

APPLICATION COVER SHEET FOR ALL NEH PROGRAMS

1. Project director or individual applicant
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major field _____ citizenship: (b) (6) country _____ month/year _____

2. Type of applicant individual institution category _____
type Research Institute status Private Nonprofit

3. Type of application new supplement previous grant number _____ Public Program codes S, P, D, T

4. Name of program Production (TV) 5. Requested grant period from: 9/01/01 to: 12/31/02

6. Project funding (for most programs) (for Challenge Grants)
a. outright funds \$ 600,000 a. fiscal year #1 \$ _____
b. federal match \$ 200,000 b. fiscal year #2 \$ _____
c. total from NEH \$ 800,000 c. fiscal year #3 \$ _____
d. cost sharing \$ 398,272 d. total from NEH \$ _____
e. total project costs 1,198,272 e. nonfederal match \$ _____
f. total \$ _____

7. Field of project L1

8. Descriptive title Breaking the Maya Code

9. Description of the project
Project will produce a two-hour television program on the decipherment of the Maya hieroglyphic script. The 400 year detective story, climaxing in the past thirty years, will be told through footage shot at key locations in Central America, Europe and the United States, together with extensive animation and graphics, archival materials and interviews with major participants in the decipherment.

10. Will this proposal be submitted to another government agency or private entity for funding? (if yes, indicate where and when)
Yes, to be determined

11. Institutional information (individual applicants may disregard this section)

a. Name of Institution Pre-Columbian Art Research Institute
city San Francisco state California

b. Employer identification number (b) (6) c. Name of authorizing official David Greene

d. Name and mailing address of institutional grant administrator
Name
Greene David Mr.
(last) (first) (initial) (title)
address
970 Dewing St., Suite 300
Lafayette, CA 94549
(city) (state) (zip code)
telephone (925) 284-8630 fax (925) 284-8631 e-mail _____

*scripting - GN-13459-98
3/01-3/02 \$90,900*

12. Certification. By signing and submitting this application, the individual applicant or authorizing official (11c) is providing the applicable certifications as set forth in these guidelines.

David Greene [Signature] 01/23/2001
(printed name) (signature) (date)

13. Names of Referees.

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Breaking the Maya Code BUDGET
Section A: Budget Details

Project Director: David Lebrun
Associate Producer: Rebecca Hartzell

Length of Project: 14 Months
Start Date: August 29, 2000

Acct#	Category Title	Page	Total
005-00	Story/Scripts/Development	1	\$ [REDACTED]
006-00	Producers	1	\$ [REDACTED]
007-00	Artists	1	\$28,125
008-00	Advisors & Interviewees	1	[REDACTED]
Total Above-The-Line			\$248,070
009-00	Production Unit Salaries	2	\$74,709
011-00	Crew - Camera	3	\$36,005
012-00	Crew - Sound	3	\$26,364
013-00	Crew - Lighting	3	\$18,344
014-00	Production Equipment	3	\$105,408
016-00	Location Fees	4	\$35,573
018-00	Film/Tape Stock	5	\$9,692
019-00	Pic/Sound Post-Prod Film	6	\$650
020-00	Pic/Sound Post-Prod Tape	6	\$215,461
021-00	Archival Aquisition	7	\$57,155
022-00	Fx/Graphics	7	\$112,168
023-00	Music	8	\$30,000
024-00	Travel/Transport	8	\$53,167
025-00	Hotel/Living	9	\$59,784
026-00	Other Production Costs	10	\$5,600
027-00	Insurance/Finance/Legal	10	\$25,116
028-00	Production Overheads	10	\$25,092
Total Production			\$890,288
	Indirect Costs		\$59,914
TOTAL ABOVE-THE-LINE			\$248,070
TOTAL BELOW-THE-LINE			\$890,288
TOTAL ABOVE & BELOW-THE-LINE			\$1,138,358
GRAND TOTAL			\$1,198,272

Breaking the Maya Code BUDGET

Section A: Budget Details

Project Director: David Lebrun
Associate Producer: Rebecca Hartzell

Length of Project: 14 Months
Start Date: August 29, 2000

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total
005-00	Story/Scripts/Development						
005-02	Rights/Option Payments						
	Michael Coe/Author	1					
	Book Rights						
005-06	Duplicating						
	Script Duplicating	20	scripts	180	0.06	216	
	Binding	20	scripts		3.45	69	\$285
						Total For 005-00	
006-00	Producers						
006-02	Producer						
	Pre-Prod	10	Weeks				
	Additional Prep	2	Weeks				
	U.S. Shoot	6.7	Weeks				
	Central America Shoot	7	Weeks				
	Europe Shoot	2.9	Weeks				
	Post Prod	32	Weeks				
	Payroll Taxes	18%					
006-03	Associate Producer						
	Pre-Prod	10	Weeks				
	Additional Prep	2	Weeks				
	U.S. Shoot	6.7	Weeks				
	Central American Shoot	7	Weeks				
	Europe Shoot	2.4	Weeks				
	Post Prod - Full Time	12	Weeks				
	Post Prod - Half Time	20	Weeks				
	Payroll Taxes	18%					
						Total For 006-00	
007-00	Artists						
007-01	Artists						
	Narrator		Allow		20,000	20,000	
	Actors (text readings)	10	Actors		596	5,960	
	Chinese Calligrapher	1			250	250	
	Typist Stand In	1			50	50	
	Payroll Taxes	18%			5,960	1,073	
	SAG P&H	13.3%			5,960	793	\$28,125
						Total For 007-00	\$28,125
008-00	Advisors & Interviewees						
008-02	Advisors						
	Principal Advisor						
	Michael Coe	1					
	Board of Advisors						

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total
008-00	Advisors & Interviewees (CONT'D)						
008-02	Advisors (CONT'D)						
	William Fash	1					
	Federico Fahsen	1					
	Nikolai Grube	1					
	Stephen Houston	1					
	Justin Kerr	1					
	Simon Martin	1					
	Mary Ellen Miller	1					
	Robert Sharer	1					
	David Stuart	1					
	George Stuart	1					
	Karl Taube	1					
	Barbara Tedlock	1					
	Evon Vogt	1					\$
008-03	Interviewees						
	Elizabeth Benson	1					
	William Fash	1					
	David Freidel	1					
	Ian Graham	1					
	Gillett Griffin	1					
	Nikolai Grube	1					
	Nicholas Hopkins	1					
	Stephen Houston	1					
	Kathryn Josserand	1					
	David Kelley	1					
	Peter Matthews	1					
	Simon Martin	1					
	Merle Greene Robertson	1					
	David Stuart	1					
	George Stuart	1					
	Dennis Tedlock	1					
	Barbara Tedlock	1					
	Others	2					\$
Total For 008-00							
Total Above-The-Line							\$248,070
009-00	Production Unit Salaries						
009-01	Production Coordinator						
	Pre-Prod	8	Weeks		1,000	8,000	
	Additional Prep	2	Weeks		1,000	2,000	
	U.S. Shoot	6.7	Weeks		1,000	6,700	
	Central America Shoot	7	Weeks		1,000	7,000	
	Europe Shoot	2.9	Weeks		1,000	2,900	
	Post-Prod Wrap	1	Week		1,000	1,000	
	Payroll Taxes	18%			27,600	4,968	\$32,568
009-04	Production Assistant						
	PA Pre-Prod	2	Weeks		500	1,000	
	PA Post-Prod	2	Weeks		500	1,000	

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total
009-00	Production Unit Salaries (CONT'D)						
009-04	Production Assistant (CONT'D)						
	Payroll Taxes	18%			2,000	360	\$2,360
009-07	Production Accountant						
	Part-Time	14.25	Months		500	7,125	\$7,125
009-09	Researchers						
	Image research specialist	4	Weeks		1,500	6,000	
	Research Assistants	24	Weeks		800	19,200	
	Payroll Taxes	18%			19,200	3,456	\$28,656
009-10	Casting Director	1	Flat Fee		4,000	4,000	\$4,000
Total For 009-00							\$74,709
011-00	Crew - Camera						
011-01	Director of Photography						
	Pre-Prod	1	Week		1,500	1,500	
	U.S. Shoot	6.7	Weeks		1,500	10,050	
	Central American Shoot	7	Weeks		1,500	10,500	
	Europe Shoot	2.9	Weeks		1,500	4,350	
	L.A. Live Shoots	1	Day	1/6	900	150	
	L.A. Still Shoots	3	Days	1/6	1,500	750	
	Payroll Taxes	18%			27,300	4,914	\$32,214
011-06	Key Grip						
	Central America Shoot	3.57	Weeks		900	3,213	
	Payroll Taxes	18%			3,213	578	\$3,791
Total For 011-00							\$36,005
012-00	Crew - Sound						
012-01	Sound Recordist						
	(Includes Equipment)						
	U.S. Shoot	6.7	Weeks		1,700	11,390	
	Central America Shoot	5.57	Weeks		1,700	9,469	
	London	2	Days		600	1,200	
	L.A. Live Shoot	1	Day	1/6	1,700	283	
	Payroll Taxes	18%			22,342	4,022	\$26,364
Total For 012-00							\$26,364
013-00	Crew - Lighting						
013-01	Gaffer						
	U.S. Shoot	6.7	Weeks		1,250	8,375	
	Central America Shoot	3.57	Weeks		1,250	4,463	
	Local Hire (London)	2	Weeks		1,250	2,500	
	L.A. Live Shoots	1	Day	1/6	1,250	208	
	Payroll Taxes	18%			15,546	2,798	\$18,344
Total For 013-00							\$18,344
014-00	Production Equipment						
014-01	Camera Equipment						
	Digital Betacam \$3600/week,						
	3 day week						
	U.S. Shoot	6.7	Weeks		3,600	24,120	

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total
014-00	Production Equipment (CONT'D)						
014-01	Camera Equipment (CONT'D)						
	Central America Shoot	7	Weeks		3,600	25,200	
	Additional Lenses	7	Weeks		800	5,600	
	Europe Shoot	2.4	Weeks		3,600	8,640	
	LA Live Shoot	1	Day		3,600	3,600	
						\$67,160	
	Second Camera, MiniDV Canon XL1						
	Central America Shoot	7	Weeks		750	5,250	
						\$5,250	
	4x5 Format Still Camera, Sinar P w/ 150 or 210mm, 3 day week						
	US Shoot	6.7	Weeks		114	764	
	Central America Shoot	7	Weeks		114	798	
	Europe Shoot	2.9	Weeks		114	331	
	LA Still Shoot	1	week		114	114	
						\$2,007	\$74,417
014-02	Camera Expendables		Allow		350	350	\$350
014-03	Lighting & Grip Equipment						
	Jimmy Jib Lite, 3 day week						
	Central America Shoot	3.57	Weeks		600	2,142	
	Steadicam Mini						
	Central America Shoot	7	Weeks		550	3,850	
	Lighting/Grip Package, Incl. Turntable						
	U.S. Shoot	6.7	Weeks		1,500	10,050	
	Central America Shoot -1st po...	3.57	Weeks		1,400	4,998	
	2nd po...	3.43	Weeks		500	1,715	
	Europe Shoot	2.9	Weeks		1,500	4,350	
	L.A. Live Shoot						\$27,105
014-05	Portable Telephone						
	US	6.7	Weeks		25	168	
	Europe	2.9	Weeks		75	218	
	Central America	7	Weeks		75	525	\$911
014-06	Sound Expendables	1			350	350	\$350
014-09	Generator						
	Copan & Palenque		Allow		600	600	\$600
014-10	Lighting Expendables		Allow		500	500	\$500
014-13	Other						
	L&D (Loss & Damage)		Allow		1,175	1,175	\$1,175
						Total For 014-00	\$105,408
016-00	Location Fees						
016-01	Central America						
	Honduras,						

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total
016-00	Location Fees (CONT'D)						
016-01	Central America (CONT'D)						
	→ IHAH fee	1	Flat		1,500	1,500	
	Guatemala,						
	→ IDEAH fee	1	Flat		1,000	1,000	
	Mexico,						
	→ INAH fee	11	Days		543	5,973	
	Mexico Film Commission Fees		Allow		1,000	1,000	
	Local Assistants (Mexico/Gta)	5	Weeks		200	1,000	
	Guide (Central America)		Allow		500	500	
	→ Broker (Central America)		Allow		1,000	1,000	
	Site/Museum Additional Staff		Allow		2,500	2,500	
	Site/Museum Staff Overtime		Allow		1,000	1,000	\$15,473
016-02	United States						
	Newberry Lib., Chicago	12	Hours		50	600	
	Princeton Art Museum	0	NO FEE		1	0	
	Philadelphia Museum	8	Hours		150	1,200	
	Staff	8	Hours		50	400	
	Metropolitan Museum of Art	16	Hours		125	2,000	
	Staff	16	Hours		25	400	
	Getty Research Institute	0	NO FEE		1	0	
	UCLA Special Collections	2	Days		100	200	
	Peabody Museum & Archive	1	Day		1,500	1,500	
	Others:		Allow		6,100	6,100	
	(Boston, M. of Fine Art,						
	Museum of Natural History,						
	Art Institute of Chicago,						
	Tozzer Library)						\$12,400
016-03	Europe						
	London Film Permit Fees		Allow		200	200	
	London, British Museum		Allow		5,000	5,000	
	Dresden, Landesbibliothek	0	NO FEE		1	0	
	Madrid, Museo de America		Allow		1,000	1,000	
	Madrid, Academia Real		Allow		1,000	1,000	
	Rome Film Permit Fees		Allow		500	500	\$7,700
Total For 016-00							\$35,573
018-00	Film/Tape Stock						
018-03	Stills stock						
	4X5 Still Camera Film,	6	Boxes		95.95	576	
	(50 sheets/box)						
	Sales Tax	8.25%			576	48	\$624
018-04	Shooting tapes						
	Digital Betacam Tape	125	Hours	60	0.9	6,750	
	\$57.6/64 Mins Sony						
	Mini DV Tape	25	Hours		22	550	
	Sales Tax	8.25%			7,300	602	\$7,902

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total
018-00	Film/Tape Stock (CONT'D)						
018-05	Sound Stock						
	DAT tape 60mins Pro-DAT	90	Hours		7.97	717	
	Mini Disc Backup	90	Hours		4	360	
	Sales Tax	8.25%			1,077	89	\$1,166
						Total For 018-00	\$9,692
019-00	Pic/Sound Post-Prod Film						
019-01	Stills Developing						
	4x5 Positive E6 Processing	300	Stills		2	600	
	Sales Tax	8.25%			600	50	\$650
						Total For 019-00	\$650
020-00	Pic/Sound Post-Prod Tape						
020-01	Tape Transfers & Dubs						
	Offline Stock & Transfers						
	Digibeta Master to 3/4", with Stock	125	Hours		30	3,750	
	Additional 3/4" Offline Stock	30	Hours		20	600	
	Composer Dubs 3/4"	2	Hours		30	60	
	Captioning Dubs Digibeta	2	Hours		160	320	
	Digibeta Master backup	2	Hours		160	320	
	3/4" Master Backup	2	Hours	2	30	120	
	Final Dubs -Vhs, With Sleeves	2	Hours	50	5	500	
	PBS Broadcast Master	2	Hours		160	320	
	PBS Master Backup	2	Hours		160	320	
	PBS Vhs	2	Hours		5	10	
	PBS Vhs W/ Time Code	2	Hours		20	40	
	Sales Tax	8.25%			6,360	525	\$6,885
020-03	Off-Line Editing						
	Avid Media Composer	28	Weeks		2,000	56,000	
	Add'l Avid Drives, \$225/18 gig hard drive	26	Weeks	4	225	23,400	
	Editor	30	Weeks		1,500	45,000	
	Assistant Editor	14	Weeks		750	10,500	
	Payroll Taxes	18%			55,500	9,990	\$144,890
020-04	On-Line Editing						
	\$400/hr, 10 8hr days						
	Digibeta to Digibeta	10	Days		3,200	32,000	\$32,000
020-05	Caption Generator						
	Closed Captioning Costs	2	Hours		720	1,440	
	Digibeta Dub	2	Hours		169	338	\$1,778
020-07	Sound						
	Recording Studio Time						
	For Narrator	3	Days		1,600	4,800	
	For Actors	2	Days		1,600	3,200	
	Sound Design & Mixing	15	Days		1,200	18,000	

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total	
020-00	Pic/Sound Post-Prod Tape (CONT'D)							
020-07	Sound (CONT'D)							
	DAT tape, 60mins Pro-DAT	30	Hours		7.97	239		
	Sales Tax	8.25%			239	20	\$26,259	
020-09	Other							
	Tape to Tape Color Correction, \$400/hr 3:1 ratio	2	Hours	3	400	2,400		
	Character Generator	5	Hours		50	250		
	Black and Coding (Digibeta)	2	Hours		125	250		
	Working Meals		Allow		750	750	\$3,650	
Total For 020-00							\$215,461	
021-00	Archival Aquisition							
021-01	Viewing Expenses							
	Viewing Tapes	10	1		25	250	\$250	
021-02	Search and Shipping Fees							
	Archive Search Fees	5			100	500		
	Shipping Archival Materials		Allow		500	500	\$1,000	
021-03	Transfer Costs							
	Viewing Dubs transfers	10	Tapes		15	150		
	Tape Stock	10			3	30	\$180	
021-04	Archive Footage Rights							
	Annenberg/CPB Video Archive	2	Minutes		2,000	4,000		
	BBC Broadcast Archive (10yrs.)	2	Minutes		3,600	7,200		
	Kuxtal Productions	1	Flat Fee		1,000	1,000		
	Other	2	Minutes		2,000	4,000	\$16,200	
021-05	Stills Rights							
	Newberry Library	10	Allow		75	750		
	National Geographic	12	Allow		600	7,200		
	Duplication Fee	12	Allow		25	300		
	Kerr Archive licensing fee	80	Allow		90	7,200		
	Duplicating Fee	80	Allow		30	2,400		
	Peabody Museum (Harvard)	25	Allow		450	11,250		
	Duplication Fee	25	Allow		45	1,125		
	Smithsonian Institute	5	Allow		100	500		
	Nevada Historical Society		Allow		1,000	1,000		
	INAH		Allow		2,000	2,000		
	Toronto Museum of Art		Allow		800	800		
	Other		Allow		5,000	5,000	\$39,525	
Total For 021-00							\$57,155	
022-00	Fx/Graphics							
022-01	Animation							
	3D Computer Graphics							
	-Palenque Animation	1			7,000	7,000		
	-Calendar Animation	1			14,000	14,000		
	-Map Animation	1			10,000	10,000		
	2D Morphing/Animation							
	-Glyph Morphs	10			2,000	20,000	\$51,000	

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total	
022-00	Fx/Graphics (CONT'D)							
022-02	Graphics & Titles							
	Graphic Designer	1	Flat		5,000	5,000		
	Graphic Artist	3	Weeks		2,000	6,000		
	Computer Graphic Artist	13	Weeks		2,000	26,000		
	Computer Graphic Assistant	13	Weeks		1,200	15,600		
	Payroll Taxes	18%			47,600	8,568	\$61,168	
Total For 022-00							\$112,168	
023-00	Music							
023-01	Music							
	Includes Composer & Recordi...	1			30,000	30,000	\$30,000	
Total For 023-00							\$30,000	
024-00	Travel/Transport							
024-02	Flights							
	Archive Tour							
	U.S. Filming Tour							
	LA-Salt Lake City	5	Persons		75	375		
	Salt Lake-Austin	5	Persons		250	1,250		
	Austin-Dallas	5	Persons		75	375		
	Dallas-Tallahassee	5	Persons		85	425		
	Tallahassee-Raleigh/Durham	5	Persons		80	400		
	Raleigh/Durham -Wash. DC	5	Persons		85	425		
	New York - Boston	5	Persons		75	375		
	Boston - Buffalo	5	Persons		75	375		
	Buffalo - Chicago	5	Persons		500	2,500		
	Chicago -Calgary	5	Persons		75	375		
	Calgary-Los Angeles	5	Persons		300	1,500		
						\$8,375		
	Central American Filming Tour							
	Los Angeles-Mexico City	6	crew		300	1,800		
	Mexico City-Guatemala City	6	crew		300	1,800		
	Guatemala City--Villahermosa	6	crew		200	1,200		
	Villahermosa-Los Angeles	2	crew		450	900		
	Merida-Guatemala City	4	Persons		300	1,200		
	Guatemala City-Los Angeles	4	Persons		450	1,800		
						\$8,700		
	European Filming Tour							
	Los Angeles-London RT	3	Persons		550	1,650		
	London-Dresden	4	Persons		250	1,000		
	Dresden-Madrid	4	Persons		200	800		
	Madrid-London	1	Person		150	150		
	Madrid-Rome	3	Persons		300	900		
	Rome-London	3	Persons		200	600		
						\$5,100	\$22,175	
024-05	Shipping		Allow		4,500	4,500	\$4,500	
024-06	Carnets & Agents Fees		Allow		1,000	1,000	\$1,000	
024-07	Excess Baggage							
	Jib, Camera, Grip & Lighting							

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total	
024-00	Travel/Transport (CONT'D)							
024-07	Excess Baggage (CONT'D)							
	U.S. Filming Tour		Allow		6,450	6,450		
	Central American Tour		Allow		3,950	3,950		
	Camera Only							
	European Filming Tour		Allow		1,990	1,990	\$12,390	
024-08	Visas							
	Permit Border Crossing, Guatemala-Honduras	1			27	27	\$27	
031-10	Parking/Gas							
	Parking Fee to U.S. Cities		Allow		300	300		
	Gas		Allow		250	250	\$550	
024-11	Bikes and Taxis							
	Taxis Archive Tour	1			150	150	\$150	
024-13	Transportation Vehicles							
	U.S. Filming Tour (1 Passenger Van 1 Equipment Van)	6.7	Weeks	2	250	3,350		
	Central America Filming Tour		Allow		4,300	4,300		
	Europe Filming Tour		Allow		1,500	1,500	\$9,150	
024-14	Other							
	Boat Rental	1			200	200		
	Helicopter Gta-Naj Tunich (4 Persons, Round Trip)	2.5	Hours	2	550	2,750		
	Tax 10%	1			275	275	\$3,225	
Total For 024-00							\$53,167	

025-00	Hotel/Living						
025-02	Crew Accomodation						
	U.S. Tour (except NY & Boston)	34	Nights	4	85	11,560	
	U.S. Tour NY/Boston	13	Nights	4	100	5,200	
	Central American Tour Gr 1	48	Nights	3	60	8,640	
	Central American Tour Gr 2	25	Nights	2	60	3,000	
	European Tour Gr 1	19	Nights	2	140	5,320	
	European Tour Gr 2	16	Nights		140	2,240	
	European Tour local hire	5	Nights		140	700	\$36,660
025-06	Meal Allowances - Crew						
	\$10 Breakfast						
	\$15 Lunch						
	\$20 Dinner						
	U.S. Filming Tour	47	Days	5	45	10,575	
	European Tour Gr 1	19	Days	3	45	2,565	
	European Tour Gr 2	16	Days		45	720	
	local hire	4	Days		45	180	
	\$5 Breakfast						
	\$8 Lunch						
	\$12 Dinner						
	Central American Tour Gr 1	48	Days	4	25	4,800	
	Central American Tour Gr 1	25	Days	2	25	1,250	

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total
025-00	Hotel/Living (CONT'D)						
025-06	Meal Allowances - Crew (CONT'D)						
	local hire	48	Days		8	384	
	Craft Services		Allow		2,000	2,000	\$22,474
025-10	Laundry						
	Laundry	1			650	650	\$650
Total For 025-00							\$59,784
026-00	Other Production Costs						
026-02	Transcription Costs						
	Transcription (4 hrs / hr tape)	70	Hours	4	20	5,600	\$5,600
Total For 026-00							\$5,600
027-00	Insurance/Finance/Legal						
027-01	Insurance						
	General Liability (domestic)	1		1.2	2,500	3,000	
	General Liability (foreign)	1		1.2	6,000	7,200	
	Production Package (equipme...)	1		1.2	1,800	2,160	
	Errors & Omissions	1		1.2	4,500	5,400	\$17,760
027-02	Finance - Bank Charges						
	Bank Service Charges	14.25	Months		25	356	\$356
027-03	Legal Fees						
	Legal		Allow		7,000	7,000	\$7,000
Total For 027-00							\$25,116
028-00	Production Overheads						
028-01	Office Rent	14.25	Months		900	12,825	\$12,825
028-03	Power/Lighting/Heating *	14.25	Months		100	1,425	\$1,425
028-04	Telephone/Telex/Fax						
	Local Distance Calls	14.25	Months		125	1,781	
	Long Distance Calls Prod	5	Months		250	1,250	
	Long Distance Calls Post Only	9.25	Months		100	925	
	Fax Line	14.25	Months		45	641	
	Internet Account	14.25	Months		19.95	284	\$4,881
028-05	Postage & Office Supplies						
	Postage	14.25	Months		50	713	
	Office Supplies	14.25	Months		70	998	\$1,711
028-06	Photocopying						
	Photocopying	14.25	Months		200	2,850	\$2,850
028-07	Office Equipment Hire						
	Fax		Allow		500	500	
	Phone System		Allow		900	900	\$1,400
Total For 028-00							\$25,092
Total Production							\$890,288
Indirect Costs							\$59,914

Acct#	Description	Amount	Units	X	Rate	Subtotal	Total
	TOTAL ABOVE-THE-LINE						\$248,070
	TOTAL BELOW-THE-LINE						\$890,288
	TOTAL ABOVE & BELOW-THE-LINE						\$1,138,358
	GRAND TOTAL						\$1,198,272

SECTION B - Summary Budget and Project Funding

SUMMARY BUDGET

Transfer from section A the total costs (column c) for each category of project expense. When the proposed grant period is eighteen months or longer, project expenses for each twelve-month period are to be listed separately and totaled in the last column of the summary budget. For projects that will run less than eighteen months, only the last column of the summary budget should be completed.

Budget Categories	First Year/ from: thru:	Second Year/ from: thru:	Third Year/ from: thru:	TOTAL COSTS FOR ENTIRE GRANT PERIOD
1. Salaries and Wages	\$ _____	\$ _____	\$ _____	= \$ <u>561,192</u>
2. Fringe Benefits	_____	_____	_____	= <u>69,154</u>
3. Consultant Fees	_____	_____	_____	= <u>27,800</u>
4. Travel	_____	_____	_____	= <u>112,951</u>
5. Supplies and Materials	_____	_____	_____	= <u>10,892</u>
6. Services	_____	_____	_____	= <u>355,569</u>
7. Other Costs	_____	_____	_____	= _____
8. Total Direct Costs (items 1-7)	_____	_____	_____	= <u>1,138,358</u>
9. Indirect Costs	_____	_____	_____	= <u>59,914</u>
10. Total Project Costs (Direct & Indirect)	_____	_____	_____	= <u>1,198,272</u>

PROJECT FUNDING FOR ENTIRE GRANT PERIOD

1. Requested from NEH:		2. Cost Sharing:	
Outright	\$ <u>600,000</u>	Applicant's Contributions	\$ _____
Federal Matching	\$ <u>200,000</u>	Third-party Contributions	\$ <u>398,272</u>
TOTAL NEH FUNDING	\$ <u>800,000</u>	Project Income	\$ _____
		Federal Agencies	\$ _____
		TOTAL COST SHARING	\$ <u>398,272</u>

3. Total Project Funding (NEH Funds + Cost Sharing) = \$ 1,198,272

1. Indicate the amount of outright and/or federal matching funds that is requested from the Endowment.

2. Indicate the amount of cash contributions that will be made by the applicant and cash and in-kind contributions made by third parties to support project expenses that appear in the budget. Cash gifts that will be raised to release federal matching funds should be included under Third-party Contributions. (Consult the program guidelines for information on cost sharing requirements.)

When a project will generate income that will be used during the grant period to support expenses listed in the budget, indicate the amount of income that will be expended on budgeted project activities.

Indicate funding received from other federal agencies.

3. Total Project Funding should equal Total Project Costs.

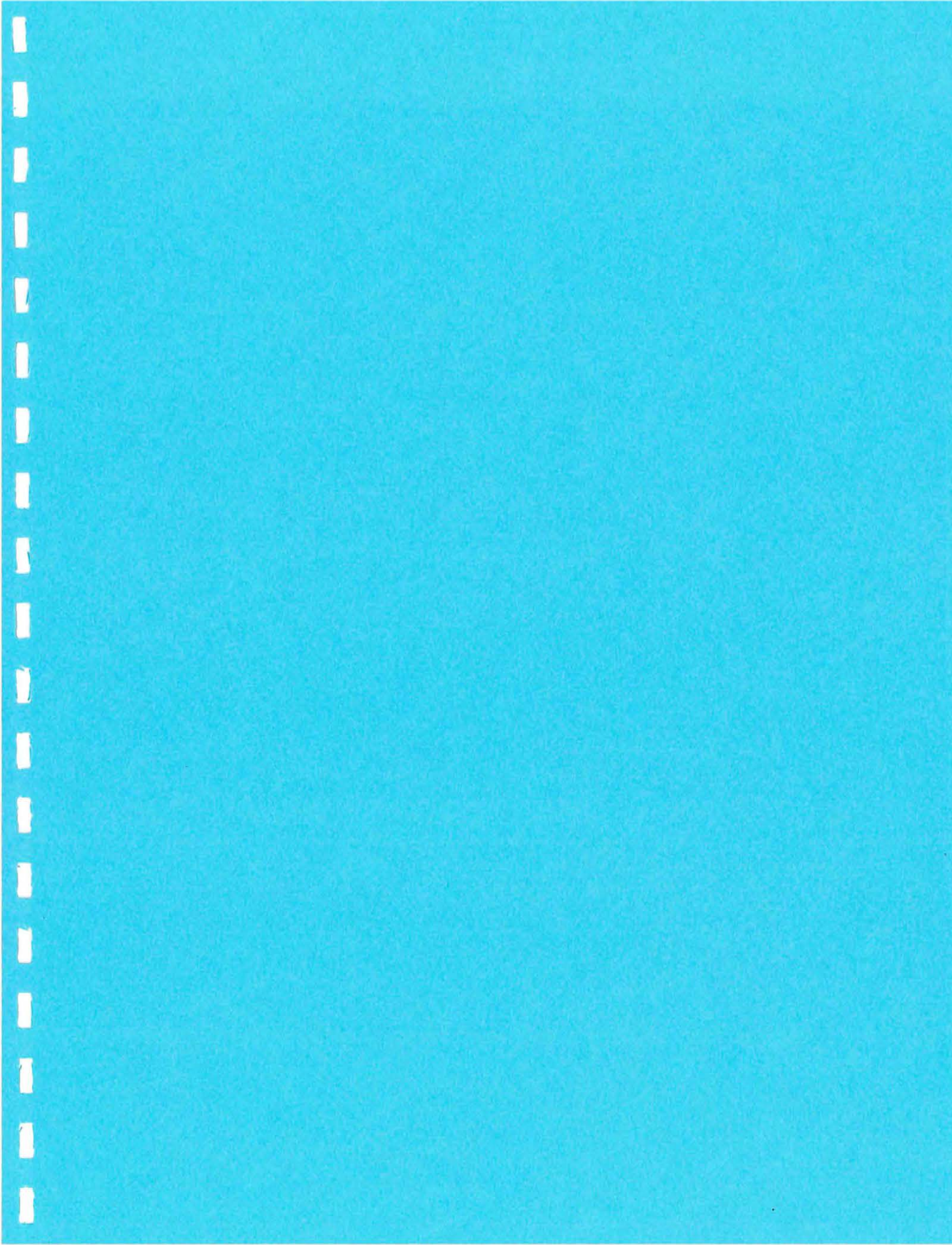
Institutional Grant Administrator/Individual Applicant. Provide the information requested below when a revised budget is submitted. The signature of this person indicates approval of the budget submission and the agreement of the organization/individual to cost share project expenses at the level indicated under "Project Funding."

Name and Title (please type or print)

Signature

Telephone (_____) _____

Date _____



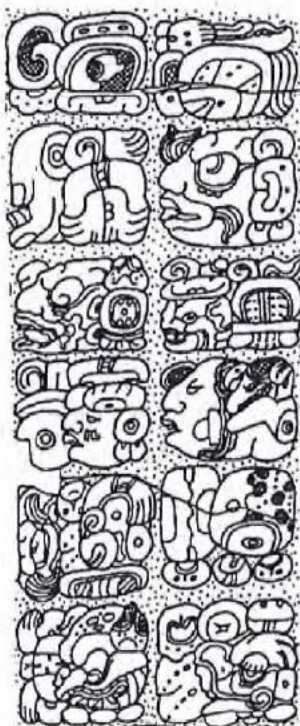
NARRATIVE ESSAY

1. The Nature of the Request

The request is for \$600,000 in outright funds and \$200,000 in matching funds toward production financing for a two-hour television program on the history of the decipherment of the Maya hieroglyphic script. The research and scripting phase of the project was funded by a grant from the National Endowment for the Humanities in 1998. *Breaking the Maya Code* will be produced for a total budget of \$1,198,272 and will require 16 months to complete.

2. Introduction to the Subject

The complex and beautiful Maya hieroglyphic script was until recently the world's last major undeciphered writing system. Its decipherment has been, and continues to be, one of our era's great intellectual adventures.



The Maya script was used in what is now southern Mexico and Central America from about AD 100 until after the arrival of the Spanish in the sixteenth century. It was written in bark paper books, carved on public monuments and inscribed on intimate objects of pottery, bone and jade.

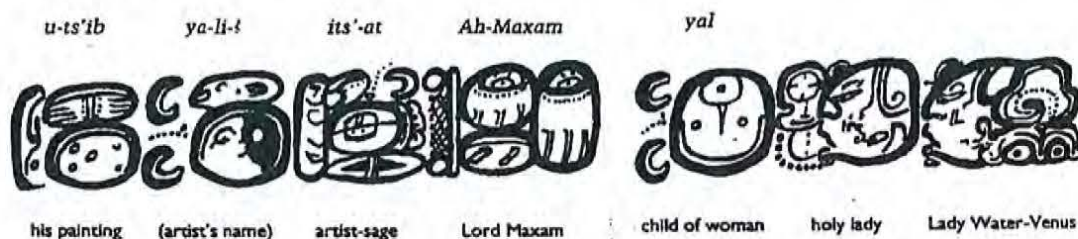
Knowledge of the Maya script was ruthlessly extinguished by the invading Spanish, who outlawed its use and burned thousands of books, severing the Maya people from the record of their past. In the nineteenth century the texts began to re-emerge, as buried cities and fantastic inscriptions were discovered in the Central American jungle, and lost Maya books were found in European libraries.

Nineteenth century scholars unraveled the complex Maya calendar and used the relationships of image and text to identify glyphs for gods, animals, colors and directions. But progress was blocked by misconceptions about Maya civilization and by fundamental misunderstandings of the nature of writing systems in general and of the Maya writing system in particular.

As of 1950, scholars were almost universally agreed that the Maya script was a limited system of logograms or "word signs" representing a few hundred words and concepts, and that the Maya inscriptions related entirely to calendric and astronomical matters.

Scholars like Sylvanus Morley and Sir Eric Thompson portrayed the Maya as an empire of peaceful people ruled by wise astronomer-priests.

Then, after decades of dead-ends, a breakthrough Russian discovery (initially rejected in the chill of the cold war) and a curious pattern of dates found at the Maya city of Piedras Negras came together to provide the keys that would open the floodgates of decipherment. Now, thanks to the efforts of a diverse and colorful group of epigraphers and historians, ethnographers and archaeologists, astronomers and linguists, artists and amateurs, 80% of the Maya texts can be read. The hieroglyphic writing system, as is now clear, is a logosyllabic system, combining logograms representing words, names and concepts with syllabic signs capable of recording all the sounds of spoken Maya.



As the decipherment has progressed, the picture that has slowly unfolded has transformed our vision of the ancient Maya, not just once, but several times over. The Maya texts now coming into focus describe an advanced civilization of warring city-states, dominated by two “superpowers” and their long struggle for domination. They record a history of alliance and betrayal, of powerful rulers, brilliant generals, and subtle and sophisticated artist-scribes. These elements are all recognizable from the history of our own culture. But the texts also tell of kings and queens who regularly shed and burned their blood to invoke the Vision Serpent. They recount ceremonies of shamanic transformation and possession by animal spirits. And their narratives are shaped by an intricate cosmology that weaves together the lives of men, the deeds of mythic heroes and the cycles of the planets and the stars.

For the Maya themselves, this recovered history and literature is a source of pride and identity; Maya children are now learning to read basic hieroglyphs in school, and parents who for centuries named their babies after Christian saints are now naming them after ancient Maya kings. But the decipherment is also opening up an invaluable treasure for the rest of us. Together with the chronicles maintained by Maya scribes in Latin script since the sixteenth century, the Maya hieroglyphic texts constitute a two thousand year written record unique in the Western Hemisphere. As scholar Linda Schele points out, the Maya civilization rose in complete isolation from the web of influence that pervaded the civilizations of Europe and Asia. Their texts, which reveal a world of both uncanny familiarity and profound difference, have much to teach us about what it means to be human.

The two-part television program *Breaking the Maya Code* will tell the story of the decipherment from the sixteenth century to the present. It will be based in large part on the 1992 book of the same title by Michael D. Coe (revised edition, 1999), supplemented by the latest discoveries in the field.

Like James Watson's classic *The Double Helix*, the book *Breaking the Maya Code* is an intellectual adventure combining a scientific detective story with a human drama of academic rivalry, collaboration and discovery, as told by a central participant in the drama. Author Michael Coe is the Charles J. MacCurdy Professor of Anthropology Emeritus at Yale University and Curator of Anthropology Emeritus at the Peabody Museum, and has himself been a central figure in the story of the Maya decipherment. Nominated for the National Book Critics Circle Award, Coe's 1992 book has been called by the New York Times "one of the great stories of 20th century scientific discovery".

Various television documentaries on the Maya have included brief segments on the glyphs, but until now no program has been devoted to the history of the Maya decipherment. *Breaking the Maya Code* will tell this story for the first time using the resources of filmic language and will bring it to new and diverse audiences.

Now is the time to record this story. It is a process that is still unfolding; new discoveries in the decipherment are being made each year, and the program will capture the excitement of these discoveries. But another matter of timing is even more critical. At this moment three generations of potential interviewees, from those who can remember and bear witness to the era of Sylvanus Morley and Eric Thompson to those who have participated in the extraordinary breakthroughs of the past three decades, are living and available to participate in this project. A decade ago, the shape of this story would not have been as clear. A decade from now, key scholars will no longer be with us.

3. Description of the Project

Program Overview

The program is divided into two one-hour parts, each composed of six to eight titled sections. In Part One we see how the key to a people's history was almost lost, and how explorers and scholars struggled for two hundred years to retrieve it. In Part Two we see how that struggle has come to fruition in the past thirty years.

In Part One the central role of the scribal tradition in ancient Maya culture will be sketched out, and we trace the systematic eradication by the Spanish invaders of literacy in the hieroglyphic

script. As nineteenth and twentieth century scholars struggle to recover and make sense of the hieroglyphs, two approaches are in recurrent conflict: some believe the script represents ideas directly, without the intervention of language; others believe it is phonetic and represents the sounds of Maya speech. A look at the nature of all writing systems and the history of other decipherments, particularly the decipherment of Egyptian by Champollion, helps us to make sense of this conflict.

Part One ends in the 1950s with the groundbreaking discoveries of Yuri Knorosov in Russia and Tatiana Proskouriakoff in the United States. Knorosov's phonetic theory uses linguistics to prove that the glyphs record spoken Maya; Proskouriakoff uses a purely structural approach, without reference to language, to prove that the glyphic texts are about Maya history and recount the birth, life and death of kings.

