherments that Heinrich Berlin and Tanya Proskouriakoff had developed, partly because by then he was really pretty well retired, and I think he felt it was perhaps an old dog and new tricks kind of situation. But on the phoneticism I think it's certainly true to say that he held the field back, he was such a fierce antagonist for things that he didn't like that it made it very difficult for people to propose them, and even very late in his life, shortly before he died, I think he said in one paper that there was only one serious epigrapher that as far as he was concerned there was only one serious epigrapher that accepted Knorosov's views. Now who he meant by that was Dave Kelley, not Floyd Lounsbury not Mike Coe, not Tanya. (Tanya kind of accepted the concept of phoneticism, but never really did anything with it.) But that was Thompson's viewpoint, you know – that, almost, if you accepted phoneticism then you couldn't be a serious epigrapher, I think was the implication of that statement.

Why the decipherment took so long

Q: What do you think it was about the nature of the Maya script that made the decipherment take so long, or about the history of the decipherment that made it take so long? How would you compare Maya to Egyptian in that respect?

Peter Mathews: Comparing Egyptian to Maya is actually pretty easy, because they were worlds apart, quite literally as well as metaphorically. With Egyptian the very famous key was the Rosetta Stone, which had transcriptions in three different scripts that enabled the decipherment to go fairly smoothly, even though it's a lot of hard work, after the initial brilliant insight by Champollion.

In the Maya area we don't have anything like a Rosetta Stone, apart from a brief section in a treatise by a Spanish priest called Diego de Landa. He called it an alphabet and gave 30-odd Maya signs with alphabetic transcriptions to them. It is clear now that the way he elicited the information was to ask "How do you write the letter *r*, how do you write the letter *beh*" and so on. If the scribe was just asked to write a sign and tell Landa what it was, we'd probably have some examples of syllabic and logographic signs. But instead the scribe, his informant, just simply wrote the sounds closest to the syllable pronunciations that Landa was giving him for the individual Spanish letters. So for example the letter (so-called) *beh* that Landa was eliciting, the scribe wrote as a footprint in a road because the Maya word for road is *be*. Now obviously that fairly short section gives us some inkling of the signs and their value, and it's certainly the best thing we've got in terms of a Rosetta Stone, but it's fairly limited, and in addition it was very early on disproved as an alphabetic, and that meant, really, it had a limbo kind of status for quite a while, because people weren't sure whether it could be trusted for anything, since it certainly *wasn't* an alphabetic.

I think the other main factor, I would say, and a far more serious factor in holding up the decipherment process, was probably the curious quirk of the trajectory of the decipherment in the early part of the 20th century. I don't think you should really hold any individual to blame for this, I think it's just the way some fields can sometimes get skewed and lead off on the wrong path, and it takes someone to do a real revolution to bring it back on the right path.

The wrong path that was followed up was basically at the turn of the century, around 1900, when major institutions like University of Pennsylvania and Harvard and shortly thereafter the Carnegie Institution of Washington were starting up in the field, one of the key desires for archaeologists was to be able to date these sites, and there was an inherent dating system in most of the Maya sites through the monuments and the hieroglyphic dates that were on them. Now the dates, because they had a mathematical component,

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were all deciphered effectively within about ten years after the discovery of the Dresden Codex. So between 1890, roughly, and 1900, 90 percent of what we now know about Maya dates was effectively deciphered. That was all very well, and it meant that archaeologists and others could go around all the sites and look at the monuments and isolate the dates and determine down to the day in history what those dates referred to, and then kind of gloss over the rest of the text very quickly and say, “well, now here you’ve got what is called a distance number or an interval of days and months and years leading forward to another date, and this date corresponds to such and such in our calendar”. So very successfully, every time a new monument was found, scholars like Sylvanus Morley could go out and immediately look at them and in five minutes work out the date. That in turn gave dates of occupation to these sites, which was the main thing of course that the archaeologists were interested in at that time, in order to fix these sites in time.

The skewing really took place in the next phase, because there was then a fairly long period where most of the decipherment work was being done in the Codices, not in the monuments, and the monuments were proving quite intractable apart from the dates. There is a section in one of Morley’s writings, and I’ve not been able to rediscover it, but I found it when I was an undergraduate, where he has a throwaway sentence saying ‘there are no other glyphs in this monument’. What he meant to say was ‘there are no other dates’ but I think that portrays a kind of a mind change in Morley’s mentality and those of his colleagues at the time, where basically they look for the dates in the monuments and where there weren’t dates they’d kind of completely ignore the rest almost to the point of saying those glyphs didn’t even exist. They certainly didn’t exist in terms of anything decipherable.

