Early efforts to photograph the Maya ruins

Q: Okay. Let's talk a bit about the, you know, this whole process of how people came to make any kind of visual sense of Maya glyphs and recorded them as the first step in any kind of decipherment, and took a long time to get a handle on making images of them. Could you talk a little bit about how that process started and how people began to get images that they could work with, to begin a decipherment?
Ian Graham: Well, I would say that the interest, first of all, was in the architecture and the mere existence of these ruins. And the thought of trying to decipher the writing was almost unthinkable. And it's true that in the 1830s, there were a few people who drew glyphs rather hurriedly of necessity, more or less accurately, but all with some resemblance to the originals. It wasn't until the middle of the century that some useful glyphs were recorded, and then not until a serious interest was taken -- mostly by an extraordinary group of German scholars in the 1880s -- that serious interest was taken in the hieroglyphs. And the result of that was that people like Alfred Maudslay really went to great trouble to record the hieroglyphs accurately. And, of course, photography.

Q: Before we get to Maudslay and photography, could we go back and talk a bit about Catherwood and the methods he used to record?

< Ian Graham: Yes. Well, Catherwood, one has to remember, was always in a hurry. Stephens and he had an immensely ambitious itinerary and, since his job was painting and drawing, that took a tremendously long time and they were working under adverse conditions with mosquitoes and so on.

He used the camera lucida for the architecture. I don't think it occurred to him to use it for the hieroglyphs, and it was only just as a guide to his drawings. He didn't draw precisely what he saw from the camera lucida. It just provided a more or less correct framework of the outlines of the buildings. Camera lucida has really disappeared from importance. It wasn't really until photography became usable in the field, about 1870 or a little bit earlier, that anybody tried photographing the hieroglyphs in a useful way.

The most heroic early photographer of Maya ruins was Desire Charnay, who set off with a huge camera to photograph ruins, mostly in the Maya area but also in other parts of Mexico and he worked under very difficult conditions. And, in those days, wet plates had to be made in a dark corner immediately before they were exposed and Charnay had a lot of difficulty doing that in places like Chichen Itza. Cobwebs and things would fall on the plate just as he was going to use it. And then it had to be developed immediately. And that was really the problem the photographers had.

It was solved in a way a little later by Osbert Salvin, who used what were called “dry wet plates” which were ready-made and didn't have to be developed immediately. They were terribly slow, very insensitive, but he took some extraordinary stereoscopic photographs at Copán in about 1870, of which only about three copies survive of the whole set. And he didn't take anything close up but they were very useful photographs and I think they spurred other people, other explorers, to try photography. And then, in about 1870,
photographic technology became more or less what it has been ever since. One still had to develop the pictures oneself, but there was no hurry about it.

And photography really became remarkably useful in about 1880, when Alfred Maudslay took huge glass plates for long distances, carried on mules, and took splendid photographs which, today, look very much like the best photography you can get today. A rival— I won't say a rival, more or less a contemporary explorer, Teobert Maler, took correspondingly good photographs, too, mostly of architecture because that was the obvious thing to photograph. Maudslay spent a bit more time working on the— well, they both spent a lot of time working on the stelae but Maler, in a less focused way, I think, and those are a wonderful resource for today.

Then, unfortunately, from the archeological point of view, roll film was developed. “You press the button and we do the rest”. And this ruined archeological photography because, even in most well-equipped expeditions, they stopped having a trained photographer. Nobody was going to have to develop anything. You developed your pictures after you got back and then you discovered that they were over exposed or out of focus whereas, in the earlier times, you developed the pictures as soon as you'd taken them and, if they didn't come out properly, you tried again the next day. So that the archeological record, photographic record, from the early years of the 20th century, is mostly miserable.

The work of Alfred Maudslay

Q: Let's go back to Maudslay, and could you give me a more detailed notion of who he was, what his background was...

Ian Graham: Yes. Maudslay, I think, was greatly influenced by his two friends, Godman and Salvin, … who were half a generation older than he was and Godman was very rich. Both of them were biologists and they produced the most extraordinary work of reference that has ever been published, really, in the field of natural history. There are 19 volumes on beetles, every single one of them beautifully illustrated. God loved beetles, as we all know. They went to Central America, their field of study was Central America, and they undoubtedly influenced Maudslay and he, as a young man with his brother, had made a tourist trip then to Guatemala. He was interested in wildlife and birds, particularly. But -- the idea of doing the same sort of thing as Godman and Salvin had done, in archeology, probably occurred to him at that time but he needed to acquire more experience of the world. And so he became a colonial administrator in the Pacific and then I think decided that, since he didn't have to worry about earning money, either,
that he would make an experimental trip to Mexico and Guatemala. And when he did
that, the modern kind of photography had been invented, the dry plate, which didn't have
to be developed straight away, but you could do it the next day. And this obviously
grabbed him, having gone to places like Copán and realized what an extraordinary set of
ruins that was, with amazing sculpture. And he did enough poking around to see that,
really, excavation would be worth his while to do. Although he did very little of it, he
did dig some trenches right down to sterile. And this enterprise was done with tact and
so he never antagonized any officials or the employees, and really he had a very smooth
passage. His main difficulties were that, sometimes, the consignment of plates that he
sent back by some cargo ship got spoiled by sea water having got into the hold or
something like that.