In Part Two, which covers developments of the past thirty years, the gropings of solitary investigators are replaced by a period of intense collaboration. A remarkable community of scholars develops, and their blending of the phonetic and structural approaches finally leads to a flood of decipherment. The resulting discoveries have transformed our view of Maya history, politics, religion and cosmology.

The complete script of the program, accompanied by 18 illustrations, is included with this proposal. Panelists are encouraged to read the script, as it provides the best possible view of our dramatic approach as well as a distillation of all the research and creative work that have gone into this project to date. As additional reference, the script is preceded by a brief section-by-section summary that touches on many points not otherwise mentioned in this proposal.

Interpretive Approach

The Maya writing system presents a baffling surface complexity, but when broken down to its simplest parts, the workings of the script are easily understood. The same applies to the reasoning process of the scholars who have deciphered it: each step can be explained clearly in ordinary English and illustrated with simple graphics. Breakthroughs in mathematics, physics or biochemistry require years of training to comprehend and can only be explained to the laymen through gross analogy. The Maya decipherment is that rare scientific discovery in which intelligent viewers can actually follow the thought process of the scientist. This program will take full advantage of that fact.

We will choose the clearest possible examples of the reasoning that leads to each major discovery, and present them so that the viewer can follow them step by step. Key breakthroughs such as Knorosov's 1952 argument for phoneticism, Proskouriakoff's 1960 demonstration that the texts contain Maya history and Stuart's 1984 proof of redundancy in the glyphic signs (script

pages 39-40, 44-48 and 71-73 respectively) will be presented in some detail, so that viewers can experience for themselves their compelling elegance.

The visual style of the program will support this approach, taking us as far as possible inside the researcher's mind and showing us things from his or her point of view. To this end, extensive use will be made of point-of-view (POV) shots showing what researchers would be seeing as they move through sites or go about their work. The specificity of the script will allow us to film exactly those Maya texts and artifacts that are crucial to a researcher's thinking process, and then to be very precise in our framings and camera moves, isolating exactly that part of the text or artifact that the researcher would focus on. Artifacts will often be photographed in a black "limbo space", placing them not on a site or in a museum but inside the researcher's mind. POV images of researcher's notes and working drawings, as well as excerpts from their correspondence with colleagues, will increase this sense of intimacy. We will use delicate lighting on sculptural relief, bringing out all the iconographic detail that a researcher would recognize, rather than the high-contrast "dramatic" lighting, so often used on Maya art, that loses detail in pools of darkness. Extensive use of digital highlighting (see Sample Reel for style example) will guide the viewer's eye through an image, just as the eye of a trained researcher will dart from glyph to glyph or from a detail in a Maya image to a corresponding detail in the glyphic text.

Throughout the last 400 years, perception of the ancient Maya has been constantly shifting. The program will emphasize that this perception is shaped by religious dogmatism in the 16th century, by cultural bias in the 19th century, by idealistic yearning in the early 20th century, and so on. As we approach the present, this shifting understanding is shaped more and more by the process of decipherment itself.

Program Elements

Interviews with approximately twenty individuals, as well as readings from the writings of historical figures, will be woven into the narrative thread of the program. Those interviewed will include direct participants in the history of the decipherment, witnesses to significant events in that history and contemporary Maya scribes and teachers. Where possible those doing field work at Maya archaeological sites will be interviewed on site; others will be interviewed in their personal work environment, whether home, office, laboratory or museum.

The earlier part of the story will be told through a narrative voice and dramatic readings from the letters, journals and other writings of the protagonists, augmented by occasional comments from interviewees with particular relevant experience. As we approach the present, a chorus of living participants will gradually take over much of the narrative. Participant-observer Dr. Michael Coe will be our guiding intelligence, framing the story at beginning and end and commenting

periodically throughout the program. Most other interviewees will appear only in relation to specific events in which they were present as active participants or witnesses. Some critical events, such as the discoveries made during the 1973 Mesa Redonda in Palenque and the 1974 conference at Dumbarton Oaks (script pages 54-58 and 58-60, respectively), will be told through the recollections of several witnesses and participants. The growing excitement of shared discovery will be conveyed in part through increasingly rapid intercutting, as scholars—interviewed separately, but describing the same vividly recalled events—virtually complete one another's sentences.

Location footage of Maya archaeological sites in Mexico, Honduras and Guatemala will focus on hieroglyphic texts that specifically illustrate the story of the decipherment, and on the Maya cities, buildings and artifacts that provide their context. Artifacts and documents will be filmed in museums and archives in Central America, Europe and the United States. Other locations will be used to evoke key moments in the history being presented and to suggest parallels with our own culture. A detailed list of locations is included in Section 7.

Sophisticated lighting will be used in the field to capture the subtle sculptural relief of Maya carvings. Photography will be done at night, where necessary, to achieve full control of lighting. A consistent lighting style will be used so that objects shot in museums can be intercut with those shot on site.

To achieve fluid camera motion when photographing sites and static objects, we will rely on a DV Steadicam, a variable speed motorized turntable and a portable, tripod-mounted jib arm. The DV Steadicam will be used for smooth handheld tracking shots. The turntable will be used in museums and collections to slowly rotate vases and other small artifacts. The remote control jib, which will permit static and moving shots at up to 18 feet of elevation, is a necessity at the sites of Copan, Quirigua and Palenque, where key texts and carvings are often ten to twenty feet above the ground; its presence will also greatly increase our options for architectural photography and establishing shots. The jib will also be used in museums, sometimes in combination with the turntable, to achieve tracking and boom shots of artifacts.

Historical materials will include photographs, graphics, paintings, letters and journals, as well as archival film and video footage. Wherever possible, original archival materials will be sought out and filmed to maintain the highest possible quality. Field notes and sketches, stills and other images will also be elicited from the personal collections of key interview subjects.

Over the past 400 years, graphic representations of the Maya and their culture have always reflected the biases and attitudes of their time. To emphasize these shifting attitudes, the program will consistently use drawings, lithographs, paintings and other images of the Maya that are contemporary with each period being examined.

Rollout photographs of Maya royal vases are a rich resource. The rollout technique developed

by project advisor and collaborator Justin Kerr “unwinds” the cylindrical images on painted vases into crisp panoramas. Kerr has documented over a thousand vases in this manner. These vases constitute the largest surviving body of Maya glyphic texts as well as the clearest and best preserved images of ancient Maya cosmology, mythology, ritual and royal life.

Graphics and animation will be used extensively in *Breaking the Maya Code*, and their design will be critical to the success of the program. They will be used to illustrate linguistic principles in general and to demonstrate steps in the decipherment, the syntax of the glyphic system and the principles of Maya calendrics. As “Sesame Street” has demonstrated for decades, imaginative animation can teach the basics of a language or writing system in ways that are both entertaining and effective. These sequences will be visually elegant and exciting, while at the same time presenting information in the clearest possible way.

Graphic highlighting will be used extensively to guide the eye through the complexities of Maya artwork and inscriptions. 2-D morphing animation will demonstrate the evolution and variant forms of glyphs, bringing them to vivid life. 3-D animation will illustrate the structure and layout of Maya sites as well as the relationships between inscriptions and architecture that has sometimes provided crucial clues to decipherment.

Audience Experience

Audiences of the program will experience and learn on several levels:

- They will learn basic principles that underlie all writing systems, through a story that vividly illustrates the vital importance of writing to culture. This latter point may seem self-evident, but it is not; just as the Maya functioned quite well without the wheel (they invented it, but used it only for children’s toys), many sophisticated cultures in Africa and the Americas functioned quite well without writing. But their lack of writing has meant that, with their passing, much of their potential contribution to the heritage of humanity has been irretrievably lost.
- Audiences will explore the fundamentals of the Maya writing system and become familiar with a small number of Maya glyphs that will be used in examples throughout the program. When a class of second graders who have studied Egyptian or Maya hieroglyphs are brought to a museum and see the real thing, they experience a shock of excitement and recognition. When a tourist at a Maya site recognizes even a single glyph or phrase, he or she experiences the thrill of discovery. Our viewers will not, of course, become literate in the Maya script, but they will at best develop an emotional connection to the script and its beauty, that sense of sharing the secret of a hidden code that has made passionate amateurs of so many of us.

- They will learn about the history and culture of the ancient Maya, as that history and culture is slowly revealed in the texts and inscriptions of the Maya themselves. And they will see that the picture we construct of another culture like the Maya says as much about our own assumptions and needs as it does about the Maya themselves.
- They will follow a vivid case study in the dynamics of scientific process, observing how individual scholars tackle and solve problems, how a dominant paradigm or scholar can encourage or stifle development, and how collaboration between creative people with different expertise and different ways of thinking can lead to breakthroughs that none could have achieved on their own.

Production Format

Production will be in Digital Betacam. Mini-DV format videotape will be used with the Canon XL-1 camera and DV Steadicam when fluid handheld motion is required. For transcription, archival and backup purposes, audio DAT tapes and Mini Discs will also be made of all interviews.

During location photography at sites, museums and archives, extensive use will be made of a high-resolution still format (4x5, 8x10, or digital) to allow maximum flexibility during the post-production process. By working from high-resolution stills, for example of a complex inscription, framings and moves can be customized and revised as needed during postproduction.

History of the Project

Plans for this program grew out of meetings between anthropologist Michael Coe and filmmaker David Lebrun in the spring of 1997. An emergency grant of \$10,000.00 was quickly obtained from a private party to film interviews with epigrapher Linda Schele, a key figure in the decipherment just (b) (6) David Lebrun contributed an additional \$5,000.00. In September 1997, Lebrun, Coe and a camera crew filmed three days of interviews with Schele in Austin, Texas. That same month, an agreement was signed designating the Pre-Columbian Art Research Institute (PARI) as the sponsor of the Maya Code Project and Lebrun as the Project Director.

In June of 1999, the President of Mexico announced that another PARI-sponsored project, performing excavations at the Maya site of Palenque, had made one of the most significant archaeological discoveries of the past several decades: a throne room filled with hieroglyphic inscriptions. Because of our relationship with PARI we were able to join the team in Palenque

within a few days to film intimate coverage of the excavations in progress.

Excerpts from both the Schele interviews and the Palenque footage are included in the VHS Sample Reel.

In July of 1998, the National Endowment for the Humanities awarded a grant of \$90,970 to fund the research and scripting phase of the project. The grant period began in March of 1999 and ended in March of 2000. During the research and scripting phase the following was accomplished:

- Research trips to eighteen cities in the United States were organized by the Associate Producer and conducted by the Project Director. On these trips, interviews were conducted with 25 scholars and digital reference photographs were made of hundreds of items in private collections, museums and archives. The ninety hours of audio tape recordings resulting from the research trip interviews were transcribed, producing approximately one thousand pages of transcripts. Using the bibliographic database software program Citation, all relevant passages were indexed to keywords representing over two hundred topics, periods and individuals in the decipherment history.
- Content Researchers used the resources of UCLA and the Getty Research Institute to assemble extensive files of reference materials on the decipherment history. Several hundred bibliographic items and research notes were entered and indexed in Citation.
- Image Researchers located archival stills and graphics, and located and screened over thirty films containing potential stock footage material for the program.
- Based on the results of the research described above, a two-hour script was written by the Project Director. From a breakdown of the written script, a production budget and shooting schedule were prepared.

4. Significance to a National Audience

Breaking the Maya Code will be directed at a broad cross-section of the national audience, including the PBS audience for documentaries on science, history and world cultures, as well as high school and college students. The engrossing story, extraordinary Maya images and lively animated graphics will also entice older children and young adults open to a challenging intellectual experience. The story of how a people traumatically cut off from their history have recovered the key to their past will be of particular relevance to members of minority groups and displaced peoples.

The program will have a built-in appeal because of its focus on the Maya. The American fascination with Maya civilization that began in the 1840's with the publications of John Lloyd Stephens has only increased with the archeological and cultural revelations of recent decades. Hundreds attend the hieroglyphic workshops that have proliferated nationwide. Thousands attend travelling museum shows like *The Blood of Kings* and *Painting the Maya Universe*. Hundreds of thousands visit the Maya archeological sites of Chichen Itza, Palenque, Tikal and Copan annually. And millions watch television specials on the history and culture of the ancient Maya.

In the past fifteen years several individual television programs, produced by the National Geographic Society, the Discovery Channel, the BBC, Time-Life Films and others, and presented in the US on public and cable television, have attempted to cover the entire culture and history of the Maya or have focused on specific archeological sites or individuals.¹ These programs appeal to a broad audience. A 1993 National Geographic Special entitled *Lost Kingdoms of the Maya*, for example, received a 6.3 Nielsen rating, very high for PBS², and was seen in whole or in part by over thirteen million people on its first showing.

However, nothing remotely like the program proposed here has been done to date. Some of the individual programs described in Appendix 5 devote a few minutes to Maya writing. However, there has never to our knowledge been a single program or film devoted to the decipherment.

Beyond its focus on the Maya, the program will have a broad appeal for those interested in scientific detective work. The title of the program refers to code-breaking as well as to the Maya. The appeal of puzzle solving will draw in many who might not ordinarily watch a program on archaeology or anthropology, and the program will be filled with intriguing epigraphic mysteries and elegant solutions to hold their interest.

Programs about language have also proven to be very popular. For example, the 1986 PBS series *The Story of English*, featuring Robert MacNeil, was a surprise hit.

Every effort will be made to make the presentation of *Breaking the Maya Code* lucid and compelling without short-changing the complexity of the subject. During the editing process, test screenings will be held for audiences drawn from local high schools and community colleges. A time code display will be provided and audience members will be asked to take time-referenced notes, particularly on any areas of confusion, loss of interest or poor comprehension. Comments will be elicited in a focus group following the screening, collated and used as the basis for adjustments, particularly to narration, graphic titles and pacing.

¹ See Appendix 5.

² The average Nielsen rating for PBS programs is 2.1%.

5. Organization History

Grants in support of *Breaking the Maya Code* will be administered by the Pre-Columbian Art Research Institute of San Francisco. PARI is a non-profit organization founded in the early 1960s by Executive Director Merle Greene Robertson. Robertson has been engaged for four decades in a project to record the monuments of Maya sites through rubbings and photography. In 1973 PARI organized the Mesa Redonda de Palenque, a periodic international conference of Mayanists that has played a pivotal role in the Maya decipherment. At the most recent conference sponsored by PARI, 425 attended and 61 papers were given by scholars from 13 countries. PARI also supports other conferences on Mesoamerican topics in the United States, Mexico, the Netherlands, Germany and France, publishes monographs, a CD-ROM iconographic database and a newsletter, maintains an 11,000 volume Mesoamerican library in San Francisco, and sponsors archeological digs. In May of 1999, the PARI archaeological project at Palenque made one of the great Mesoamerican archeological discoveries of the past fifty years: a tomb and elaborate palace filled with hieroglyphic inscriptions.

PARI is administered by a nine-member board of directors and has eight research associates. Maya Code Project grant funds are administered by PARI Treasurer and General Manager David Greene through a separate account which has been established for that purpose.

Production will be carried out by producer David Lebrun and his company Night Fire Films. Night Fire Films has a production and post-production facility in Venice, California, including computer graphics production and film and video editing capabilities for various formats. Additional production staff will be hired specifically for this project.

6. Project Staff and Board of Advisers

Project Staff

Archaeologist and epigrapher Michael D. Coe, author of the book *Breaking the Maya Code* on which this television program is largely based, will serve the program as Principal Adviser, as well as appearing on camera. In addition to conducting field archaeology in five countries over the past four decades, Dr. Coe has been a central figure in the modern history of the Maya decipherment. His numerous books and monographs include *Mexico, The Maya, In the Land of the Olmec, The Atlas of Ancient America, The True History of Chocolate, The Art of the Maya Scribe* and the seminal book and exhibit *The Maya Scribe and His World*. Dr. Coe is the Charles J. MacCurdy Professor of Anthropology, Emeritus, at Yale University and Curator of Anthropology, Emeritus, at the Peabody Museum of Anthropology. Academic honors he has received include a senior fellowship at the National Endowment for the Humanities, membership in the National Academy of Sciences and the Tatiana Proskouriakoff Award from

Harvard University.

Documentary filmmaker David Lebrun, author of the script for the program, will serve as Project Director and producer. Mr. Lebrun has over thirty years' experience in the writing, production and editing of documentary, animated, and anthropological films. He has served as producer or editor on over forty documentaries. He was associate producer and editor of the four-part PBS series *Living Maya* (fully funded by NEH) and his credits as producer, writer and editor also include numerous other projects on Mesoamerican and North American cultures. Films he has produced have received numerous awards including the Bronze Hugo of the Chicago Film Festival and the Silver Medal of the Virgin Islands Film Festival and have been shown by invitation at Filmex, the Margaret Mead Film Festival and the Flaherty Seminar. Films he has edited have also received numerous awards, including the Academy Award for best documentary feature (*Broken Rainbow*, on the Navajo / Hopi land dispute). Mr. Lebrun spent ten years in educational film production and distribution as president of First Light Video Publishing and has taught film production and history at the graduate school level at the California Institute of the Arts. Lebrun has curated numerous art exhibits and has recently edited a book of letters, *In the Meridian of the Heart*, forthcoming in spring 2001 from David Godine Publishers.

Associate Producer Rebecca Hartzell had a background in business administration before receiving a Masters in Film Production from the University of Southern California. Her current projects as producer include the dramatic features *The Decay of Fiction*, directed by Pat O'Neill, and *Heatstroke*, directed by Nina Menkes, both supported by grants from the Rockefeller Foundation, and a documentary series pilot for PBS, *Amazing Women: the Uncommon Road*.

Board of Advisers

The Maya Code Project draws on the expertise of a distinguished group of advisers, including epigraphers, art historians and iconographers, ethnographers, linguists, archaeologists, cultural historians and artists. The group is large and diverse because the Maya decipherment has drawn, historically, on so many different fields of expertise. The board of advisers includes:

- Architect Federico Fahsen, Guatemala's leading epigrapher and former Ambassador to the United States.
- Archaeologist William L. Fash, the Bowditch Professor of Central American and Mexican Archaeology and Ethnology at Harvard University and director of the excavations at Copan, Honduras.
- Ethnographer and epigrapher Nikolai Grube, Assistant Professor of Anthropology at the University of Bonn, and Schele Professor at the University of Texas.
- Epigrapher, archaeologist and cultural anthropologist and Stephen D. Houston, University

Professor of Anthropology at Brigham Young University and director of the excavations at Piedras Negras, Guatemala.

- Photographer and iconographer Justin Kerr, the world's pre-eminent photographer of Maya art.
- Epigrapher Simon Martin, among the most promising young contributors to the decipherment, the author of several innovative papers on Maya dynastic history and warfare and co-author of *Chronicles of the Maya Kings*.
- Art Historian Mary Ellen Miller, Chair and Professor in the Department of the History of Art at Yale University.
- Archaeologist Robert J. Sharer, Shoemaker Professor of Anthropology at the University of Pennsylvania and author of the 1994 Fifth Edition of the definitive *The Ancient Maya*.
- Epigrapher David Stuart, Lecturer in the Department of Anthropology at Harvard University and Assistant Director of the Corpus of Maya Hieroglyphic Inscriptions at the Peabody Museum.
- Archaeologist and historian George E. Stuart, Chairman Emeritus of the Committee for Research and Exploration of the National Geographic Society and author of numerous books and articles on the Maya and on the history of the Maya decipherment.
- Art historian Karl A. Taube, Professor in the Department of History of Art at California State University at Riverside and the leading iconographer of Maya and Teotihuacan art.
- Ethnographer Barbara Tedlock, Professor of Anthropology at the State University of New York at Buffalo, editor of *American Anthropologist Magazine* and author of *Time and the Highland Maya*.
- Ethnographer Evon Z. Vogt, Professor of Anthropology Emeritus at Harvard University, dean of Maya ethnography and author of the classic studies *Tortillas for the Gods* and *Zinecantan*.

7. Plan of Work

The project is being conducted in four phases: Planning and Proposal; Research and Scripting; Production; Dissemination and Outreach. The Planning and Proposal phase was completed in 1998. The Research and Scripting phase was completed in March of 2000. Funding is currently being sought for Phase Three: Production. Following is an outline of the tasks that will be completed during the Production phase. The accompanying Task Schedule for Phase Three shows the time allocation for each task.

Pre-Production

The Project Director and Associate Producer will engage staff and crew including Image Researcher, Research Assistant, Production Coordinator, Cinematographer, Sound Recordist,

Gaffer, Grip, Editor, and Assistant Editor. Production Assistants will be hired locally as needed.

The Associate Producer will revise the production schedule and budget created during the research and scripting phase, generate all necessary location and equipment lists, and negotiate access to archaeological sites and museums in Mexico, Guatemala, and Honduras, and to museums and archives in the United States and Europe.

Under supervision of the Associate Producer, the Production Coordinator will research, schedule and book all camera, electric, and grip equipment rentals as well as all transportation, accommodations and shipping. During production, the Production Coordinator will remain in the Los Angeles office coordinating operations.

The Image Researcher and Research Assistant will locate and negotiate licensing rights for images (stills, video and film footage, and documents) that will be incorporated into the program. The Graphic Designer and Project Director will develop plans for graphic design, color schemes, textures and typography, and for the integration of graphics and live action. The Project Director and Associate Producer will consult with a web designer and initiate budgeting, fund raising and planning for the project web site.

U.S. Production

Throughout production the Associate Producer, in collaboration with the Project Director, will maintain communications with personnel at the current site, upcoming locations and the LA office, oversee logistics, maintain the production schedule and annotate each take using both a computer based automated logging system and a lined script. The Project Director will conduct all interviews. The Project Director and Cinematographer will design and compose each shot. The Cinematographer will operate the video and still cameras. The Gaffer will work with the Cinematographer to light each object and interview, and will double as camera assistant and second camera operator as needed. The Sound Recordist will record all interviews and will build up a library of wild sound at all appropriate locations.

Crew consisting of the Project Director, Associate Producer, Cinematographer, Gaffer and Sound Recordist will first travel to the following locations in the United States to videotape interviews with witnesses and scholars, and to videotape and photograph objects located in museums and archives:

- Stephen Houston interview in Salt Lake City, Utah.
- Barbara Macleod interview, Nicolai Grube interview and Schele archive materials in Austin, Texas.
- David Freidel interview and Kimball Art Museum in Dallas-Fort Worth, Texas.

- Kathryn Jossierand and Nicholas Hopkins joint interview in Tallahassee, Florida.
- George Stuart interview and Stuart Archive in Barnardsville, North Carolina.
- Elizabeth Benson interview, Smithsonian Institute, Dumbarton Oaks Research Library and exterior shoots in Washington D.C.
- University of Pennsylvania Museum in Philadelphia, Pennsylvania.
- Gillett Griffin interview and Princeton Art Museum in Princeton, New Jersey.
- Metropolitan Museum and Museum of Natural History in New York, New York.
- Ian Graham, William Fash, and David Stuart interviews, Peabody Museum and Tozzer Library in Cambridge, Massachusetts; Boston Museum of Fine Arts in Boston, Massachusetts.
- Michael Coe interview and exteriors in Heath, Massachusetts.
- Barbara and Dennis Tedlock joint interview in Buffalo, New York.
- Art Institute of Chicago and Newberry Library in Chicago, Illinois.
- David Kelley interview and exteriors in Calgary, Canada.

Central American Production

Crew consisting of the Project Director, Associate Producer, Cinematographer, Gaffer, and Grip will travel to the following locations to videotape archaeological sites, and to videotape and photograph objects located in museums:

- Museo Nacional de Antropologia in Mexico City, Mexico.
- Museo de Antropologia e Historia in Guatemala City, Guatemala.
- Copan archaeological site and museums in Copan Ruinas, Honduras; possible interviews with Copan project scholars.
- Archaeological site of Quiriguá and Naj Tunich cave in Guatemala.
- Palenque archaeological site and museum in Palenque, Mexico; interview with Merle Greene Robertson; possible interviews with Palenque project scholars.

The above locations involve the largest equipment package, including a jib arm and portable generator. A Grip has been added to the crew for these locations to meet the technical requirements of deploying jib, lighting and generator on terrain that is often uneven and steep and in difficult-to-access locations (inside temples, palaces, etc.).

Assuming scholar work schedules permit us to schedule interviews on site at Copan and Palenque, the Sound Recordist will join the crew for the final days in Copan and for the period in Palenque. The Grip and Gaffer will then return home, and a smaller crew consisting of the Project Director, Associate Producer, Cinematographer, and Sound Recordist, with a minimal equipment package, will then travel to the following locations in the Yucatan Peninsula and the Guatemala Highlands. In each area, an assistant fluent in the local Maya language will be hired.

- Archaeological site of Tonina, Mexico.
- The towns and sites of Calakmul, Coba, Cozumel, Izamal, Mani, and Merida on the Yucatan Peninsula.
- The towns and sites of Utatlan, Momostenango, and Rabinal in the Guatemalan highlands.

European Production

Crew consisting of the Project Director, Associate Producer and Cinematographer will travel to the following locations (in the order presented) to videotape interviews with witnesses and scholars, and to videotape and photograph objects and documents located in museums and archives (Additional crew will be hired locally as needed):

- Simon Martin and Peter Mathews interviews, British Museum (including the Eric Thompson Archive, Maudslay Archive and Kensington Annex) and exteriors in London, England.
- Royal Library in Dresden, Germany.
- Home of Juan de Tro y Ortulano, Academia Real de Historia, and Museo de America in Madrid, Spain.
- Exterior scenes (including Minerva obelisk, other Egyptian obelisks, Roman inscriptions and other exteriors) in Rome, Italy.

Los Angeles Production

Crew consisting of the Project Director, Cinematographer and Gaffer will videotape miscellaneous insert scenes. The Project Director and Cinematographer will photograph documents at the Getty Research Institute and UCLA Special Collections.

Post-Production

As videotapes are returned to the Los Angeles office during production, all select takes will be digitized and organized by the Assistant Editor. Transcripts of all interviews will be made and indexed to scene numbers and keywords by the Transcriber and Research Assistant.

On completion of production the Associate Producer will serve as Post Production Supervisor, overseeing post production personnel, budget and schedule, as well as managing the office and interfacing with project advisers, sponsor, funding entities and broadcasters.

The Project Director and Editor will have a three to four week period to review all footage and materials. Working in sequence, the Project Director will utilize the indexed interview transcripts to prepare a "paper edit", augmenting the lined script maintained during production with suggested interviewee quotes and alternates for each script scene and revising script narration as needed. "Scratch" recordings of narration and other voice-over texts will then be made.

When the Project Director and Assistant Editor have prepared the above materials for the first scenes, the Editor will begin working in sequence to perform a first cut. With the highly organized materials at his or her disposal a tight first edit will be completed very quickly (ten to twelve weeks maximum), leaving the balance of editing time for all necessary advisory review, restructuring and fine tuning. The Project Director has used variants of this editing method on over forty documentaries, and it is reliably efficient.

Meanwhile, original graphic imagery will be prepared by a Graphic Artist skilled in Maya calligraphy. Graphics and photographs will be scanned and digitized by the Digital Graphic Assistant. All moves on stills, text overlays, highlighting and other graphic elements will be composed in the digital domain (and timed to the scratch audio track) by the Digital Graphic Artist and Digital Graphic Assistant. 3-D and 2-D animation sequences will be created by an outside animation firm; all compositing will be performed in-house using Adobe After Effects. As graphic and still sequences are completed, they will be incorporated into the program by the editor.

Examples of graphic and still photograph sequences prepared and composited in this manner are included in the VHS Sample Reel. An important advantage of this approach is that framing, "camera" moves and timing within graphic and photographic sequences can be quickly revised at the Editor's request as needed.

The project advisors will review a first edit of each Part as it is completed. Based on advisory input, the final edit will be created. Music for the program will be composed, and final narration and other voices will be recorded. These audio elements and production sound effects will be incorporated into a final sound design and mix by the Sound Editor, working at his own facility. Finally, the online edit will be performed at an outside facility under the supervision of the Project Director and Editor.

SCHEDULE AND TASK ALLOCATION FOR PHASE THREE: PRODUCTION

01					02									
Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	
MONTH 1	MONTH 2	MONTH 3	MONTH 4	MONTH 5	MONTH 6	MONTH 7	MONTH 8	MONTH 9	MONTH 10	MONTH 11	MONTH 12	MONTH 13	MONTH 14	

PRE-PRODUCTION	PRODUCTION			POST-PRODUCTION									
	U.S. Shoot		Central America Shoot	Europe Shoot	Review Footage & Transcripts; Pick-Takes	L.A. Shoot	Off-Line Editing/Graphics/Audio Production						Online

PRODUCER/DIRECTOR Direct R'srch/Prep/Design Direct Production Review Prod. Direct Edit, Graphics, Music, Mix & Online

ASSOCIATE PRODUCER Set Up Shoots Coordinate on Location Manage Post-production Budget, Schedule and Personnel, etc.

PRODUCTION COORDINATOR Book Travel and Equipment; Coordinate from LA Office

IMAGE RESEARCHER Research

RESEARCH ASSISTANTS Image/ Artifact Research Transcribe / Index Interviews

DIRECTOR OF PHOTOGRAPHY Production Production Prod. Prod.

GAFFER Production Production Prod. "

GRIP Production

SOUND Production Production "

PRODUCTION ASSISTANT Prep Wrap

EDITOR Review, 1st Cut Part 1 1st Cut Part 2 Fine Cut 1 & 2 Online

ASSISTANT EDITOR Digitize & Log Footage/ Assist Editor

GRAPHIC DESIGNER Design Scheme

GRAPHIC ARTIST

DIGITAL GRAPHIC ARTIST Create Digital Graphics

DIGITAL GRAPHIC ASSISTANT Digital Graphics Production

ANIMATORS 3-D and 2-D Animations

COMPOSER Compose and Record Music

SOUND EDITOR Sound Design

ADVISORY PANEL Review Pt. 1 Review Pt. 2

WEB SITE DESIGNER Create Web Site Architecture Adapt/Incorporate Digital Graphics

8. Web Site and Archive

A web site and web-based archive are integral parts of the conception of this project. Because the web site will be built largely of digital materials gathered and created for the television program, we believe a site of considerable depth and richness can be constructed with a relatively modest additional investment of time and expense. Funding for the web site is not being sought at this time; once initial funding is obtained for production, work on budgeting and funding the web site component will begin immediately.

As currently envisioned, the web site will include three primary pathways: to an Exploratory region for students and casual visitors, to an Archival region for scholars, and to a Teaching Materials region for educators. For television viewers and others interested in learning more about the Maya and their script, the site will include:

- Animated presentations on the basic workings of the Maya writing system, arithmetic and calendar, derived from the television program graphics.
- An illustrated time line of the decipherment history. Each key historical figure will link to a biographical entry accompanied by a photographic or graphic portrait, a video clip where appropriate, and a brief bibliography.
- A section on “The Maya Scribe and his World” illustrated with images of Maya scribes at work in royal courts (drawn primarily from rollout photography of Maya vases) as well as images of carved shell inkpots and other scribal tools, and samples of the distinctive calligraphy and sometimes signed work of known individual scribes.
- Interactive images of Maya hieroglyphic inscriptions and related art. Clicking on details of a hieroglyphic text or image will highlight both the detail and a textual commentary; alternatively, an inscription can be “played” with each sign or glyph highlighted in sequence as its Maya sound or English translation is both spoken and highlighted in on-screen text. These sequences will be derived from graphic sequences prepared for the television program.
- Links to a select group of superb Maya-related web sites. These links will be contextual; for example, viewers wishing detailed and current information on the discoveries at Palenque covered in the film will be referred to the richly illustrated web site of the Pre-Columbian Art Research Institute (mesoweb.com), which is conducting the ongoing excavations there; those wishing more information on Maya vases and their texts will be referred to the web site of the Foundation for the Advancement of Mesoamerican Studies (famsi.org), which houses the complete, indexed Kerr Archive of rollout vase photographs.

For more advanced students and researchers, the site will also include archives of materials gathered during the creation of the program:

- Databased and indexed transcripts of the 25 audio interviews conducted during the research

phase of the project (these have already been transcribed and indexed to 200 key words, and amount to over 1000 pages.)

- Databased and indexed transcripts of the 15 to 20 video interviews to be conducted during production, accompanied as technologically appropriate by video clips or complete video interviews.
- High-resolution images of complete Maya texts, derived from 4x5, 8x10 or high resolution digital images to be shot during production. For many Maya texts, images of this quality are not otherwise available.

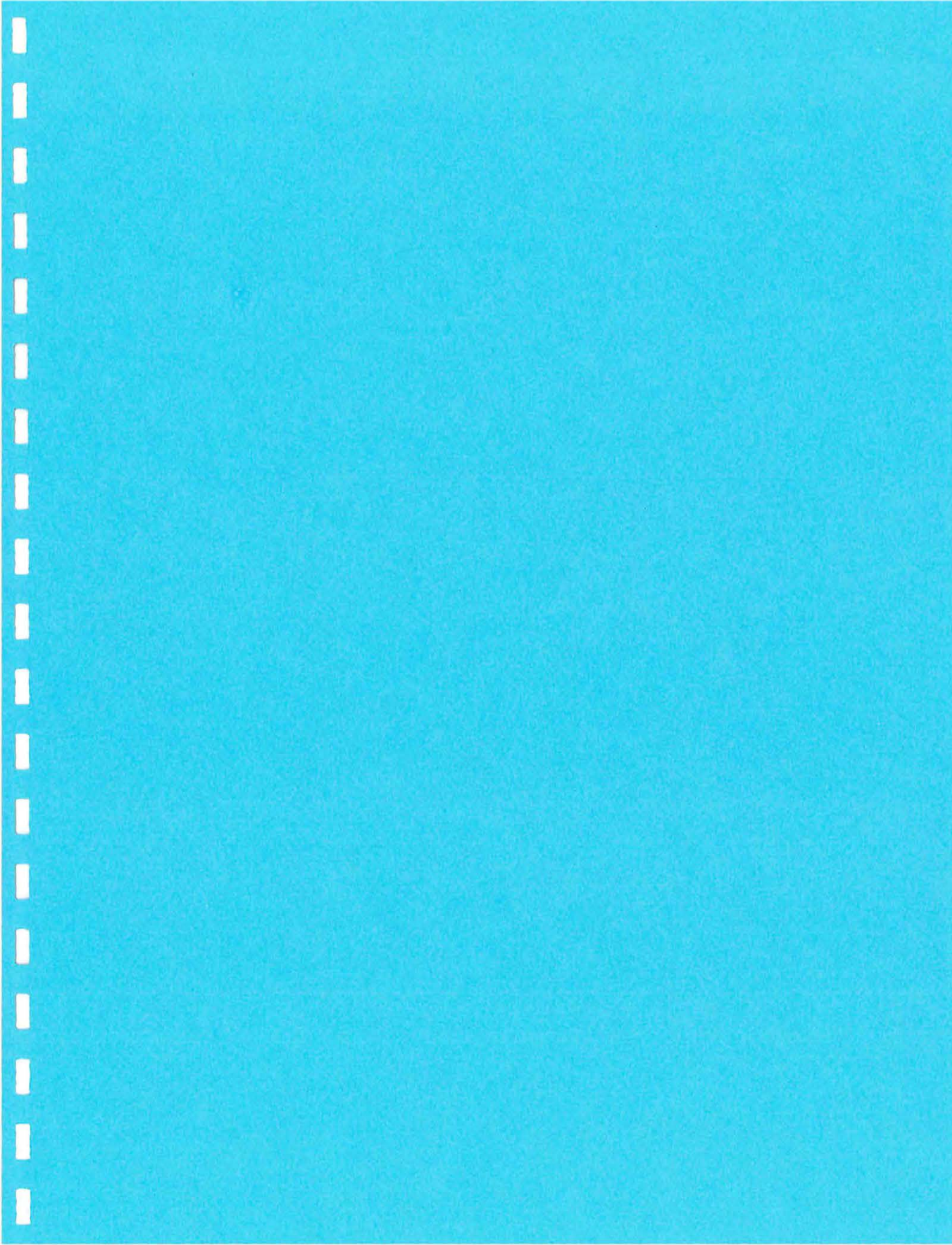
Finally, for teachers, the web site will include printable materials including illustrated study guides and suggested exercises for various levels, maps, drawings of Maya texts, and charts of Maya signs for syllables, days, months, numbers, common verbs and basic nouns.

This initial concept for the site will be developed and refined in consultation with educators, Mesoamerican scholars and web designers.

9. Fundraising Plan

\$600,000 in outright funds and \$200,000 in matching funds for the Production Phase are being sought from NEH. Several avenues will be pursued to fund the remaining \$398,272.

- If deemed advantageous to facilitate raising funds from private foundations and government agencies, an alliance will be formed with a public television station. Preliminary discussions were held at an earlier phase of the project with WNET in New York, and strong interest in the project was expressed. This discussion will be renewed, and others will be initiated.
- When the project was in proposal stage in 1998, Paula Apsell, Executive Producer of NOVA and WGBH science programming, offered to fully fund the project at a one-hour length. The offer was declined because we were (and remain) convinced that it is not possible to do justice to this story in a single hour. In the search for completion funding for the two-hour project, and with a completed script in hand, we will be prepared to renew that conversation.
- Charles Schuerhoff of C.S. Associates, an international television distributor based in Boston, will present the project to British and European television networks, seeking international co-production funding.
- Matching funds will be sought from corporate donors, particularly those in communications and digital technology where the project's themes of codes and communications systems will be a natural fit, and from foundations, such as the Arthur Vining Davis Foundation, whose preference is for "capstone" grants assuring completion of production.



APPENDIX 1: STAFF RESUMES

CURRICULUM VITAE

Michael D. Coe

Born (b) (6)

Education:

1941-46	St. Paul's School, Concord, NH
1950	A.B., Harvard College
1959	Ph.D., Harvard University

Positions:

1958-1960	Assistant Professor of Anthropology, University of Tennessee
1960-1961	Instructor in Anthropology, Yale University
1961-1963	Assistant Professor of Anthropology, Yale University
1963-1968	Associate Professor of Anthropology, Yale University
1968-1990	Professor of Anthropology, Yale University
1968-1970	Chairman, Department of Anthropology, Yale University
1979-1990	Chairman, Council on Archaeological Studies, Yale University
1990-1994	Charles J. MacCurdy Professor of Anthropology, Yale University
1994-	Charles J. MacCurdy Professor of Anthropology, Emeritus, Yale University

Other appointments:

1963-1979	Advisor, Center for Pre-Columbian Studies, Dumbarton Oaks, Washington, D.C.
1962-1974	Editor, Yale University Publications in Anthropology
1967-1968	Associate Curator of Anthropology, Peabody Museum of Natural History
1968-1994	Curator of Anthropology, Peabody Museum of Anthropology
1994-	Curator of Anthropology, Emeritus, Peabody Museum of Anthropology
1978-	Chairman, Executive Committee, Planting Fields Foundation
1984-	Chairman and President, Planting Fields Foundation
1986-1992	Trustee, Mt. Lebanon Shaker Village
1996-	Member, Advisory Board, Plains Indian Museum, Cody, WY

Field Research:

Prehistoric archaeology in Wyoming, Tennessee, Connecticut, Costa Rica, Belize, Guatemala, and Mexico.
Historic archaeology in Connecticut, Massachusetts, and New York.