So the next logical step from that was the statement that started to be made increasingly in the ‘40s, that all the Maya were interested in was time, and they were worshipping the passage of time, and the people who inhabited these cities – which weren’t cities but rather “vacant ceremonial centers” as the term was – were calendar priests who would have a few retainers around them, and the bulk of the population would be living in small rural hamlets dotted around the countryside. And on important calendrical events they would all flock into the cities and celebrate the passage of time.

So over the period from about 1930 to 1950, broadly, this view changed to the point where the Maya society was quite a strange society; it was not ruled over by political leaders but rather by spiritual leaders, even though some of these cities like Tikal were known by then to be huge, and even though a few like Uaxactun had been known to have house mounds ranging out from the city center, they were considered to be affectively uninhabited, and the inscriptions, along those same lines, talked about time. In the

context of time and sacredness it would've been quite sacrilegious to talk about history, and personal doings, and people and places and so on. So really, I think, by the 1950s that mindset had happened where Thompson could make that statement to Tanya that "You know that the inscriptions of Piedras Negras cannot refer to historical individuals because we've reached a stage now where it's all about the passage of time" and so I think there probably were a couple of lost decades in there in the 30s and 40s. especially, where advances could have been made if the right avenue, the right path had been taken. But of course it's so easy to say that in retrospect, and I'm mindful that people might be saying that about me in 20 years time, that if only Mathews had not got so fixated on X or Y maybe we could've advanced the field more!

The origins of Maya writing

Q: The earliest texts we see are pretty sophisticated, what's your take on where it came from, how it came about and how it developed?

Peter Mathews: Well the origin of Maya writing is still a huge issue, and one that's very cloudy, I think, to most of us. What is clear is that the earliest inscriptions that we have really are relatively fully formed. There is nothing like some old-world scripts where we can see development going on over a fairly protracted period in some cases, from what anyone looking at them would say are rudimentary signs, into a fully developed and much more elaborate script.

The first inscriptions that we have, which don't carry dates but belong to what we call the late pre-classic period, in the centuries around the time of Christ, are already very fully developed text, and ones that we can really read in the context of late classic inscriptions; they've got a different style to them, but they are quite similar in their composition and so on. Most of them are portable objects, so that does lead to the question of whether the script even developed outside the Maya lowlands, or to what extent people who were able to travel outside the Maya lowlands were affected by the concept of writing. Clearly elsewhere in Mesoamerica writing seems to have been an earlier development, and the most obvious candidate for the predecessor of the Maya was the Olmec script that was written around the gulf coast of Mexico, and also in a broad band stretching down along the Pacific slope of Chiapas in Guatemala, in the centuries before Christ and a couple of centuries immediately after. There is in fact a huge debate going on right now about that script, and what language is involved; whether it's a Mayan language or whether it is a Mixe-Xoquean language, which was a different language group in middle America. I don't think I'll get into that argument here, but I think that most scholars – I may be putting words in their mouths – would accept that there was a degree of stimulus

diffusion, at the very least, between that earlier script that we know of in the adjacent Olmec area and Maya. There seemed to be some cases also of direct sign borrowing, so I think we can go further and just say it was an idea that was influencing the Maya; I think there were clearly Maya who developed the Maya script who were even borrowing some of the signs and the next questions is – were they borrowing those signs with the same phonetic values or interpretations, and so on, and that is still a matter of debate because, as I said, the question of the underlying language of the Olmec and epi-Olmec script is still in debate. I personally believe it was Mixe-Xoquean but I know that there are other people like Mike Coe who strongly believe that it was not, so we still have some work to do on that.

The suppression of Maya writing after the Spanish Conquest

Q: When the Spanish arrived and found this script all over the place, they first were curious about it, you have Landa and Gaspar Chi, and then in turn began to suppress it. What do you think were the motivations for suppressing it?