And when he came to publishing it, Godman and Salvin decided to put in a sort of
appendix to their work, which would be archeology. And this is, of course, a famous and
still very useful work and it owes some of its importance from the fact that Maudslay
realized that, although the reproduction of photographs had improved a lot by the time he
was ready to publish, you couldn't see all the details in the published photographs. So he
employed artists to draw, as precisely as they could, from the photographs. And so he
illustrated not every monument but most of them with a drawing as well as a photograph,
and that is the reason that that work is still of some use today.

Then, rather an unfortunate occurrence from the point of view of archeology occurred;
Kodak developed the film which could be developed-- the Brownie, more or less. “You
press the button and we do the rest”, the roll film, which could be exposed and taken
back to the lab in another country. Previously, explorers had always developed their
films and members of archeological expeditions developed their films in the evening so
that, if the picture didn't come out right-- because there were no exposure meters in those
days. You just had to take trial exposures. If it didn't come out, you took the same
photograph the next day. But around about 1900, you start getting very poor
photographs. Very often, the photographers who were not trained would take the same
photograph several times with different exposures but not having checked the focus, or
vice-versa. And it wasn't until the exposure meter was developed in about 1930 that one
of those sources of trouble was solved.

But drawing, to my mind, is still extremely important if it's done by somebody who has
some knowledge of the matter that he is drawing.

Q: Right. Let's talk about what Maudslay had to go through once he decided that he
was going to go into places like Quiriguá, what he had to do to get good photographs.
Ian Graham: Well, travel in Central America and Yucatán when Maudslay began his work was not at all easy. Maudslay, fortunately, could afford to have a mule train of up to 20 mules and mule drivers, and they themselves, Maudslay and his wife, went mounted on mules. The difficulties of establishing a camp there when he first went to Copán really must have been overwhelming because he had no idea what conditions he was going to face. He didn't know what kinds of food stuffs would be available anywhere. But, very soon, he managed to take notes on everything that he needed and very little, very few things ever went wrong. And one reason was, I think, that he had a wonderful ability to get on with people of all conditions of life and he was lucky, as well, to have met a man called Gorgonio Lopez who came from basically a Kekchi background in Guatemala and was obviously very intelligent and had some education. I think he could certainly read and write. And he had brothers who were also extremely useful and he depended on them to do many things that they'd never been faced with before but they had marvelous native intelligence. And he-- it's unfortunate to have to make this contrast. Whereas Maler, who had rather an irascible nature, was constantly complaining about the lazy, deceitful natives, you never hear that from Maudslay. He trusted them and they trusted him.

Maler was just as good a photographer as Maudslay was. They both used large format cameras, 10 x 12 inches very often -- both of them used cameras of that size, glass plates. Maler occasionally used flexible film, which was unfortunate, really, because [while] the glass plates are liable to break in transit or careless storage, the flexible films, like modern films, in those days, often deteriorated and the emulsion would peel off from the backing. The lenses were extremely good by then, so they were really making the most of a recently developed technology and, really, their photographs have not been surpassed today. I have printed a lot of Maudslay's glass plates that had been sitting in the British museum for a long time, … and you wouldn't be able to produce a better photograph today than some of the ones that he took. They are marvelous.

Other photographers, though, who certainly deserve mention, Osbert Salvin, himself, heroically tried taking stereoscopic photographs at Copán in 1870, I think it was, and this was in the face of the problem of having to develop your pictures immediately. But he learnt about a rather puzzling kind of emulsion which was called a “dry wet plate”. They were used occasionally on arctic expeditions in those days. When he tried them first, at Quiriguá, of course, he had no exposure meter and he didn't know how fast or slow the film was. He gave an exposure of something like 20 minutes and then he, when he next had an opportunity to develop it, it came out hopelessly unexposed so he had to go back and try again. But he did take some really remarkably good stereoscopic photographs. And another man who took stereoscopic photographs a little later when the technology
was so much better was a rather crazy Frenchman who did a lot of photography in Yucatán, all of which or most of which has survived but, unfortunately, didn't take photographs of sculpture, close-up photographs of sculpture.

<crew talk>

**Ian Graham**: I couldn't think of his name when I needed it. Well, Maudslay learned on the job, learned to take photographs on the job and, of course, he soon realized that, if you want to have the details of an inscription show up clearly, you have to have the right kind of lighting. Well, of course, in many cases, you couldn't do anything about that because it would be facing north and so the sun would never shine on it. But, in cases when the light was only obscured by a tree, well, then, he would have the tree cut down. I don't think anybody could blame him for that because trees would grow up very quickly there. He never used flash but Maler did try using flash on a tablet in Palenque, because photographs—getting incident lighting, you'll get much better definition of the images if the light is falling at a raking angle on the stone, bring up the relief, and so photographing the tablets in the little temples in Palenque presents an almost impossible situation because you can't get a light far enough away to produce fairly uniform raking light but Maler did try that using magnesium flash.

Q: When we get to Morley, who's going out and photographing a great many things, focusing really on the calendric parts of inscriptions, we're now into roll film, I believe, not as good photography?

**Ian Graham**: Not necessarily, no. They used cut film a lot.

Q: But, you know, I think you showed me before some images of things where, you know, he'd photograph the inscription sort of the calendric part of the inscription and then the other part, he'd...