Academic honors:

1981	Senior Fellowship, National Endowment for the Humanities
1986	Member, National Academy of Sciences
1989	Tatiana Proskouriakoff Award, Harvard University

Principal publications (books and monographs only):

- 1961 *La Victoria, An Early Site on the Pacific Coast of Guatemala*. (Papers of the Peabody Museum, Harvard University, Vol. 53). 163 pp. Cambridge, MA.
- 1962 *Mexico (Ancient Peoples and Places)*. 245 pp. London: Thames and Hudson. (Many subsequent editions).
- 1965 *The Jaguar's Children: Pre-Classical Central Mexico*. 126 pp. New York: Museum of Primitive Art.
- 1966 *The Maya (Ancient Peoples and Places)*. 186 pp. (Many subsequent editions).
- 1967 *Early Cultures and Human Ecology in South Coastal Guatemala* (with Kent V. Flannery). (Smithsonian Contributions to Anthropology, Vol. 3.) 136 pp. Washington, D.C.
- 1968 *America's First Civilization: Discovering the Olmec*. New York: American Heritage Press.
- 1973 *The Maya Scribe and His World*. 160 pp. New York: The Grolier Club.
- 1978 *Lords of the Underworld: Masterpieces of Classic Maya Ceramics*. 142 pp.
- 1980 *In the Land of the Olmec* (with Richard A. Diehl). 2 vols. Vol. 1: The Archaeology of San Lorenzo Tenochtitlán. 416 pp. Vol. 2: The People of the River. 198 pp. University of Texas Press.
- 1983 *Aztec Sorcerers in 17th Century Mexico: The Treatise on Superstitions by Hernando Ruiz de Alarcón* (with Gordon Whittaker). 329 pp. Albany: Institute for Mesoamerican Studies.
- 1986 *Atlas of Ancient America* (with Dean Snow and Elizabeth P. Benson). 240 pp. New York: Facts on File.
- 1992 *Breaking the Maya Code*. 304 pp. London and New York: Thames and Hudson.
- 1996 *The True History of Chocolate* (with Sophie D. Coe). 280 pp. London and New York: Thames and Hudson.
- 1997 *The Art of the Maya Scribe* (with Justin Kerr). 240 pp. London: Thames and Hudson.

CURRICULUM VITAE
(abridged)

David Lebrun

Home and Work Address: 805 Crestmoore Place, Venice CA 90291
Phone: 310-821-9133
Fax: 310-821-0224
E-Mail: (b) (6)
Social Security #: (b) (6)
Place and Date of Birth: (b) (6)
Citizenship: (b) (6)

Education:

1958-1962 Verde Valley School, Sedona, Arizona
1962-1966 Reed College, Portland, Oregon
1966-1967 University of California, Los Angeles, B.A. Theatre Arts / Motion Pictures, 1967

Languages:

Spanish (reading, fair speaking)
French (reading*)
Italian, German (some reading)

Skills and Experience:

Film and video writing, producing, camera and editing; documentary and anthropological film production; bilingual and multilingual production; animation and special effects; live multimedia production; interactive digital media production; educational film and video distribution; teaching film at graduate school level; archive and exhibition curating; technical writing; text editing.

Select Work Experience and Filmography:

1997-Present Writer, Producer and Director of *Breaking the Maya Code*, a television documentary series on the history of the Maya decipherment, for Night Fire Films. Research and scripting completed 1999-2000 under planning and scripting grant from the National Endowment for the Humanities.
1996-Present President, Night Fire Films, Venice, California, a documentary film production company.
1994-Present Writer, Producer and Director of *Proteus*, a 35mm. feature documentary on nineteenth century artist and scientist Ernst Haeckel, for Night Fire Films. In post production.
1987-1996 Co-Founder and President, First Light Video Publishing, Los Angeles. The company produced and distributed educational films on the subjects of film, video, audio, multimedia and theater production technique. Responsibilities included the

- production and acquisition of a catalog of over 200 films and the marketing of that catalog to universities, schools and individuals.
- 1987-1994 Writer and Producer of twelve educational and training films on video and audio production technique, for First Light Video Publishing.
- 1970-1986 Independent Producer, Director, Writer and Editor, Los Angeles. Credits on over 50 films, primarily documentaries and educational films but also including editorial work on dramatic television series (*Rosetti and Ryan, Columbo*) dramatic miniseries (*Wheels, Centennial*) and dramatic features (*Thief, Murphy's Law, Delta Force, Invaders from Mars*).
- 1982 Editor, *Broken Rainbow*, feature documentary on land dispute between Hopi and Navajo Tribes, for Earthworks Productions. Winner of Academy Award for Best Dramatic Feature, 1983.
- 1980-1981 Lecturer in the Film School of the California Institute of the Arts; taught graduate level classes in editing and production.
- 1978-1981 Associate Producer and Editor of *Living Maya*, a series of four one-hour films on a year in the life of a Yucatec Maya village, produced by Kuxtal Productions for PBS. Fully funded by the National Endowment for the Humanities.
- 1977-1978 Post-Production Supervisor and Editor, KOCE-TV. Designed post production operation for *The Growing Years*, a 36 episode series on child development produced by KOCE and McGraw Hill. Station had never previously produced a series on this scale. Created schedule, hired staff, supervised all phases of post production, scripted two and edited five films of the series.
- 1976 Supervising Editor of a series of six dramatic educational films produced by Peter Schnitzler Productions for Harper and Row. Edited three of the films.
- 1976 Producer and Director, *Tanka*, animated film based on Tibetan art and mythology.
- 1975-1976 Editor, two bilingual documentaries on Mexican folk artists, *Sabina Sanchez* and award-winning *Pedro Linares*, for The Works.
- 1973 Editor, twelve films for *Visions* series, produced by Donald Wrye Productions for the United States Information Agency.
- 1971-1973 Writer, Producer and Director, UCLA Media Center. Wrote, produced and directed three films, *Individuals, A Teacher in Reflection, and A Meeting*, for the National Institute of Mental Health. Edited two additional films for NIMH. Wrote and directed one film, *The Galapagos Tortoise*, for the National Science Foundation.
- 1970-1971 Editor, Genesis Films / Filmways. Edited two documentary feature projects, one on musician Frank Zappa and one on author Ken Kesey. Unreleased.
- 1967-1970 Producer and Director, *The Hog Farm Movie*, documentary feature on a travelling commune.
- 1966 Producer and Director, *Sanctus*, documentary on a Mazatec Indian curing ceremony in Oaxaca, Mexico, and other Mexican rituals.

Festivals, Awards and Fellowships:

- Films written, produced and directed by David Lebrun have won awards including:
- Bronze Hugo, Chicago International Film Festival
 - Gold Medal, Virgin Islands International Film Festival
 - Cash Award, Ann Arbor Film Festival
 - Honorable Mention, Bellevue Film Festival
 - Director's Choice Film, Sinking Creek Film Celebration
 - Bronze Apple, National Educational Film Festival
 - Silver Apple, National Educational Film Festival.

Films written, produced and directed by David Lebrun have been shown by invitation at festivals including:

American Feature Entry, Sorrento Film Festival
Filmex, Los Angeles
Filmex Special Retrospective, *Animation, the Illusion of Motion*
Wellington Film Festival (New Zealand)
Athens Film Festival
Conference on Visual Anthropology
The Margaret Mead Film Festival
The Flaherty Seminar.

Films edited by David Lebrun have won awards including:

Academy Award, Best Documentary Feature
First Prize, American Film Festival
First Prize, International Craft Film Festival
IFPA Cindy award
First Prize, Birmingham International Educational Film Festival
Bronze Chris, Columbus Film Festival
CINE Golden Eagle

Fellowships and Grants:

Reed College Creative Artist Grant, 1966
Dorland Mountain Colony Fellowship, summer 1981.
National Endowment for the Humanities Planning and Scripting Grant, 1998

Curatorial and Archival Experience:

1999 Curator, *Rico Lebrun: Carnal Relations*, Koplin Gallery, Los Angeles
1997 Curator, *Rico Lebrun: Paintings and Drawings After Goya, Grunewald, Rembrandt, Rubens, Traini and Velasquez*, Koplin Gallery, Los Angeles
1994 Curator, *Rico Lebrun: Drawings and Graphics for Dante, Brecht, Machado de Assis and Melville*, Koplin Gallery, Santa Monica.
1992 Curator, *Rico Lebrun: Drawings and Sculpture 1959-1963*, Koplin Gallery, Santa Monica).
1987 Preparator of all film materials, Sonya Levien Archive, Huntington Library, Pasadena.
1985 Curator, *Rico Lebrun: Mexico /Spain*, Mekler Gallery, Los Angeles.
1964-1966 Prepared all materials for the Rico Lebrun Archive of the Archives of American Art, Smithsonian Institution, Washington D.C.

Publications:

1991-2000 Co-editor (with James Renner), *In the Meridian of the Heart: Selected Letters of Rico Lebrun*, David R. Godine Publishers (in press).

Rebecca Hartzell
Associate Producer

Biographical Information:

Birthdate: (b) (6)
Birthplace: (b) (6)
Citizenship: (b)
Office Address: 4314A Via Marina
Marina Del Rey, CA 90292
Telephone: 323-573-9484

Education:

Masters in Film Production, 1999 University of Southern California
Women in Film Scholarship awarded
Producer of five short graduate films including one documentary
B.A, 1997 University of Southern California
Marshal School of Business scholarship awarded

Current Projects as Producer:

The Decay of Fiction, dramatic feature. Directed by Pat O'Neill, Executive Producer Irvin Kershner. History, memory, dream and film noir meet and merge at LA's historic Ambassador Hotel. Fully shot by motion-control camera. Partially funded by the Rockefeller Foundation. Currently in post-production.

Heatstroke, dramatic feature. Directed by Nina Menkes, Executive Producer Gus Van Sant. Story of two sisters, set in Los Angeles and Cairo, Egypt. Partially funded by the Rockefeller Foundation. In pre-production.

From the Mississippi Delta: A Memoir, dramatic feature. Based on the true story of an African-American woman raised in rural poverty, and her twenty-year struggle to receive her doctorate degree. In option under Whirlwind Films.

The Search for the Holy Men of India, documentary feature. Directed by Folco Terzani; cinematographer/editor Roko Belic, Oscar-nominated last year (*Genghis Blues*) and a Newsweek journalist. Documentary on "holy men" of the Indian Himalayas. In production.

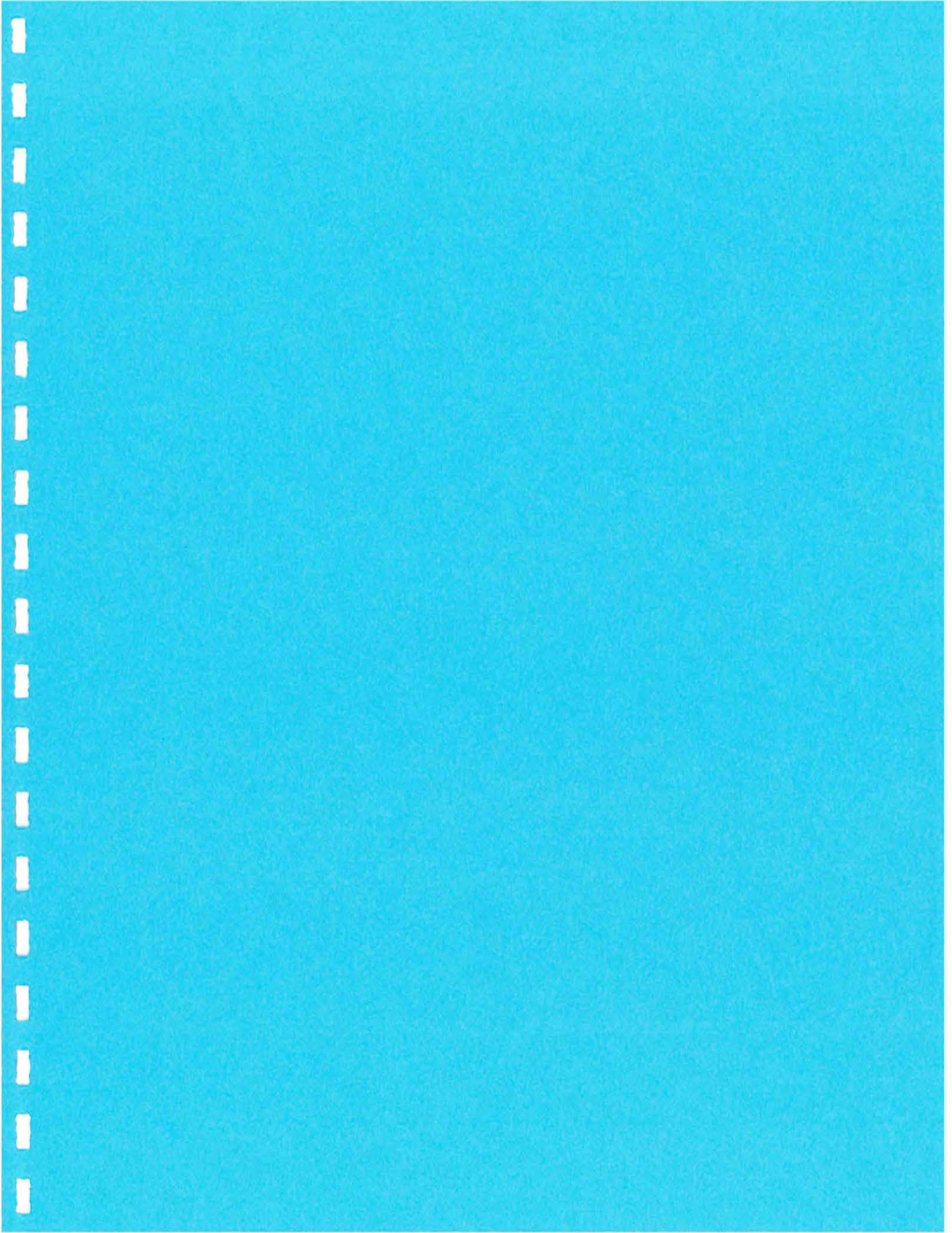
Amazing Women: The Uncommon Road, thirteen-part documentary series for PBS. Set in communities around the world, each thirty-minute episode focuses on one woman making a difference. Pilot in pre-production.

The Volunteer's Goal: Change the World, one-hour DV documentary for the Visual History of the Shoah Foundation, about holocaust survivors who volunteer at the foundation to support other survivors. Expected completion by May 2001.

Other Employment:

1994-1996: New York Life, Seattle, Washington
Executive Sales Associate / Marketing

1993-1994: AT&T Wireless Communications, Seattle, Washington
Account Executive and Financial Accountant



APPENDIX 2: ADVISER RESUMES

CURRICULUM VITAE

Nombre: Federico Fahsen Ortega
Fecha de Nacimiento: (b) (6)
Nacionalidad: (b) (6)
Estado Civil: (b) (6)
Idiomas: Espanol, Ingles y Frances
Profesion: Consultor, Arquitecto-Planificador Urbano y Regional

ESTUDIOS

Universidad: Licenciatura en Arquitectura, Universidad de Southern California, Los Angeles, U.S.A.

Licenciatura en Administracion Publica, Universidad de Southern California, Los Angeles, U.S.A.

Master en Planeamiento Urbano y Regional, Universidad de California, Berkeley

Cursos en Economia, George Washington University, Washington, D.C., U.S.A.

TRABAJO PROFESIONAL:

Presidente / Socio fundador de la firma Fahsen & Asociados Consultores, de 1971 a presente.

Embajador de Guatemala en los Estados Unidos de America de diciembre 1983 a febrero 1985.

Vice Ministro de Relaciones Exteriores, 1983.

Director del Instituto Nacional de Turismo, INGUAT, de Mayo 1982 - agosto 1983.

Gerente General, Financiera de Inversiones, S.A. agosto 1980 - noviembre 1981.

Director de la Comision de Financiamiento Externo, Secretaria General de Planification Economica. 1975 - 1977.

TRABAJO UNIVERSITARIO:

Miembro del Consejo Fiduciario de la Fundacion de la Universidad del Valle de Guatemala, 1980 al presente.

Catedratico de la Facultad de Arquitectura de la Universidad de San Carlos de Guatemala, 1965 - 1974 y de las Universidades Francisco Marroquin, Del Valle de Guatemala, y Rafael Landivar 1978 - 1993

OTROS CARGOS:

Director Ejecutivo, Unidad Tecnica Operativa de Rescate del Patrimonio Cultural,
1976 - 1978

ASOCIACIONES PROFESIONALES:

Academico de Numero, Academia de Geographia e Historia de Guatemala.

PUBLICACIONES:

Obras Maestras del Museo de Tikal, con Juan Antonio Valdes y Hector Escobedo,
Parque Nacional Tikal, Instituto de Antropologia e Historia, 1994, Guatemala.

The Reigning Dynasty of Waxactun During the Early Classic: The Rulers and the Ruled, with Juan Antonio Valdez (in press)

Hallazgo y Lectura de la Estela 40 de Tikal Guatemala, con Juan Antonio Valdez y Gaspar Munoz, 1997, IDEAH y Agencia de Cooperacion Espanola.

Fin de Clasico Temprano, Andres Ciudad ed., en prensa, Mayab, Espana.

Over two dozen articles on the epigraphy and history of Guatemalan archaeological sites and artifacts, published in *Research Reports on Ancient Maya Writing*, *American Antiquity*, *Ancient Mesoamerica*, *Mexicon*, *Texas Notes on Pre-Columbian Art, Writing and Culture*, and other publications.

CURRICULUM VITAE

NAME: William L. Fash
RANK: Professor
DEPARTMENT: Anthropology
Harvard University
Peabody Museum, 11 Divinity Avenue
Cambridge, MA 02138
TELEPHONE: (617) 496-4884 (Office, Cambridge, MA)
504-61-40-93 (Office, Copan, Honduras)

EDUCATION

- 1995 Ed.D (Hon.) Tulane University, New Orleans, LA.
1983 Ph.D. in Anthropology, Harvard University, Cambridge, MA.
1976 B.A. Summa Cum Laude, with High Distinction in Anthropology, University of Illinois, Urbana, IL.

RESEARCH AND TEACHING INTERESTS

Archaeological method and theory; the rise and fall of complex culture and civilization; ideology and political symbolism; settlement pattern studies; archaeology and ethnology of Mesoamerica; archaeological conservation.

PROFESSIONAL EXPERIENCE (RECENT)

- 1/95- Bowditch Professor of Central American and Mexican Archaeology and Ethnology, Harvard University, Department of Anthropology
9/92-9/94 Professor, Northern Illinois University, Department of Anthropology, De Kalb, IL.
9/90- Vice President for Scientific Matters, The Copan Association, Copan, Honduras.
9/88-6/92 Associate Professor, Northern Illinois University, Department of Anthropology, De Kalb, IL.
1/88-7/96 Director, Copan Acropolis Archaeological Project, Copan, Honduras
9/87-1/92 Executive Director, The Anthropology Museum, Northern Illinois University, De Kalb, Illinois.
6/85- Director, Copan Mosaics Project, Copan, Honduras

SELECTED PUBLICATIONS (BOOKS ONLY)

- n.d. *The Rise and Fall of the Classic Maya Kingdom of Copan*. School of American Research, Santa Fe. Co-editor with E. Wyllys Andrews
- n.d. *The Future of the Maya Past: Twenty Years of Research and Conservation at the Ruins of Copan*. Co-author with Barbara W. Fash, in preparation.
- 1996 *Visiones del Pasado Maya: Investigaciones del Proyecto Arqueologico Acropolis Copan, 1988-1992*. The Copan Association. Co-editor with Ricardo Agurcia Fasquelle.
- 1992 *History Carved in Stone: A Brief Guide to the Ruins of Copan*. The Copan Association, and Instituto Hondureno de Antropologia y Historia. Co-author with Ricardo Agurcio Fasquelle.
- 1991 *Scribes, Warriors and Kings: The City of Copan and the Ancient Maya*. Thames and Hudson, London and New York.

FIELDWORK AND RESEARCH (RECENT)

- 1985- Director, the Copan Mosaics Project. Responsible for funding, administration and research of large-scale multidisciplinary program of investigation, hypothetical reconstruction and restoration of eighth century and earlier architecture and sculpture of the Copan Acropolis. Focus was on Structures 10L-26 (with the Hieroglyphic Stairway and Temple), 10L-22 (the Temple of Meditation), 10L-22A (the Council House) and 10L-10 (the Ballcourt).
- 1988- Director, the Copan Acropolis Archaeological Project. Responsible for funding, 1996 administration and research of large-scale, multi-disciplinary, multi-national program of investigation, hypothetical reconstruction and restoration of eighth century and earlier architecture and sculpture on and adjacent to the Copan Acropolis.

Nikolai Konrad Grube

Personal Data:

Place of Birth: (b) (6)
Date of Birth: (b) (6)
Home Address: (b) (6)
Phone: (b) (6)
e-mail (Germany): ups402@ibm.rhrz.uni-bonn.de
e-mail (Belize): (b) (6)
Office Address: Universität Bonn
Seminar für Völkerkunde
Römerstraße 164
53117 Bonn
Germany
Phone: +228-734412
FAX number: +228-734385

Education:

1981: Abitur degree at Albertus-Magnus-Gymnasium, Bergisch-Gladbach
Bensberg
1982-1986: University of Hamburg: Ancient American Cultures; Ethnology; Near
Eastern Studies with focus on Hittite and Sanskrit; Linguistics;
1985: M.A. Thesis "Die Struktur der Primären Standardsequenz auf Keramiken
der Klassischen Mayakultur" (The Structure of the Primary Standard Sequence
on Classic Maya Ceramics)
1986-1989: University of Hamburg, Dissertation Research
1989: Dissertation "Die Entwicklung der Mayaschrift" (The development of Maya
writing), Ph.D. degree at University of Hamburg in "Altamerikanische Sprachen
und Kulturen" (Ancient American Languages and Cultures)

Social Service: (Social service or military service are obligatory in Germany for every male
after leaving school)
1981-1982: Welfare centre for handicapped children, Cologne

Language Skills:

Fluent English, Spanish, Yucatec Maya; Sanskrit, Hittite, Latin, K'iche'

Research Interests:

Agrarian societies; political anthropology; millenarianism and revitalization
movements; anthropology of religion and shamanism; ethnohistory, especially of
the Maya Lowlands;
Early states, especially Classic Lowland Maya; writing systems, especially Maya
and related systems; iconography, rhetoric and sources of power; decipherment
of Maya writing; historical linguistics of the Maya Lowlands;
Detection of historical continuity from Pre-Columbian Past to Present in
Mesoamerica; use and interpretation of history by modern indigenous
communities; documentation, preservation and revival of native mesoamerican
cultures.

Professional Positions:

1986-1989: lecturer, University of Hamburg (Ancient American Languages and
Cultures)
1989-1990: lecturer, University of Bonn (Anthropology Department)

1990-present: assistant professor, University of Bonn (Anthropology Department)
1991-1993: Scientific curator of the travelling exhibition "Die Welt der Maya" (The Maya World)

Honors and Research Awards:

1984-1986: Scholarship, Studienstiftung des Deutschen Volkes
1986-1989: Dissertation Scholarship, Studienstiftung des Deutschen Volkes
1992-present: Deutsche Forschungsgemeinschaft (German counterpart to NSF) research grant for a project on the oral history of the Caste War

Teaching Experience:

1986-1989: University of Hamburg: "Introduction to Maya Codices"; "Contemporary Chol and Hieroglyphic Verb Morphology"; "Olmec Iconography"; "Introduction to Ethnoarchaeology"; "The Archaeology of Teotihuacan: New Interpretations"; "The Classic Maya Collapse"
1989-present: University of Bonn: "Spoken Yucatec Maya (3 Semesters)"; "Classical K'iche'"; "The Borgia Group of Codices"; "The Ethnohistory of the Cruzoob Maya"; "The Ethnohistory of the Petén"; "Research Seminar: Maya Warfare"; "Research Seminar: State and Social Organization of Copán"; "The Mesoamerican Preclassic"; "Ethnographic Fieldwork"; "Research methods in Cognitive Anthropology"

Other Professional Experiences:

1991-1993: Organization of the exhibition "Die Welt der Maya"; acquisition of objects; edition of catalogue; scientific advice for all further venues after initial display at Hildesheim
1992: Organized symposium on the Transition from the Preclassic to the Early Classic in the Maya Lowlands; Roemer- und Pelizeus-Museum, Hildesheim, November 1992
1992-present: Collaborated on about ten TV documentaries on Maya Archaeology and Ethnology with German and American TV stations.

Fieldwork:

1984, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997: Every year several months of research in Señor and Tixcacal Guardia, Quintana Roo, Mexico, on oral traditions on the Caste War, Cruzoob messianistic religion, and apocalyptic prophecy.
1991, 1992, 1993, 1994, 1995, 1996, 1997: Recording texts on the history of the Yucatec Maya in the Cayo district of Belize, and their concept of cyclical time.
1987, 1988, 1989, 1990, 1991, 1992, 1993: Every year one or two weeks of epigraphical work at Copán with Linda Schele and David Stuart.
1989, 1990, 1991, 1992, 1994, 1995: Project epigrapher, Caracol Project (Directors: Arlen and Diane Chase) (one month per year).
1993, 1996: Project epigrapher, La Milpa (Directors: Gair Tourtellot and Norman Hammond) (three weeks)
1994, 1996: Project epigrapher, Proyecto Nacional Tikal at Yaxhá (Director: Oscar Quintana Samayoa)

Publications:

With Eva and Arne Eggebrecht, *Die Welt der Maya*, Verlag Philipp von Zabern, Mainz, 1992.
With Linda Schele, *The Peten Wars*, n.d.
Over 90 articles, book chapters and reviews.

CURRICULUM VITAE

STEPHEN D. HOUSTON

SS # (b) (6)

Personal Data

Born: (b) (6)
Married: (b) (6)
Children: (b) (6)
Citizenship: (b) (6)
Address: Dept. of Anthropology
Brigham Young University
945 SWKT
PO Box 25522
Provo, UT 84602-5522
e-mail: sdhouston@acd1.byu.edu
phone: (b) (6)

Research Interests:

Archaeology: archaeological method and theory; world archaeology; settlement pattern archaeology; Mesoamerican culture history; social context of exchange

Cultural Anthropology: trade and urbanism; anthropology of art; literacy; narrative and discourse; comparative religion

Art and epigraphy: ancient Maya writing, methods of decipherment, linguistics; Precolumbian art, especially Mesoamerican and Maya art; modes of representation; documentation; script development; computer imaging

Language Competence

Spoken and Read: English, Spanish, Swedish
Read: Classic Mayan, French, Danish, Norwegian

Education

Ph.D., Anthropology 1987 Yale University
M. Phil., Anthropology, 1983 Yale University
B.A. Anthropology, 1980 University of Pennsylvania

Positions

1997-present	University Professor, Brigham Young University
1996-1997	Professor, Brigham Young University
1994-1996	Associate Professor, Brigham Young University
1987-1993	Assistant Professor, Vanderbilt University
1997-	Director, Proyecto Piedras Negras, Guatemala
1993-	Curatorial Affiliate, Peabody Museum, Yale University
1993- 1994	Postdoctoral Affiliate, Department of Anthropology, Yale University
1990	Field Director, Proyecto Petexbatun / Dos Pilas, Guatemala
1989-1994	Co-editor, Ancient Mesoamerica, Cambridge University Press
1988-1993	Co-Director, Proyecto Petexbatun. / Dos Pilas, Guatemala
1986	Director, Dos Pilas Mapping Project, Guatemala
1985-1987	Epigrapher, Caracol Project, Belize
1982-1983	Teaching Fellow, Yale University
1980-1981	Curatorial Assistant, Peabody Museum, Yale University

Publications (Books, Monographs and Edited Volumes Only)

- Contracted Ancient Maya Writing (Stephen Houston and David Stuart) Norman: University of Oklahoma Press
- Contracted *Catalog of the Dumbarton Oaks Collection, Mesoamerica* (with Karl Taube). Washington, D.C.: Dumbarton Oaks.
- In prep *Essays on Ancient Maya Writing: A Sourcebook* (edited by Stephen Houston, Oswaldo Chinchilla, and David Stuart) Norman: University of Oklahoma Press (one-third consists of the editors' historical commentary.)
- In press *Form and Function in Classic Maya Architecture* (edited volume) Dumbarton Oaks Research Library, Harvard University (with three contributions by Houston)
- 1994 *Classic Maya Place Names* (David Stuart and Stephen Houston) Washington D.C.: Dumbarton Oaks
- 1993 *Hieroglyphs and History at Dos Pilas: Dynastic Politics of the Classic Maya*. Austin: University of Texas Press.
- 1989 *Reading the Past: Maya Glyphs*. London: British Museum Press; University of California Press
- 1985 *The Dynastic Sequence of Dos Pilas, Guatemala* (Stephen Houston and Peter L. Mathews) Pre-Columbian Art Research Institute, Monograph 1.
- 1983 *Contributions to Maya Hieroglyphic Decipherment, 1*. HRAFlex Books, New Haven (editor).

JUSTIN KERR

Justin Kerr, born in New York City, has been a photographer and lecturer on Precolumbian subjects since 1960 when he first visited Mexico. He maintains the archives of his photographs of Precolumbian objects which is accessed by scholars, book publishers, and other media.

In 1972, Kerr was commissioned to photograph the objects for Dr. Michael Coe's monumental work, *The Maya Scribe and His World*. This project led Kerr into designing and building a rollout camera with which to record Maya vases. Since that time the recording and study of Maya vases has been a priority. His archives of rollout photographs of the vases are now being published in an ongoing series.

Kerr has lectured and led workshops on Mayan vases Maya epigraphy and other Precolumbian subjects at numerous locations including Yale University, Princeton University, The Detroit Museum of Fine Art, the University Museum, Philadelphia, Denver Art Museum, Long Island Museum of Fine Art, the De Young Museum, San Francisco, the Birmingham Art Museum, Cincinnati Art Museum, The University of Alabama, the Brooklyn Museum, Maya Societies in Washington, DC, Miami, and Minnesota, the Maya Hieroglyph Workshops at Cleveland State University and the University of Texas, Austin, the University Museum, Philadelphia and the Metropolitan Museum of Art.

At the beginning of 1996, he traveled to Bonampak in Mexico, where he took part in the Bonampak Mural conservation project under the direction of Dr. Mary Miller of Yale. He is a member of the board of directors of The Maya Workshop, Austin Texas and a research associate with the Copán Mosaic Project, Copán, Honduras. He is also a member of the board of directors of the Foundation for the Advancement of Mesoamerican Studies, Crystal River, FL.

Books Published:

The Maya Vase Book, Volume 1 through 5 edited by Barbara and Justin Kerr.
Published by Kerr Associates, NY

The Art of the Maya Scribe with Michael Coe. Published by Thames and Hudson, London, and Harry Abrams Inc., New York to be released March, 1998

Articles Published:

Some Observations on Maya Vase Painters (with Barbara Kerr), *Maya Iconography*, Elizabeth P. Benson and Gillett G. Griffin, eds. 1988, Princeton

Notes on the Maya Vision Quest, (with Brian Stross), *The Maya Vase Book*, Vol. 2. Kerr Associates, 1990 New York.

A Scribe at Copan, *Copan Notes*, Copan ,1990

The Popol Vuh as a Political Instrument, *New Theories on the Ancient Maya*, Elin C. Danien and Robert J. Sharer eds., University Museum, 1992, Phila.

Notes on "The Acrylic Workshop": The unmasking of a fake, *Mexicon*, May 1993

CURRICULUM VITAE

David Strickland Stuart

TITLES AND AFFILIATIONS:

Lecturer, Department of Anthropology, Harvard University
Assistant Director, Corpus of Maya Hieroglyphic Inscriptions, Peabody Museum,
Harvard University

PERSONAL DATA:

CURRENT OFFICE ADDRESS: Peabody Museum of Anthropology and Ethnology,
Harvard University, 11 Divinity Ave., Cambridge, MA 02138. Tel. (617)496-2070,
Fax (617) 495-7535, e-mail dstuart@fas.harvard.edu.

PLACE AND DATE OF BIRTH: (b) (6)

SOCIAL SECURITY NUMBER: (b) (6)

LANGUAGE PROFICIENCIES:

Speaking and reading fluency in Spanish; Basic speaking and reading knowledge of
Chinese (Mandarin); Extensive analytical knowledge of Classical Yucatec (Mayan)
and modern Ch'orti (Mayan); Basic proficiency in Classical Nahuatl

DEGREES:

1989: B.A. Summa cum laude, Princeton University, Princeton, NJ
Department of Art and Archaeology
Department of East Asian Studies
1995: Ph.D. Vanderbilt University, Nashville, TN
Department of Anthropology

TEACHING EXPERIENCE:

1994-1996: Department of Anthropology, Harvard University
Fall 1990: Department of Anthropology, Vanderbilt University
Spring 1986: Department of Art and Archaeology, Princeton University

ACADEMIC HONORS AND AWARDS:

1992-93 Weatherhead Fellowship, The School of American Research, Santa Fe, NM
1991-92 University Graduate Fellowship, Vanderbilt University
1991 Presidential Award, Vanderbilt University
1989-1991 Mellon Fellowship in the Humanities
1989-1990: Sydney P. Colowick Graduate Scholar Award, Vandervilt University
1989: Senior Thesis Prize, Department of Art and Archaeology, Princeton University

1984-1989: Prize Fellowship, the John D. and Catherine T. MacArthur Foundation
1983-1984: Junior Fellow, Pre-Columbian Studies, Dumbarton Oaks

ARCHAEOLOGICAL FIELD EXPERIENCE (includes excavation, mapping, ceramic analysis, drafting, epigraphy):

- 1995,1996 Co-Director of Harvard field school. Copan, Honduras
1995 Recording of hieroglyphic texts at Calakmul and Chichen Itza, for Corpus of Maya Hieroglyphic Inscriptions, Harvard University
1992 Sculpture assembly and documentation, Copan Archaeology Project (William L. Fash, Director)
1991 Epigraphic Research, Copan Archaeology Project, Honduras (William L. Fash, Director)
1990 Supervisor of excavations at Arroyo de Piedra, Petexbatun Regional Archaeology Project, Guatemala (Arthur A. Demarest and Stephen D. Houston, general directors)
1989 Epigraphic research, Copan Archaeological Project, Honduras (William L. Fash, director)
1988 Supervisor of excavations in Str. 10L-26, Copan Archaeological Project, Honduras (William L. Fash, Director)
1987 Supervisor of Excavations in Str.10L-26 and Str. 10L-11, Copan Archaeological Project, Honduras (William L. Fash, Director)
1986 Epigraphic research, Copan Archaeological Project, Honduras (William L. Fash, director)
1985-1988 Epigraphic research, Rio Azul Project, Guatemala (Richard E.W. Adams, director)
1984 Archaeological reconnaissance, Lacantun and Usamacinta Rivers, Mexico and Guatemala, under auspices of National Geographic Society
1981 Epigraphic survey and photography, Najtunich, Guatemala, under auspices of the National Geographic Society
1977 Epigraphic research, Palenque, Mexico (Linda Schele, director)

PUBLICATIONS (BOOKS ONLY):

- 1995 *A Study of Maya Inscriptions*, Ph.D. Dissertation, Department of Anthropology, Vanderbilt University
- 1994 *Classic Maya Place Names* (Senior author, with Stephen D. Houston), Washington, D.C.: Dumbarton Oaks
- Ancient Maya Writing* (with Stephen D. Houston), University of Oklahoma Press, in preparation
- The Mesoamerican Image*, in preparation
- Maya Cosmology* (with Evon z. Vogt), in preparation

CURRICULUM VITAE

George Edwin Stuart

(March 1996)

Address:

WORK: National Geographic Society; Washington D.C. 20036.
Telephone (202)828-5480

HOME: (b) (6)
Tel. (b) (6) ; Fax (b) (6)
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Tel. (b) (6) Fax (b) (6)

Social Security No.: (b) (6)

Place and Date of Birth: (b) (6)

Personal Data: (b) (6)
(b) (6)

Education and Academic Degrees:

1952-1956 University of South Carolina, B.S. Geology, 1956
1966-1970 George Washington University, M.A. Anthropology, 1970
1970-1971 University of North Carolina, Chapel Hill, Ph.D. Anthropology, 1975
1985 Litt.D. (honorary), Belmont Abbey College, Belmont, N.C.

Languages:

Spanish (reading, writing and speaking)
Yucatec Maya (some reading, some speaking)

Present Employment and Activities:

Vice President for Research and Exploration, National Geographic Society,
Washington, D.C.
Chairman, Committee for Research and Exploration, National Geographic Society
Senior Assistant Editor, Archeology, National Geographic Magazine
President, Center for Maya Research, Washington, D.C.
Editor, Research Reports on Ancient Maya Writing
Advisory Board, The Kislak Foundation, Miami Lakes, Florida
Advisory Board, Archaeology Committee, Programme for Belize, Belmopan, Belize
Advisory Board, Society for the Preservation of Virginia Antiquities
Advisory Board, Asociacion Copan, Tegucigalpa, Honduras

Employment History:

- 1960-Present National Geographic Society
1986-Present Center for Maya Research
1974-1975 Co-Director, Coba Archeological Mapping Project, Quintana Roo, Mexico
1971-1979 Assistant Professorial Lecturer, George Washington University; lecturer at Catholic University, Duke University and the Smithsonian Institution
1958-1960 Assistant to Director E. Wyllys Andrews IV, National Geographic Society-Tulane University Expedition to Dzibilchaltun, Mexico. Worked with Alfredo Barrera Vasquez of Merida on Yucatec Maya linguistic studies.
1954-1958 Archaeological Field Assistant, Georgia Historical Commission
1952 Archaeological Field Assistant, University of Georgia-Charleston Museum

Selected Publications:

- 1968 *The Ruins of Ikil, Yucatan, Mexico* (with E. Wyllys Andrews IV). Middle American Research Institute, Tulane University, New Orleans.
- 1969 *Discovering Man's Past in the Americas* (with Gene S. Stuart). Special Publications Division of the National Geographic Society, Washington, D.C.
- 1977 *The Mysterious Maya* (with Gene S. Stuart). Special Publications Division of the National Geographic Society, Washington, D.C.
- 1989 *The Beginnings of Maya Hieroglyphic Study: Contributions of Constantine Samuel Rafinesque and James H. McCulloh, Jr.* Research reports on Ancient Maya Writing, No. 29., Washington, D.C., Center for Maya Research.
- 1992a *Quest for Decipherment: An Historical and Bibliographical Essay on the Study of Maya Hieroglyphic Writing.* Philadelphia: The University Museum.
- 1993 *Lost Kingdoms of the Maya* (with Gene S. Stuart). National Geographic Society, Washington, D.C.
- 1996 *Archaeology and You* (with Frank McManamon). Washington D.C.: National Geographic Society, Society for American Archaeology and the National Park Service

CURRICULUM VITAE

NAME: Karl Andreas Taube SS# (b) (6)

POSITION Associate Professor, Dept. of Anthropology, University of California, Riverside

ADDRESS: Department of Anthropology
University of California at Riverside
Riverside CA 92521-0418

PERSONAL: Date of Birth: (b) (6)
Place of Birth: (b) (6)
Citizenship: (b) (6)

EDUCATION:

1988: Ph.D. Dept. of Anthropology, Yale University

1983: Master of Philosophy, Yale University

1983: Master of Arts, Yale University

1980: B.A. with Honors, Dept. of Anthropology, University of California at Berkeley

1975-1977: Attended Stanford University.

LANGUAGES: Spanish
Spoken Yucatec Maya

RESEARCH INTERESTS

Professor Taube has engaged in extensive archaeological and linguistic fieldwork in Yucatan, and has participated in archaeological projects in Chiapas, Mexico, highland Peru, and coastal Ecuador. Taube has broad interests in the archaeology and ethnology of Mesoamerica and the American Southwest. Much of his recent research and publications center upon the writing and religious systems of ancient Mesoamerica.

PUBLICATIONS (BOOKS AND MONOGRAPHS ONLY):

1995 (co-edited with Scott Frederick) *The View From Yalahau: 1993 Archaeological Investigations in Northern Quintana Roo, Mexico*, Latin American Studies Program Field Report Series, No. 2 University of California at Riverside, Riverside.