Peter Mathews: Oh I think in Landa's case it was absolutely quite clear, and certainly in his eyes quite justified, because he was trying to stamp out idolatry, and the best way he knew of doing that was to completely eliminate the power of the native priests, and a lot of their power came through their use and control and knowledge of the ancient hieroglyphic books. So much as we can lament the destruction of probably dozens of codices if not more by people like Landa, I think in fairness to him we've got to understand that he was very seriously minded and quite literally saving the souls of these Maya, as he understood it, and that the destruction of the codices and other "idols", as he called them, was an important part of that. It's especially tragic when he is ironically the one person that gave us any kind of eye-witness account, so to speak, of the hieroglyphs themselves, with his short alphabet and three or four examples of words in Maya transcribed in glyphs – even though he got it all wrong.

Q: The suppression went on for at least 200 years, until 1697 or maybe 1720. Did it continue to be entirely a religious thing, or do you think it became political?

Peter Mathews: Well exactly, the suppression of the codices and the native priests that began, as I think, largely for religious motives, obviously was also a political act by the Spaniards, who were trying to gain control over a population that vastly outnumbered them, politically as well as religiously. That eventually evolved, certainly, into outright political domination. I think as the religious issues became less, not important but less prominent in the conquest process, the political ramifications of the conquest became far

more important, and the first thing was taking control over the entire Maya area, which didn't effectively take place until 1697 when the last independent kingdom of the Maya was taken over by the Spaniards in the central Peten in Guatemala. Even after that, of course, there were many very widespread revolts and rebellions in the Maya area, and well into the last century, up until the 1920s, there were major no-go areas in northern Yucatan and the current state of Quintana Roo which were dominated by independent Maya who wouldn't let any Mexicans into their territory without a fight. After the colonial period the modern "nation states", if we can call them that, of Mexico and Guatemala continued the process. Depending on how you want to put it in political terms, obviously a large part of the issue was that there were still so many Maya living, and they were in the case of Guatemala outnumbering the non-indigenous population. That immediately causes a problem in any kind of democratic society, as to how one deals with that. If you've got the possibility of being outvoted, do you try and deal with it in military terms, and repressive terms, or take some other approach? Unfortunately the history of Guatemala is that a degree of repression has gone on until quite recently, when there were peace accords signed, and there is now a conciliation commission, and I think for the first time in a very long time the future of the Maya is brighter than it had been in the past.

Q: In the Olmec, and the Maya as well, there's a lot of symbolic communication – you know the Olmec pieces that are these complexes of symbols – and so did the Maya. Where do you draw the line between complex communication with symbols and writing which also is full of symbolic communication?

Peter Mathews: Well one of the questions that's often been asked concerning the ancient Maya is "What proportion of the population was literate?" The direct answer of course is we don't know for sure, but most of us I think would guess that probably about 15 or 20 percent of the population is likely to have known how to read and write hieroglyphs, and that would generally correspond with the elite segments of society. If that is right you've effectively got an elite part of the society that knows how to read and write, and they need to communicate in turn to an illiterate segment of the great bulk of their society. One way you can do that of course is to read out texts in public readings, and that may well have happened. But the other very great feature about Maya writing is that it is incorporated in one of the great art styles of the ancient world, and generally the relationship between the art and the writing is a very direct one. There's a good complement between the figures portrayed and the acts they're doing, and the descriptions of those acts and dates and names in the text that accompanies the scene. So I think, in a way, that bridges that problem of how do you get across the message that it is incorporated in hieroglyphs to an illiterate segment of the society, the great mass of the population who are maybe coming in to witness a ceremony. Those people who couldn't

read and write the glyphs, if they could understand some of the key elements in the art and the iconography – and of course a lot of that they would be seeing on a fairly regularly basis, in terms of costumes that signified particular rituals and whatnot – then as long as you’ve got those images they will convey the same message. What the Maya seemed to have done is put those images all over the place; we find that buildings for example are heavily decorated with all sorts of motifs of Maya art, almost like billboards to advertise what the function of that building was, in some cases even what the building was named. The accompanying text more often than not would talk about who built the building and on what date and so on. But for the general population simply seeing this large scale iconography, in many cases, would be saying what that building was for. That would probably be sufficient; they then wouldn’t be surprised when the ceremonies that took place in that building were following along certain lines.

So I think that the relationship between text and image, and the fact that iconography was so commonplace in the Maya area on public architecture and in public monuments, probably went a long way to giving the message, so to speak, even without saying it in words. Rather like, say, the northwest coast cultures of the northwest US and British Columbia where the totemic signs and so on could be interpreted by society in a pictorial kind of sense.