**Ian Graham**: Yes.

Q: Could you talk a bit about that?

**Ian Graham**: Yes. Well, Morley started his work in the first decade of the 20th century and this meant that he was using ready-made film, mostly cut film, which was— you put into a holder which fit into the back of a large format camera. I suppose he may have used roll films occasionally but I think mostly it was rather larger format cut film and, occasionally, glass plates. And he and his photographers took pretty good photographs, except that I don't think they did develop their pictures on the spot. And his photography has, I'm afraid, another shortcoming. He was really only interested in the parts of the
inscriptions that he could read, the first part. Because Morley quite soon really gave up hope of ever deciphering the rest of the inscriptions, he found rather an easy way out of this by deciding that the matter written about in the latter part of those inscriptions would be rather boring. It would be mostly about battles between the gods in outer space and who really cared about that? So mostly his photography was of the initial part of an inscription with the calendrical data and astronomical data that he was interested in.

And it really got worse after about 1925, I think, or it was demonstrated more clearly when some Carnegie Institution people went to Calakmul, a very distant site, very hard to get at in those days, and there, there were a number of a few magnificent monuments, mostly lying face down. And they employed men with large beams as levers to lift them up and, in the photograph of one monument there, which they just managed to get up about 10 degrees, and then it was decided to give the men a rest so they put chocks underneath to keep it there and continued pushing it up. Well, the photograph showing--taken to show the immense labors that were necessary to raise these does show the side of the monument, which had an inscription on. It had just emerged from the earth and this would have been the perfect moment to photograph it. But all one can see of it are glimpses between the legs of the laborers who are lifting these poles up and then they got it turned over on its back and-- or its side, rather. And, of course, all was not lost because somebody could have come back later and photographed the sides except that the people who did come back were looters and-- in about 1950. And they sawed the inscriptions off the sides and so we have no photographs of them. Yes, it was very sad that Morley really gave up on recording as well as trying to decipher the later part of the inscriptions and it wasn't for another 40 years that anybody took much interest in them.

His own background and remarkable entry into the field of Maya studies

Q: Let's talk about how you got into...

Ian Graham: Well, I was initially trained as a physicist. After doing only one year at Cambridge, I went into the Navy, because this was 1943. And because of having some knowledge of physics, I was sent off to the main radar research establishment in Malvern, Worcestershire, which, from my point of view, was idyllic because here were some extraordinary geniuses working at full blast, trying to produce new kinds of radar or ways of jamming other kinds of radar. And I was in the naval aviation side, so that I was put to work on airborne equipment which could be used both by the RAF and by naval aviation. And, having got our box to work, which was a secondary radar, in other words, one
which, when challenged by a big radar, would send a message back saying who they were. I then had the immense pleasure of flying this, testing it in various kinds of aircraft. And then, eventually, I was demobilized and went back to college and got my degree. And worked for three years in the first laboratory that had been set up at the National Gallery working on problems of varnishes, on paintings and things like that, which was certainly very interesting but I didn't really feel that I was going to spend my life doing that and rather dropped out.

And then I had the opportunity to buy, for next to nothing, an extraordinary Rolls Royce, a 1927 open car with a body like a torpedo, coming to a point at the tail, very stylish and unique because, in those days, each Rolls Royce had a body made to the order of its purchaser. So I ran around in that for a bit but I bought it solely with the idea of selling it to somebody enormously rich in Hollywood. And so, having given myself two years enjoyment of it, I shipped it over to New York. I spent a little time there earning some pocket money for the next part of the journey and then set off. But, for extraneous reasons, I didn't go straight to Hollywood, anyway. I thought the road leading there, the highway leading there didn't look very interesting. And so I...

Q: Go back to your arrival… Mention the car and your arrival in New York.

Ian Graham: Yes. Well, I got the car safely to New York and worked there for a time to earn some money for the next stage of the journey. But, for irrelevant reasons, I didn't set off in a southwesterly direction but rather to the south, because it seemed more interesting to pass through Virginia and the Carolinas and so on, and then I got to Texas and visited the King Ranch. And, near the King Ranch, I went to a gas station and there was a big sign on it saying, "Last gas before Mexico". Mexico? Hmm… That's an idea!

So I went back to the nearest crossing, which took me over to Matamoros, a town without the least charm, and I pursued my way through incredibly boring countryside with horses that would dash out from behind a bush. And I finally got to Mexico City and had no idea what I was going to do when I did get to Mexico City, because I'd hoped to find a couple of friends there, but neither of them happened to be there. So as a matter of course, I went to the museum -- not the present museum, that didn't exist -- a rather dingy, dusty one near the Zocalo, and there was confronted by a large rectangular slab of stone, very neatly carved, with figures and rows and columns of funny square designs with sort of wiggles. And I scratched my head, wondering what on earth those could be, because it looked like writing, but I knew there hadn't been any writing in the new world. So that was a mystery.
So I pursued my way and got up to Los Angeles and sold the car and came back to England, but still a bit puzzled about that little sculpture. I went to the British Museum and discovered, of course, it was Maya writing. And this intrigued me. I had no illusions about my possibility of deciphering it. I knew I didn't have that kind of brain but it did occur to me, having seen the extraordinary volumes of Maudslay and the plaster casts, which were still on show in those days in the museum, that one of the things that might be useful would be to make a better record of the sculpture because, by looking at more recent publications, Carnegie Institution publications, for instance -- the Carnegie Institution had splendid archeologists. They did very good work indeed but, as I've been saying, the quality of reproduction of the texts didn't really seem good enough.