- 1993 *Aztec and Maya Myths*. Legendary Past Series, The British Museum, London, and University of Texas Press, Austin (Translations into German, Italian, French, Greek, Japanese and Spanish also currently in print).
- 1993 (with Mary Ellen Miller) *Gods and Symbols of Ancient Mexico and the Maya: an Illustrated Dictionary of Mesoamerican Religion*. Thames and Hudson, London.
- 1992 *The Major Gods of Ancient Yucatan*. Studies in Pre-Columbian Art and Archaeology, Number 32. Dumbarton Oaks, Washington, D.C.
- 1988 *The Albers Collection of Pre-Columbian Art*, Hudson Hills Press, New York.
- in press *Olmec Art at Dumbarton Oaks*. Dumbarton Oaks, Washington, D.C.

Barbara Tedlock, Ph.D.

Curriculum Vitae (abbreviated)

Department of Anthropology
 State University of New York at Buffalo
 Buffalo, NY 14261 [phone: 716:645-3241]

Education

- 1978 Ph.D. in Anthropology, SUNY at Albany
- 1973 MA in Anthropology, Wesleyan University, Middletown CT
- 1967 BA *cum laude* in Rhetoric, University of California at Berkeley

Employment History

- State University of New York at Buffalo: Associate Professor of Anthropology (1987-1989), Professor of Anthropology (1989-present).
- Tufts University: Assistant Professor of Anthropology (1978-82). Associate Professor of Anthropology (1982-1987).

Honors & Awards

- 1997 American Anthropological Association President's Award "for distinctive leadership in forging a new vision for the flagship journal of the American Anthropological Association, the *American Anthropologist*, and for dedication and commitment to the profession of anthropology and to the American Anthropological Association."
- 1995 National Academy of Sciences, Invited Lecture, "Mayan Astronomy: What we Know & How we Know it."
- 1988 Vassar College, John Christie Memorial Lecture & Award for, "Outstanding Research in Anthropological Linguistics."
- 1980 Chades Borden, Geoffrey Bushnell, and Juan Comas Prize Award for, "Sound texture and metaphor in Quiché Maya ritual language," the best linguistic contribution presented at the 43rd International Congress of Americanists, Vancouver.

Grants & Fellowships

- 1997-93 American Anthropological Association, Grant-in-aid for the *American Anthropologist*.
- 1994 American Council of Learned Societies, Fellowship in Mayan Linguistics & Translation.
- 1993 National Endowment for the Humanities, Fellowship Grant for University Professors.
- 1991 Center for Cognitive Science, Grant-in-aid for Mayan Linguistics & Cognitive Studies.
- 1989 National Institutes of Health, Biomedical Research Support Grant Program.
- 1986 National Endowment for the Humanities, Fellowship Grant for Independent Study.
- 1981 Weatherhead Resident Fellowship, School of American Research, Santa Fe, NM.

Selected Publications

- 1998 "Continuities and Renewals in Mayan Literacy and Calendrics," in *Theorizing the Americanist Tradition*, ed. Regna Darnell. Toronto: University of Toronto Press, 120-134.
- 1995 "The Linguistic Evidence from Dreams," in *Handbook of Psychological Anthropology*, ed. Philip K. Bock. Westport, Connecticut: Greenwood, 279-295.

CURRICULUM VITAE

EVON ZARTMAN VOGT, JR.

Academic Record: A.B. University of Chicago, 1941 (Geography)

M.A. University of Chicago, 1946 (Anthropology)

Ph.D. University of Chicago, 1948 (Anthropology)

Dissertation: "Navaho Veterans: A Study of Acculturation"

- 1937-41 Attended University of Chicago. Student Marshall, 1940-41.
- 1941-42 Attended graduate school at University of Chicago. Charles R. Walgreen Fellowship in Anthropology.
- 1942-45 Served in United States Navy. Rank of Lieutenant (senior grade). Duty as Air Combat Intelligence Officer aboard aircraft carrier in the Pacific.
- 1946-47 Attended graduate school at University of Chicago. Research Assistant for Committee on Human Development, University of Chicago.
- 1947-48 Fellow of the Social Science Research Council - Demobilization Award - Field work with Navaho Indians.
- 1948-49 Instructor in Social Anthropology, Harvard University.
- 1949-50 Instructor in Social Anthropology, Research Fellow in Social Anthropology in the Peabody Museum at Harvard University; Deputy Coordinator of "The Comparative Study of Values in Five Cultures" Project, supported by grant from the Rockefeller Foundation.
- 1950-55 Assistant Professor of Social Anthropology, Harvard University, Assistant Curator of Social Anthropology, Peabody Museum (other positions remain as in 1949-50).
- 1953-55 Co-ordinator of "The Comparative Study of Values" Project.
- 1953 Member of the Social Science Research Council's Inter-University Seminar on "Acculturation" held at Stanford University in July and August.
- 1956 Member of the Social Science Research Council's Inter-University Seminar on "American Indian Culture Change" held at the University of New Mexico in July and August.
- 1955-59 Associate Professor of Social Anthropology, Harvard University.
- 1957-- Director Harvard Chiapas Project.
- 1959-89 Professor of Social Anthropology, Curator of Middle American Ethnology, Harvard University.
- 1989-- Professor of Social Anthropology, Emeritus and Honorary Curator of Middle American Ethnology in the

Peabody Museum of Archaeology and Ethnology, Harvard University

- 1962-- Organizer and Chairman of International Symposium on "The Cultural Development of the Maya," Burg Wartenstein, Austria, September 6-13.
- 1968 Visiting Scholar in the USSR (October-November) as guest of the Institute of Ethnography of the Academy of Sciences of the USSR. Jointly sponsored by the National Academy of Sciences, Washington, D.C., visited Institutes and lectured in Moscow, Leningrad, and Tashkent.
- 1969-73 Chairman, Department of Anthropology, Harvard University.
- 1974-82 Master of Kirkland House, Harvard University.
- 1980 Organizer and Chairman of International Symposium on "Prehistoric Settlement Patterns" in Honor of Professor Gordon R. Willey, Burg Wartenstein, Austria, August 16-24.
- 1985 Visiting Scholar in Bulgaria and Yugoslavia (June-July) as guests of the Institutes of Ethnography and Folklore of the Bulgarian Academy of Sciences in Sofia and the Serbian Academy of Sciences in Belgrade. Jointly sponsored by National Academy of Sciences, Washington, D.C. Lectured in Sofia and Belgrade.
- 1985-88 Chairman, Committee on Latin American and Iberian Studies, Harvard University.
- 1989 National Academy of Sciences Academy Scholar to the USSR (September - October). Guest of the Institutes of Archaeology and Ethnology of the Academy of Sciences of the USSR. Visited institutes and lectured in Moscow, Leningrad, and in the Republic of Georgia.

Honors:

Fellow, Center for Advanced Study in the Behavioral Sciences, Palo Alto, California, 1956-57.

Fellow, American Academy of Arts and Sciences (elected 1960): Councilor for Class III 1974-78.

Elected to the National Academy of Sciences, Washington, D.C., 1979.

Chairman, Section on Anthropology, National Academy of Sciences, 1982-84.

Chairman, Class V (Behavioral and Social Sciences), National Academy of Sciences, 1987-1989.

Fray Bernardino de Sahagun prize for the year 1969, by the Instituto Nacional de Antropologia e Historia, in the branch of Anthropology for my work entitled *Zinacantan: A Maya Community in the Highlands of Chiapas*, judged to be the best work of the year by a foreign investigator.

The Harvard University Press Faculty Prize, for the best work of scholarship written by a Harvard faculty member and published by the Harvard University Press, awarded for the year 1969, for *Zinacantan: A Maya Community in the Highlands of Chiapas*.

Decorated Knight Commander, Order of the Aztec Eagle, Republic of Mexico, January 6, 1978.

Publications (Books and Monographs):

Leonard McCombe, Evon Z. Vogt, and Clyde Kluckhohn. *Navaho Means People*. Harvard University Press, 1951.

Modern Homesteaders: Life in a 20th Century Frontier Community. Cambridge: Harvard University Press (Belknap Press), 1955.

Gordon R. Willey, Evon Z. Vogt, and Angel Palerm (eds.) *Middle American Anthropology, A Special Symposium of the American Anthropological Association*. Social Science Monographs, V, Washington, D.C.: Pan American Union, 1958.

William A. Lessa and Evon Z. Vogt (eds.) *Reader in Comparative Religion: An Anthropological Approach*. Evanston, Illinois: Row, Peterson & Co., 1958 (Fourth edition 1979).

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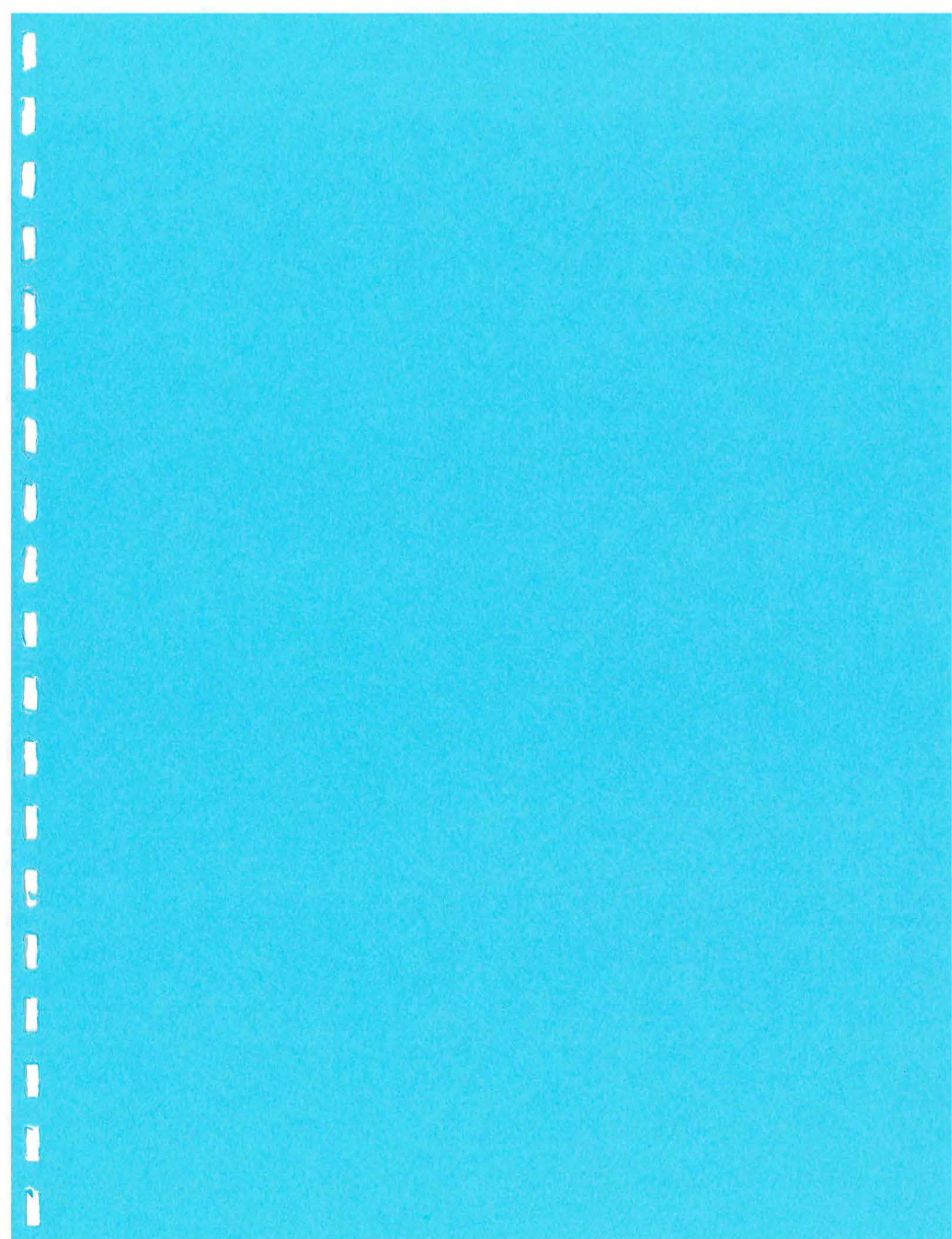
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Tortillas for the Gods: A Symbolic Analysis of Zinacanteco Rituals. Cambridge: Harvard University Press, 1976 (Paperback edition 1993).

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Fieldwork Among the Maya: Reflections on the Harvard Chiapas Project. University of New Mexico Press, 1994.

In Preparation: (With David Stuart) *Maya Cosmology*.



APPENDIX 3: LETTERS OF COMMITMENT



Michael D. Coe

(b) (6)

To Whom It May Concern:

31 July 1997

I am collaborating with Mr. David Lebrun on a projected three-part television series on the history of the Maya decipherment, which will be based in large part on *Breaking the Maya Code*. As far as we know, this story has never been presented visually to a television audience; if there has been any coverage of the nature of the Maya script, its decipherment, and significance to the understanding of the ancient Maya, this has been brief and not very informative.

We think that this story is worth telling, and that now is the time to do it, when so many of the recent participants are still active. The three films will include informative interviews with the major actors in the most recent phases of the decipherment, including those who were present at the First Palenque Mesa Redonda.

David Lebrun is an experienced maker of documentary films for television and an animator; in addition, he has an extensive knowledge of Maya culture and Maya epigraphy. He is just the person to produce this series.

Sincerely,

Michael D. Coe
Charles J. MacCurdy Professor of Anthropology, Emeritus
Yale University



FEDERICO FAHSEN

December 18, 1997

Mr. David Lebrun
Producer
Nightfire Films
805 Crestmoore Place
Venice, California 90291

Dear Mr. Lebrun:

This is to confirm our recent communications concerning my role as advisor to the TV program on Maya Culture, Archaeology and Epigraphy, etc. It should also confirm my acceptance of the terms and conditions proposed by you.

I am also including a C.V. (unfortunately in Spanish) do to the urgency of your request.

Hoping to hear from you soon I remain.

Sincerely yours,



Federico Fahsen O.

FF:ip

HARVARD UNIVERSITY
DEPARTMENT OF ANTHROPOLOGY

William L. Fash
Bowditch Professor of Central American and
Mexican Archaeology and Ethnology

Peabody Museum
11 Divinity Avenue
Cambridge, MA 02138

November 12, 1997

Mr. David Lebrun
Producer
Night Fire Films
805 Crestmoore Place
Venice, CA 90291

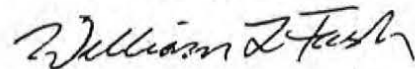
Dear Mr. Lebrun:

Thank you for your inquiry regarding my interest in serving as an advisor for *Breaking the Maya Code*.

I would be delighted to serve as an advisor. As a teacher, I am committed to education and am happy to be of service and contribute my knowledge to your project.

Thank you again, and I look forward to hearing from you as the plans for the project progress.

Yours sincerely,



William L. Fash

WLF/wmf
l-lebrun.wlf

Dr. Nikolai Grube
Seminar für Völkerkunde der Universität Bonn
Römerstraße 164
53117 Bonn
Tel. (privat): (b) (6)
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e-mail: ups402@ibm.rhrz.uni-bonn.de

Grube/Seminar für Völkerkunde/Römerstr. 164/53117 Bonn
David Lebrun
Night Fire Films
805 Crestmoore Place
Venice, CA 90291
USA

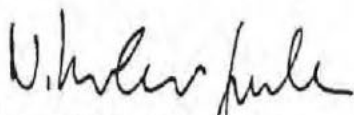
13. Dezember 1997

Dear Mr. Lebrun,

I am writing to you in order to inform you that I accept your invitation to cooperate as an adviser for your three part television series on the decipherment of Maya Hieroglyphic Writing. I accept to review the proposal for the series, the shooting scripts for each program and the edited VHS cassettes and to send you my comments via mail and e-mail. I have already received the draft proposal and will comment upon it as soon as possible.

I am looking forward to cooperate with you in this unique series, which for the first time will document the long history of research and collaboration which finally led to the decipherment of the last major undeciphered ancient writing system.

Sincerely yours,



(Dr. Nikolai Grube)

Stephen Houston

(b) (6)

sdh@email.byu.edu

(b) (6)

Mr. Lebrun
Night Fire Films
805 Crestmoore Place
Venice, CA 90291

Nov. 7, 1997

Dear Mr. Lebrun:

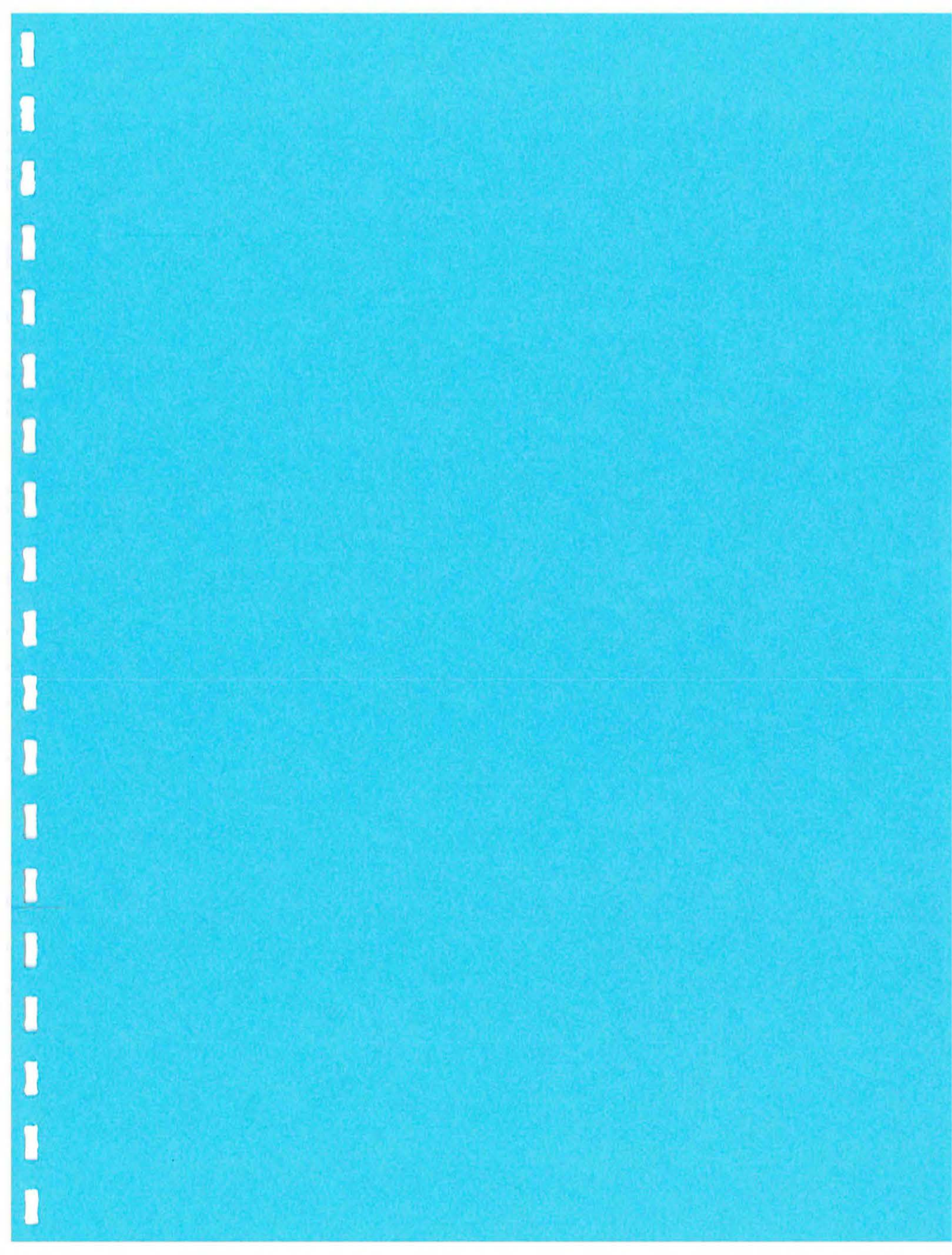
I would be delighted to serve on your board of advisers. It will be a fascinating and important series, building on one of the best books ever written about the rediscovery of antiquity.

With very best wishes,



Stephen Houston

cc: Mike Coe



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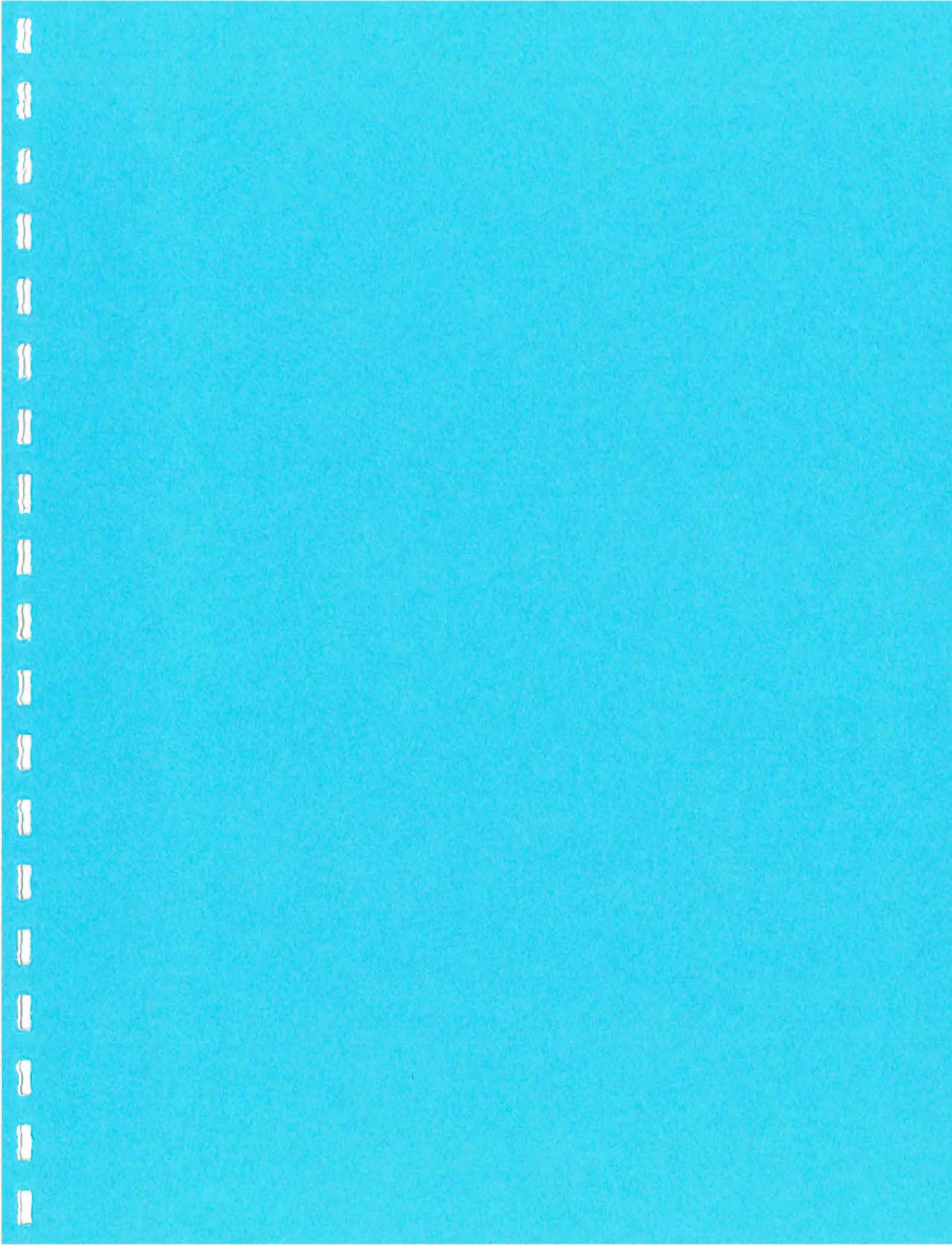
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Tozzer, Alfred M., *Landa's Relacion de las Cosas de Yucatan*, Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University.

Vogt, Evon Z., *Tortillas for the Gods: A Symbolic Analysis of Zinacanteco Rituals*, University of Oklahoma Press, 1993.

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BREAKING THE MAYA CODE

SCRIPT SUMMARY

SCRIPT PART 1

SCRIPT PART 2

ILLUSTRATIONS

BREAKING THE MAYA CODE

INTRODUCTION TO THE SCRIPT

NATURE OF THE SCRIPT

What follows is the script for a two hour program divided into two sixty minute parts.

The key function of the script will be as a template to guide the formulation of interview questions, the selection of locations and objects to be filmed, and precise details of framing, lighting and camera movement. The script runs about 25% long, to insure that all important topics and artifacts will be documented during production. Like all documentaries, the film will be made in the editing room. While the finished product will differ in detail from the script as it stands, it will be faithful to the content, structure and method of what you are about to read.

INTERVIEWS

In most cases, the interview excerpts in the following script are based on transcripts of audio-taped interviews conducted during the research phase of the project; in some cases, statements have been adapted from a scholar's published writings. In the final program, these will be replaced with scenes from the videotaped interviews to be conducted during production. While details will change, content will be similar.

In the case of the late Linda Schele, interview excerpts are based on transcripts of the videotaped interviews conducted with her for this project in 1997.

Scholars will be identified by subtitles stating their name and specialization when they first appear and periodically thereafter; these titles have not been included in the script at this time.

ARCHIVAL MATERIAL

Considerable archival research was performed during the research and scripting phase of this project. Where specific graphics, stills, film and video have been located, they are specified. Additional archival research will be performed during the production phase.

HIGHLIGHTING

In many live action and graphic sequences, "highlighting" is specified. This will in almost all cases be accomplished by preparing a soft-edge digital matte of the area to be focussed on, and fading everything else in the frame down perceptibly, as if in shade. When the viewer's eye is to be focussed on a series of elements one by one, each will fade up to full exposure, as if in direct sunlight, as it is mentioned.

Samples of this technique are included in the VHS sample reel.

SCRIPT SUMMARY

PART ONE: THE WORD MADE VISIBLE

INTRODUCTION (Script pp. 1-3) After an introductory scene drawing parallels between the role of writing in ancient Maya civilization and the role of writing in our own, we meet Michael Coe at his Berkshire farmhouse and take a brief overview of the origin and history of the Maya script, up to the arrival of the Spanish in the sixteenth century.

THE PERSISTENCE OF THE SCRIBES (pp. 3-11) The invading Spanish systematically suppress the hieroglyphic writing system of the Maya, severing the colonial Maya from their two thousand year history. But Maya scribes persist, learning to write their Mayan languages in Latin script and transcribing sacred texts and histories into European characters. These sixteenth century texts are still carefully guarded and studied in remote Maya villages, where literacy and written history are prized.

"WHO SHALL READ THEM?" (pp. 11-16) When Europeans rediscover the Maya city of Palenque in the 1780's, the hieroglyphic symbols carved on its walls are perfectly unintelligible. Early scholars and explorers struggle to make sense of the glyphs, even to draw and record them with any accuracy. Most are led astray by prejudice and fantasy, concluding that the men who created this advanced culture and its writing must have come from the Near East or from the mythical Atlantis. A few conclude correctly that the cities were built by ancestors of the living Maya, and that the texts are written in a Maya language.

THE KEY THAT DIDN'T FIT (pp. 16-23) The discovery in 1860 of a "Maya alphabet", transcribed by the friar Diego de Landa in 1651, creates hope that the script can be deciphered. But the resulting decipherments are nonsense, and the "key" is discredited.

To understand why, we step back for a look at the nature of writing systems and the history of decipherment, in particular the story of the Egyptian decipherment by Champollion. From the time of the Greeks, Egyptian characters were regarded as "hieroglyphs", literally sacred symbols, standing for profound ideas without the intervention of language. But in fact the signs of all true writing systems represent the letters, syllables or words of a specific language. Champollion's breakthrough came through the recognition that the Egyptian system was a mix of signs for words and signs for letters. The Maya system, on the other hand, is a mix of signs for words and signs not for letters but for syllables. This is why Landa's "alphabet" produced nonsense decipherments. It would take scholars almost a century to disentangle the error.

OF TIME AND THE STARS (pp. 23-29) Maya numbers are the earliest aspect of the writing system to be clearly understood. Through numbers, nineteenth century scholars learn to understand the complex Maya calendar, and, through the calendar, their astonishingly accurate and sophisticated astronomy.

CLUES IN THE PICTURES (pp. 29-32) Late 19th century scholars search for clues in the relationship between image and text on Maya monuments and in the three surviving Maya books or codices. Through these patterns of correspondence, they identify the hieroglyphs that stand for various gods, animals and objects, though they cannot read these signs in any specific language. One American scholar's attempt to prove that some glyphs spell words phonetically in Yucatec Maya is scornfully discredited by the scholarly establishment.

THE ASTRONOMER PRIESTS (pp. 32-36) Early 20th century scholars focus on the calendric and astronomical portions of the texts, which they can now read with some sophistication, and disregard the remaining portions of the texts, which they cannot read at all. Dominated by British scholar Eric Thompson, they establish a picture of ancient Maya society as a peaceful civilization devoted to the calendar and ruled by wise astronomer-priests, a picture that answers the yearning of a Europe and America convulsed by world wars.

A WIND FROM THE EAST (pp. 36-40) In 1952, at the height of the Cold War, Soviet scholar Yuri Knorosov publishes an elegant proof that many Maya glyphs represent the syllabic sounds of Maya language. Archaeologist Michael Coe and his wife Sophie, recognizing the importance of Knorosov's work, translate it and champion it in the west. But Thompson and other western scholars reject Knorosov's theory as crackpot Stalinist science. Thompson's most telling objection: if it were a true phonetic system, a trickle of correct readings would soon turn into a flood. But for over thirty years, this flood would fail to materialize.

THE REVOLUTION (pp. 40-48) In the midst of the Depression, a young Russian exile finds work as a draftsman for a Philadelphia Museum expedition to the Maya site of Piedras Negras. Tatiana Proskouriakoff's superb reconstruction drawings and paintings become the defining images of Maya cities. But her 1960 analysis of a pattern of dates on a series of carved stelae at Piedras Negras will revolutionize Maya studies.

At the time, it was almost universally believed that the images and texts on Maya monuments were religious and symbolic, and had no relation to history or to historical figures. But working purely from pattern, without reference to language, Proskouriakoff elegantly proves that three undeciphered hieroglyphs stand for "birth" "death" and "accession to kingship". She establishes beyond doubt that the figures on these stelae are not priests and gods but kings, their wives, and their children, a family album in stone of a Maya dynasty. The Maya glyphs, Proskouriakoff proves, record history.

PART TWO: A NEW WORLD

INTRODUCTION (pp. 49-50) When John Lloyd Stephens and Frederick Catherwood explored Palenque in the 1840s, they discovered a temple filled with hieroglyphic inscriptions. In 1952, Mexican archeologist Alberto Ruz discovers a royal tomb deep below the Temple. In a stone sarcophagus ringed with hieroglyphic text is the body of a man, covered in jade. It will be more than twenty years before scholars will learn to read his name— Pacal.

PACAL'S PEOPLE (pp. 50-61) In 1973, a new generation of Mayanists gathers at Palenque. They accept both the phonetic approach of Knorosov and the structural approach of Proskouriakoff, and are eager to apply them both to the decipherment of Palenque's history. On the last day of their conference, in a single afternoon, painter Linda Schele and Australian undergraduate Peter Mathews map out the final 200 years of Palenque's 400 year dynasty, the story of the great king Pacal and his descendants. A few months later, at a conference at Dumbarton Oaks in Washington DC, Schele, Mathews and their colleagues unravel the story of the first 200 years of Palenque's dynasty, the events leading to Pacal's accession to power, by deciphering the inscription on the rim of his sarcophagus.

DOWN INTO XIBALBA (pp. 61-64) For many decades, the texts on ancient Maya ceramics had been dismissed as merely decorative. In the 1970s archaeologist Michael Coe demonstrates the remarkable continuity between the texts and images on 6th to 8th century royal Maya ceramic vases and the story of the legendary Hero Twins and their journey to the underworld, Xibalba, as told in the great sixteenth century Quiche Maya creation epic, the Popol Vuh. He also establishes the critical importance for the decipherment of the formulaic rim text on vases, which he hypothesizes is a funerary chant.

BEFORE THE FLOOD (pp. 64-69) A brilliant and precocious child named David Stuart begins his study of the Maya script at age 8 and becomes Linda Schele's assistant at Palenque at age 11. Schele involves a wider public in the excitement of Maya decipherment through dynamic workshops at the University of Texas, and Stuart makes his first phonetic decipherment in the depths of a Guatemala jungle cave.

Knorosov's phonetic approach now has many followers. But the "flood" of decipherment that Thompson had predicted would occur with a true phonetic system has not yet come.

THE NAMES OF THINGS (pp. 69-74) In the early 1980s, Mathews and Stuart discover that many ancient Maya objects are "tagged" with the name of the object and the name of its owner, using the possessive syllable *u*. Then Stuart makes the critical discovery that this same syllable *u* is represented by many glyphic signs, all identical in meaning. This same redundancy is quickly discovered for other syllables, collapsing the complexity of the script and producing the long-delayed "flood" of decipherment. Armed with new readings, scholars are able at last to

decipher the rim text on Maya vases. It turns out to be not a funerary chant but an elaborate example of name tagging, stating the type and use of the vessel, the name of its owner and sometimes the name of its artist. Because this text appears in hundreds of variations, its reading is a key to further decipherment.

OF SCRIBES AND KINGS (pp. 74-82) Through the unearthing of a probable scribal “palace” at Copan in Honduras, together with the decipherment of glyphs for scribal roles and activities and the interpretation of scribal images on Maya vases, the central role of scribes in ancient Maya culture begins to emerge.

In 1986, Schele and Stuart join the major archeological project underway at Copan. Armed with his new understanding of “name tagging”, Stuart discovers that many objects and architectural features of Copan are named in their inscriptions: incense burners, thrones, stelae, stairways, and temples. The Maya city is in fact a sacred landscape of symbolic temple-mountains, mirroring the larger landscape that surrounds it.

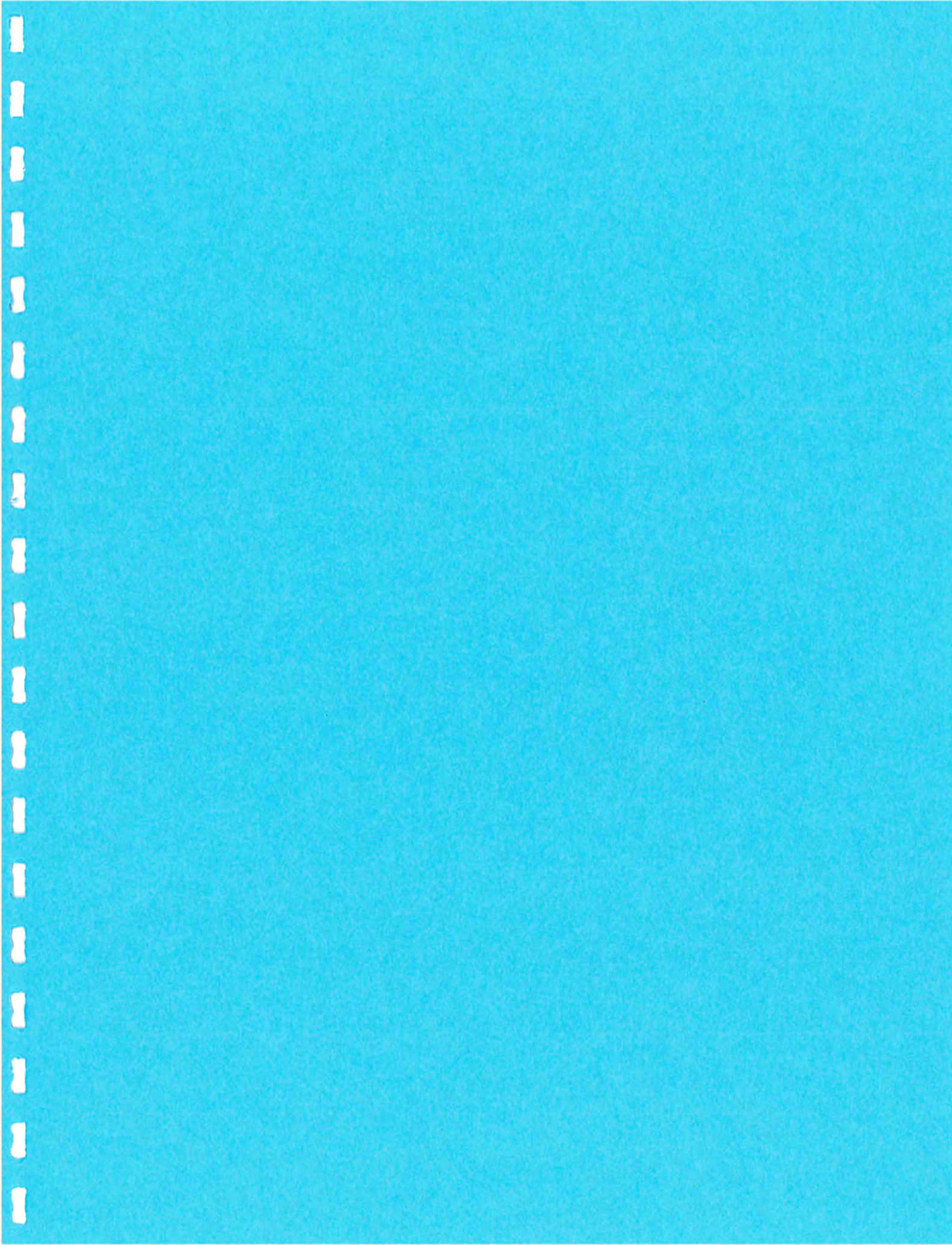
Stuart and Schele also work with archaeologists to understand the city’s history. An altar surrounded by sixteen figures, long thought to portray a “congress of astronomers”, turns out to represent the sixteen kings of Copan’s dynasty. The founder, named in the text as K’inich Yax Kuk Mo’ or “sun-eyed blue-green quetzal-macaw”, hands a scepter symbolically to his final successor, Yax Pasaj. There is at the time no archeological evidence for the existence of such a founder. But evidence of his existence is gradually revealed, and in 1995 the tombs of Yax Kuk Mo’ and his queen are discovered, within a spectacular buried temple emblazoned with a huge full-color glyph of the sun-eyed, blue-green quetzal-macaw.

BRINGING IT ALL BACK HOME (pp. 82-93) The long-held model of ancient Maya political structure was of a region of more or less equal city-states. But this picture is transformed in the early 1990’s by the decipherment of a series of verbs involving warfare and political relationships. It turns out that Classic Maya political history was a protracted struggle between two “superpowers”, Tikal and Calakmul, each acting through their smaller client states and surrogates. By the tenth century, this struggle led to political exhaustion, and the Maya states disintegrated.

But the Maya themselves remain, planting corn and worshipping the old gods of earth and sun, moon and rain. And as the close links between ancient and modern Maya culture and language become clearer, scholars turn more and more to the modern Maya for clues to the understanding of their ancestors. The words of a shaman in eastern Yucatan help Nikolai Grube decipher a key glyph as the word *way*, meaning shamanic transformation into an animal form. The extraordinary parallels between the scenes in ancient Maya art and a traditional Maya dance-drama still performed in the highland Guatemala village of Rabinal help illuminate the meaning of another glyph as *ahk’ot*, or dance.

Finally, through the decipherment, scholars are able to give a gift of knowledge back to the Maya themselves, long divorced from their historical past by deliberate and unrelenting colonial policies. Hieroglyphic workshops for groups of adult Maya began at their request in the 1980s, and became a crucial component in a recent resurgence of Maya cultural pride. Now Maya teachers are teaching the meaning of glyphs to Maya schoolchildren, and Maya parents are naming their babies after ancient Maya kings.