The future of the decipherment

Q: What do you think of the future of the decipherment, where do you think we’re going now, what do you think will happen in the next 20 years or so?

Peter Mathews: Well, right now the decipherment process is in another exciting phase, and it’s really switching into high gear on the linguistic decipherment. The structural decipherment I think is now largely done. It’s probably a rather rash statement, but we’re mopping up rather than coming to any major new sets of conclusions such as we made in the past. What we’re now mainly working on is the various specific linguistic components of the decipherment, and one of the key debates going on right now is spelling conventions. How did the Maya spell their words, in very precise terms, because the sound inventory of Mayan languages is different from our own. There are questions for example as to whether long vowels, and vowels with other phonemes added to them – which certainly in modern languages are distinctive features, and seemed to have been distinctive features in the ancient language - the question is were they signaled in the hieroglyphic system or were they kind of glossed over? And there’s still a big debate going on on that, and the camp that feels that they *were* recorded - there are two mini-

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camps within that who are debating over how to write those complex vowels as they're called, how those rules are generated and how they were organized.

So in many ways this is I suppose the kind of, I don't want to call it the final phase of decipherment, but to an outsider it may look like that, where we're now focusing on the nitty gritty. Having done the big picture stuff, we're now going back and visiting details and trying to mop up those and get a greater understanding of ironing out those details.

Q: What is the language of the script?

Peter Mathews: <laugh> Well, there is debate too on what the underlying language is, we are particularly blessed in the Maya area that we still have two-dozen-odd Mayan languages spoken today by probably seven or eight million native speakers of Maya. We have 500 years of documentation of these languages, including a couple that have become extinct. So we've got one of the best-documented language families anywhere in the world, almost rivaling English you could say. If you add up the number of documents that we have from the 16th century in England, we've got a considerable proportion of those stretching across all of the Mayan languages. The reason that happened is because the Spaniards, when they first came and tried to apostatize to the Indians and convert them to Christianity, were so vastly outnumbered that most of the early Spanish priests would write grammars and dictionaries and catechisms and so on in the Mayan language so that they and the people that came after them could convert the Indians, but convert them in their own language rather than trying to teach millions of Maya to speak Spanish first as an initial step.

So in other words we've got a great wealth of Mayan languages to work with, for linguistics to do historical reconstructions and attempt to calculate what the earlier forms of the languages were and how they group into sub-groupings and all that. The long and the short of it is that the Mayan language of the hieroglyphs is definitely related to the lowland Mayan languages, which is the most basic subdivision among modern Mayan languages. The languages of highland Guatemala do not seem to have been instrumental in the formation of the hieroglyphic language, rather it is the languages of the lowlands. There are three major sub groupings for those and all of them seem to have played a part. One is the Yucatecan subgrouping of Mayan languages, the other is Cholan and the third is Tzeltalan – which is today spoken in highland Chiapas, ironically, but it's linguistically considered a lowland language. Of those three I think it's pretty clear that the Cholan group of languages is the principal underlying language, although fairly early on I think Yucatecan speakers borrowed the script and made some conversions in it over to their language. But the question of which Cholan language is still a matter of debate. There are both eastern and western Cholan languages, and a very instrumental language relating

to the hieroglyphs is one that became extinct in the couple of centuries after the conquest [Cholti] and that certainly seems to play a large part in the hieroglyphic language.

Q: Do you feel that there were or not hieroglyphic used in the highlands? The Tedlocks will point out that there were references in the Popol Vuh to, “This next picture shows – “ and such and such, indicating that it was copied from a hieroglyphic text. Barbara Tedlock has this 1722 manuscript in Quiche, you lay it over the Madrid Codex and the division of the Almanacs exactly match... what do you think of all of this?

Peter Mathews: I’m quite convinced that there was hieroglyphic knowledge in the highlands as well. I think the early colonial references in manuscripts make it pretty clear that those earliest manuscripts, that are of course in Latin script, were probably ultimately adopted from hieroglyphic prototypes. I certainly think even if you don’t favor that view, there’s still a very strong argument for it that I think no one can deny. The question really is where the hieroglyphic script first developed, and it’s I think quite clear that that took place in the lowlands rather than the highlands. But the presence of hieroglyphs and hieroglyphic texts in the highlands - I’m convinced that they were there, and that they were used.

Q: Thank you, I think that’s it.

Peter Mathews: Okay!