So it did occur to me that I might make myself useful by doing this and I had a little cash in my pocket from the sale of the Rolls to a man who played for the Los Angeles Rams, who was so large that he'd hardly get his feet onto one pedal at a time. I don't know what happened to him but I certainly owe a tremendous debt to the strange quirky idea I had of driving this thing all the way up to Los Angeles. So, having made a few investigations, read a few books, some of them the wrong books, of course, and some of them the right ones, I thought I'd go back and have another look at Mexico. So I went to Mexico City and took a bus down to Chiapas, to San Cristobel de Las Casas and there, of course, somebody said, “oh, you must go and see Franz Blom”, Don Pancho Blom, who was living there with Trudy, his amazing wife.

Well, Pancho Blom was extremely encouraging and made various suggestions, said I should go to Copán, even went to the extent of giving me a sleeping bag, a mummy bag which zipped up to the neck, which proved to be very useful. So I traveled around for a year-- no, nine months-- taking photographs in all parts of the Maya area, learning a bit of Spanish, the sort of thing which many people have done, but I did, in the course of this, found myself taken by a native guide to some ruins which I knew that nobody had ever studied. And there, in fact, I was confronted by a stela covered with something like philodendron which, obviously, had never been ripped off by anybody interested in archaeology. So that, I think, was the turning point, when I realized that I could do something useful, since I was fairly handy with a camera and thought I might be able to draw things in a useful way.

So then I returned to England and did some more reading, got some wrong notions out of my head, probably not all of them, and decided to make a more detailed study of the hieroglyphic texts using flash, for instance, which turned to be extremely useful and inexpensive and portable, just ordinary electronic flash. No, it wasn't electronic. It was bulbs in those days. And, some years later, I became interested in stereoscopic
photography as well because that is extremely useful when, for some reason or another, you can't get a good glancing light to bring up a relief. And, of course, I visited Tikal, which was, by then, being excavated by the University of Pennsylvania and I learned a lot from watching them and talking to them and Bill Coe was extremely cordial and some of his crew. But, of course, I noticed one thing and that was that, if they were confronted with a very heavy stela, to photograph it, they had the crew and the equipment to move it about until it was in the right position, which I knew I would never be able to do. So I had to work out ways of lighting monuments that were immovable. Before long, I was levering up huge slabs by means of fairly simple gadgets, winches and so on, but then you were limited in what you could do from the lighting point of view. Well, stereo was very useful there. Very inexpensive. Somebody suggested it to me early on, and I pooh-pooed it but, of course, I found that it really is the answer.

**His discovery of previously unknown Maya sites**

And, of course, then, if I was going to make some kind of publishable record, I had to find out how to survey these sites. And I found that there was a plethora of sites waiting to be discovered. I only had to go to the twist bar in Flores and talk to some of the chicleros there and they would tell me of extraordinary sites. They would exaggerate the splendors of these sites and I would say, okay, let's go. Because this would be in the month of March or April or early May, I suppose, which was the best time of the year for traveling for the ordinary person, because it was fairly dry. But the chicleros depended on the sap rising in their trees to make the gum and so there was nothing they could do in the dry season except hang about in the bars and brothels, spending the money they'd earned from the last season. So they were nearly always ready to come with me as a guide, and I can't say I discovered, but I was taken to sites which had never been seen by archeologists before and only on, I suppose, two occasions, was I taken on a wild goose chase deliberately.

Most of the chicleros were wonderful people. They were mostly illiterate, very difficult to converse with, I found, because, on top of my insufficient knowledge of Spanish, their version of Spanish is simply appalling. I mean, they drop off the first syllable of words and, if there were three syllables, they may drop off the first and the last syllable and so it's extremely difficult. And "f"s and "j"s are muddled up, and I still can't understand chicleros when they get really excited telling a yarn over the campfire. I lose track completely. But they are very loyal people. I never had anything stolen. I would leave equipment like, later on, I had a movie camera which was worth something and tape recorders. I would leave them unguarded in our little camps and nothing was ever stolen.
They did sometimes draw blood, but that was just between friends. But I owe a tremendous lot to those chicleros and got taken to many, many sites.

But I must say, there was one site that I was not taken to, but discovered all by myself. I'd been working up in the far north with the collaboration of an oil man, who'd taken me to a site that I mapped and recorded and so on and then, flying back from a settlement called Dos Lagunas in a DC-3, going back to Flores, Petén, I happened to be sitting on the starboard side of the plane, as I always sat next to the window, and looking at the almost flat landscape there, I was amazed to see a sort of carbuncle sticking up on the horizon. One only flew at 1,000 feet in the Petén in DC-3s. And I thought, good heavens, what can that be? It's much too big to be a Maya mound because it must be at least 15 miles away and yet it's too big to be a natural hill. So when I was next in Guatemala City, I went to the Department of Cartography, where they were just starting on a great venture of mapping Petén properly. They had had a proper aerial survey taken and the people in the cartographic department were very kind in letting me use their photographs and I managed to find this huge pyramid, in fact, there were two huge pyramids. And, looking at it under the stereoscope, I almost-- I jacked my head back because these things looked as if they were going to poke holes in my eyes, because they were exaggerated in relief. So I thought, well, this needs looking into.