Today, 60 to 90 percent of the glyphs are deciphered, and whole texts can now be read as literature, as poetry and as history. With new discoveries, our understanding will be refined. But the ancient glyphs, silent for so long, have begun to speak again.



BREAKING THE MAYA CODE PART I: THE WORD MADE VISIBLE

EXT. MALL, WASHINGTON D.C., DAY
A SNOWSTORM IN WHAT APPEARS TO
BE A DESERTED RURAL WILDERNESS OF
BARE TREES AND HOWLING WIND.
VISIBILITY IS POOR.

AS THE CAMERA EXPLORES WE BEGIN
TO GLIMPSE FAMILIAR MONUMENTS IN
THE DISTANCE: A SPIRE, A DOME. WE
ARE ON THE MALL, IN THE CENTER OF
WASHINGTON DC.

WE SEE A SERIES OF MONUMENTS AND
BUILDINGS WITH STONE INSCRIPTIONS,
ON AND NEAR THE MALL.

EXTERIOR: THE LINCOLN MEMORIAL.

INTERIOR, LINCOLN MEMORIAL: A
FRAGMENT OF THE GETTYSBURG
ADDRESS.

THE VIETNAM MEMORIAL, STRETCHING
INTO THE FOG AND SNOW.

EXT. MAYA SITE, DEEP JUNGLE, DAY
GLIMPSES OF A DESERTED AND
CRUMBLING MAYA CITY, TANGLED IN
JUNGLE GROWTH.

PANELS WITH STONE INSCRIPTIONS IN
HIEROGLYPHIC TEXT.

NARRATOR: Imagine that visitors from another
world arrive to find our cities mysteriously deserted.
Our books have been destroyed in some terrible
calamity, metal has rusted away, plastic decomposed.
All that remains to speak for us is the written record
we have left in stone.

The visitors cannot read our mysterious script, though
they suspect that what they see is writing.

If they could decipher it, what would they find? The
names of monuments and buildings... the dates of
births and deaths, of battles and of treaties...

...the deeds of leaders and of generals...

...statements of our founding myths and deep beliefs.

What would they make of us? Would they be able to
piece together an image of who we are?

Over the past two hundred years, dozens of cities filled
with stone inscriptions have emerged from the jungles
of southern Mexico and Central America.

In utter isolation from Europe and Asia, the ancient
Maya created one of humanity's great civilizations,
with stunning achievements in mathematics,
astronomy and art.

They wrote in a hieroglyphic script that is one of the
most complex, and certainly one of the most beautiful,
ever invented by man.

A CARVED STONE STELA PORTRAYING
A WARRIOR KING STANDING
TRIUMPHANT OVER HIS CAPTIVE, WITH
HIEROGLYPHIC TEXT.

CRUMBLING WALLS; CARVED STONE
WRAPPED AND CRACKED BY VINES.

ARCHIVAL FOOTAGE

DENSE TREES IN ROARING FLAME.
YUCATEC MAYA MEN ARE BURNING A
FIELD TO MAKE MILPA (PLANT CORN).

A MAYA DIGGING STICK TAPS THE
EARTH. A MAN AND HIS SONS ARE
PLANTING CORN IN SCORCHED, ROCKY
GROUND.

A HIGHLAND MAYA TOWN ON A FESTIVAL DAY

STEEP MOUNTAINS IN THE DISTANCE.
A PROCESSION MOVES THROUGH THE
COUNTRYSIDE. STRANGE COSTUMES,
BANNERS, MASKS.

ARCHIVAL GRAPHICS AND PHOTOS
FREDERICK CATHERWOOD COLORED
ENGRAVING, CIRCA 1850, OF A STONE
INSCRIPTION IN DEEP JUNGLE.

LATE NINETEENTH CENTURY
PHOTOGRAPHS OF PEOPLE STARING AT
STONE INSCRIPTIONS.

ARCHAEOLOGISTS AND EPIGRAPHERS
COLLABORATING
CROUCHING SCHOLARS CLEAR EARTH,
SHINE FLASHLIGHTS ON GLYPHS.

These texts were carved by ancient Maya scribes a few centuries after the time of Christ. Their meaning has been shrouded for centuries in mystery and speculation.

But as we are only now beginning to realize, the ancient Maya in fact recorded on their public monuments much what we have put on ours: ...records of the birth and death of kings, of alliances and battles; of ceremonies, myths and deep beliefs.

The Maya eventually abandoned their jungle cities. Stone walls were overcome by jungle growth; carved wood and plaster, painted paper and woven cloth rotted away in humid heat. But the Maya themselves didn't disappear.

There are some six million Maya today, speaking some thirty distinct Mayan languages. They live in a territory that spreads from the pine-covered highlands of Guatemala to the limestone lowlands of Yucatán.

The modern Maya still revere the written word. Scribes in remote villages still carefully guard their histories and genealogies, their plays and sacred texts. But they no longer write on public monuments and the walls of buildings. They have learned from bitter experience to keep their writings hidden.

When Spanish invaders arrived here in the sixteenth century, they suppressed the Maya script so thoroughly that by the eighteenth century, when Europeans rediscovered these inscriptions, neither the Maya nor anyone else on earth could read them.

For the past two hundred years, scholars have struggled to decipher these signs and to read the messages the ancient scribes had labored, with such effort and such art, to set in stone. They have been hampered by prejudice and wishful thinking, by preconceptions of the Maya and their culture and by misunderstandings of the very nature of writing.

Now, at last, a unique collaboration of archaeologists and artists, linguists and astronomers, amateurs and experts, is succeeding in breaking the code. And what do the texts reveal?

FLASHLIGHT BEAM PLAYS OVER
DETAIL OF CARVED GLYPHS.

The ancient Maya turn out to have much in common
with the modern Maya.

BIG CLOSE-UP OF FLASHLIGHT BEAM ON
A SINGLE GLYPH: A MAYA HEAD.

And, ultimately, they bear an uncanny resemblance to
– ourselves.

MAIN TITLE GRAPHIC OR ANIMATION:
“**BREAKING THE MAYA CODE**” AFTER A PAUSE,
ADD SUBTITLE: “**PART ONE: THE WORD MADE
VISIBLE**”

EXT. COE FARM, THE BERKSHIRES, DAY
A CAR PULLS UP A FORESTED DIRT
ROAD AND EMERGES INTO OPEN SPACE:
A 19TH CENTURY FARMHOUSE AMONG
ROLLING FIELDS AND DISTANT
MOUNTAINS.

MICHAEL COE PARKS AND WALKS PAST
FARMHOUSE TO A SMALL WOODEN
OUTBUILDING.

NARRATOR: Michael Coe has spent much of his
career studying Maya writing, and has made important
contributions to its decipherment. But he does not
consider himself primarily an epigrapher, a person who
studies writing.

INT. COE'S FARM OFFICE, DAY
COE SITS DOWN AND GOES TO WORK,
AMID BOOKS AND DRAWINGS OF MAYA
AND OLMEC MONUMENTS, A
COMPUTER, SCANNER AND OTHER
EQUIPMENT.

He began his career as an archeologist, studying the
origin of civilization in that region between northern
Mexico and Nicaragua that archeologists call
Mesoamerica. In the 1960s he was excavating the
ruins of the civilization that preceded the Maya in
Southern Mexico—the Olmec.

EXT. LA VENTA PARK, VILLAHERMOSA
HUGE OLMEC SCULPTURES IN A JUNGLE
SETTING.

MICHAEL COE (VOICE OVER): The Olmec had a
sophisticated system of visual communication, a rich
language of religious symbols.

MICHAEL COE INTERVIEW, HEATH
FARM OFFICE, DAY

MICHAEL COE (ON CAMERA): But writing does
more than this. Writing is speech put in visible form,
in such a way that any reader instructed in its
conventions can reconstruct the vocal message.

MONTAGE: A SERIES OF INCISED JADES
JADE WITH INCISED HUMAN FIGURE.

NARRATOR: Mesoamerican writing may have
developed out of condensed visual codes like those of
the Olmec.

JADE WITH INCISED HEAD, HANDS AND
BODY ORNAMENTS, ARRANGED TO
SUGGEST A FIGURE.

On these carved jades, we see irrelevant parts of the
human figure drop away until we are left with only the
parts that carry coded meaning: the head, the hand
gestures, the insignia.

JADE WITH SIMILAR INCISED SYMBOLS,
ARRANGED IN A ROW.

MICHAEL COE INTERVIEW

LA VENTA MONUMENT 13

NEXT TO FIGURE IS A FOOTPRINT
SYMBOL AND A SINGLE COLUMN OF
THREE WORN GLYPHS.

3-D TOPOGRAPHIC MAP OF SOUTHERN
MESOAMERICA.

OLMEC AND MAYA REGIONS AND KEY
SITES ARE LABELED.

HIGHLIGHT MONTE ALBAN SITE
SYMBOL.

OVERLAY DETAIL OF DANZANTE
FIGURE AND INSCRIPTION. FADE OUT
OVERLAY.

HIGHLIGHT LA MOJARRA SITE SYMBOL.
OVERLAY DETAIL OF LA MOJARRA
STELA. FADE OUT OVERLAY.

HIGHLIGHT KAMINALJUYU SITE
SYMBOL. OVERLAY DETAIL OF
KAMINALJUYU STELA 10 INSCRIPTION.
FADE OUT OVERLAY.

SLOW MOVE IN TO CENTRAL LOWLAND
JUNGLE REGION. A CLUSTER OF "MAYA
CITY" SYMBOLS APPEAR ONE BY ONE.

INT. BLACK (LIMBO SPACE)

THE DUMBARTON OAKS PECTORAL,
HELD IN TWO HANDS. CARVED ON IT IS
THE FACE OF AN OLMEC DEITY.

HAND TURNS OVER THE PECTORAL TO
REVEAL MAYA TEXT AND THE FIGURE
OF A MAYA RULER.

BIG CLOSE-UP OF THE TWO COLUMNS
OF SIMPLE GLYPHS.

It is easy to imagine how such symbols might evolve
into signs for specific words.

MICHAEL COE: We have only one clue that writing
ever evolved among the Olmec.

Next to a carved figure of a walking man is a single
column of glyphs, literally "carved symbols", that may
state his name, and a footprint that may signify travel.

NARRATOR: But after 500 BC, in the aftermath of
Olmec civilization, several early scripts developed in
Southern Mesoamerica:

To the North, at the Zapotec site of Monte Alban...

...the earliest known writing accompanies the figures
of captives.

In the Isthmus of Tehuantepec another script
developed, known only from a handful of small objects
and a single long inscription.

And at scattered sites on the Pacific coast and in the
Maya highlands, fragments of text have been found
that seem to be ancestors of the Maya script.

Between the dry flatlands of Yucatán in the north and
the forested highlands of the south is a lowland region
of dense, tropical jungle: the Petén. It was here that
Maya culture and writing grew and flourished.

This Olmec carving...

...was re-used, perhaps as early as the first century
BC, to record the accession of a Maya king.

The glyphs are crude. But they are already arranged in
the paired columns that will be the standard
arrangement of classic Maya texts.

MONTAGE: A SERIES OF MAYA
INSCRIPTIONS, OF INCREASING
COMPLEXITY.

During the third to the ninth centuries of the Christian era— what scholars call the Maya Classic Period— scribes developed this script into a sophisticated art form. The simple glyphs became more complex. Scribes developed distinctive styles, and vied with one another for elegance of expression.

MONTAGE: INSCRIPTIONS IN VARIOUS
MEDIA

The Maya carved messages on stone... bone... jade... stucco... wood... They painted texts on walls... on pottery... and in thousands of bark-paper books.

REPRISE 3-D TOPOGRAPHIC MAP OF
MAYA REGION
IN CENTRAL LOWLAND JUNGLE REGION,
“MAYA CITY” SYMBOLS FADE AWAY
ONE BY ONE.

Starting in the ninth century, the creation of stone monuments dwindled away as the cities of the central lowlands were deserted.

TRUCK NORTH ON MAP TO YUCATAN
PENINSULA.

But the scribal arts, the recording of history and the transmission of knowledge through writing, continued to flourish in the cities of the Yucatán Peninsula. Then, in the early sixteenth century, visitors arrived from another world.

FADE OUT. FADE IN SECTION TITLE OVER BLACK:
“**THE PERSISTENCE OF THE SCRIBES**”. FADE OUT.
FADE IN:

STORM OFF THE COAST OF YUCATÁN,
DAY

LIGHTNING, WILD SEA, WAVES ON
ROCKY SHORE.

NARRATOR: Hernan Cortez sailed from Cuba in February, 1519, on his way to the conquest of central Mexico. But he was blown off course by a great storm.

SEA OFF COZUMEL ISLAND, DAY
DISTANT VIEW OF COASTAL MAYA
TEMPLE ON A ROCKY SHORE.

A contemporary chronicler describes what happened next, in a letter addressed to the Pope:

CLOSER VIEW OF TEMPLE FROM THE
SEA.

PETER MARTYR VOICE: “A sudden and violent storm drove them out of their course to the island of Cozumel, off the Eastern coast of Yucatán.

INT. HOUSE, COZUMEL ISLAND, DAY
A POLE AND THATCH MAYA HOUSE.
INSIDE IT IS DARK; BRIGHT SUNLIGHT
FILTERS THROUGH THE THATCH.

“The islanders, seized with terror, abandoned their towns and fled into the depths of the forests, and the Spaniards took possession of their empty houses and ate the supplies they contained.

A FIRE IS STILL BURNING. A HAMMOCK
IS SWAYING IN THE WIND.

“They found a number of ornaments, tapestries, clothing, and beds of native cotton called hammocks.

PAN DOWN. HANDS OPEN A MAYA
CODEX.

“They even discovered, Most Holy Father, innumerable books.” —Peter Martyr, historian and secretary of the Council of the Indies, 1520.

EUROPEAN ARCHIVAL GRAPHICS
CORTEZ' FLEET AT SEA, SOLDIERS
LANDING, CONQUEST OF TOWNS.

MAYA CODEX MONTAGE
BIG CLOSE-UPS OF SCRIPT DETAILS.

SCENES ACCOMPANYING THE TEXT IN
THE DRESDEN, MADRID AND PARIS
CODICES.

EXT. DRESDEN STATE LIBRARY, DAY
ESTABLISHING SHOT.

INT. DRESDEN STATE LIBRARY, DAY
THE DRESDEN CODEX IS DISPLAYED
UNFOLDED, IN A LONG CASE.

CLOSE-UP TRACKING SHOT OF CODEX
IN CASE.

EXT. FLATLANDS OF YUCATÁN, DAY
ESTABLISHING SHOT.

EXT. PLAZA MAYOR, MÉRIDA, DAY
MONTEJO PALACE FAÇADE: C.U.
ARMORED CONQUISTADOR STATUE.
PAN DOWN TO SCREAMING MAYA
HEADS UNDER ITS BOOTS.

MONTEJO PALACE FAÇADE, WIDE. PAN
TO REVEAL BUSTLING PLAZA MAYOR.

CODEX TEPETLAOZTOC
SCENES OF SPANISH LORDS
NEGOTIATING WITH NATIVE LORDS.

NARRATOR: Cortez and his fleet continued north, and began their assault on the Aztec Empire of central Mexico. Five months after their visit to Cozumel they divided up the spoils of the ongoing conquest and sent one fifth of the treasure, as required by their charter, to the king of Spain.

Included, almost as an afterthought, were "several books of painted figures." Peter Martyr saw and described them in Seville. They may have come from Cozumel Island.

PETER MARTYR VOICE: "The characters are very different from ours: dice, hooks, loops, strips and other figures, written in a line as we do; they greatly resemble Egyptian forms.

"Between the lines are marked out figures of men and animals, principally of kings and magnates, by which one can believe that there are written within the deeds of each king's ancestors." —Peter Martyr

NARRATOR: One of those screen-fold books ended up in the Royal Library, now the State Library, of Dresden, Germany.

It was damaged in the World War II fire-bombing of the city by the Allies, but miraculously survived.

Another Maya book found its way to Madrid. A third is in Paris. A fourth was discovered in Mexico in the 1960s. Of all the rest of the "innumerable books" of the Maya, not one is known to have survived the destruction that was to come.

After the conquest of the Aztecs, Cortez and his lieutenants turned again to the flatlands of Yucatán.

Their first expedition was driven out. But when the Spaniards returned in 1540, the Maya had been decimated by smallpox and civil war.

Despite fierce resistance, Francisco Montejo established a Spanish capital here in 1542, on the site of the ancient Maya city of Tiho. He called it Mérida.

The local Maya lords, the lineages of the Xiu and the Pech; the Canul and Canche, made accommodations with the invaders.

CODEX AXCATITLAN
SCENES OF FRIARS BAPTIZING INDIANS

They accepted baptism and Spanish names, and agreed to supply tribute and labor to the foreigners. But most had no intention of giving up their ancient customs and beliefs.

VARIOUS MEXICAN CODICES
SCENES OF FRIARS AND NATIVE
STUDENTS.

Franciscan friars established monasteries and compiled Mayan dictionaries and grammars. There were soon more than two thousand boys in the Mérida school, selected from the sons of the Maya nobility. As they sang in choir and learned the elements of Christian faith, they also learned to read and write their own Mayan language in the European script.

The friars were preparing these boys to return to their towns as Christian schoolmasters. But the children of Maya lords had always been trained as scholars and scribes. By teaching them the European script, the friars were unwittingly putting into their hands a powerful tool for the preservation of Maya culture, and even a weapon against the conquerors.

EXT. MONASTERY, IZAMAL, DAY
ESTABLISHING SHOTS.

In 1549 a monastery was built at Izamal, on top of an ancient Maya platform. This theater for Christian conversion, with its vast outdoor spaces, was designed and built by a young friar just arrived from Spain named Diego de Landa.

MICHAEL COE INTERVIEW

MICHAEL COE: Landa was an ambitious and charismatic preacher. He became fluent in Yucatec Mayan and then spent years traveling through the region by himself, sometimes converting whole villages with his rhetoric. In 1561 he was back at Izamal as *Provincial*, or head of the Franciscan order in the peninsula.

INT. MONASTERY, IZAMAL, DAY
MEDIUM SHOT OF LANDA PORTRAIT.
SLOW ZOOM IN.

Landa was a sympathetic and acute student of Maya culture, and wrote an account that is our single best guide to Maya life in the sixteenth century. He also had close friends among the Maya lords.

XIU FAMILY TREE
MOVE UP TREE FROM FOUNDER
FIGURES AT BASE TO GASPAR CHI'S
NAME AT TIP OF A TOP BRANCH.

NARRATOR: One of these friends was a man named Gaspar Antonio Chi. Chi was a member of the Xiu lineage, and about this time he painted his family tree. The names are Mayan, until the current generation.

EXT. MONASTERY, IZAMAL, DAY
COURTYARD OF THE MONASTERY.

One day in 1561, probably in the courtyard at Izamal, Landa and Chi sat together to make a record of the Maya writing system.

CLOSE-UP OF A BROWN HAND, WRITING
THE HIEROGLYPHS OF LANDA'S
"ALPHABET" ON A TABLET.

Landa sounded the letters of the Spanish alphabet one by one, and asked Chi to write the equivalent letters in the Maya script.

EXT. TOWN OF MANÍ, YUCATÁN, DAY
ESTABLISHING SHOTS.

MAYA MEN AND WOMEN PRAYING IN
MANÍ CHURCH.

CODEX TLAXCALA
SCENES OF TORTURE OF INDIANS BY
PRIESTS .

EXT. TOWN OF MANÍ, YUCATÁN, DAY
PLAZA OF MANÍ CHURCH.

CODEX TLAXCALA
SCENE OF A FRIAR BURNING A HUGE
PILE OF IDOLS.

MAYA CODEX FACSIMILE PAGES
DETAILS FROM CODICES SHOWING
PLANTING, ANIMALS, RITUALS, ETC.

CODEX DETAILS BURN.

EXT. YUCATÁN LANDSCAPE, DAY

Chi also gave the names and glyphs for the twenty Maya days and the eighteen Maya months. Landa included all of this in his manuscript on the history and customs of Yucatán.

But this period of scholarly exchange was to end abruptly. In 1562 a friar in the town of Maní discovered that the local people, to insure planting rains and good hunting, were still making offerings to the carved sculptures the Spanish called "idols".

Most shocking to the friars was the discovery that these ceremonies were led by the same young men they had trained as Christian schoolmasters.

Landa came to Maní and commenced an inquisition. The Maya nobles were arrested. Those who admitted making offerings were tortured until they confessed to all the crimes of devil worship the Spanish could imagine.

Before it was over thousands were tortured, and hundreds were killed or crippled in the process.

On the twelfth of July Landa held a public auto-da-fe before the church of Maní. It was his greatest act of public theater. Viewing platforms were prepared, banners were painted. After the open-air mass, after the reading of sentences and the public punishments...

...all the objects of so-called devil-worship were burned in a huge pyre. It is unclear how many books were burned that day. But it is clear that books were burned, on that day and on many others.

JOSÉ DE ACOSTA VOICE: "In the Province of Yucatán there used to exist some books of leaves, in which the learned Indians kept the distribution of their times and the knowledge of plants, animals and ancient customs, in a way of great neatness and carefulness.

It appeared to a teacher of doctrine that all this must be to make witchcraft and magic art, and so those books were burned. Afterwards not only the Indians but many eager-minded Spaniards who desired to know the secrets of that land felt badly." –José de Acosta, Jesuit scholar, 1590.

NARRATOR: But this was not the end of the scribes.

A RURAL YUCATÁN VILLAGE
ESTABLISHING SHOT.

PAGES FROM THE BOOKS OF CHILAM
BALAM

3-D MAP OF THE CENTRAL AND
NORTHERN MAYA REGION
MOVE IN, ARCING EAST AND THEN
SOUTH,

HIGHLIGHT EASTERN YUCATÁN.

HIGHLIGHT THE GUATEMALAN
LOWLANDS.

LABEL NOJPETÉN (TAYASAL), IN THE
CENTRAL GUATEMALAN LOWLANDS.

ARCHIVAL FOOTAGE
HELICOPTER SHOT, GLIDING ACROSS
LAKE PETÉN ITZÁ.

HELICOPTER SHOT CIRCLES THE ISLAND
OF FLORES (TAYASAL).

ARCHIVAL DOCUMENTS
CONTEMPORARY WOODCUTS OF THE
CASTE WAR, BY GABRIEL GAHONA.

SCRIBAL CASTE WAR LETTERS.

They transcribed the now-forbidden glyphs into European script. By the end of the sixteenth century most villages had their sacred writings secreted away in this new form in what are called The Books of Chilam Balam, or "The Books of the Jaguar Prophets."

These books give us an alternative view of the history we have just described. For the Maya, the great event of recent history was not the founding of Mérida but the breakup of the Mayapan confederacy a hundred years before. For the Maya, the Spanish were just one of a series of foreign invaders, one of a list of modern afflictions that also included trees bearing less fruit, people going barefoot and children disrespecting parents.

The hieroglyphic books were disappearing from Yucatán.

But in the sparsely populated east...

...and in the dense jungle of the central lowlands, writing in the ancient script continued throughout the sixteenth and seventeenth centuries.

The last independent Maya kingdom to be conquered by the Spanish was an island fortress deep in the jungle of the Petén.

It was the city of NojPetén, known to history as Tayasal, capital of the Itzá Maya.

The Spaniards stormed Tayasal in 1697, imprisoning its rulers and smashing its temples. There were probably active scribal workshops in the city up to its final days. But after the fall of Tayasal, literacy in the ancient script was lost. No Maya scribe would write a hieroglyphic text for the next three hundred years.

But the scribes themselves lived on, still writing in their own Mayan languages but now in European script. In 1847, Maya peasants and hacienda workers rose up against their oppressors in what is called the Caste War. They came close to taking back all of Yucatán. And Maya scribes were at the heart of the action, writing hundreds of tactical messages between the native Maya officers.

EXT. MOMOSTENANGO, GUATEMALA, DAY

A MAYA DAYKEEPER MAKES OFFERINGS AT A HILLSIDE SHRINE. THE ALTAR IS PILED WITH LAYER AFTER LAYER OF GENTLY CURVED POTTERY DISHES FROM YEARS OF OFFERINGS; THEY LOOK IN FACT LIKE THE LEAVES OF A HUGE BOOK.

FADE OUT. FADE IN SECTION TITLE OVER BLACK:
"WHO SHALL READ THEM?". FADE OUT. FADE IN:

EXT. TONINÁ SITE, CHIAPAS, DAY
 PAN ACROSS GORGEOUS ROLLING COUNTRYSIDE, PASTURE AND HORSES.

PAN REVEALS THE TOWERING ACROPOLIS OF TONINÁ, RISING TIER UPON TIER AGAINST A MOUNTAIN SIDE.

TONINÁ STONE DISKS
 A SEATED RULER, SURROUNDED BY A RING OF GLYPHS. (SEE FIGURE 1)

A SERIES OF DISCS WITH LARGE DAY SIGN CARTOUCHES IN THEIR CENTER, EACH SURROUNDED BY A RING OF GLYPHS.

EXT. TONINÁ SITE, CHIAPAS, LATE P.M.
 VIEW LOOKING DOWN FROM TOP OF ACROPOLIS.

TILT UP TO VIEW OF DISTANT HORIZON.

DENNIS TEDLOCK: In Guatemala the whole notion that one should have a book is... You are out someplace and someone will start to tell you a myth or tale of some kind and they will say, "You know, I have all of this in a book at home." Sometimes the book turns out to be an old catechism, but that's not the point. The point is that all this ought to be written in a book somewhere, and everyone should have a book.

BARBARA TEDLOCK: They call altars where you burn your copal incense...that's a book. It's a metaphor, but—it's where you put everything. In Momostenango we were taken by our teachers to specific altars, that were in their lineage. "We can only burn in those", they said, "nobody else's. In those particular places, the book is being written... words have been going in... this is a book into which we speak our history."

NARRATOR: It was barely a decade after the fall of Tayasal before Europeans began puzzling over the Maya glyphs.

Around 1710 a Dominican friar traveling from Guatemala visited the site of Toniná in what is now the Mexican state of Chiapas. There he saw a number of mysterious carved disks.

ANONYMOUS FRIAR VOICE: "Among these buildings there are also many coats of arms made of very hard stone, having about five hand-spans in diameter, more or less. All about their circumference there is a fringe, and in this fringe many characters of various figures and ciphers, which Father Garrido says are Chaldean letters.

"More than letters they seem to me like ciphers or hieroglyphs, meaning actions and events; because each of these figures is placed in its little house, and each house has too much labor to be a single letter."

NARRATOR: Then silence, for seventy years. Toniná, like the other Maya cities, is swallowed by jungle and forgotten by Europe.

But starting around 1780, a series of expeditions visited the jungle city of Palenque, not far from Toniná.

ARCHIVAL GRAPHICS

PLATES FROM *DESCRIPTION D'EGYPTE*
OF FRENCH SCIENTISTS AND EGYPTIAN
MONUMENTS. A PARTY OF SURVEYORS
CLAMBERS OVER THE SPHINX WITH
LADDERS AND TRANSITS, ETC.

ROSETTA STONE

ESTABLISHING SHOT.

CLOSE-UPS OF EACH TEXT AS NAMED.

MONTAGE: MASTERPIECES OF
EGYPTIAN HIEROGLYPHIC WRITING,
PAINTED ON WOOD AND CARVED IN
STONE

PORTRAIT OF CHAMPOLLIONATLANTIC JOURNAL

COVER OF "THE ATLANTIC JOURNAL
AND FRIEND OF KNOWLEDGE".

RAFINESQUE'S CHART OF THE MAYA
SCRIPT.

PORTRAIT OF RAFINESQUE

MONTAGE OF RAFINESQUE PAMPHLET
COVERS

TITLES INCLUDE "AMERICAN MANUAL
OF MULBERRY TREES", "GENIUS AND
SPIRIT OF THE HEBREW BIBLE", "THE
PULMIST, OR THE ART TO CURE
CONSUMPTION", ETC. RAFINESQUE'S
NAME APPEARS AS AUTHOR ON EACH.

Over the next few years, Europe and America would become fascinated with the mystery of undeciphered scripts. When Napoleon invaded Egypt in 1798, he took with him an army of scientists to study the ancient monuments. The wealth of images they carried back to France stirred a wave of "Egyptomania" and inspired a ten year old provincial boy named Jean-Francois Champollion to begin studying the languages of the Near East.

The greatest find of the expedition was the Rosetta Stone, a carved slab bearing the same inscription in three languages. One was in Greek, which could be read. One was in the Egyptian demotic or popular script. And one was in hieroglyphs.

There had been speculation about Egyptian hieroglyphs since the time of the ancient Greeks, most of it highly fanciful. The Rosetta Stone seemed to be the key Egyptian scholars had been waiting for. But the solution evaded them for twenty-five more years.

Then, in 1824, Champollion presented to an astonished world his "Summary of the Hieroglyphic System of the Ancient Egyptians". His decipherment opened up a whole world of ancient literature and history.

Six years later, in 1832, the first issue of "The Atlantic Journal and Friend of Knowledge" was published in Philadelphia. Among articles on such subjects as "Sulfur in Trees" and "The History of China" was "A First Letter to Mr. Champollion on the Graphic Systems of America, and the Glyphs of Otolum or Palenque".

The author of all these articles, and the editor and publisher of the Atlantic Journal, was a remarkable man named Constantin Samuel Rafinesque-Smaltz. He was born to a French father and a German mother in Turkey. By his own account, possibly exaggerated, by the age of 12 he had read a thousand books and at 16 had studied fifty languages.

RAFINESQUE VOICE: "Versatility of talents and of Professions is not uncommon in America, but those which I have exhibited may appear to exceed belief: and yet it is a positive fact that I have been a Botanist, Geologist, Historian, Poet, Philologist, Economist, Professor, Surveyor, Architect, Engineer, Palmist, Librarian... and I hardly know myself what I may become as yet!"

FRONTISPIECE OF *ANALYSE DE LA NATURE*

RAFINESQUE SURROUNDED BY ANIMALS, BIRDS, SHIPS AT SEA, ETC.

HUMBOLDT'S *YUE DES CORDILLERES* DRESDEN DOUBLE PAGE (FIGURE 7).

DEL RÍO AND CABRERA BOOK
HAND OPENS BOOK TO TITLE PAGE:
"DESCRIPTION OF THE RUINS OF AN ANCIENT CITY".

PLATE SHOWING "VOTAN" IN ELABORATE COSTUME.

BOTH BOOKS
PLATE OF SIX GLYPHS IN DEL RIO AND CABRERA.

PULL BACK TO REVEAL THAT DEL RIO AND CABRERA BOOK IS LYING ON TOP OF MUCH LARGER HUMBOLDT BOOK, OPEN TO DRESDEN DOUBLE PAGE.

HUMBOLDT'S *VUE DES CORDILLERES* DETAIL OF DRESDEN DOUBLE PAGE, WITH MANY MAYA NUMBERS.

BIG CLOSE-UP OF MAYA NUMBER THIRTEEN.

MICHAEL COE INTERVIEW

NARRATOR: When Rafinesque turned his mind to the Maya, what did he have to work with?

In 1810 the scientific explorer Alexander von Humboldt had published five pages of the Dresden Codex in a massive volume about his voyages through Central and South America.

Then, in 1822, Ignacio Armendáriz' Palenque drawings were finally published, with Captain del Río's account of the expedition and an essay by a lawyer named Paul Felix Cabrera...

...who argued that the carvings of Palenque illustrate the voyages of the native king Votan, including his visits to Rome and Spain.

Much of Rafinesque's theorizing was as fanciful as Cabrera's. But even with only the unreliable drawings of Armendáriz to go on ...

...Rafinesque correctly deduced that the carvings from seventh century Palenque and the book from fifteenth century Yucatán were in the same script, and products of the same culture.

He also deduced that the bars and dots in the Maya glyphs were numbers, and that the dots were ones and the bars were fives.

Two bars and three dots, for example, would represent the number thirteen.

MICHAEL COE: He also suggested that the language represented by this script is still spoken by the Maya of Central America, and that knowing this, it will be possible to decipher manuscripts like the Dresden. A lot of scholars would spend the next hundred years denying that the script has any relation to spoken Maya.

I have to take my hat off to Rafinesque. To make any progress on a decipherment you have to have a substantial database of texts, accurately recorded. Champollion had hundreds of superb plates of Egyptian inscriptions that Napoleon's army of scientists made in Egypt. Rafinesque had only two short documents, one of them highly unreliable. And he accomplished a lot.

WALDECK DRAWINGS
SITE OF PALENQUE FROM A DISTANCE.

VIEW OF THE PALACE, OVERGROWN,
WITH FRESH TREE STUMPS IN
FOREGROUND.

A PALENQUE INSCRIPTION.

A PHOENICIAN TEMPLE GUARD ON THE
FAÇADE OF THE TEMPLE OF THE
DWARF, UXMAL.

DETAIL OF PALENQUE INSCRIPTION,
SHOWING TWO ELEPHANT HEADS.
DISSOLVE TO:

PALENQUE SITE
IDENTICAL FRAMING OF ACTUAL
GLYPHS (T.I. CENTER PANEL, H2 TO J3).
THEY BEAR LITTLE RESEMBLANCE TO
ELEPHANTS.

INTERVIEW WITH DAVID STUART
HE IS IN THE MAYA CORPUS PROJECT
WORKROOM AT HARVARD'S PEABODY
MUSEUM, TRACING A DRAWING OF A
MAYA TEXT.

ARCHIVAL GRAPHIC
A BRIG IN THE CARIBBEAN.

CATHERWOOD ENGRAVINGS
RIVERBOAT ENTERING THE RIO DULCE.

COLOR PLATE: PULL BACK FROM SCENE
OF DEEP JUNGLE, TO REVEAL THE HUGE
STONE TORSO AND HEAD OF A MAYA
KING PROTRUDING FROM THE GROUND:

COLOR PLATE: A STELA COVERED WITH
HIEROGLYPHS (STELA F) AGAINST DEEP
JUNGLE. WIDE SHOT.

NARRATOR: As Rafinesque was publishing his
"Letters to Champollion", an eccentric French artist
and self-styled Count named Jean-Frederic Waldeck
was spending a year at Palenque.

He cleared the jungle growth, lived for months in a
temple on the site...

...and labored long and hard over his intricate
drawings.

But Waldeck's work, lovely as it is to look at, was
compromised by an over-active imagination and his
conviction that the Maya cities had been built by
Chaldeans, Phoenicians and Hindus.

His drawings of the glyphs at Palenque even include
Indian elephants among the characters.

DAVID STUART: It's really a story of being visually
confused and sorting through this confusion. It took
decades if not centuries to visually get comfortable
with Maya glyphs.

Aside from the intellectual problems of the
decipherment, and really hand in hand with that, is just
this utter hopelessness in early Maya scholarship with
making visual sense of this writing system!

NARRATOR: In October of 1839, architect and artist
Frederick Catherwood set out to visit the Maya region
in the company of travel writer John Lloyd Stephens.

After six weeks of travel by ship, riverboat and mule,
they arrived at the site of Copán, in what is now
Honduras.

Catherwood came prepared. He had served as
draftsman on an expedition to Egypt, and had done
similar work in Arabia. He brought with him a
scientific drawing aid called the camera lucida that
would project an image through a prism onto a sheet of
paper.

JOHN LLOYD STEPHENS VOICE: "From the
beginning, our great object and effort was to procure
true copies of the originals, adding nothing for effect
as pictures.

COLOR PLATE: CLOSE VIEW OF STELA F
HIEROGLYPHS.

“Even in this there was great difficulty. The designs were very complicated, and so different from anything Mr. Catherwood had ever seen before as to be perfectly unintelligible.

COLOR PLATE: STELA D AND ITS ALTAR.
TILT UP FROM ALTAR TO STELA; CUT IN
TO CLOSE-UP OF STELA.

“I shall not offer any conjecture in regard to the people who built this city, or whether it fell by the sword, or famine, or pestilence. One thing I believe, that its history is graven on its monuments. No Champollion has yet brought to them the energies of his inquiring mind. Who shall read them?” – John Lloyd Stephens, 1839.

STEPHENS AND CATHERWOOD, WITH
EIGHT NATIVE BEARERS AND TWO
MULES, CLIMB A TREACHEROUS
MOUNTAIN PASS SINGLE FILE.

NARRATOR: From Copán Stephens and Catherwood traveled through the highlands of Guatemala into Mexico.

COLOR PLATES: SITES IN CHIAPAS AND
YUCATÁN.

By the time they left the region in 1842, they had examined forty Maya sites. Their inexpensively printed books were a huge success, and gave a broad public their first look at the ancient Maya.

Unfortunately, scholars for generations to come would pay little attention to Stephens’ clear-sighted conclusion: that the ancestors of the Maya had built these cities, and that the inscriptions contained their history, written in the Maya language.

STEPHENS VOICE: “Unless I am wrong, we have a conclusion far more interesting and wonderful than that of connecting the builders of these cities with the Egyptians or any other peoples. It is the spectacle of a people skilled in architecture, sculpture, and drawing, and, beyond doubt, other more perishable arts, not derived from the old world, but originating and growing up here, without models or masters, having a distinct, separate, independent existence; like the plants and fruits of the soil, indigenous.”

FADE OUT. FADE IN SECTION TITLE OVER BLACK,
“**THE KEY THAT DIDN’T FIT**”. FADE OUT. FADE IN:

ARCHIVAL GRAPHICS
VIEWS OF MEXICO CITY, CIRCA 1850

NARRATOR: In 1848, six years after Stephens and Catherwood returned from Central America, a scholarly French *abbé* named Brasseur de Bourbourg arrived there to start explorations of his own. But Brasseur wasn’t looking for cities; he was looking for books.

MICHAEL COE INTERVIEW

MICHAEL COE: An *abbé* in nineteenth century Europe, had the best of two worlds: on the one hand he was steeped in a kind of sanctity, and on the other he could move freely in the world of the flesh, with all its intellectual and other pleasures. Brasseur, like Franz Liszt, wore his habit very lightly.

PORTRAIT OF BRASSEUR DE BOURBOURG

NARRATOR: Brasseur did have a passionate vocation, but it was for Mesoamerican languages and history. His priestly role gave him access to the libraries and scholars of the Vatican and the collections of Catholic Spain and Central America. And his discoveries were astonishing.

EXT. RABINAL, HIGHLANDS OF GUATEMALA, DAY
ESTABLISHING SHOT FROM ABOVE THE TOWN.

In the Guatemalan provincial town of Rabinal, where he spent some time as a parish priest...

THE PLAZA AND CHURCH OF RABINAL.

...he learned the Quiché Maya language and recovered and transcribed a Pre-Columbian drama called the Rabinal Achi.

EXT. GUATEMALA CITY, DAY
ESTABLISHING SHOT, SAN CARLOS UNIVERSITY ARCADE PATIO.

In the University Library of Guatemala City...

THE POPOL VUH MANUSCRIPT

...he found the only surviving copy of the Popol Vuh, the Quiché Maya epic of creation.

EXT. MADRID, DAY
THE HOME OF JUAN DE TRO Y ORTULANO.

In the private collection of a descendant of Cortez in Madrid...

THE MADRID CODEX ON EXHIBIT

...he found seventy pages of what is now called the Madrid Codex. Rejoined with a shorter fragment, it is the longest of the three Maya books surviving in Europe.

EXT. MADRID, DAY
ACADEMIA REAL DE HISTORIA,
ESTABLISHING SHOT.

But his greatest discovery was made in Madrid's Royal Academy of History.

INT. ACADEMIA REAL DE HISTORIA
SHOT ROAMS THE LIBRARY.

In 1862, while ferreting out materials related to the Americas in the totally uncatalogued library of the Academy...

LANDA MANUSCRIPT.

...Brasseur found the manuscript of Diego de Landa's *Relación de las Cosas de Yucatán*, or "Account of the Things of Yucatán", lost for three hundred years.

CALENDAR PAGES.

“ALPHABET” PAGE (*FIGURE 8*).

BOURBOURG’S PRINTING OF THE
TROANO CODEX (PORTION OF THE
MADRID)

PAGE XXVIII: MOVE IN TO FIGURE OF A
DEITY MAKING AN OFFERING, WITH
INSCRIPTION.

HIGHLIGHT GLYPH ELEMENTS AS
BRASSEUR NAMES THEM, STARTING AT
BOTTOM RIGHT AND PROCEEDING UP
EACH ROW.

HIGHLIGHTING AND SOUND OF
TRANSLATION CONTINUE UNDER
BRASSEUR’S EXPLANATION.

MICHAEL COE INTERVIEW

LANDA MANUSCRIPT
THE ALPHABET PAGE.

It was not Landa’s original sixteenth century manuscript; that has never been found. It was an abridged copy made a hundred years later. But it contained a wealth of information on Maya history and customs.

It included copies of Landa’s drawings of the glyphs for the Maya months and days. With these, a start could be made at reconstructing the Maya calendar.

Even more important, it included the Maya “alphabet” that Landa had transcribed with Gaspar Antonio Chi, on that long ago day in the monastery of Izamal. Here at last was the “Rosetta Stone” that would solve the mystery of the Maya glyphs. Or was it?

When Brasseur published his fragment of the Madrid Codex in 1866, he applied Landa’s key, treating the glyphs as an alphabet. The results were disastrous. He got the reading order upside down. And he interpreted the glyphs in terms of his own increasingly strange ideas about the origins of Maya civilization.

BRASSEUR DE BOURBOURG VOICE,
TRANSLATING: “Founded / Augmented / Water
Ice / Death / Water
That / There / No more movement...”

BRASSEUR DE BOURBOURG VOICE,
COMMENTING: “At this point, you will ask what do these inscriptions tell, what is the secret knowledge they convey? Eh! Well, they confirm point by point, with innumerable details, what I have advanced in my last work.... This is the history of the cataclysms which have caused a part of ancient America to submerge.”

MICHAEL COE: Many otherwise sane Americanists have been brought down by their conviction that Maya civilization just had to come from somewhere else. It basically comes out of prejudice, the belief that this sophisticated culture couldn’t possibly have been created by the ancestors of the peasant farmers who live there now. Brasseur’s particular obsession was the myth of Atlantis. According to Brasseur, refugees from Atlantis bearing the arts of civilized life had reached Yucatán and Central America.

NARRATOR: But the problem went beyond Brasseur’s obsession with Atlantis; others tried to apply Landa’s key to the glyphs with no more success. Many finally dismissed the “alphabet” as a hoax.

LARGE PANEL OF GLYPHS
CLOSE-UP OF GLYPHS. PULL BACK TO
REVEAL WHOLE PANEL.

EXT. ROME, DAY
HIGH VIEW OF THE CITY. CHURCH
BELLS ARE RINGING.

WIDE SHOT, PIAZZA DELLA MINERVA.
TRAFFIC; BELLS CONTINUE IN THE
DISTANCE.

SLOW ZOOM IN TO OBELISK AT CENTER
OF PIAZZA.

VIEW OF ELEPHANT.

VIEW OF PEDESTAL AND INSCRIPTION.
SLOW MOVE IN TO CLOSE-UP OF
INSCRIPTION.

PAN UP TO CLOSE-UP OF HIEROGLYPHS.

MICHAEL COE INTERVIEW

DETAILS OF FALCON, CROCODILE AND
EYE, AS THEY ARE MENTIONED.

TITLE PAGE OF "DE SYMBOLICA
AEGYPTORIUM SAPIENTA"
TILT UP. TWO OBELISKS; BETWEEN
THEM ARE ALCHEMICAL SYMBOLS:
SUN, MOON, FOUNTAIN, A LAMB WITH A
CROSS, A CROCODILE, ETC. AT TOP OF
IMAGE ARE MOUNTAIN PEAKS AND
WIND GODS.

For the next century, most respected scholars working with the Maya glyphs rejected Landa's key – and fundamentally misunderstood the Maya script.

To understand why, we must step back for a look at the history of decipherment, and at the very nature of the written word.

In the Piazza Minerva in Rome there is a curious and charming monument. The obelisk is Egyptian.

The elephant that supports it was designed by Bernini.

On the pedestal is a Latin inscription, which explains that it represents an example of how "strength of mind should support the weight of wisdom."

MICHAEL COE: But in the mid seventeenth century, when this monument was erected on the order of the Pope, there was not one person in the world who could actually read the strange signs carved on the obelisk. Why was it assumed that they dealt with "wisdom"?

The assumption goes back to classical antiquity. The ancient Greeks couldn't *read* Egyptian characters, but they nevertheless called them "hieroglyphs" meaning "sacred writing".

NARRATOR: According to Diodorus Siculus, the Egyptian script was metaphorical. A picture of a falcon stood for "anything that happens suddenly..." a crocodile meant "evil"... and an eye symbolized "guardian of justice".

Plotinus also believed the Egyptian script expressed thoughts directly, without the intervention of letters, words, and sentences. "Each separate sign is in itself a piece of wisdom", he said, "a piece of reality, immediately present." Here was truly ideographic or "idea" writing, thought in visual form.

PORTRAIT PHOTO OF MAUDSLAY IN
SUIT AND TIE.

TALL, LEANING STELAE.

A PROCESSION OF MAYA LABORERS
WITH BACKPACKS.

ARCHIVAL GRAPHIC

A 19TH CENTURY PHOTOGRAPHER IN
THE FIELD, HIS HEAD UNDER A CLOTH
BEHIND A HUGE CAMERA. A BOY
WAITS WITH THE NEXT PLATE.

PAN TO A TENT FILLED WITH
CHEMICALS AND DEVELOPING TRAYS.

MAUDSLAY PHOTOGRAPHS

MAUDSLAY STILLS OF PALENQUE,
COPAN, AND TIKAL.

MAUDSLAY WRITING AT A PORTABLE
DESK INSIDE A NARROW VAULTED
STONE CHAMBER.

TEMPLES SURROUNDED BY FELLED
TREES.

STILLS OF INSCRIPTIONS.

A MAUDSLAY PACK TRAIN LEAVING A
SITE. MEN AND MULES ARE BURDENED
WITH HUGE, WEIRDLY SHAPED
PACKAGES.

INT. BRITISH MUSEUM KENSINGTON
ANNEX

MOLD OF FOUR GLYPHS FROM COPÁN
STELA A (A3-B4). DISSOLVE TO:

HUNTER DRAWING

SAME FOUR GLYPHS. DISSOLVE TO:

In fragile health, he had come for the climate.

But when he saw the huge stelae of Quiriguá, he was
so struck by their beauty that he resolved to devote
himself to documenting the Maya ruins and
inscriptions.

He returned prepared to make papier-mâché molds,
plaster casts, and images in the new medium of
photography.

Expedition photographers in the 1880s had to work
with enormous dry plate cameras...

...and generally developed their negatives in the field.
The process was arduous. But the results could be
stunning.

Maudslay spent the next eight years documenting sites
all over the Maya region.

He lived in the ruins, and used his quarters as a
darkroom.

At each site trees and brush were cleared.

Then Maudslay and his collaborators made
photographs and molds of every carving, every
inscription that could be found.

Transporting the thousands of plaster and paper molds
out of the jungle was even more difficult than bringing
the materials in. They were delicate, awkwardly
shaped, and as large as five feet square.

But they all made it back to the British Museum....

...where detailed drawings were made from the molds
and photographs.

ARCHIVAL PHOTOS
PORTRAIT OF JOSEPH GOODMAN.

The answer came from a former newspaperman in San Francisco named Joseph T. Goodman.

VIRGINIA CITY IN THE 1850S.

Before he was twenty-three, Goodman had become owner and editor of the *Territorial Enterprise* of Virginia City, Nevada, site of the Comstock Lode. Goodman gave Mark Twain his first writing job in 1861, and got rich on his gold investments.

PHOTO OF GOODMAN, OLDER.

Later in San Francisco, he turned to Maya studies. He claimed several discoveries that he probably knew Förstemann had made before him. But he wasn't just a frontier braggart.

Goodman's greatest contribution was a correlation between the Maya long count and our own calendar. With a slight correction, it is widely accepted today.

EXT. COBA SITE, DAY
ESTABLISHING SHOT WITH STELA 1.

According to Goodman's correlation, the Maya creation fell on August 13th, 3,114 BC. This remarkable stela at Coba commemorates that date.

SLOW PAN UP DATE ON STELA 1.

The cycle of 400 year *baktuns* that began that day will come to an end in AD 2012, and some have thought that for the Maya that will be the end of the world. But above the *baktun* count, this stela shows higher cycles, each a power of 20 larger than the one before. Six places above the *baktun* is a cycle of 26 billion years, rather more than current estimates of the age of the universe. And there are a dozen more levels of magnitude before we reach the largest cycle.

PAN UP COMES TO A HALT AT LARGEST
CYCLE ON TOP OF STELA.

By the time this largest cycle moves forward by a single digit, our sun will long be cold and the visible stars will have turned to dust.

WIDE SHOT OF STELA 1.

For the Maya, even the life and death of this universe is only a moment in ever larger circles within circles of time.

FACE OUT. FADE IN SECTION TITLE OVER BLACK,
"CLUES IN THE PICTURES". FADE OUT. FADE IN:

INTERWOVEN IMAGES AND TEXTS ON
MAYA CARVINGS.

NARRATOR: Maya images and texts were often interwoven. The writing is filled with pictures; the pictures with glyphic symbols.

MAYA CODICES
SCENES OF IMAGE AND TEXT.

Late nineteenth century scholars searched for clues to the script in the interplay of image and text.

MONTAGE OF GODS.

They noticed that about fifteen distinctive figures occurred again and again in the codices.

DRESDEN 40C: HIGHLIGHT THREE IMAGES OF THE GOD CHAC. THEN HIGHLIGHT IDENTICAL GLYPHS AT A2 IN THE PHRASE ABOVE EACH GOD.

DRESDEN 7B: HIGHLIGHT THE THREE DIFFERENT GODS. THEN HIGHLIGHT THE THREE DIFFERENT GLYPHS AT A2 IN THE PHRASE ABOVE EACH GOD.

CLOSE-UPS OF GODS, AS NAMED.

ORIGINAL GRAPHIC
HEAD GLYPHS FOR THE DEATH GOD,
MAIZE GOD, AND SUN GOD.

MONTAGE: ANIMAL GLYPHS IN CODICES
AND ON MONUMENTS

ARCHIVAL PHOTOGRAPHS
PORTRAIT OF CYRUS THOMAS

PORTRAIT OF SELER.

GROUP PHOTO OF SELER AND
COLLEAGUES.

These figures seemed part human, part supernatural. Scholars call them gods, though we must remember that this is not a Maya category but our own.

When the gods in a series of pictures were the same, in this case the rain god Chac... the third glyph in the phrase above each god was the same.

When the gods varied... the glyphs varied as well. These glyphs clearly named the gods.

There was the death god, shown as a skeleton or a figure with rotting flesh....

...the Maize god, the god of corn, with tassels growing from the tip of his head....

...the sun god, Kinich Ahau, his body marked with the *kin* sign that means sun or day.

Each is represented by a glyph that is a virtual portrait of the god.

In the same way, turn of the century scholars identified the images and glyphs for dozens of insects, reptiles, birds and mammals.

But while they knew what *things* these glyphs stood for, they couldn't read them. Without a Rosetta Stone, they had no way to tie them to the sounds of human speech.

An attempt to break this impasse was made by a former agronomist from the East Tennessee frontier. By the late 1880s, Cyrus Thomas became convinced that much of the Maya writing system was phonetic. But his ideas met formidable opposition.

The towering figure in Pre-Columbian studies in those years was the Prussian scholar Eduard Seler.

Seler was the center and focal point of a brilliant German circle of Americanists, in a tradition that had begun with Förstemann.

MICHAEL COE INTERVIEWLANDA MANUSCRIPT
ALPHABET PAGE.

ORIGINAL GRAPHIC SEQUENCE
FOUR LANDA GLYPHS IN A VERTICAL
ROW, WITH LANDA'S READINGS: "CA",
CU" "B" "L"

ADD QUESTION MARKS, GIVING
"CA" "CU" "B?" "L?"

MADRID CODEX
WIDE VIEW OF PAGE WITH TURKEY
TRAPPING SCENE.

CLOSE-UP OF A TURKEY TRAPPED IN A
SNARE.

TILT UP TO 4 GLYPHS ABOVE THE
PICTURE; HIGHLIGHT CU SYLLABLE.

ORIGINAL GRAPHIC SEQUENCE
SYLLABIC CUTZ GLYPH FROM PREVIOUS
SCENE. CU SIGN IS LABELED. ADD
LABEL TO TZ SIGN, FORMING "CU TZ".

HIGHLIGHT "RIBCAGE" SIGN LABELED
"TZ".

FADE OUT CU SIGN, LEAVING LABELED
TZ SIGN.

FADE IN, AFTER TZ, THE SECOND SIGN
IN THE WORD FOR DOG.

PUT WORD "PEK'" ABOVE GLYPHS.

MICHAEL COE: You would think that Seler himself, with his formidable command of languages, ethnohistory, archaeology, and every known Mesoamerican codex, would have been just the person to decipher the Maya script.

Well, he did identify glyphs for colors and a few other signs. But he was profoundly suspicious of phoneticism. When Cyrus Thomas published his ideas in the American journal *Science*, Seler responded, and there was a battle royal between the two of them over the next two years.

NARRATOR: Thomas began by taking a fresh, hard look at Landa's "alphabet".

Some of Landa's readings were consonant-vowel syllables.

Thomas decided that many of the others probably were as well.

With a Yucatec Mayan dictionary at hand, he began using the pictures in the codices as clues to fill in the blanks.

For example, above a picture of a wild turkey in a snare...

...is a glyph composed of Landa's sign for *cu*, and a second sign.

The word for turkey in Yucatec is *cutz*. So Thomas proposed, quite logically, that the second sign might represent the "tee-zee" sound at the end of *cutz*.

But Seler, who like most German scholars believed that the Landa's signs were really ideographs, had identified this second sign as an ideograph for a headless skeleton or ribcage.

If Thomas was correct, he argued, the ribcage glyph should have the "tee-zee" value in other contexts.

For example, it is the first part of the glyph for dog.

But the word for dog in Yucatec Maya is *pek'*.

CROSS OUT "TZ" BELOW GLYPHS WITH
A SLASHING RED X.

MICHAEL COE INTERVIEW

MADRID CODEX
TURKEY TRAPPING SCENE.

PICTURE OF A DOG.

MOTUL YUCATEC DICTIONARY
WIDE SHOT.

BIG CLOSE-UP OF THE ENTRY FOR *TZUL*.

ORIGINAL GRAPHIC
LABELED GLYPH FOR TURKEY ON LEFT;
LABELED GLYPH FOR DOG ON RIGHT.
THEY SHARE A COMMON VALUE:
"CU TZ TZ UL"

PHOTOGRAPH: VERY OLD CYRUS
THOMAS

MICHAEL COE INTERVIEW

FADE OUT. FADE IN SECTION TITLE OVER BLACK,
"THE ASTRONOMER PRIESTS". FADE OUT. FADE IN:

ARCHIVAL STILL AND FILM OF
CARNEGIE INSTITUTE PROJECTS
YOUNG SYLVANUS MORLEY.

MASSIVE TEMPLE EXCAVATION AT
UAXACTUN.

RECONSTRUCTING THE TEMPLE OF THE
JAGUARS, CHICHÉN ITZÁ.

MORLEY WITH A STELA IN THE JUNGLE.

So, Seler concluded, Thomas' reading must be wrong. He continued in this way, glyph by glyph, disproving Thomas' readings.

MICHAEL COE: How could a Tennessee frontiersman stand up in debate with a walking encyclopedia like Seler? In the face of this onslaught, Thomas finally gave up abjectly.

NARRATOR: Many of Thomas' readings were open to attack. But the irony is that Thomas was right about phoneticism, and he was right about the turkey.

And Seler was wrong about the dog.

What Seler missed was that Yucatec has a second, less common word for dog.

The word is *tzul*.

It's starting syllable *is* the same as the last syllable of *cutz*. If Seler had found this word, he might have become a phoneticist.

MICHAEL COE: By the turn of the century, Thomas concluded that the glyphs were largely numeric and calendrical, and that they "contain little, if anything, relating to the history of the tribes by whom they were made."

A people with writing, but without written history! This is hardly what Stephens had predicted, standing in the ruins of Copán so many years before!

NARRATOR: In 1914 a young enthusiast named Sylvanus Morley persuaded the Carnegie Institution of Washington to fund a massive program of archaeology that would continue through the 1950s.

Morley's early Carnegie projects explored the site of Uaxactun...

...and reconstructed much of Chichén Itzá.

But his great obsession was finding hieroglyphic inscriptions.

ARCHIVAL STILL OR FILM: CHICLEROS
TAPPING TREES

The natives who tapped the jungle trees for chicle often stumbled on Maya ruins...

MORLEY'S "REWARD" POSTER

...so Morley advertised a bounty of twenty-five dollars in gold to any *chiclero* who reported an unknown site with inscribed stones.

MORLEY PHOTOGRAPHS OF
HIEROGLYPHIC INSCRIPTIONS

Morley found and photographed hundreds of previously undocumented inscriptions. He called it "bringing back the epigraphic bacon".

But his interest in hieroglyphs was focussed almost entirely on dates.

A CARVED INSCRIPTION
HIGHLIGHT PORTIONS OF TEXT AS
MENTIONED.

It was not an unreasonable obsession. On stone inscriptions, almost all deciphered hieroglyphs had to do with the Calendar Round... the long count... the cycles of the moon.... and other astronomical and calendric data.

ALL CALENDRIC GLYPHS, ABOUT TWO-THIRDS OF THE TEXT, ARE NOW HIGHLIGHTED.

In many inscriptions, these accounted for more than two-thirds of all the glyphs. The annoying remainder stubbornly resisted analysis.

HIGHLIGHTING OF CALENDRIC PORTION OF TEXT IS REPLACED BY HIGHLIGHTING OF THE REMAINING ONE-THIRD OF THE GLYPHS.

In some of his writings, Morley seems to clearly understand that these undeciphered glyphs were the key to everything, that they must give the names and events that would tell what happened on all those dates.

ARCHIVAL PHOTOGRAPH OF SYLVANUS
MORLEY

But in practice, Morley focussed on what he could understand. His ambition was to recover every possible long count date, and to make sense of them by sorting them in sequence.

A DATED STELA

For over six hundred years starting in the late third century, dated stelae appear all over the Maya region.

HIGHLIGHT BAKTUN ENDING DATE ON A STELA.

Some clearly celebrate calendar festivals, like the end of a *baktun* every 400 years....

HIGHLIGHT A KATUN ENDING DATE.

...or the end of a *katun* every twenty years.

MORE DATED STELAE.

Others mark the date of known astronomical events, like an eclipse, or the first appearance of Venus as morning star.

But many dates simply resisted such interpretation. Could they possibly be the dates of historical events? The suggestion was made, but it was not pursued.

ARCHIVAL PHOTO: YOUNG ERIC THOMPSON

THOMPSON AS A CAMBRIDGE STUDENT.

CARNEGIE PROJECT WORK AT CHICHÉN ITZÁ.

THOMPSON'S BELIZE JUNGLE CAMP.

THOMPSON WITH MAYA VILLAGERS IN BELIZE, CIRCA 1930.

PHOTO OF JACINTO CUNIL.

SMALL CLAY SCULPTURES AND INCISED JADE FIGURES
MAYA MEN SITTING CROSS-LEGGED, IN CONTEMPLATIVE POSTURE.

PROSKOURIAKOFF PAINTING
ARIAL VIEW OF CHICHÉN ITZÁ: A PLAZA WITH TEMPLES, SURROUNDED BY VAST TRACTS OF JUNGLE.

Instead, Maya studies took a different direction, under the influence of an Englishman named John Eric Sydney Thompson. Beginning in the 1920s, Thompson would dominate the field for almost fifty years by sheer force of intellect and personality.

Thompson became captivated by the Maya while studying anthropology at Cambridge. In 1925 he wrote to Sylvanus Morley, asking for a job.

ERIC THOMPSON VOICE: "Although I had studied anthropology at Cambridge, my knowledge of Maya was self-taught. My chief asset, the ability to read and compute Maya dates, was one I knew would appeal to Morley; students of Maya glyphs were as scarce as hen's teeth."

NARRATOR: Morley gave Thompson a job at Chichén Itzá, and put him to work reconstructing ancient buildings.

Thompson later directed digs at various sites in British Honduras.

But he took time off from digging to study the living Maya.

Among his workmen and ethnological informants was a young Socotz Maya named Jacinto Cunil, who was to become Eric's lifelong friend and *compadre*.

MICHAEL COE: The influence of this man on Thompson cannot be overestimated: for Thompson, Jacinto was an exemplar of all the virtues of his ancestors: moderation in all things, honesty, humility, and a profound religious devoutness.

NARRATOR: Because what could be read in Maya texts was focussed on the calendar, Thompson would conclude that the focus of their civilization was time itself. He elaborated a picture of the ancient Maya as a peaceful people ruled by wise astronomer-priests who spent their time studying the movements of the stars.

In Thompson's vision, Maya cities were ceremonial centers inhabited only by the priests and surrounded by jungle; Maya farmers would gather there for festivals celebrating the cycles of time and the stars.

WORLD WAR ONE STILLS
THE FACES OF SHELL-SHOCKED MEN.

A BATTLEFIELD LITTERED WITH
CORPSES.

MICHAEL COE INTERVIEW

A HAND LEAFS THROUGH THE SHEETS
OF THOMPSON'S "GREY CARDS"; ON
EACH CARD IS PASTED IMAGES OF ALL
KNOWN INSTANCES OF A SINGLE
GLYPH, WITH NOTES ADJOINING EACH
PICTURE.

DRESDEN CODEX
IMAGES OF DOGS.

ARCHIVAL PHOTO
ERIC THOMPSON, CIRCA 1950.

Thompson, the son of a London doctor, had fought in the trenches of World War One. The experience of a civilization savagely tearing itself apart may have made him eager to believe in the Maya as a wise and peaceful people. And a war-exhausted world was eager to accept his vision.

ERIC THOMPSON VOICE: "The Maya philosophy is best summarized in the motto 'nothing in excess'. Harmonious living, moderation and the spirit of 'live and let live' characterize Maya civilization." – Eric Thompson

MICHAEL COE: In short, the ancient calendar priests according to Thompson were basically High Church Anglicans like himself!

I don't find it easy to talk about Eric Thompson dispassionately even at this late date. I'm torn between admiration for him as a scholar and a liking for him as a person, and an intense distaste for certain aspects of his work and for the way he treated some of his opponents.

NARRATOR: Thompson would make genuine contributions to the Maya decipherment. He constructed a meticulous classification of the signs, assigning what scholars would for decades call "Thompson Numbers" to over eight hundred glyphs and locating every instance of each glyph in the known inscriptions. But Thompson believed the script was fundamentally ideographic, with each sign representing a cluster of ideas.

ERIC THOMPSON VOICE: "Without a full understanding of the text one can not, for instance, tell whether the presence of a glyph of a dog refers to that animal's role as bringer of fire to mankind or to his duty of leading the dead to the underworld.

"Clearly, our duty is to seek more of those mythological allusions. The solution of the glyphic problem leads us, key in hand, to the threshold of the inner keep of the Maya soul, and bids us enter." – Eric Thompson, 1950

STEVE HOUSTON INTERVIEW

STEVE HOUSTON: When I first got interested in the Maya I was a senior in college. I remember picking up Thompson's "Maya Hieroglyphic Writing", and it just seemed so impenetrable—you're kind of overwhelmed by the erudition and the complexity of argument, which bespoke his brilliance, but at the same time was deeply misleading. Anyone picking up that book would probably draw the conclusion, "Well, this is hopelessly esoteric, and you need to be Eric Thompson in order to figure out what's going on here."

MICHAEL COE INTERVIEW

MICHAEL COE: Thompson made some tremendous discoveries and should be given credit for them. Nevertheless, his role in cracking the Maya script was essentially negative, as stultifying and wrong as Athanasius Kircher's influence on Egyptian studies.

ARCHIVAL PHOTO
BENJAMIN LEE WHORF.

NARRATOR: In 1933, the linguist Benjamin Lee Whorf made a cogent argument that the Maya script was phonetic and represented the sound of spoken Maya. But Whorf was not a Maya specialist; and the specific decipherments he suggested were full of errors. Thompson and his allies picked them apart.

ARCHIVAL FILM
ERIC THOMPSON TENDING THE PLANTS
IN HIS ENGLISH GARDEN.

At mid-century, the situation was essentially unchanged. Thompson's vision of the peaceful Maya and their calendar-priests was almost universally accepted. The glyphs, beyond the calendar, were regarded as a miscellany of notations, not a coherent writing system.

ERIC THOMPSON WORKING IN HIS
OFFICE, EXAMINING DRESDEN CODEX
FACSIMILE AND WRITING.

One prominent Mayanist concluded that the glyphs were an insoluble problem. Who would read them? Apparently—no one.

FADE OUT. FADE IN SECTION TITLE OVER BLACK, "A
WIND FROM THE EAST". FADE OUT. FADE IN:

ARCHIVAL FILM
BERLIN UNDER AERIAL
BOMBARDMENT. BERLIN IN FLAMES.

RUSSIAN TROOPS ENTER THE CITY.

NARRATOR: In May of 1945, the Russian army marched into Berlin. With them was a young artillery spotter named Yuri Valentinovitch Knorosov, who until the war had been at Moscow University, studying the writing systems of Egypt, China and India.

MICHAEL COE INTERVIEW

MICHAEL COE: I visited Knorosov in Leningrad in 1989. The way he told me the story, when his unit reached the center of Berlin the National Library was in flames.

ARCHIVAL STILLS

RUSSIANS IN BERLIN. RAISING OF THE
RUSSIAN FLAG OVER THE REICHSTAG.

ARCHIVAL PHOTOS

KNOROSOV AS A YOUNG MAN.

MOSCOW UNIVERSITY CLASS AND
CAMPUS SCENES, CIRCA 1946.

MICHAEL COE INTERVIEWARCHIVAL PHOTOS

KNOROSOV, CIRCA 1950.

LENINGRAD INSTITUTE OF ETHNOLOGY,
THE FORMER *KUNSTKAMMER* (ART
MUSEUM) OF PETER THE GREAT.

MICHAEL COE INTERVIEWARCHIVAL FOOTAGE

STALIN REVIEWS A MILITARY PARADE;
LOOMING POSTERS OF "UNCLE JOE".

ARCHIVAL STILL

MICHAEL COE AND HIS BRIDE SOPHIE,
CIRCA 1955.

He rushed into the building and was able to rescue a single book: by extraordinary coincidence, it was a reprint of the three Maya codices. He put it in his backpack and brought it home to Moscow.

NARRATOR: According to a somewhat more plausible version of the story, Knorosov's unit found crates in the library, filled with books hastily packed for removal by the Nazis. The Russians sent the crates back to Moscow instead, and when they were unpacked Knorosov found the Maya book.

In any case, after the war Knorosov was back at Moscow University, studying the writing of Japan and China.

MICHAEL COE: His professor was Sergei Tokarev, a specialist in the peoples of Siberia, Eastern Europe, Oceania and the Americas. Marxism at least had the merit of encouraging a comparative approach! One day in 1947 Tokarev asked his brilliant pupil, "If you believe that any writing system produced by humans can be read by humans, why don't you try to crack the Maya system?"

NARRATOR: Knorosov's reply was to learn Spanish and do his doctoral dissertation on Bishop Landa's manuscript.

He took up a research post in Leningrad's Institute of Ethnology, and spent the rest of his life working in a tiny office above the banks of the Neva. In October 1952, he published a paper entitled "Ancient Writing of Central America."

MICHAEL COE: Now, this period was the height of Stalinist repression. Many of the best minds in the universities had been executed or imprisoned. The Soviet Union in 1952 was a most unlikely place and time for a great breakthrough in the Maya decipherment.

NARRATOR: In 1955, when he was a graduate student at Harvard, Michael Coe met and married a Radcliffe anthropology major named Sophie Dobzhansky, the daughter of an exiled Soviet geneticist. That winter they traveled to Yucatán.

EXT. MÉRIDA, DAY
STREET SCENE. PAN TO FAÇADE OF A
LOCAL, SPANISH LANGUAGE BOOK
SHOP.

ARCHIVAL STILLS
MICHAEL COE, CIRCA 1960.

SOPHIE COE, CIRCA 1960.

YURI KNOROSOV, CIRCA 1960, HOLDING
SIAMESE CAT. A NARROW,
INTIMIDATING FACE; WIDE EYES WITH
A HYPNOTIC, PENETRATING STARE.

MADRID CODEX
COSMOGRAM PAGE. HIGHLIGHT
DIRECTION GLYPHS AT CARDINAL
POINTS.

ORIGINAL MORPHING GRAPHIC
GLYPH FOR "WEST", A HAND OVER A 4-
SPOKED *KIN* SIGN, MORPHS THROUGH
SEVERAL VARIANTS.

ADD WORD "COMPLETION" NEXT TO
HAND, THEN ADD WORD "SUN" NEXT TO
KIN SIGN BELOW IT.

ADD "KIN" NEXT TO *KIN* SIGN.

ADD "CHI" NEXT TO HAND.
ADD "CHIKIN" BELOW GLYPH. (SEE
FIGURE 9, FOR THIS AND FOLLOWING
EXAMPLES)

MADRID CODEX
PAGE 40A, CLOSE-UP OF VULTURE AND
TEXT ABOVE IT.

MICHAEL COE: One of my manias is collecting books on Mesoamerica. So while we were in Mérida we went prowling through the bookstores. And we came across a grubby little pamphlet published by the Mexican Communist Party. It was a translation of Knorosov's 1952 article. So I bought it, and read through it several times. And it made incredibly good sense.

NARRATOR: Coe started a correspondence with Knorosov across the Iron Curtain that would continue until they finally met in Leningrad over thirty years later. Sophie Coe translated Knorosov's papers into English, and the Coes were responsible for their American publication.

Knorosov, with his wide knowledge of writing systems, was sure that Maya, like most other scripts, would combine signs for words with sign for sounds. Like Cyrus Thomas before him, he began with the assumption that Landa's "alphabet" was really a syllabary. But he followed through with far more rigor.

For example, nineteenth century scholar Leon de Rosny had identified the glyphs for the four directions, shown here on a diagram in the Madrid Codex.

This is the glyph for "west". The upper sign represents a hand, with thumb and forefinger touching. The four-spoked lower sign was known to be the sign for "day" or "sun".

Eric Thompson, convinced that the glyphs always stood for ideas, had concluded that the upper sign meant "completion" and read the glyph as "completion of sun", or sunset, therefore west.

Knorosov, convinced that the glyphs stood for Maya sounds, suggested that the sun sign should be read as kin, the word for sun in Yucatec Maya...

...and that the hand sign should be read as the syllable *chi*. This would make the combination *chikin*, which is in fact the word for West in Yucatec Maya.

To prove his reading of the hand sign, Knorosov tested it in other contexts. Over a picture of a vulture in the Madrid Codex...

HIGHLIGHT *KU* AND *CHI* SIGNS AS THEY ARE NAMED.

ORIGINAL GRAPHIC SEQUENCE
 “KU” BELOW *KU* SIGN ON LEFT; “CHI”
 BELOW *CHI* SIGN ON RIGHT.

CROSS OUT FINAL “I” WITH A RED SLASH, LEAVING “KU CH”.

NEW GRAPHIC: “TURKEY” GLYPH ON SCREEN LEFT, SYLLABLES LABELED “CU AND “TZ”.

ADD FINAL “U”, MAKING THE SYLLABLE “TZU”.

CROSS OUT “U” WITH RED SLASH.

AT SCREEN RIGHT ADD SYLLABIC “DOG” GLYPH.

ADD “TZU” LABEL TO FIRST SYLLABLE.

ADD “L” UNDER SECOND SYLLABLE, MAKING “TZU L”.

ADD “U” AFTER “L”, MAKING “TZU LU”.

CROSS OUT “U” WITH A RED SLASH.

NEW GRAPHIC: BAR-AND-DOT “ELEVEN” (TWO BARS, ONE DOT).

REPLACE BARS AND DOTS WITH A THREE-SIGN GLYPH. LABEL *LU* AND *CU* SIGNS AS NAMED.

LABEL *BU* SIGN.

CROSS OUT FINAL “U” WITH A RED SLASH, LEAVING “BU LU C”.

...were Landa’s *ku* sign plus the hand sign Knorosov read as *chi*.

In syllabic writing systems, the final vowel of syllable pairs is normally silent...

...so the combination would read *kuch*, which is in fact Yucatec Maya for “vulture”.

Knorosov accepted Cyrus Thomas’ syllabic reading of the “turkey” glyph as *cutz*...

...but identified a key feature of Maya writing: two syllabic signs used to form a word will normally have matching vowels. By this principle, the second syllable should be *tzu*...

...though the final vowel is not pronounced.

As Seler had pointed out, the final sign of the “turkey” glyph...

...was also the first sign of the glyph for “dog”.

Knorosov read this correctly as *tzul*.

According to his principle of matching vowels, the second glyph of *tzul* should stand for the syllable *lu*...

... though here again the final *u* is not pronounced.

In one of the Dresden Codex almanacs, where a bar-and-dot number eleven should be...

...this glyph appears instead. The first sign is obliterated. But the second sign is Knorosov’s *lu*. The last is Landa’s *cu*...

...and the word for eleven in Yucatec Maya is *buluc*.

So the *lu* reading is confirmed.

NEW GRAPHIC: A COLUMN OF GLYPHS,
WITH KNOROSOV'S READINGS.
HIGHLIGHT SHARED SYLLABLES, ONE
SET AT A TIME:

CHI KIN	WEST
KU CHI	VULTURE
CU TZU	TURKEY
TZU LU	DOG
BU LU CU	ELEVEN
CU CHU	BURDEN
CHU CA AH	CAPTURED

ARCHIVAL PHOTO OF ERIC THOMPSON,
CIRCA 1952

MICHAEL COE INTERVIEW
HE IS LOOKING AT A COPY OF
KNOROSOV'S ARTICLE.

ARCHIVAL PHOTOS
ERIC THOMPSON, CIRCA 1960.

ERIC THOMPSON, CIRCA 1973

ORIGINAL GRAPHIC
A SERIES OF PHONETIC SYLLABLES,
EACH LABELED, APPEAR ONE BY ONE
ON SCREEN, AT FIRST RAPIDLY, THEN
MORE SLOWLY, THEN COMING TO A
STOP.

ARCHIVAL PHOTO
PASSENGER SHIP IN A NORTH SEA
WINTER STORM, CIRCA 1915.

Knorosov continued in this way. Many of his readings were interlocked to a degree that made coincidence impossible.

To an open mind, he had clearly established that at least some signs in the script were phonetic.

But Eric Thompson did not have an open mind about phoneticism in the Maya script.

MICHAEL COE: It certainly didn't help that this was coming out of Soviet Russia, with a preface by the Russian editor stating that Knorosov's Marxist-Leninist methodology had solved a problem which had defeated bourgeois scholars. That certainly didn't sit well with an anti-Communist conservative like Thompson!

NARRATOR: Thompson went on the counterattack. Some of Knorosov's specific readings were questionable or downright wrong, and, as he had with Benjamin Whorf, Thompson leapt on these to discredit Knorosov's whole method.

Until his death in 1975, shortly after being knighted by the Queen of England, Thompson would continue to treat Knorosov's work with contempt as crackpot Stalinist science.

His most serious criticism was that with a true phonetic writing system, each successful reading should lead to more, to a flood of decipherment. But after Knorosov's initial success there followed only a trickle of new readings. In fact there was one more missing key to the phonetic glyphs, and it would not be found until the 1980s.

Meanwhile, the study of the Maya script would be transformed. The revolution did, in fact, come from Russia. But it came in the form of a child.

FADE OUT. FADE IN SECTION TITLE OVER BLACK,
"THE REVOLUTION". FADE OUT. FADE IN:

ARCHIVAL PHOTOS

A PHILADELPHIA ROW HOUSE PORCH, CIRCA 1917. A MOTHER WATCHES HER ELDEST DAUGHTER WATER THE LAWN BELOW. THE YOUNGEST DAUGHTER, WATCHING INTENTLY, IS TANIA.

PORTRAIT PHOTO OF TANIA, CIRCA 1924.

PHILADELPHIA STREET, CIRCA 1930. UNEMPLOYED PEOPLE HUDDLE IN THE COLD.

FAÇADE OF THE UNIVERSITY MUSEUM, CIRCA 1930.

PHOTO OF LINTON SATTERTHWAITE, SMOKING A PIPE.

PIEDRAS NEGRAS PROJECT
PHOTOGRAPHS AND DRAWINGS
PHOTO: THE ARCHAEOLOGISTS' ENCAMPMENT BY THE RIVER.

PHOTO: TANIA DIRECTING WORK IN AN EXCAVATED STRUCTURE.

TANIA'S PIEDRAS NEGRAS WORKING DRAWINGS, FILLED WITH OVERLAPPING PERSPECTIVE LINES.

PHOTO: STRUCTURE K-5 UNDER RECONSTRUCTION. A HUGE MASK EMERGES FROM THE SIDE OF A DIRT MOUND.

PROSKOURIAKOFF PAINTINGS
PIEDRAS NEGRAS STRUCTURE K-5. MASKS FLANK THE CENTRAL STAIR. FIRES ARE BURNING IN THATCHED HOUSES; PEOPLE MOVE ABOUT.

NARRATOR: Tatiana Proskouriakoff was born in Tsarist Siberia in 1909. But her family came to America six years later, only a year before the Russian Revolution. Tania and her sister were raised in Philadelphia.

Tania, already remarkable as a child, studied architecture at Pennsylvania State University.

But when she graduated in 1930, the country had just entered the Great Depression, and jobs in her new profession were almost non-existent.

She worked for a while in a Philadelphia department store, then out of boredom began making drawings at very low pay for a curator in the University Museum.

Her drawings attracted the attention of Linton Satterthwaite, who had just become director of a massive archaeological project in Guatemala. He couldn't offer her a salary, but he invited her to join the expedition.

Piedras Negras, deep in the Petén jungle on the banks of the Usumacinta River, was one of the great cities of the Ancient Maya. Proskouriakoff's job was to produce architectural restoration drawings of what the buildings might have looked like when the city was flourishing.

But over the five years she worked at Piedras Negras, she found herself deeply involved in the physical reconstruction of the site.

She was an expert surveyor and strong spatial thinker, using her careful measurements to slowly build up a three dimensional model of the city.

Her reconstruction drawings and paintings...

...were not just architecturally precise. They brought the ancient Maya city to life.

AERIAL VIEW OF THE PIEDRAS NEGRAS ACROPOLIS: A COMPLEX, MULTI-LAYERED SERIES OF STRUCTURES. THE RIVER WINDS TOWARD THE HORIZON.

GROUP PHOTO OF CARNEGIE STAFF

PROSKOURIAKOFF PAINTINGS
VIEWS OF COPÁN.

HER AERIAL VIEW OF UAXACTUN: A CLUSTER OF TEMPLES SURROUNDED BY JUNGLE.

SERENE PHOTOGRAPH OF TANIA, CIRCA 1950, WEARING AMETHYST BROOCH.

SLOW MOVE IN.

DAVID FREIDEL INTERVIEW

EXT. HARVARD CAMPUS, DAY
OLD BRICK BUILDINGS ON THE HARVARD CAMPUS. PAN TO THE ENTRANCE OF THE PEABODY MUSEUM.