It was rather daunting because I didn't know exactly where they were, but I did manage to find that out, pretty much, from the cartographic materials they already had. Then it was a question of finding one's way to it. And I tried the sort of terrestrial equivalent of dead reckoning, where you measure how far you've gone in a certain time and check the direction with a compass. And I worked up this system until it was really quite reliable and did manage to get to this extraordinary site. And I'll never forget. As we approached one of the pyramids, it suddenly went dark and I thought, how strange. It's not cloudy. I was in the shadow of this enormous pyramid, which was the tallest Maya pyramid at a site called Mirador, which was subsequently, was worked on by archeologists and proved to be extremely ancient. So this combination of dead reckoning with a compass and counting -- taking a compass reading every minute and noting it in a notebook and then plotting it afterwards-- proved to be a very useful technique for finding one's way about, for localizing any monument sites that one discovered.

Q: Thank you. Let's go back to when you were first taken to a Maya site. About going to Aguateca.

Ian Graham: Aguateca, yes. Yes, Sayaxche is a little settlement on one of the great rivers in that area, the Rio de la Pasión, and I went into a little hole in the wall to buy a package of cigarettes, perhaps, I forget what it was, but I got into conversation, if you
could call it that, with the owner of this little store. I had really very little Spanish. I did know some Italian, so I did pick up some Spanish fairly quickly, but I suppose I told him I was interested in the ruins and he said, oh, he knew of some and, if I liked, he could take me there.

So next day, we went off -- unfortunately, it was pouring rain! -- in a little dugout canoe with a small outboard motor, and we went up a river and through a lake and then into a smaller river, and landed at the spring where this little stream started. And climbed up a hill and there was the most extraordinary feature: a great chasm. Some ancient volcanic movement had split open this hill, leaving a chasm about 200 feet deep or something like that. But there was a bridge across it, which was partly natural but also, obviously, built up with masonry at the sides, which I found intriguing, and there were a number of stelae, one of them partly embedded in a tree and still with a philodendron-like plant growing up its surface. It was in fairly good condition, and there were others that had fallen but, by feeling underneath, you could feel that the relief was crisp.

So I, of course, never thought about whether I should get permission to do anything. I just decided I would come back with some supplies and see what I could do. So -- I think it was the next year -- I did come back, and did some amateur mapping of the site, and I managed to borrow an ancient jack made from black iron and some heavy wood, which some redoubtable Maya who looked like Hercules carried on his back up the hill, and we lifted up the stela and there was a sculpture. But some of the surface had scaled off because there was a weak layer in the stone. So, rather alarmed about this, I went up to Tikal and consulted with Ed Shook. And Ed Shook, instead of wagging his fingers and saying, naughty, you shouldn't have been playing with this, gave me some epoxy and some molding rubber. So I did my best to stick the fallen pieces back. Didn't work very well because the stone was very wet from previous rains. And I made a rubber molding of it. And this was really the beginning of my resolve to record as many sites like that as I could. And I did.

[Crew Talk]

**Ian Graham:** Well, I soon discovered from talking to people in Sayaxche that there were a number of other sites roundabout, Dos Pilas and other sites. And so I did some work at those. And then I had been going to the offices of the petroleum companies in Guatemala City, because a petroleum law had been passed a few years before and so there was a great deal of activity. And I'd ask geologists from these companies what sites they had seen, and one of them was up in the north, which I mapped --it didn't have any sculpture- and I got several leads from them.
But the most interesting one I got in that way was from a company that was working in the southeastern part of Petén, an area which I hadn't been into at all, which could be reached either by boat on an upper tributary of the Pasión River, or else on foot from quite a long way away towards what was then the British Honduras side. So I decided to go on foot because the trail made by the petroleum company might still be recognizable, and I had the names of two people who'd worked for that oil company. So off we went. It was not a particularly difficult business to get there because the trail was partly open, but it took three or four days -- I think four days to get there and three days coming back. And this was a site which had not been touched by anybody since it was abandoned by the Maya, and it had some beautiful monuments. The stone there is of excellent quality. There were also buildings, beautiful ashlar masonry which was said in the publications of the time not to exist in southern Petén. So after a short stay there I decided to come back. I think we were only there for three days, we didn't carry much in the way of food or anything, so I had to come back the next year. And this time I came with mules to carry more provisions and I borrowed two hydraulic jacks from the Peabody Museum Project in Petén, and had time to map the site, or name part of the site. And this and the results of that expedition and of some of the other sites that I worked at, I rather tentatively showed to Bob Walker, who was the professor at Tulane, Professor of Archeology at Tulane. I'd met him actually at Tikal. We'd sat next to each other at dinner in the camp, because the archeologists and the few visitors ate together, and then he said “Well, I've got some whiskey in my bag, come to the room and we can share a tot.”

So I opened up a little bit, lost any shyness I had about my illicit work, and asked him what he thought I could do with these meager bits of information that I had collected, and he said “Well, write it up and send it to me and I'll see what we can do. Maybe I'll have some recommendations.” Well, amazingly, he decided to publish it as a Tulane publication, which certainly did something to my self-confidence. So I went on hoping to do eventually another Tulane volume but things got really out of control, because before many years had passed I found myself being offered a grant to record all of the Maya inscriptions, which was a completely impossible project. One person couldn’t possibly do that ever, but it did allow me to start a more focused program of recording monuments, and if possible doing all the monuments at one site in order to publish them together, whereas before I'd been in too much of a hurry really to do all the monuments at one site because I was longing to get to the next one I'd heard about.

This came at a very fortunate time because by about 1964 I had used up all the money that my grandmother had given me, which she hoped I was going to put to a more prudent use. She was horrified that I was wasting it all in Mexico. The idea of Mexico
and Guatemala revolted her. Anyway, the money was giving out, so the opportunity of doing similar work under the auspices of this foundation was extremely encouraging.

The first thing I had to do was to get some idea of the scale of the project, which meant doing some library work, by going through all the literature, or most of the literature, and noting all the sites in which monuments with inscriptions had been mentioned, and then sort of grading the quality of the existing photographs, or drawings. And in order to do this I needed the use of a first class library, and at first I thought of going to Tulane since I had a good relationship with Bob Walker. But as I was in New York, I thought well, this other place, Harvard, they have worked for a very long time in this field, so I came to Cambridge and I appropriated a seat in the library of the Peabody Museum. And having equipped myself with a small file index, started noting all there was and the quality of the existing records and so on. That went on for about five days, but by then the librarian had begun to wonder about this stranger who was using the library freely, and she made inquiries of the director of the museum, who to my astonishment said “Well, we'll make you a research fellow, so that you can work there as long as you like.” This was a thoroughly unexpected development!

And this is what I've been doing ever since really. I first of all had to think rather hard about how this should be done, what techniques should be used for recording eroded monuments, for instance, I didn't think first at that moment about stereoscopic photography, I'd for some reason rejected the idea of that. I had to think more closely about what to include, what to exclude, because it was too eroded, how to do the mapping, I'd more or less worked out a way of mapping just with a compass and tape, using a rather good military compass that I had. And so this is how I landed up at the Peabody Museum, and the program has continued all this time.

After a short time I was able to take on a colleague who was completely unprepared in this field of activity but he was intelligent and willing, Eric Von Euw was his name, and he spoke perfect Spanish, which was a help, and he and his girlfriend did some rather heroic work at Cobá and other sites which hadn't been visited for a long time and required long hikes to get to. And since then I've had other colleagues who were trained anthropologists, Peter Matthews and David Stuart, both of whom had ideal ability to draw and also in decipherment, which I have to confess is the field that I have never shone in. But I'm still awed by the scale of the undertaking, I don't know when it will be finished, if we have two people working at it fulltime, which is rather unlikely, because anybody who is a first class epigrapher can't really be expected to sit at the desk drawing very minutely all the details of monuments. They need to make use of their more intellectual apparatus. But perhaps the work can be shared out between two people, one
fully trained and another who has more limited abilities such as I have, and it may take another 50 years.

But I've jumped ahead rather, because the first thing I had to do was to design the corpus, what it should consist of, what size it should be. I of course was very anxious to have--

<Crew Talk>

**His race against time to document sites before they were stripped by looters**

Q: Go ahead.

**Ian Graham:** Well it was always very exciting to arrive at a new site of course, and then sometimes rather daunting when you saw how much mapping there was to do, because the mapping is a slow business, but very necessary. And then when it came to recording the monuments, very often one had to turn over a slab of stone weighing two tons with only small portable equipment. But there again I developed methods of doing so which worked fairly well, there's always a slight danger of accidents but fortunately, that never happened. And this sort of thing proceeded for some time until a dreaded day when I lifted up a monument and found that part of the inscription, a beautiful inscription, this was at a site called Dos Pilas in the Sayaxche area, the man who I'd engaged to help me on this trip was a--

<Crew Talk>

Q: Go ahead.

**Ian Graham:** Well, while at Sayaxche I'd heard about these other ruins called Dos Pilas, which had been discovered by a boatman living there. So I had a young man go with me, and I made a rough map of the site, and there were several stelae lying face up, which meant that they were rather eroded, and one which was lying face up so that the image of the ruler was very badly eroded, but feeling underneath I could feel there was a hieroglyphic inscription. And the young man I had with me said “You know, there was an Italian here some time ago and when he lifted up with a jack you could see the inscription in the mud which had been underneath it. So I got going with a jack and it was exactly as he said, the inscription was cast in the mud, but the top two rows of the hieroglyphs had been very neatly sawed off. And eventually, by the way, I tracked those two beautiful hieroglyphs down to a man who had made a small fortune in whiskey in the
1920s and he had them in his living room mounted very expensively on separate stands, the only trouble was that they were both upside down, which must’ve somewhere impaired his proper appreciation of them.