INT. PEABODY MUSEUM, DAY
BASEMENT PHOTOGRAPHIC ARCHIVE. ANCIENT FILING CABINETS AND CUPBOARDS, LABELED WITH THE NAMES OF MAYA SITES.

When Sylvanus Morley visited the University Museum in 1939, he saw her aerial view of the Piedras Negras Acropolis. Brimming with enthusiasm, Morley asked her to join the staff of the Carnegie Institution at Copán.

Tania became a Carnegie employee, as at Piedras Negras virtually the only woman in a world of male archaeologists.

Over the next several years she made paintings of cities and buildings all over the Maya region. They were reproduced endlessly, and became the defining images of the ancient Maya city.

In a way, they illustrate Eric Thompson's vision of vacant ceremonial centers inhabited by priests and surrounded by jungle.

But Tania was well aware that the temples were surrounded by acres of un-excavated residential districts. She was simply unwilling to draw or paint what she hadn't measured and surveyed.

Unlike the romantic Thompson, Proskouriakoff had a precise and scientific mind. She was never willing to present anything to the public until the case for it was air-tight.

DAVID FREIDEL: She was very quiet, very small. She had a presence, a quiet confidence. Very pretty eyes, she always wore an amethyst brooch that set off her eyes.

She had enormous concentration. She was quiet spoken, but very clear, very distinct, and she was always exceptionally articulate. She never rambled, she always spoke precisely. If there was a group of people and she spoke, everyone stopped and listened, because she normally had something to say.

NARRATOR: When the Carnegie Institution shut down its archeology section in 1958, all its records were deposited at Harvard's Peabody Museum.

Proskouriakoff was given a small pension by the Carnegie, and the Peabody gave her space to work in a basement room, where she could have access to the Maya files. She spent the rest of her life working at the Peabody.

POV SHOT: DELICATE HANDS GO THROUGH A FILE WITH HUNDREDS OF INDEX CARDS, EACH WITH PROSKOURIAKOFF'S PRECISE DRAWING OF A SINGLE ELEMENT OF COSTUME OR GESTURE.

MICHAEL COE INTERVIEW

PIEDRAS NEGRAS STELAE
A FIGURE SEATED IN LOTUS POSTURE IN A NICHE AT THE TOP OF A LADDER, WEARING AN ELABORATE CROWN.

STELA 14: ANOTHER CROWNED FIGURE SEATED IN A NICHE AT THE TOP OF A LADDER..

PROSKOURIAKOFF PAINTING: AERIAL VIEW OF PIEDRAS NEGRAS
MOVE IN TO ROW OF EIGHT STELAE IN FRONT OF TEMPLE J-4.

MAP OF PIEDRAS NEGRAS SITE
BIG CLOSE-UP: IN FRONT OF TEMPLE 0-13, TEN STELAE ARE MARKED AND NUMBERED IN RED. A FEMALE HAND NEATLY CIRCLES "S-14" IN PENCIL.

PAN TO STRUCTURE J-4. EIGHT STELAE ARE MARKED AND NUMBERED. PENCIL CIRCLES "S-6".

PIEDRAS NEGRAS STELA 11
MOVE FROM FIGURE IN NICHE...

...DOWN LADDER...

...TO SACRIFICIAL VICTIM AT FOOT OF LADDER.

Beginning in the 1940s, Proskouriakoff undertook a systematic study of the evolution of Maya sculptural motifs. The work gave her an unparalleled view of the whole body of Maya art in stone. It also led her inexorably to ask questions whose answers would turn the whole Mayanist world upside down.

MICHAEL COE: Her great breakthrough had very little to do with the Mayan language: the texts might as well have been written in Swedish or Swahili for her purposes. Her approach was purely *structural*.

NARRATOR: It began with a single date. At Piedras Negras, there were several stelae showing what Eric Thompson had described as "gods seated in niches formed by the bodies of celestial dragons."

Sylvanus Morley had read the dedication date on one of these stelae, called Stela 14, as AD 800. Eric Thompson corrected Morley in the 1940s, putting the dedication 39 years earlier. It seemed a minor point of purely academic interest.

But as Proskouriakoff studied the sequence of dates at Piedras Negras in the late 1950s, she began to notice a pattern. The Maya would set up a series of stelae in front of a temple, one every five years. Then they would move to another temple and erect a new series.

The new, earlier date on Stela 14 made it the first in its series.

Proskouriakoff realized that, in fact, each stela showing "a god seated in a niche" was the first in its series. What did the pattern mean?

TATIANA PROSKOURIAKOFF VOICE: "My first thought was that the "niche" motif represented the dedication of a new temple, and that the ladder marked with footsteps ascending to the niche symbolized the rise to the sky of the victim of sacrifice, whose body was sometimes shown at the foot of the ladder. It occurred to me that if I searched for a hieroglyph peculiar to these stelae, I might find the glyphic expression for human sacrifice.

"What I found instead started an entirely new train of thought and led to surprising conclusions." – Tatiana Proskouriakoff

FULL PROSKOURIAKOFF'S CHART

ALL SEVEN SERIES OF STELAE, OVER 240 YEARS, ARE CHARTED IN THE MANNER SHOWN ABOVE. PAN DIAGONALLY DOWN THE GRID, FROM UPPER LEFT TO LOWER RIGHT.

THE SAME PATTERN OF BIRTH, ACCESSION AND DEDICATION DATES OCCURS IN EACH SERIES.

ARCHIVAL PHOTOS

TATIANA PROSKOURIAKOFF.

LINTON SATTERTHWAITE.

ORIGINAL GRAPHIC SEQUENCE

BIRTH SIGN ABOVE ACCESSION SIGN. ADD RULER 3 NAME AND TITLE GLYPHS AFTER EACH.

ADD PIEDRAS NEGRAS EMBLEM GLYPH AFTER EACH.

PIEDRAS NEGRAS STELA 1

FULL SHOT OF A STOUT WOMAN IN A LONG DRESS, WEARING AN ELABORATE CROWN AND HOLDING A WHISK.

HEAD AND SHOULDERS SHOT OF WOMAN. PAN DOWN EMBROIDERY ON DRESS TO HEM AND SANDALED FEET.

ORIGINAL GRAPHIC SEQUENCE

NAMES OF WIFE AND DAUGHTER OF RULER 3. HIGHLIGHT FEMALE HEAD GLYPH IN EACH.

NARRATOR: If the "frog" meant birth and the "toothache" meant accession to power, then each set of stelae might record the rule of a king. The dates fit this interpretation perfectly. These kings would have come to power between the ages of twelve and thirty-one. Their reigns would have been between five and forty-seven years. And the time from the birth of one king to the accession of the next would never be more than sixty years, a reasonable human lifetime. In October of 1958 she wrote her old mentor, Linton Satterthwaite:

TATIANA PROSKOURIAKOFF VOICE: "Dear Linton, I am sending you a brief summary of the data I got together on P.N. Stelae. Eric has compared these intervals with English successions and says that they are impossibly long.

"I'd like to try Egyptian pharaohs, Chinese Mandarins and Turkish sultans (Aztecs and Russians were too murderous). But my real interest is to find other hypotheses – have you anything else to suggest that might account for this pattern, or do you think it is fortuitous? Hastily, Tania."

LINTON SATTERTHWAITE VOICE: "Dear Tania, The pattern of this chart couldn't be coincidental. This is an extremely important hypothesis. As ever, Linton."

NARRATOR: In each series, birth and accession were followed by the same cluster of signs...

...often ending in the Piedras Negras emblem glyph. Proskouriakoff concluded this sequence must be the ruler's name.

But when figures in long robes appeared, the names were different. Thompson thought these robed figures were priests.

Proskouriakoff realized they were women. Their costumes were skirts and *huipils* similar to the garments worn by Maya women today.

And their name glyphs always started with a female head.

GEORGE STUART INTERVIEW

GEORGE STUART: I remember in Mérida, 1959, Bill Andrews running into the lab and saying Tania was working on this nutcake thing about dynasties at Maya sites, and we all laughed about it.

There was a big storm, we couldn't get to the meeting of Americanists in Mexico City, so we didn't hear anything more about it for a while, and then her paper came out. None of us were ready for it. But we should have been...

MICHAEL COE INTERVIEW

MICHAEL COE: When she gave Eric Thompson the draft of her paper, Eric's immediate reaction was "That can't possibly be right!" But he took it home and read it that night, and by the following morning he had made an about-face: "Of course you're right." She may have been Russian, but she was no Red Menace!

ARCHIVAL PHOTOS
IN A SERIES OF STILL CLOSE-UPS, CIRCA 1970, PROSKOURIAKOFF IS AT WORK EXAMINING A SERIES OF TINY CARVED MAYA JADES.

NARRATOR: Proskouriakoff and Berlin found meaning in pattern: the interacting patterns of text, image, architecture and geography. If only the power of their method could be combined with Knorosov's phonetic approach, based in spoken Maya language, the words of the ancient Maya scribes might come to life once more.

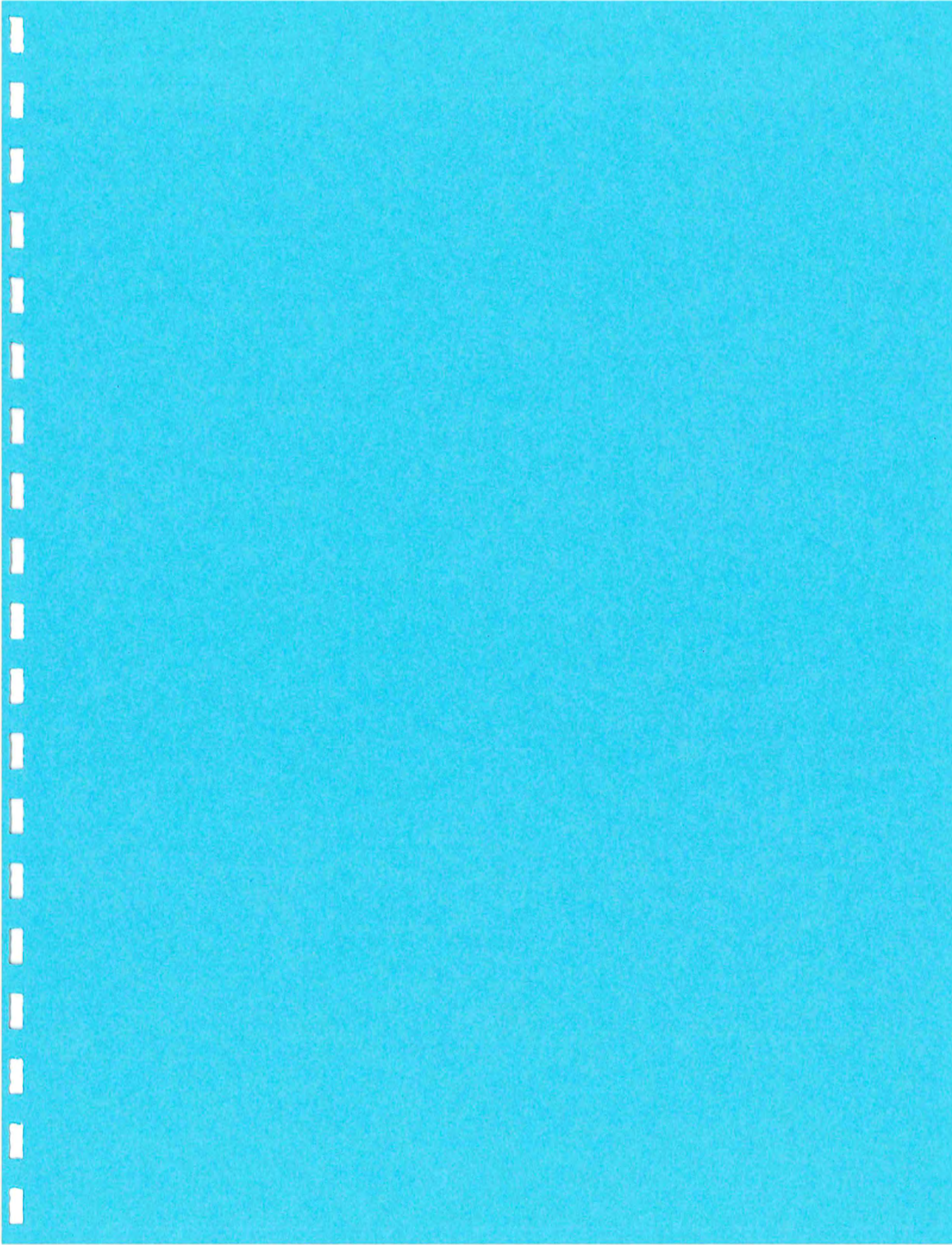
WITH A MAGNIFYING GLASS, SHE IS EXAMINING A SMALL JADE WITH A CARVED INSCRIPTION. SLOW MOVE IN ON INSCRIPTION.

In the meantime, much of the text was still hidden in shadow. But Proskouriakoff had created a framework within which the next generation would be able to find its way.

MOVE ENDS ON INSCRIPTION, HELD BETWEEN HER FINGERTIPS.

Above all, she had shown what the texts were about: not unworldly truths, but living human beings. The ancient Maya had entered history.

FADE OUT. END OF PART ONE.



BREAKING THE MAYA CODE PART II: A NEW WORLD

[Recap: A brief summary of Part I reminds us of 1500 years of Maya writing and the nature of the Maya script (a mix of logographic signs for words and syllabic signs for sounds); the Landa “alphabet” and the suppression of the script; the nineteenth century rediscovery and study of Maya texts, Thompson vs. Knorosov, and Proskouriakoff’s discovery of history in the texts.]

MAIN TITLE GRAPHIC OR ANIMATION:
“**BREAKING THE MAYA CODE**” AFTER A PAUSE, ADD
SUBTITLE: “**PART TWO: A NEW WORLD**”

PALENQUE SITE, DAY
CHIAPAS JUNGLE HILLS. PAN TO:

NARRATOR: For over a hundred years, the Maya decipherment had been the work of lone individuals, scattered about the world and working largely in isolation. But all that was about to change.

DISTANT VIEW OF PALENQUE SITE,
FRAMED TO MATCH NEXT SCENE
(CATHERWOOD ENGRAVING).

It began at Palenque, where the decipherment itself had begun over a century before.

CATHERWOOD COLORED ENGRAVINGS
OF PALENQUE
DISTANT VIEW OF THE SITE.

When writer John Lloyd Stephens and artist Frederick Catherwood arrived here in the spring of 1840...

VIEW OF THE PALACE

...they took up residence in the palace at the center of the city.

PAN TO TEMPLE OF THE INSCRIPTIONS,
COVERED BY JUNGLE.

Towering over the palace was the ruined mound of a huge structure.

3-D ANIMATION DERIVED FROM TEN
CATHERWOOD’S ELEVATION DRAWINGS
WIDE VIEW OF SANCTUARY EXTERIOR.
MOVE IN.

Inside the imposing building at its top... they discovered three huge panels of hieroglyphic writing.

MOVE THROUGH CENTRAL DOORWAY
INTO OUTER CHAMBER. TWO PANELS
OF GLYPHS FLANK CENTRAL ROOM.

VOICE OF J.L. STEPHENS: “The impression made upon our minds by these speaking but unintelligible tablets I shall not attempt to describe.

CONTINUE MOVING IN TO INNER ROOM.
STOP ON FULL SHOT OF CENTRAL
HIEROGLYPHIC PANEL.

The Indians call this building an *escuela* or school, but our friends the Padres called it a tribunal of justice, and these stones, they said, contain the tables of the law.”— John Lloyd Stephens

PALENQUE SITE, DAY

WIDE SHOT OF RESTORED TEMPLE OF THE INSCRIPTIONS, WITH PALACE IN LEFT FOREGROUND.

CLOSER VIEW OF SANCTUARY, MATCHING PERSPECTIVE OF ANIMATION SEQUENCE.

WIDE SHOT ALONG OUTER CHAMBER FROM EAST END, SHOWING PANELS OF GLYPHS. TILT DOWN TO REVEAL ENTRANCE TO DOWNWARD PASSAGE LEADING DEEP INTO THE MOUNTAIN.

ARCHIVAL PHOTOS

RUZ'S 1952 DISCOVERY OF THE TOMB.

RAISING SARCOPHAGUS LID WITH TRUCK JACKS.

PACAL IN CRYPT, WITH JADE MASK.

NARRATOR: The building was dubbed the Temple of the Inscriptions.

But for over a hundred years after Stephens and Catherwood's visit to Palenque, its true nature and purpose remained a mystery.

Then in 1948, Mexican archeologist Alberto Ruz discovered the entrance to a hidden passage filled with rubble.

The passage took four years to clear. It led down over 70 feet to the heart of the temple-mountain.

In the crypt at the end of the tunnel was an enormous limestone sarcophagus.

Its lid was encircled with a hieroglyphic inscription, and portraits and glyphs adorned its sides. Inside were the remains of a man, masked and swathed in jade.

For decades, it had been believed that Maya writing had to do only with the stars, the gods, and the cult of time.

Suddenly, hieroglyphs were associated with the body of a human being. But it would be two decades before scholars would learn to read his name— Pacal.

FADE OUT. FADE IN SECTION TITLE OVER BLACK:
"PACAL'S PEOPLE". FADE OUT. FADE IN:

EXT. GULF COAST, DAY

WAVE CRASH – MEXICO'S GULF COAST.

VAN ON GULF COAST ROAD NEAR VILLAHERMOSA.

ARCHIVAL PHOTO

LINDA SCHELE, CIRCA 1970.

MOISES MORALES, CIRCA 1970

NARRATOR: In 1970, a young painter and art teacher named Linda Schele took a vacation trip to Mexico. She, her husband and two students were headed for the Yucatán peninsula. On a momentary whim, they took a side road to Palenque. It would change her life.

Over the next few days, Schele fell under the enchantment of the place.

Moises Morales, the chief guide at Palenque, who was knowledgeable and deeply passionate about the site...

MERLE ROBERTSON, CIRCA 1970.

ROBERTSON AND CREW ON SCAFFOLDS,
DOING PHOTOGRAPHY AND RUBBINGS
OF PALENQUE SCULPTURE.

MERLE ROBERTSON INTERVIEW
IN PATIO OF HER PALENQUE HOME.

PALENQUE SITE, DAY
INTIMATE VIEWS OF THE SITE

REPEATED DETAILS IN SCULPTURE:
ROYAL FIGURES MAKING SIMILAR
GESTURES; EFFIGIES HELD IN HANDS.

INT. SCHELE INTERVIEW

PALENQUE SITE, DAY
PULL BACK FROM PURE WHITE SECTION
OF STUCCOED WALL AT PALENQUE.
TENDRILS OF PLANT MOTIFS ENTER
EDGES OF FRAME AS SHOT WIDENS.

RAPID SERIES OF SIMILAR PLANT AND
BORDER MOTIFS.

INTERCUTTING ACCELERATES TO
ABSTRACTION, THEN STOPS SUDDENLY
ON A TRANQUIL VIEW OF PALENQUE.

EXT. CALGARY, CANADA, DAY
CALGARY DURING A WINTER SNOW
STORM.

PETER MATHEWS INTERVIEW

...introduced her to Merle Greene Robertson, also an artist and school teacher, who had spent the past decade documenting remote sites all over the Maya lowlands. When Schele arrived in 1970, Robertson was engaged in a race against time to record the crumbling sculpture and inscriptions of Palenque.

MERLE ROBERTSON: She couldn't stay away, so then the next year, she came down and worked on the photography project with me.

NARRATOR: As they worked, Schele came to know Palenque intimately. She struggled to make sense of its architecture, its sculpture— and its writing.

Where the texts were a mystery, Schele sought clues in pattern: the placement of buildings and sculpture, the repetition of symbols... objects... gestures.

LINDA SCHELE: As a painter, you're taught to see pattern, and the ability to perceive and reproduce pattern is at the core of being a painter no matter what you do.

When you begin painting you break the white, which means you just get color on to whatever surface you're painting. As you paint you wait for the painting to do something unusual, and then you follow it where it wants to go.

Well, that's the research methodology I use in Maya stuff, and have for the last 30 years: to approach it by gathering all the information you can about one subject, and then wait for it to pattern. And when it patterns you follow it, wherever it wants to go.

NARRATOR: As Schele crawled inch by inch over the site of Palenque, a young Australian student in Calgary, Canada was also getting to know the site — in a very different way.

PETER MATHEWS: It started out as a kind of a hobby in high school. I was intrigued by the writing system, really the beauty of it. And I just thought anyone who wrote so beautifully, I would really like to know more about.

EXT. CALGARY, CANADA, DAY
ANTHROPOLOGY BUILDING,
UNIVERSITY OF CALGARY. STORM
CONTINUES.

ARCHIVAL PHOTOS
DAVE KELLEY, CIRCA 1971.

PETER MATHEWS INTERVIEW

PETER'S PALENQUE NOTEBOOK: MOVE
DOWN COLUMNS OF CAREFULLY
ANNOTATED GLYPHS.

ARCHIVAL PHOTOS
MERLE ROBERTSON'S HOUSE IN LA
CAÑADA, PALENQUE, UNDER
CONSTRUCTION.

ARCHIVAL PHOTO
GILLET GRIFFIN, CIRCA 1973.

PALENQUE SITE, DAY
POV, MOVING THROUGH PALENQUE
SITE.

LINDA SCHELE INTERVIEW

MERLE ROBERTSON INTERVIEW
ON PALENQUE PORCH, LATE P.M.,
RELAXING WITH A DRINK.

NARRATOR: When Mathews came to the University of Calgary as a college freshman, he discovered that Mayanist David Kelley was teaching there.

Kelley, a maverick in Maya studies, had been one of the first Western champions of Knorosov's phonetic approach to the decipherment. Later he had applied Proskouriakoff's structural and historical method to the inscriptions of Quiriguá.

PETER MATHEWS: David did a wonderful thing for me of saying, "Well, if you want to learn this, then why don't you pick a site and learn all of the hieroglyphs of that site, as a way of getting up to speed on the variations and the patterns of structure and so on". He said the obvious site to work with is Palenque, because its got such long clear texts, so why didn't I work with those.

NARRATOR: Mathews spent most of that year working under Kelley's patient guidance, transcribing all the texts of Palenque from scattered books and articles and sorting them glyph by glyph until they filled three fat binders.

Meanwhile, in Palenque, Merle Robertson was building a home and reference library that would become a focus for students, scholars and lovers of the Maya.

Gillett Griffin, an art historian at Princeton University, was one of the many lovers of the Maya who gravitated to Merle and her home. In the fall of 1973 he brought a student named David Joralemon on his first visit to Palenque.

LINDA SCHELE: I remember going through the ruins with David and Gillett, in which I basically told David all of the things that I had learned by working inside the ruins in a concentrated way for three years.

That evening, we all met on the back of Merle's porch...

MERLE ROBERTSON: We were sitting right here, where we are, on this porch, and there was Bob and I and Linda, David Joralemon, and I think Gillett.

LINDA SCHELE INTERVIEW

LINDA SCHELE: I'm quite sure that it was Gillett who popped out, after one or two nice glasses of rum, "Wouldn't it be wonderful if we had a conference *on Palenque in Palenque?*"

GILLETT GRIFFIN INTERVIEW

GILLETT GRIFFIN: And I said, "Let's have a round table." and David Joralemon said, "Mesa Redonda," and Merle said, "We'll have it."

ARCHIVAL PHOTO

MERLE GREEN ROBERTSON, CIRCA 1970

NARRATOR: Robertson sent letters to a small circle of Mayanists, including archaeologist Michael Coe and linguist Floyd Lounsbury of Yale, David Kelley in Calgary—

LINDA SCHELE INTERVIEW

LINDA SCHELE: --And Merle received a letter from Dave Kelley, who was in England at the time, and couldn't come. And he said that he had this very bright young student named Peter Mathews who he would like to be able to come in his place.

ARCHIVAL PHOTO

PETER MATHEWS, CIRCA 1973.

GILLETT GRIFFIN: Peter, who didn't have any money really, sort of hocked everything so he could go down.

ARCHIVAL PHOTOS:
MESA REDONDA. PARTICIPANTS IN
CIRCLE ON MERLE'S FLOOR.

NARRATOR: And so the first Mesa Redonda de Palenque, or Palenque Round Table conference, was held in December, 1973. Those who attended were a varied bunch: some were senior leaders in their fields; others young students. But they all accepted Tatiana Proskouriakoff's proof that the glyphs contained history. They accepted Yuri Knorosov's still controversial proof that at least some of the glyphs stood for the sounds of Maya speech.

MESA REDONDA PARTICIPANTS
EXAMINING DETAILS AT PALENQUE
SITE.

And they were eager to apply these principles to the texts and images of Palenque. It was a richly productive week.

PETER'S NOTEBOOK

A HAND OPENS IT AND LEAFS
THROUGH PAGE AFTER PAGE OF
METICULOUS GLYPHS.

GILLETT GRIFFIN: —And then most of the way through the whole week, they began to realize that Peter had brought with him four notebooks in which he had charted out every glyph ever recorded at Palenque—

PETER MATHEWS: —I came down with these three damned binders loading up my suitcase—

GILLETT GRIFFIN INTERVIEWARCHIVAL PHOTOS

1973 MESA REDONDA.

GILLETT GRIFFIN INTERVIEWPETER MATHEWS INTERVIEWTABLET OF THE 96 GLYPHS (SEE FIGURE 13)ORIGINAL GRAPHIC SEQUENCE:
FIRST FIVE PHRASES OF 96 GLYPHS
TABLET IN PARALLEL ROWS.CALENDAR ROUND DATES SLIDE LEFT,
DISTANCE NUMBERS SLIDE RIGHT.HIGHLIGHT ROW OF CALENDAR ROUND
DATES.

HIGHLIGHT ROW OF VERBS.

MOVE IN ON SENTENCES 3-5, FROM
VERB TO EMBLEM GLYPH. HIGHLIGHT
CHUM VERB IN EACH. (SEE FIGURE 14)YAXCHILAN LINTEL 1
ACCESSION OF BIRD JAGUAR.

GILLETT GRIFFIN: And so Mike Coe stood up at the end of a morning session, and said, "Linda knows every stone of Palenque. Peter knows every glyph. Why don't you two kids go and put together a dynastic history? Everything's there to do it with, but nobody has ever done one."

PETER MATHEWS: My memory of it is that the formal papers had all been given at this point, and this was the last day of the conference. It was kind of a free afternoon...

GILLETT GRIFFIN: We went off to find the site of El Tortugero, and we couldn't find it.

PETER MATHEWS: Linda and I decided that we'd work on this stuff. And so we said, "let's see what we can actually do with these dates in chronological order."

NARRATOR: The last known inscription of Palenque is a small, elegantly inscribed panel from the Palace tower, known as the Tablet of the 96 Glyphs. Five years earlier, in 1968, Heinrich Berlin had found on this tablet the first clues to the identity of Palenque's rulers.

Arranging the glyphs into parallel phrases...

...Berlin first isolated the calendar information.

The dates started in AD 652 and moved forward.

What happened on those dates? Proskouriakoff had shown in 1960 that verbs follow dates in Maya inscriptions...

...and Berlin saw that the verb signs in three of these sentences were identical.

At the nearby city of Yaxchilan, the same verb sign was used to describe an action of Lord Bird Jaguar on the day of his inauguration. So, Berlin reasoned, these three sentences were probably also about the accession of kings.

ANIMATED GRAPHIC:

CHUM VERB MORPHS INTO A CLEAR IMAGE OF A SEATED HUMAN FIGURE.

ORIGINAL GRAPHIC SEQUENCE

REPEAT GRAPHIC OF THREE SENTENCES FROM TABLET. HIGHLIGHT PARALLEL ELEMENTS IN EACH VERB PHRASE AS THEY ARE NAMED.

THE GLYPHS FOLLOWING THE VERB SLIDE RIGHT TO ARRANGE THEMSELVES IN PARALLEL ROWS.

HIGHLIGHT COLUMN OF 3 *KINICH* GLYPHS.

HIGHLIGHT COLUMN OF 3 EMBLEM GLYPHS.

HIGHLIGHT COLUMN OF THREE KING NAMES.

HIGHLIGHT *KINICH* AND EMBLEM GLYPH COLUMNS.

HIGHLIGHT COLUMN OF THREE KING NAMES.

ARCHIVAL PHOTO
HEINRICH BERLIN.

PALENQUE SITE, DAY
VIEW OF TABLETS IN TEMPLE OF THE INSCRIPTIONS.

CLOSE-UP OF "SUN SHIELD" NAME GLYPH. HIGHLIGHT "SUN" SIGN, THEN "SHIELD" SIGN.

NAME PHRASE OF KAN BALAM IN THIRD TABLET; HIGHLIGHT SNAKE/JAGUAR HEAD.

INT. MERLE'S HOUSE, DAY
SLOW PAN PAST KITCHEN...

We now know that the verb means *chum* or 'seating'... and represents a seated human figure.

The whole verb phrase reads *chum...laj... ti... ajaw... el*, or "was seated in kingship."

Who was seated? After the verb, Berlin had noticed another repeating pattern.

It began with a winged shape and a *kin* or "sun" sign...

...and ended with the Emblem Glyph of the city of Palenque.

The glyphs in the middle were different in each sentence.

Berlin had concluded that the whole phrase must be a royal title, like "Lord so-and-so of Palenque".

The changing glyphs in the middle were the rulers' names. He had found four rulers in the Tablet, and labeled them Rulers A, B, C and D.

The cautious Berlin had not gone beyond that, at least in his published papers.

At about the same time, Yale art historian George Kubler proposed that Berlin's Ruler A was the man in the sarcophagus beneath the Temple of the Inscriptions.

His name glyph appears again and again in the inscriptions of the temple. Kubler called him "Sun Shield".

Kubler also identified a fifth king of Palenque, whom he called "Snake Jaguar." He seemed to be Sun Shield's successor.

This was how things stood in December of 1973, when Peter Mathews and Linda Schele sat down at Merle's kitchen counter to "find some kings".

...ACROSS COUNTER... TO FAR SIDE OF ROOM.

LINDA SCHELE INTERVIEW
SHE DRAWS *KINICH* TITLE ON LARGE PAD

PETER MATHEWS INTERVIEW

PALENQUE SITE, DAY
MONTAGE OF NAME PHRASES IN THE TEMPLE OF THE INSCRIPTIONS AND THE CROSS GROUP. IN EACH, THE *KINICH* TITLE IS HIGHLIGHTED.

ANIMATED GRAPHIC
WHITE HEADBAND VERB. MORPH THROUGH SEVERAL VARIANTS.

LINDA SCHELE INTERVIEW

GILLETT GRIFFIN INTERVIEW

SCHELE AND MATHEWS CHARTS
NAMES AND DATES, CRUDELY LETTERED IN FAT MAGIC MARKER.

ARCHIVAL PHOTO
MOISES MORALES AT MESA REDONDA, 1973.

GILLETT GRIFFIN INTERVIEW

LINDA SCHELE: We had the four kings A, B, C, and D from Berlin; we had the two names, Snake Jaguar and Sun Shield, that Kubler had set up...

...and what we did is we followed a title that Berlin had pointed out on the 96 Glyphs, and this was the title. Now at the time we didn't know what it meant, but Berlin had pointed out that it was in front of all the names on the Tablet of the 96 Glyphs.

PETER MATHEWS: All of the later rulers, you see, share this honorific prefix in their royal names. So that was obviously a good place to look. Anytime we had that prefix we could be pretty sure that was a ruler.

NARRATOR: They found over forty examples of this title, later read as *kinich*, meaning "sun-eyed" or "sun-faced". Over forty records of events in the lives of kings. Some were accompanied by the known glyphs for birth, accession and death.

On some dates, they discovered a new term for an accession ritual, later read as "tying on the white headband". There were over a dozen references to this ceremony being performed by the "sun-faced" lords.

LINDA SCHELE: By 5:00 o'clock that afternoon, we had gotten large pieces of poster paper and we drew the name of each of the kings on them....

GILLETT GRIFFIN: We came back, mosquito bitten, you know, testy, tired, sweaty, and that evening the two kids stood up and said, "We have a dynastic history for you. We have six rulers."

LINDA SCHELE: And we had them with funny names like Sun Shield, and Lord Toothache-

GILLETT GRIFFIN: And at that point Moises Morales stood up— veins standing out on his forehead, purple with rage, he said, "Why is it that when important things like this are discovered, you give the name in English? The people who made these ruins are Chol. There's a Chol sitting right there, and he has an interpreter, they have a dictionary." And everybody was taken aback, and in shock!

SCHELE AND MATHEWS CHARTS
THE NAME 'SHIELD' IS CROSSED OUT
VIGOROUSLY NEXT TO HIS GLYPH, AND
'PACAL' IS WRITTEN IN.

'SNAKE JAGUAR' IS CROSSED OUT NEXT
TO HIS GLYPH, AND 'CHAN BAHLUM' IS
WRITTEN IN.

CLOSE-UPS OF NAMES ON CHARTS.
LORD HOK... LORD CHAAC... CHAC
ZUTZ... LORD KUK...
GILLETT GRIFFIN INTERVIEW

DAVID STUART INTERVIEW

ARCHIVAL PHOTO
GEORGE AND GENE STUART, CIRCA
1973.

EXT. WASHINGTON D.C., DAY
ESTABLISHING SHOT OF CITY.

EXT. DUMBARTON OAKS RESEARCH
FACILITY, WASHINGTON, D.C., DAY
ESTABLISHING SHOT.

ARCHIVAL PHOTO
HEINRICH BERLIN.

ELIZABETH BENSON INTERVIEW

LINDA SCHELE INTERVIEW

ARCHIVAL PHOTO
LINDA SCHELE, CIRCA 1974.

NARRATOR: So they chose to call the king in the sarcophagus *Pacal*, the Chol Maya word for shield. Phonetic versions of the name have since confirmed their choice: his full name was *Hanab Pacal*, or Flower Shield.

By the end of the evening they had charted out names and dates for Pacal and his successors, the last two hundred years of Palenque's 400 year history.

GILLETT GRIFFIN: And so, suddenly you had names coming out from outer space, and you had portraits, and you had dates... Suddenly the Maya were giving us their history. And it was absolutely heady stuff. It was amazing stuff.

DAVID STUART: I remember my Dad and my Mom went to the first Mesa Redonda, and I didn't know anything about Maya archaeology, though I knew who the Maya were. I was probably seven years old. I remember how excited they were about that conference. I remember standing in the living room of our house in Chapel Hill and just sensing that from them after they got home.

NARRATOR: Elizabeth Benson, who had attended the December Mesa Redonda...

...directed a Mesoamerican research center at Dumbarton Oaks, a private institute in Washington, DC. She quickly scheduled a small conference there at which she hoped the Palenque group could share their ideas with scholars like Proskouriakoff and Berlin.

ELIZABETH BENSON: I wrote a letter to Heinrich Berlin. But he wrote back saying that he was no longer involved with "those things with which I used to toy of yore." I think those were his words exactly. So, Berlin did not come. But the Palenque people came, and Tania Proskouriakoff came, George Kubler came... And the Saturday of it did not go well. It fell rather flat.

LINDA SCHELE: The meeting was a bloody disaster. Merle sat next to me, terrified that I was going to get into a fight with Tania. And she wanted to make sure that I didn't do that, so she sat on me the whole time.

BARBARA MACLEOD: --and at that time Linda was drinking heavily, smoking and cussing...

BARBARA MACLEOD INTERVIEW

...and you know, sort of being all things that Tania wasn't...

DAVID KELLEY INTERVIEW

DAVID KELLEY: —and then at one point Tania was saying something, and Linda couldn't restrain herself, and interrupted her and said, "Well, that can't be right!" and tried to show how.

ARCHIVAL PHOTO
TANIA PROSKOURIAKOFF, CIRCA 1974.

This was, first, not Tania's idea of decorum, and, second, not somebody that was likely to know whether she was right or not. And she was essentially deeply and permanently offended.

PETER MATHEWS INTERVIEW

PETER MATHEWS: Poor Betty—by the end of the first day, she must have thought this was an unmitigated disaster.

ELIZABETH BENSON INTERVIEW

ELIZABETH BENSON: Sunday morning went a little better, and then people began taking planes and going off, and Tania left, and Mike left, and George Kubler left.

MICHAEL COE INTERVIEW

MICHAEL COE: I'd had enough, I couldn't take it any more.

ELIZABETH BENSON INTERVIEW

ELIZABETH BENSON: And then the others were sort of talking, there were five of them, Peter and Dave and Linda and Merle Robertson and Floyd. They were talking kind of two by two, and then something happened, and they were all arguing over one glyph.

LINDA SCHELE INTERVIEW

LINDA SCHELE: I turned around and looked at Dave Kelly and said, "I want to talk to you." And he said, "Yeah." And Floyd said, "I've got something I want to say too."

PETER MATHEWS INTERVIEW

PETER MATHEWS: It was kind of Palenque all over again, but with more of us.

INT. DUMBARTON OAKS LIBRARY,
NIGHT
HANDS UNROLL "SARCOPHAGUS
RUBBING" ON DUMBARTON OAKS
LIBRARY FLOOR, AMONG SCATTERED
BOOKS.
SARCOPHAGUS RUBBING
A PHRASE IN THE RUBBING RIM TEXT.
HIGHLIGHT CALENDAR ROUND DATE.

I remember Merle had got her rubbings of the sarcophagus edge, the inscription, up from Tulane. We had that rolled out on the floor, you know—

NARRATOR: The inscription on the rim of Pacal's sarcophagus tell of 11 events, each with a date in the Maya Calendar Round. Calendar Round days repeat every 52 years and are therefore ambiguous unless they can be tied to a specific historical date. Alberto Ruz had thought they were all events in the life of Pacal.

HIGHLIGHT VERB.

HIGHLIGHT NAME.

PACAL'S SARCOPHAGUS
A FIGURE ON THE SARCOPHAGUS SIDE.
HIGHLIGHT NAME NEXT TO HIS HEAD,
IDENTICAL TO NAME ON RIM.

OTHER MALE AND FEMALE FIGURES ON
THE SARCOPHAGUS SIDE.

SARCOPHAGUS RUBBING
CLOSE-UP DEATH VERB IN RIM TEXT.

PAN RIM TEXT.

INT. DUMBARTON OAKS LIBRARY,
NIGHT
MONTAGE: HANDS, PENCILS, SHADOWS
POINTING TO GLYPHS AND PORTRAITS
ON SARCOPHAGUS RUBBINGS,
THUMBING THROUGH BOOKS, ETC.

LINDA SCHELE INTERVIEW

EXT. DUMBARTON OAKS BUILDING AND
GROUND, NIGHT
PAN FROM BUILDING TO VIEW DOWN
PATH, THE LIGHTS OF WASHINGTON
D.C. IN THE DISTANCE.

But Berlin had pointed out that almost every date was followed by the same unknown verb...

...and that each time the verb is followed by a different name.

These same names appear next to the ten figures on the sarcophagus sides, sprouting out of plants.

Were they gods, priests, or kings? What was the event that happened to each of them? And when did it happen?

What the Dumbarton Oaks group determined, that night and over the months that followed, was that these nine were royal figures, the ancestors of Pacal. Seven had been kings and queens, their accession to power recorded on the tablets in the Temple above.

The verb was death.

And the dates of their deaths could be precisely fixed in time by the mention of two calendar festivals in the text. The royal deaths were spread over two hundred years.

LINDA SCHELE: And Dave Kelly, Peter Mathews, me, Floyd and Merle, down on our knees, on the floor at Dumbarton Oaks, started running the names, and running the dates, and matching the people to the portraits on the side, and in two and a half hours we had the first 200 years of Palenque's dynastic history worked out.

I can remember the strangest sorts of things, as— we got to arguing over whether Hok's name was a peccary or what, and this disembodied arm delivered a book on the natural history of the animals in the area into the middle of the thing. Or Floyd would say, "Gosh, I'm thirsty." The arm would come in from the other side with a glass of ice water. And that was Betty, she was facilitating us...