This was my first inkling of the looting problem, which I was to see all too much. I now realize what started all that -- certainly I was quite unconscious of it to begin with -- it was the Vietnam War, that the value of the dollar had collapsed as a result of the Vietnam War and wealthy people were looking for a better way of investing their money, something with a good upside, as they say in Wall Street. And some genius had the idea that an underappreciated form of art was Maya sculpture. So an industry began, to look for and carve, to cut off the finer bits of sculpture. And the buyer who wanted to protect his investments could buy a piece like this for a pittance to start with, even if he didn't like it he could keep it for five or 10 years and it would’ve appreciated enormously and so he could sell it and get his money back. And this was the motive force behind the looting that began. And the whole thing has cost me a tremendous amount of unnecessary labor trying to piece things together and hunt down missing pieces.

It's also made traveling in those areas a bit more dangerous, because the looters don’t like to be interrupted by outsiders. That was actually something which happened to me, woefully, when I had three men with me, and we went to a small site not far from the road which goes from Flores to Belize, and we arrived at the ruins late in the afternoon and there was a ramshackle shelter left which could've been left by chicleros or anybody. And we were just beginning to try and reinforce this so that we could use it when a shot rang out and one of my men fell dying, he died in a matter of minutes. The supposedly responsible person was found and sent to jail, but who knows if he was really the responsible person. But this has rather colored the whole of this activity, you have to be more careful now.

I went to one site, which is 25 kilometers west of Tikal, where an extraordinary wooden lintel was found, and taken away of course, and there I found looking down on a plaza which was at a lower level than the rest of the ruins, I saw over the rather low vegetation which must’ve been cut down at some point, a wooden framework sticking up. I thought “That's very surprising, it looks as if somebody has built a thatched hut there since my last visit.” But it wasn’t that at all. When I went to look at it, it was an elevated stand for a watchman to stand with a rifle to pick off anybody who might be interrupting the looters, which certainly gave one food for thought.

Q: What would you say has been the overall impact of the looting on the Maya corpus?
Ian Graham: Well, I suppose you could say that a certain number of monuments have appeared in the market and have been available for a recording that might not have been discovered for a long, long time, but in almost every case they have been damaged in some way. And on top of that it's very seldom that you can find out exactly where they came from, and the provenience of a piece like that is very important. Occasionally you can make a good guess from the style of the carving, and then you can find the names of rulers who have been established on monuments that were found still *in situ*. It's hard to say, but I think there's no question that it's been highly deleterious, no, I think that has been an absolute calamity, and it's been very hard to persuade people who are otherwise reasonable that it is a calamity. There's really nothing more I can say about that, but it's certainly made me uneasy. For some time I was going around with armed policemen in Petén, somebody had arranged that I should do that, but it's such a nuisance because they were people who didn't fit in at all.

Q: There is now a great deal of material that is now in private and public collections, things are in the Maya database, and more than half the inscriptions that are available to us are things that originally were looted. How do you feel about this?

Ian Graham: Well in the case of the monuments I think it's entirely deleterious. I can't think of any reason to be glad for that, but I have to admit that in the field of painted ceramic vessels one’s judgment is reversed, because an enormous amount of effort has been put by looters looking for such things. It really started I suppose with a legally excavated piece that the Peabody Museum dug up in Petén at Altar de Sacrificios, which was an astonishment to everybody, showing with a hieroglyphic inscription and a readily understandable scene. And very soon such painted vessels were fetching enormous prices and as a result hundreds of looters were scattered through Petén digging fiendishly away. Occasionally they have revealed monuments that we might not have found for another 50 years or 100 years, but to use that as an excuse is just indicative of the sort of ridiculous haste -- monuments should be left to be discovered in the future, in the proper way, with proper techniques of excavation. But this lust for carved vessels, has changed everything, every site has been dug up fiendishly. And of course a great many nice pots have been broken. It's commonplace to see, at the foot of a big trench, a mass of broken pots. Many of them are not particularly important but some of them are pretty good quality, but somehow marred in one way or another, and so they’ve just been thrown away with other pieces and you don’t have any idea of the provenience of these pieces.

So I look at all this with very mixed feelings. We've learned a tremendous amount about domestic life and the peculiar practices of the elite, ways in which they got high and so on, and you can also learn something about the vassal towns’ relationship with the
His use of both photography and drawing for documentation

Q: Is there anything else that you feel that we've left out that you'd like to say about the Corpus Project or about your work?

**Ian Graham:** Well I think the prospects for the Corpus program are not in any doubt, it will continue. It has not been easy to fund it; even otherwise enlightened universities have been extremely slow to lend anything to the fundraising efforts. But I'm sure it will come to include most of the hieroglyphic inscriptions, and take its place really in some of the other great collections of data. The question of the pots was handled inevitably by a photographer [Justin Kerr] who decided that he would take rollout photographs. I think I can lay claim in a very modest way to having taken the first rollout photograph of the Altar de Sacrificios vase, but my technique was very primitive and he was the far better one. And he has produced an invaluable corpus of rolled out designs from pots, the inscriptions of which deal with entirely different matter, not to do with kinship, but a lot of it is to do with more intimate matters, which you could never learn from the monumental inscriptions.

Q: Tell us about photography and drawing.

**Ian Graham:** Well I realized some time ago looking at old photographs that the reproduced versions of them in books never showed all the details that you can see in the negative itself. Now of course that situation isn’t quite the same because photographic printing is much better than it was, or photographic reproduction in books is much better than it was. But still there's an edge to looking at drawings, looking at monuments themselves and recording that in drawings, because you can cast light from a series of different directions so a thin line, an incised line which doesn't show at all when the light is falling on it in the same direction does show when the light it falling at right angles. So one of the things I very soon learned was to draw photographs. I could draw monuments fairly roughly perhaps but refine them at night with a flashlight, moving the light around from all directions.

Q: Can you say that again about the photographs and drawings?
Ian Graham: One of the things I learned fairly early was that it was very useful to examine the monuments at night with a flashlight and draw them because you can see thin, almost eroded lines, incised lines in the stone when the light is, the raking light is falling on it at right angles. But when it's falling on it in the same direction as the line the line won't show up at all. So I made a habit of making drawings, even though they were pretty much out of kilter most of the time, that didn't matter, it was the details that were important. So I decided to make use of this in doing the corpus by illustrating each monument with the best photograph that I had. But to reproduce three or four different photographs, each taken with the light falling from different directions, would make the whole work much too bulky and much too expensive. And besides, the drawing would have a utility that a photograph doesn't have, because a drawing can be photocopied and transmitted electronically in a way that a photograph can't be with the same retention of fine detail. So that was from the beginning one of the pillars of the corpus, that every monument that was worth reproducing at all would be accompanied by a drawing, and these drawings would be made on the spot with light that could be moved in various directions. And that meant of course that in preparing the publication itself one had to make very careful drawings. They of course could be traced from the photographs to begin with, so unlike my field drawings which were quite distorted, these would not be, but one can almost always fill in fine details that you have recorded on the spot that are not easily visible in any photograph.

A detailed discussion of his current work on a circular altar from Toniná

As a matter of fact I’m working now on the most astonishing altar, altar from the site of Toniná. The stone that it was carved in, fortunately, is a very fine grain, and it hasn't been eroded to any noticeable extent. But it has such fine detail that no photograph could ever show all the details. This is a photograph I took standing on a stepladder, photographing it from above, with a flash lighting up from one side, and then I took another photograph with a flash lighting it again in a raking light from another side, from another direction.

This monument consisted of circular areas with wedge-shaped inscriptions, eight glyphs in each wedge. The inscriptions are not too difficult to record photographically, because when looking at an inscription you have some idea of what you're looking at. But the central area has an immense amount of fine iconography, all jammed together, and it’d be hopeless to just publish this as a photograph, you could not make out more than a quarter of it. But this is where drawing comes in to save the day, I must say I wish I had been
able to sit down and draw the monument on the spot, as I say, all I could do was take a few photographs, and have been drawing it. I haven't finished it yet, but this is it. Large areas are missing because they flaked off over the course of centuries, but you can see, to start with, a few recognizable features. Here is a head of a man with a bead in the end of his nose, and there are one or two other heads, and this man’s arms are sort of embracing something, like this.

It’ll take epigraphers some time to work out all the significance of this, but the inscription around it has an extraordinary amount of history from other sites. It's really one of the most interesting monuments that I know of, and it's certainly a very challenging one from the point of view of publication. It's probably hard to see, but the background of all these relief sculptures is recessed and flat, and it's a help to distinguish one piece of iconography from another if the flat ground in between is stippled. That’s the language that I’ve settled on to indicate or to differentiate between what is un-carved original and what is an area that was carved but is now eroded or fallen, flaked off. So it's a very time consuming job. It’ll take three days, or three or four days to draw a monument like this, but fortunately they're not all quite as difficult as this one.

Q: Talk about the stippling.

Ian Graham: Well from the beginning I made a practice of stippling the plain background of the sculptures, it makes the thing much easier to read. And even more so in this case, because this monument is such a welter of bits and pieces that it's very hard to figure out what's going on. But here the stippling does show up very clearly the various carved units, which otherwise just seem to become a jumble of stuff. It's also useful in showing what is eroded or what has disappeared, all this part has flaked off.

Q: Go ahead.

Ian Graham: Well another reason for making drawings, is that they can be reproduced without any loss of legibility. Whereas a photograph of a pretty eroded piece of stone, even when lit as well as possible, isn’t going to tell the whole story, because, as I was saying, you get a different image according to the angle from which the lighting comes. So the drawing is in fact a summary of the details that can be obtained in various ways, which may include old photographs of fragments of the stone which have disappeared. So not quite everything in the corpus is still existing. The information from the broken pieces that have disappeared since has been melded into what remains, so that it makes it a more convenient resource for epigraphers.
Q: Can you show the example?

**Ian Graham:** Well there's one monument of an extraordinarily intricate text which got broken at some point or pieces were broken off by a looter I suppose, and it'd be very difficult to get half of the information on this inscription ever on the printed page from a photograph, whereas a drawing clarifies the whole thing. But I should say that this drawing isn’t yet finished, because there was a kind of a wing part over here, which I knew existed, because you could tell where it got broken off on both sides, or cut off on both sides. But now I have an image from this side, so to some extent one is reuniting broken pieces. But this is so intricate that no single photograph could ever show all the details in a way that the drawing does. Of course you have to rely on the artist’s integrity and knowledge to have got as much as possible out of it. You can also see here that there's a break here, these two pieces are separate. So the drawings are, to the extent possible, a summary of the whole inscription.