...and we got done about 10:00 o'clock that night. I mean, we walked home absolutely elated, like that last night at the Mesa Redonda.

ELIZABETH BENSON INTERVIEW

PACAL'S GRANDFATHER, ON
SARCOPHAGUS SIDE. SLOW MOVE IN.

LADY ZAK KUK ON SARCOPHAGUS SIDE.
SLOW MOVE IN.

OVAL PALACE TABLET: CLOSE-UP OF
LADY SAC KUK.

WIDER SHOT OF OVAL TABLET: SAC
KUK IS PASSING "CROWN" TO PACAL.

ROW OF KINGS GROWING OUT OF
PLANTS ON SARCOPHAGUS SIDE.

EXT. PALENQUE SITS, DAY
VIEW PAST PALENQUE PALACE, ACROSS
RIVER TO THE CROSS GROUP. MOVE IN.

HIGH ANGLE FROM HILL ABOVE
SHOWING THE THREE TEMPLES OF THE
CROSS GROUP.

FULL SHOT, TABLET OF THE CROSS.

FULL SHOT, TABLET OF THE FOLIATED
CROSS.

FULL SHOT, TABLET OF THE SUN.

TABLET OF THE CROSS: KAN BALAM
AND THE WORLD TREE.

TRUCK LEFT TO START OF CREATION
TEXT.

ELIZABETH BENSON: That was the great moment. At that moment I thought, "Each one of them saw and knew something that the others didn't. And it took all of them to put that together, and they did it."

NARRATOR: When the childless King Ah-Ne-Ol-Mat died in AD 612, there was a crisis in the Palenque succession. There were no heirs in the male line.

But there was a niece, Zak Kuk, who was married to a nobleman. And they had a nine year old son, Pacal.

So Zak Kuk became queen of Palenque. Three years later, when her son was twelve years old...

...she passed the symbols of rulership on to him.

Among the ancestral kings on the side of his sarcophagus, Pacal includes not only his mother Zak Kuk but also his father and grandfather, though neither were kings.

Across the Otolum River from the center of the city, his son Kan Balam— Snake Jaguar— went even further to legitimize his succession.

Each of the three temples he built here is dedicated to one of the three founding gods of the city, and each has an elaborate hieroglyphic tablet in its inner sanctuary.

They are known to scholars as the Tablet of the Cross...

...the Tablet of the Foliated Cross...

...and the Tablet of the Sun.

On the Tablet of the Cross, Kan Balam stands next to the cross-shaped world tree at the center of creation.

He is wearing the simple white headband of accession, and holding a symbol of royal power.

The text of the three tablets, worked out by epigraphers over the years to come, make Kan Balam's inauguration the climax of a narrative that begins with the creation of the world.

PALENQUE SITE, DAY
 VIEW INTO SANCTUARY OF THE TEMPLE
 OF THE FOLIATED CROSS AT PALENQUE.
 MOVE IN SLOWLY TO FULL VIEW OF
 TABLET.

MAYA VASES

MAYA VASE ROLLOUT PHOTOS
 PAN ROLLOUT PHOTO, VASE OF THE
 SEVEN GODS.

THE HERO TWINS.

THE HERO TWINS IN MAGICIAN
 DISGUISE.

TWIN WITH BLOWGUN.

TWINS AS BALLPLAYERS.

THE HERO TWINS DANCING BEFORE THE
 LORDS OF XIBALBA.

RESURRECTION OF THE MAIZE GOD,
 FLANKED BY THE HERO TWINS.

A SERIES OF CODEX STYLE VESSELS,
 WITH FANTASTIC SCENES ON A LIGHT,
 PAPER-LIKE BACKGROUND.

GLYPHIC TEXTS ACCOMPANYING
 SCENES ON VASES.

BLACK BACKGROUND
 ROTATING POT WITH TEXT AROUND
 THE RIM.

Like the tablets of the Cross Group at Palenque, carved a thousand years before, the story told in the Popol Vuh begins among the gods before the creation of the world... moves through mythical early history into the lives of known kings... and ends in the present, in the time when it was written.

As he assembled the Grolier show, Coe realized that the painted vases all around him, produced in the Maya jungle lowlands in the sixth to eighth century AD...

...were covered with images that echoed the story of the Popol Vuh, as written down in a highland Maya village a thousand years later.

He saw the council of the gods at the creation of the world, before the birth of the sun...

He saw the Hero Twins, Hunahpu and Xbalanque....

...tricksters and magicians...

...hunters and blowgunners...

...great players of the Maya ballgame.

He saw scenes of the underworld, Xibalba, where the hero twins tricked the Lords of Death...

...and brought their father, the Maize God, back to life, just as corn is reborn each year from the darkness beneath the earth.

Coe also saw vases painted in a style very much like that of the known hieroglyphic books. He called this the Codex Style, and suggested that these pots may in fact have been copied directly from bark paper books.

Over a thousand royal vases have now been found. Many teem with characters and scenes found nowhere in the Popol Vuh. The glyphs that caption the pictures on these vases are among the most difficult of Maya texts, and are now the largest single body of Maya writing. It may be many years before we know whether they contain the shattered fragments of a seventh century, hieroglyphic Popol Vuh.

But in the texts that ran around the rim of the vessels, which seemed quite independent of the images, Coe noticed a striking and complex pattern.

MICHAEL COE INTERVIEW
HE IS HOLDING A STACK OF 5 X 7
CARDS. WITH CERAMIC TEXTS.

EXT. DESERTED SWIMMING HOLE ON
THE GREEN RIVER, DAY
ESTABLISHING SHOTS. SOUNDS OF
SPLASHING AND BOISTEROUS
CHILDREN.

POV SHOT OF COE'S HANDS LEAFING
THROUGH STACK OF 5 X 7 CARDS ON
THE BANK OF THE SWIMMING HOLE.
EACH CARD HAS A ROW OF GLYPHS.

SLOW MOVE IN. SOMETIMES COE
HOLDS ONE CARD BELOW ANOTHER, SO
THE TWO INSCRIPTIONS LINE UP FOR
COMPARISON.

MICHAEL COE INTERVIEW

COE'S CHART

BLACK BACKGROUND
ROTATING VASE WITH PSS RIM TEXT
AND FANTASTIC UNDERWORLD SCENE
OF SKELETAL AND HALF-ANIMAL
MONSTERS.

ZOOM IN SLOWLY TO ROTATING RIM
TEXT.

MICHAEL COE: I looked at every pot I could find,
and put the rim texts on cards. I ended up with several
hundred. That summer, I took all this material with me
to our summer home in the Berkshire hills, to work in
peace and quiet.

With the distraction of five children, it wasn't always
easy to get research done. But every warm day, while
the kids were swimming...

...I would sit on the bank with my 5 by 7 cards.

A pattern began emerging as I sat listening with one
ear to my kids...

NARRATOR: The rim texts varied in length. But they
were always drawn from the same twenty or thirty
glyphs. And, in all the hundreds of examples, the
glyphs always appeared in the same order.

MICHAEL COE: So I laid the stuff out and I made a
big chart and saw how these glyphs would line up.
And then Dave Kelley came to visit me, and he sat
here and I said, "Don't I have something here?" And
he said, "Yes, there's no doubt about it."

NARRATOR: It was like seeing a series of
fragmentary alphabets: not always the same letters, but
always from the same series, and always in the same
order.

Coe called the pattern the Primary Standard Sequence,
or PSS for short.

Though not a single glyph in the sequence could then
be read, Coe became convinced that the PSS,
appearing as it did on vases buried with the dead and
covered with underworld scenes, was a highly
formalized funerary chant or prayer for the dead.

As it turned out, and as Coe himself cheerfully
acknowledges, he was dead wrong about that. It would
take over twenty years and many minds to unlock the
secrets of the PSS. But it would prove to be another
key to the decipherment.

FADE OUT. FADE IN SECTION TITLE OVER BLACK:
"BEFORE THE FLOOD". FADE OUT. FADE IN:

ARCHIVAL PHOTOS
DAVID STUART AS A BABY.

THREE-YEAR-OLD DAVID STUART, A
 PACIFIER IN HIS MOUTH, BEING
 CARRIED UP THE STEPS OF A ZAPOTEC
 TEMPLE.

LITTLE DAVID DRAGGING AN
 UNIDENTIFIABLE OBJECT ACROSS A
 MONTE ALBAN DANZANTE, AS HE
 WALKS BEHIND HIS FATHER.

SITE OF COBA, DAY
ESTABLISHING SHOT.

DAVID STUART CHILDHOOD DRAWINGS
HOUSE IN COBA.

COBA TEMPLES AND DETAILS OF
 SCULPTURE.

DAVID STUART INTERVIEW

DAVID STUART CHILDHOOD DRAWINGS
DRAWINGS OF GLYPHS: CRUDE AT
FIRST, THEN MORE COMPLEX AND
SOPHISTICATED.

ARCHIVAL PHOTO
EIGHT YEAR OLD DAVID DRAWING
WITH CONCENTRATION AS A MAYA
MAN LOOKS OVER HIS SHOULDER.

EXT. NATIONAL GEOGRAPHIC
BUILDING, WASHINGTON D.C., DAY

NARRATOR: For those who argue whether children are shaped by nature or nurture, by genetics or environment, David Stuart presents an interesting case.

Born with what he himself describes as “a good visual memory” but what most would call an extraordinary mind....

...David also lived and traveled from early childhood among the sites and artifacts of Ancient Mesoamerica. His father George was the archaeology editor of the National Geographic Society, his mother Gene a writer for Geographic.

David’s earliest childhood memory is an image of his own tiny hand dragging a toy truck across the carved stones of the Zapotec city of Monte Alban— stones containing some of the earliest writing in Mesoamerica!

When David was eight years old, in 1974, George Stuart took his family to Coba in the Yucatán, where he was mapping the ancient site on a National Geographic research project.

They lived for the summer and fall in a Maya thatched house, and David started to make drawings.

DAVID STUART: We were there for five months that first season. And up to that point I had had no real interest in the Maya.

And it was hard. I was not happy, I remember, the first weeks. Eight years old, pulled out of school, taken to live in a thatched hut in the middle of this kind of dirty lakeside village. But they came across a couple of inscriptions at Coba, while my Dad was working there.

And that just fascinated the hell out of me. The glyphs, and seeing these things come out of the ground, and putting them together. And so I remember spending a lot of time with him. He would be drawing and I would be drawing, sort of doing what he was doing.

So that’s really how it started. Just being in an isolated environment where I had no other kinds of distractions. It really just grew that way, in that place, in a very intense way.

NARRATOR: Two years later, in Washington, D.C., David met Linda Schele.

INTERVIEW WITH LINGUIST AND
EPIGRAPHER BARBARA MACLEOD

A COPY MACHINE
IT IS CRANKING OUT COPIES OF MAYA
INSCRIPTIONS, ONE AFTER ANOTHER.

ARCHIVAL PHOTOS
WORKSHOP PARTICIPANTS DURING
OPEN DISCUSSION.

BARBARA MACLEOD INTERVIEW

INTERVIEW WITH NICHOLAS HOPKINS
AND KATHERINE JOSSERAND

ARCHIVAL PHOTOS
WORKSHOP PARTICIPANTS GATHERED
OVER CUT-UP COPIES OF MAYA TEXTS.

INTERVIEW WITH NICHOLAS HOPKINS
AND KATHERINE JOSSERAND

ARCHIVAL PHOTO: SCHELE AND
STUART TOGETHER, CIRCA 1980

KATHERINE JOSSERAND: You know, maybe they've figured something out while our back has been turned. We went up, and went to this thing. And it was just amazing, it was so cogent. A lot of people there were just, "Ahhh, I had no idea what's going on."

BARBARA MACLEOD: Suddenly, the doors opened. Hearing the news of what was going on and having access to material.

Instead of waiting years for new discoveries to be published, Linda made all that stuff available. It was just an immediate pipeline to the frontier.

NARRATOR: Insights came from all directions – not just from Maya specialists, but from astronomers, doctors and engineers.

BARBARA MACLEOD: You'd hear, from way down the hall up there in the Art Building, you'd hear Linda going, "Oh shit!" Here you are four doors away, you know that something has been discovered —

KATHERINE JOSSERAND: But, I mean, this was all over the auditorium. All kinds of people had little bits of information that they would contribute.

NARRATOR: Perhaps most significant was collaboration between the epigraphers, specialists in Maya writing, and the linguists, specialists in spoken Mayan.

NICHOLAS HOPKINS: You know, Linda would say, "This syllabically spells out such and such, but we don't know what the word means." And we'd say, "Linda, we've worked on Mayan languages, and that word means so and so." [acting as Linda] "Oh wow!"

KATHERINE JOSSERAND: In 1980, Linda and David Stuart came to Mexico City and stayed in our house for about a week. And we taught the two of them how to use dictionaries in different Maya languages. And how comparative linguistics worked in Mayan, so that if you had a word of this shape in this language, what it might look like in that language.

LINDA SCHELE: So David sat side by side with me to learn linguistics from Nicholas and Katherine, and went to conferences with me.

LINDA SCHELE INTERVIEWS

NAJ TUNICH, GUATEMALA, DAY
THE VAST CAVE MOUTH: BELOW THE
HANGING STALACTITES, A MAYA WITH
A FLASHLIGHT, HIS BACK TO US, IS
MOVING INTO THE CAVE.

ARCHIVAL PHOTOS
GEORGE STUART, WITH CAVE MOUTH
BEHIND HIM, SHINING FLASHLIGHT ON
PAINTED POTTERY AS HE KNEELS OVER
IT.

15 YEAR OLD DAVID IN THE CAVE WITH
HIS FATHER.

NAJ TUNICH, GUATEMALA, DAY
POV FOOTAGE OF PAINTINGS ON CAVE
WALLS, BY FLICKERING LIGHT.

DAVID STUART INTERVIEW

NAJ TUNICH, GUATEMALA, DAY
PAN TEXTS ON CAVE WALL.

CLOSE-UP OF TEXT WITH *PA XA*
COMPOUND.

BIG CLOSE-UP OF *PA XA* GLYPH.
HIGHLIGHT COMPONENTS AS THEY ARE
NAMED.

ORIGINAL GRAPHIC SEQUENCE
PA XA GLYPH. LABEL *PA* WITH "PA" AND
XA WITH "X_".

ADD FINAL "A", CROSSED OUT WITH A
RED SLASH.

DAVID STUART INTERVIEW

My big problem was getting all of the old fogies,
scholars, to accept having this young boy in there, and
getting them to realize that he was understanding what
they were saying, and that they should not treat him
like a brat, but treat him like a colleague.

NARRATOR: Later that same year a Maya farmer
named Bernabé Pop discovered a huge cave in the
jungle of Eastern Guatemala. Deep inside the cave,
Pop found drawings and glyphs on the cave walls.

That December, National Geographic dispatched
George Stuart to investigate.

David, now 15, was the project epigrapher, or
specialist in Maya writing.

Almost half a mile in, they found that the walls were
covered with drawings of ballplayers... dwarves...
bloodletting rites... and glyphic texts.

DAVID STUART: It was extremely exciting – I was
just exhausted physically that whole trip. But coming
across these texts, having no idea what they were, I
mean it just blew me away. I remember looking at the
glyphs and absorbing all sorts of neat stuff.

I saw the *Pa xa* glyph, which is the month name *Pax*,
written phonetically, the first example we had ever
seen of that.

I looked at it and it was a *pa* and this mystery sign after
it which had to be a *xa*. You know, it just had to be,
because it was part of all this calendric information,
and the month *Pax* was the only reading that made
sense.

NARRATOR: According to Knorosov's phonetic
theory, two syllabic signs used to spell a word will
usually have matching vowels, though the final vowel
is often dropped. Thus if the two syllables David saw
on the cave wall spelled the name of the Maya month
Pax, the unknown second syllable must be *xa*.

DAVID STUART: I remember going wow, there's the
xa syllable, right there. That was my first syllabic
reading.

NAJ TUNICH, GUATEMALA, DAY
 FIGURES MOVING THROUGH CAVE
 TOWARD EXIT, SEEN FROM BEHIND.

NARRATOR: Firm syllabic readings were still few and far between, and each one was a major accomplishment. Eric Thompson, writing in 1971, had taken this as proof of the failure of Knorosov's phonetic approach. With a true phonetic decipherment, he wrote, as with the breaking of a cipher, the rate of decipherment should increase with each new reading.

THE FIGURES EMERGE INTO THE LIGHT.

As the decipherment moved into the 1980s, a "flood" of syllabic decipherment had not yet arrived. But events of the next few years would change all that.

FADE OUT. FADE IN SECTION TITLE OVER BLACK:
 "THE NAMES OF THINGS". FADE OUT. FADE IN:

ANIMATED GRAPHIC
 U BRACKET GLYPH.

NARRATOR: The developments that opened the floodgates began with a single syllable.

MORPH THROUGH SEVERAL EXAMPLES
 OF THE U BRACKET.

This bracket shape is the sign for the phonetic syllable *u*. It appears in Landa's syllabary, and has been known since the earliest days of the decipherment. *U* is also a Maya possessive pronoun, meaning "his" or her".

DRESDEN CODEX
 GLYPHIC *U CUCH* ACCOMPANIES
 FIGURE OF WOMAN CARRYING A GOD
 IN HER BACKPACK. HIGHLIGHT *CUCH*
 GLYPH.

For example, this sign from the Dresden Codex is read *cuch*, "burden".

HIGHLIGHT U BRACKET.

With the *u* bracket in front of it, it reads *u cuch*...

HIGHLIGHT GOD IN BACKPACK.

... "her burden".

MICHAEL COE INTERVIEW

MICHAEL COE: Dave Pendergast is the curator at the Royal Ontario Museum in Toronto. He contacted me, and asked if I could recommend somebody who could look at some glyphs.

PETER MATHEWS INTERVIEW

PETER MATHEWS: Mike handed me one day, this is while I was at Yale, a couple of inscriptions from Altun Ha, and he said Dave Pendergast had been wondering if anyone could do anything with these. One of these inscriptions was carved on a pair of ear flares from a burial.

RELIEF SCULPTURE
 SIDE VIEW OF MAYA KING WEARING
 EAR FLARES.

NARRATOR: Ear flares were disks worn as jewelry by Maya royalty and nobles.

PAIR OF EAR FLARES FROM ALTUN HA
 EACH HAS THREE GLYPHS.

On these ear flares, from a royal grave in Belize...

CLOSE-UP OF *UTUP* GLYPH. HIGHLIGHT AND LABEL *U* SIGN.

HIGHLIGHT AND LABEL *TU* AND *PA* SIGNS AS THEY ARE NAMED.

CROSS OUT FINAL "A" WITH RED SLASH.

BOTH EAR ORNAMENTS: HIGHLIGHT REMAINING FIVE GLYPHS.

PETER MATHEWS INTERVIEW

TIKAL BONE
MEDIUM SHOT.

CLOSE-UP OF INSCRIPTION; HIGHLIGHT GLYPHS AS NAMED.

EXT. STUART HOME IN SUBURBAN MARYLAND, DAY
SLOW ZOOM TO WINDOW.

MONTAGE OF NEWSPAPER AND MAGAZINE STORIES ON DAVID'S AWARD.

ZOOM IN ON DAVID'S PICTURE IN ONE OF THE STORIES.

PIEDRAS NEGRAS STELA 3
HIGHLIGHT DATE, A1-B3.

HIGHLIGHT VERB PHRASE.

...Mathews immediately spotted the *u* bracket, meaning "his", or "her".

It was followed by two known phonetic syllables: *tu...* and *pa*.

Tup in Yucatec Maya means ear ornament.

The remaining glyphs were the ruler's name and titles. So the whole text read, "His ear flares, Lord so-and-so." It was the first known case of an ancient Maya tagging an object with a declaration of ownership.

PETER MATHEWS: I wrote back to Dave Pendergast saying I thought that's what this was, and if so it's very nice, because it's confirmation that the Maya were doing the same thing we have in so many Old World scripts. One of the earliest Latin inscriptions that we have says essentially that "this is the sword of so and so".

NARRATOR: Shortly afterward, David Stuart noticed a similar pattern on several carved bones from a tomb at Tikal:

...*u...ba...ki...* or *u bak*, "his bone".

Then one day in February, 1984, Stuart was at his family's home when he received an unexpected phone call: in recognition of his achievements as a Mayanist, he had been chosen for a MacArthur Fellowship, awarded to give major scholars and other innovators financial freedom to pursue their work.

At age 18 and just out of high school, he was the youngest recipient ever of the prestigious prize, known in the press as the "genius award". The wire services picked up on the story immediately, and it made headlines across the country.

David took the event in stride; he used some of the cash award to buy a computer, and decided to take two years before college to concentrate on the glyphs.

He turned his attention to a pair of signs whose decipherment most Mayanists thought long settled.

Maya inscriptions often begin with an introductory Long Count date, elaborately presented...

...followed by the event that happened on that day.

HIGHLIGHT COMPONENTS OF
“DISTANCE NUMBER”.

ORIGINAL GRAPHIC SEQUENCE
“COUNT FORWARD” AND “COUNT
BACKWARD” GLYPHS SIDE BY SIDE.
LABEL THE “FORWARD” GLYPH WITH A
PLUS SIGN.

LABEL THE “BACKWARD” GLYPH WITH
A MINUS SIGN.

REPLACE BOTH GLYPHS WITH *XOC*
HEAD VARIANTS.

HIGHLIGHT BOTH *XOC* HEADS.

ARCHIVAL FOOTAGE
ERIC THOMPSON INTERVIEW, IN HIS
HOME STUDY IN ENGLAND.
THOMPSON DRAWS PICTURES TO
ILLUSTRATE HIS POINTS. HIS DRAWING
IS INTERCUT WITH THE INTERVIEW IN
OVER-THE-SHOULDER CLOSE-UPS.

CARVED GLYPHS
VARIANTS OF THE “COUNT FORWARD”
GLYPH, AS THEY ARE MENTIONED.

ORIGINAL GRAPHIC SEQUENCE
BRACKET, *XOC* HEAD, “WATER SIGN”,
HUMAN HEAD, MONKEY HEAD, ALL IN A
ROW.

Then comes an interval or what Mayanists call a
“distance number”— in this case 382 days...

...followed by one of two signs.

As Eric Thompson had shown long before, one of
these signs signaled addition, a count forward to a new
date.

The other signaled subtraction, a count backward to a
prior date.

In one of his most famous arguments, Thompson had
pointed out that many examples of the “count forward”
and “count backward” glyphs shared a common sign
that Thompson identified as the head of a shark, or *xoc*
in Maya. In Yucatec Maya, *xoc* can also mean “to
count”.

ERIC THOMPSON: The Maya had trouble expressing
abstract ideas; some of them they got round by using
rebus writing. You know, that kind of thing that kids
do, you draw an eye and a tin can and some wavy lines
to say “eye can sea”. The Maya had trouble with the
word for count, and they did a lot of counting. The
nearest word they could find was their name for the
shark, which in Maya comes very close to the English
word, its called *xoc*. *Xoc* is both “shark” and “count”.
So they had to use the picture of the *xoc* fish.

But it’s a bit of a trouble to keep on carving a shark’s
head every time you want to use the word count, and
the Maya were so hepped on numbers that they were
counting all the time. The way they got round it was
this: the shark lives in water, so let’s use water as a
symbol. But there were difficulties there, because the
actual symbol for water is jade. These are some of the
kinds of complications you get in Maya writing! So
what it finally amounts to, they used the symbol for
jade, which stands for water, water stands for shark,
and shark stands for *xoc*, to count.

NARRATOR: What David found that made him doubt
Thompson’s convoluted theory was that several other
signs also substituted for the shark: a human head... a
monkey... and, on a stela at Quiriguá, the *u* bracket.

Could these all somehow be rebuses for the word
“count”? David thought there was a far more
straightforward explanation: all of them—bracket,
shark, “water sign”, human head and monkey— simply
stood for the syllable *u*.

ORIGINAL GRAPHIC SEQUENCE
 THE DISTANCE NUMBER
 INTRODUCTORY GLYPH, WITH *U*
 BRACKET AS A COMPONENT. REPLACE
U WITH SHARK, THEN WITH JADE SIGN.

ORIGINAL GRAPHIC SEQUENCE
 THE TWO DIRECTION COUNT GLYPHS.
 HIGHLIGHT COMPONENT SIGNS AS
 NAMED; BELOW THEM THE SYLLABLES
 “U TI YI” AND “I U TI” APPEAR.

THE FINAL VOWELS ARE ELIMINATED
 WITH RED SLASHES, LEAVING “U TI Y”
 AND “I U T”.

PIEDRAS NEGRAS STELA 3
 WIDE SHOT OF BACK SIDE OF STELA, LIT
 AGAINST BLACK BACKGROUND.

CLOSE-UP OF BACK SIDE. MOVE DOWN
 TWO COLUMNS OF TEXT, FROM C2-D2
 TO C7-D7. ELEMENTS ARE
 HIGHLIGHTED AS THEY ARE SPOKEN IN
 ENGLISH.

DAVID KELLEY INTERVIEW

ORIGINAL GRAPHIC SEQUENCE
 ABOUT TWENTY VARIANT *U* SIGNS
 APPEAR RAPIDLY, ONE BY ONE,
 FORMING ROWS. EACH IS LABELED “U”
 IN LATIN SCRIPT.

PETER MATHEWS INTERVIEW

The proof was that all these signs seemed to freely substitute for *u* in other contexts that had nothing to do with counting.

The backward and forward counting glyphs were, in fact, phonetically spelled phrases.

In Maya, *Utiy* means “since it happened” and *i ut* means “and then it happened”.

Thompson’s calendric arithmetic was revealed as story telling.

MAYA VOICE (STARTS SOLO, GOES UNDER AS NARRATOR TRANSLATES): “*I ut hun kibin / canlahun uniu / nawah / ix katun ajaw / ix naman ajaw yichnal / Kinich Yo’onal Ac / buluc lahun uinalihy hun habiy / hun katun, I ut / kan kimi / kanlahum ikat / siyah / ix huntan ac / ix kin ajaw.*”

TRANSLATION VOICE (OVER MAYA VOICE): “...and then it happened, on the day One Cib Fourteen Kankin, that she was adorned in marriage, Lady Katun Ajaw, lady of Naman, in the company of Kinich Yo’onal Ac. And after 10 *kins*, 11 *uinals*, 1 *tun* and 1 *katun*, it happened, on the day 4 Cimi 14 Uo, that their daughter was born, the Lady Huntan Ac.”

DAVID KELLEY: When David Stuart gave his paper in Denver—

— he simply said that everything that substituted for *u* was *u*. And I didn’t believe it for a minute! It was a whole set of far too many values for one item. It took me six years to get to where I almost believed that. That they were just substituting madly!

PETER MATHEWS: When I first saw that argument of David’s, I said there’s absolutely no way that it could be that way. But it turned out to be an incredible contribution.

DAVID STUART INTERVIEWORIGINAL GRAPHIC SEQUENCE

AS ABOVE, A ROW OF SEVEN SYLLABIC SIGNS FOR THE SYLLABLE *HO* FORMS RAPIDLY.

ORIGINAL GRAPHIC SEQUENCE

A ROW OF TEN VARIANTS OF *NU* FORMS RAPIDLY.

ORIGINAL GRAPHIC SEQUENCE

TWO ROWS OF EIGHTEEN VARIANTS OF *TI* FORM RAPIDLY.

ARCHIVAL PHOTOS

STILLS OF HOUSTON, TAUBE AND MCLEOD, CIRCA 1985.

BLACK BACKGROUND

CENTERED PAINTED MAYA VASE, WITH PSS RIM TEXT.

RAPIDLY CUT SERIES OF CENTERED MAYA VESSELS (ALL WITH PSS RIM TEXTS) OF ALL SIZES, SHAPES AND DESIGNS.

CUTTING COMES TO REST.

A PAINTED BOWL.

A CARVED BOWL.

A CYLINDER VESSEL.

A PLATE.

A THREE-LEGGED DISH.

A VASE.

DAVID STUART: What this made clear was that for any sign in the script the scribes can draw upon two or three, maybe five or six, alternative signs to slide into that place without changing it. And they do it! And because of that, Maya is the most visually complex writing system ever made by mankind.

But once you realize this is what they are doing, you can start to collapse the variability that you see on the surface.

NARRATOR: Over the next few years, syllabic signs were deciphered with increasing rapidity. Today, well over a hundred of the Maya glyphs have been deciphered as syllabic signs, with up to twenty or more signs for a single syllabic sound.

In the mid-1980s a new generation of epigraphers was taking shape: archeologist Steve Houston... art historian Karl Taube... linguist Barbara McLeod.

Armed with the new syllabic readings, they turned their focus to the rim text of Maya vessels, the formulaic text that Michael Coe had dubbed the Primary Standard Sequence.

Because the PSS appeared on so many pots, they were able to compare variation in the glyphs with variations in vessel type and other factors over hundreds of examples.

The process produced a whole cluster of readings. It turned out that the Primary Standard Sequence was not a funerary chant after all.

It had five parts. First, a dedicatory phrase. Then, painter vessels often had a glyph that David Stuart read *u tzib*, "his writing and painting".

At the same position, carver vessels had a bat-head sign that reads "his carving".

The third phrase, as Houston and Taube proved, designate the vessel type. On vases it reads *yuchub*, "his drinking vessel"...

...on plates, *u lak*, "his clay plate"...

...and on serving dishes *u hawte*, "his tripod dish".

The fourth phrase on vases almost always includes a glyph that Stuart read as...

CLOSE-UP OF *KAKAW* GLYPH ON THE VASE. HIGHLIGHT SYLLABLES AS THEY ARE NAMED.

MAYA VASE ROLLOUTS

PALACE SCENES: LARGE CACAO VESSELS BEING POURED; SMALL MUGS HELD IN HANDS OF DRINKERS .

MAYA VASE

CLOSE-UP OF RIM TEXT OF SLOWLY ROTATING VESSEL. EACH SECTION OF THE PSS IS HIGHLIGHTED AS NAMED.

MICHAEL COE INTERVIEW

CLOSE-UP OF RIM TEXT OF A VESSEL IN HIGHLY DIFFERENT CALLIGRAPHIC STYLE. ROTATION AND HIGHLIGHTING AS ABOVE.

DAVID STUART INTERVIEW

FADE OUT. FADE IN SECTION TITLE OVER BLACK: **“OF SCRIBES AND KINGS”**. FADE OUT. FADE IN:

ARCHIVAL FOOTAGE

EXCAVATION, THE LAS SEPULTURAS RESIDENTIAL DISTRICT OF COPÁN.

...*ka.. ka... wa...* or *kakaw*. “Cocoa” is another word, like “shark”, that we have borrowed from the Maya.

DIEGO DE LANDA VOICE: “They make of ground maize and cacao a kind of foaming drink which is very savory, and with which they celebrate their feasts.” — Diego de Landa, 1566.

TRANSLATION VOICE: “It was dedicated... its surface... its writing... his thin-walled drinking vessel... for tree-fresh... cacao.”

MICHAEL COE: The last section of the sequence gave the name and titles of the owner of the vessel, or sometimes of the artist. And so the whole, elaborate sequence turned out to be, in fact, a gigantic case of ...name tagging.

TRANSLATION VOICE: “It was presented... It was blessed... it was painted... her drinking vessel... for her cacao food... Lady Kan... Holy Lady of Tikal”.

DAVID STUART: Maya writing at the very beginning was used for labeling, labeling objects, labeling people in scenes. All the long historical stuff is much later.

But even in the elaborate texts at Palenque, they will close the inscription with what amounts to a name tag: a dedicatory event in the house of somebody. It's the pinnacle of the text, because that's what they are really focussing on.

I finally began to think that Mayan texts, in their real core, are ultimately concerned with name tagging, no matter what text you're looking at.

NARRATOR: In the late 1970s, a series of major archeological projects began at the site of Copán, in Honduras. By shifting their focus in recent decades from palaces and temples to the buried neighborhoods around them, archeologists had demonstrated with stunning success that Maya sites were not “vacant ceremonial centers” but real and complex cities, sometimes with populations in the tens of thousands.

EXT. COPÁN SITE, DAY
RECONSTRUCTED SCRIBE'S COMPOUND
IN LAS SEPULTURAS.

BENCH FROM SCRIBE'S HOUSE
ESTABLISHING SHOTS.

DETAIL OF BENCH INSCRIPTION; PAN
 TEXT AND HIGHLIGHT GLYPHS AS THEY
 ARE NAMED.

MAC CHANAAL AND FATHER UNDER
 CENTER OF BENCH; THEN PAUAHTUNS
 AT LEFT END OF BENCH; THEN
 PAUAHTUNS AT RIGHT END OF BENCH.

SCULPTURE OF MONKEY SCRIBE

SCRIBE'S HOUSE FAÇADE
WIDE SHOT.

SCRIBE WITH INKPOT.

MAYA VASE ROLLOUT PHOTOS
A COURT SCENE. A ROYAL SCRIBE
WRITES IN A CODEX.

VASE INSCRIPTION: HIGHLIGHT *UTZIB*,
 THEN HIGHLIGHT ARTIST'S NAME.

PIEDRAS NEGRAS STELA 14
ESTABLISHING SHOT, THEN CLOSE-UP
OF A SCULPTORS' SIGNATURE.

GILLETT GRIFFIN INTERVIEW

MAYA VASE ROLLOUT PHOTOS
SCRIBES AT WORK, SEATED ON
THRONES.

The Copán team focussed on an outlying neighborhood of large and small residential compounds, often including artisan workshops as well as living quarters. In a particularly imposing residence that dominated one of the largest compounds...

...they found a spectacular bench or throne, with one of the most beautiful of all Maya inscriptions. It named the resident and his parentage, and declared that he was a courtier of the king, Yax Pasaj.

TRANSLATION VOICE: "11 Ajaw, 3 Ch'en / his house was dedicated / Mac Chanaal / the son of / Lady Sun Lord / the successor of / Kuk Kawil."

NARRATOR: The center supports of the bench portrayed Mac Chanaal himself and his father, Kuk Kawil. But the bench was supported at its corners by four Pauahtuns, shown by Michael Coe to be patron gods of writing.

Buried in the foundation was the figure of a monkey-scribe, holding his brush and inkpot.

And painstaking reconstruction revealed that the building façade bore large carved figures of scribes...

Could this have been the home of a high-ranking royal scribe?

In many societies, scribes are bureaucrats or lowly artisans. But it began to look as if the role of scribe among the Maya was far more elevated.

This idea was reinforced by the discovery that some Maya scribes actually signed their own work, an extraordinary indicator of status. David Stuart and others began to find the phrase *utzib*, "his writing" followed by a name, on Maya royal vessels.

Sculptors, too, signed their works, using a phrase beginning with the distinctive bat-head verb that read "his carving".

GILLETT GRIFFIN: In the world of the 8th century, you had— only in China, and maybe the Arab world, would you have people signing their pottery. In Europe, you had people painting their bodies blue, and hanging each other up with broadswords. But, in the jungles of Central America, you had people so refined, that princes were signing the pottery they painted!

MAYA PLATE

A GOD, SITTING ON THE SURFACE OF THE COSMOS, PAINTING A BOOK.

SLOW MOVE IN.

EXT. KIMBALL MUSEUM, NIGHTARCHIVAL PHOTOS

OPENING OF "THE BLOOD OF KINGS" AND INSTALLATION STILLS OF EXHIBIT.

MONTAGE OF YAXCHILAN LINTELS AND OTHER OBJECTS EXHIBITED IN "THE BLOOD OF KINGS"MONTAGE

PRESS HEADLINES AND FEATURE STORIES ABOUT THE EXHIBIT.

ARCHIVAL FOOTAGE

ARCHEOLOGISTS DOING SURVEY IN RESIDENTIAL NEIGHBORHOOD OF A MAYA CITY.

MICHAEL COE INTERVIEW

NARRATOR: On several Maya plates and vessels, a divine scribe is shown painting his codex on the surface of the earth itself.

According to the Christian Bible, the universe begins with God's spoken word. But for the ancient Maya, the universe was painted by the gods, and written by divine scribes.

In May of 1986, an exhibit titled "The Blood of Kings", created by Linda Schele and art historian Mary Miller, opened at the Kimball Art Museum in Fort Worth, Texas.

For the first time, a broad public saw what glyphs and images had revealed about the ancient Maya since the First Mesa Redonda thirteen years before.

The exhibit presented a revolutionary image of the Maya elite, not as peaceful philosophers but as kings and queens who fought bloody wars, decapitated captives, and, in great public ceremonies, pierced their own tongues and genitals to offer blood to the gods.

"The Blood of Kings" was a huge success, and put a spotlight on Linda Schele. The art history teacher from Tennessee became possibly the most famous Mayanist in the world during the decade that followed "The Blood of Kings".

Archaeologists had shifted their focus from the doings of royal courts to the structures of everyday life. It had been a refreshing and democratic change. Now, because the inscriptions were by and about the elite, the decipherment was threatening to shift focus back to the kings and generals, and some archeologists resisted.

MICHAEL COE: A lot of archaeologists felt threatened and resentful. Here was a bunch of outsiders who were getting top coverage in the daily press and news magazines, who had never had to endure the heat, ticks, and gastrointestinal problems endemic to field excavation, who had never had to sort their way through mountains of drab potsherds and obsidian chips. Here was a person like Linda Schele, filling huge auditoriums to capacity wherever she went, and she didn't even have a degree in anthropology! It was unfair.

EXT. COPÁN SITE, DAY
ESTABLISHING SHOTS.

MONTAGE: COPÁN INSCRIPTIONS.

DAVID STUART INTERVIEW

EXT. COPÁN SITE, DAY
MONTAGE: COPÁN INSCRIPTIONS.

ARCHIVAL PHOTO
STUART CROUCHING IN COPÁN
STOREHOUSE, 1986. SHELVES COVERED
WITH SCULPTURE FRAGMENTS
STRETCH INTO THE DISTANCE.

INT. COPÁN STOREHOUSE
SHELF OF STONE INCENSE BURNERS.

CLOSE-UP OF *U SAK LAK TUN* GLYPH ON
AN INCENSE BURNER.

HIGHLIGHT *LAK*.

HIGHLIGHT *TUN*.

CLOSE-UP OF *TUN* SIGN. HIGHLIGHT
“CAVE”, “STALACTITE” AND “SPLASH”
AS THEY ARE MENTIONED.

U SAK LAK TUN ON ANOTHER INCENSE
BURNER. HIGHLIGHT COMPONENTS AS
NAMED.

COPÁN ALTAR U, NIGHT
FRONT OF ALTAR, LIT IN BLACK LIMBO.
MOVE IN SLOWLY ON HUGE MONSTER
HEAD.

NARRATOR: Some archeologists welcomed the contributions of the decipherers with open arms. In the summer of 1986, just after the opening of “The Blood of Kings”, Bill Fash of Harvard University invited Linda Schele and David Stuart to spend the summer working with his team at Copán.

DAVID STUART: Copán-If you're going to choose any site to look at the complexities of the Maya script, Copán's the place. It's the most, the cruelest site!

I ignored Copán for years when I was getting into this stuff. I was so intimidated by it. Because the Baroque-ness of the inscriptions— They weren't structured like the longer narrative texts at Palenque: date, event, name, distance number, date, event, name, distance number ...

they were doing all these weird things at Copán! You would have this long inscription on a stela with just one date. And combinations of signs you hadn't seen anywhere.

NARRATOR: The discoveries began on his first day in Copan. In an artifact storehouse on the site...

... Stuart found a group of large incense burners, each with a glyphic inscription.

DAVID STUART: ...and about three or four of them had this glyph that was spelled in neat, funky different ways each time, very typical of Copán, but there was *lak*, which I know meant plate, also it was a word for incense burner, as a dish of the gods. And there was *tun*.

NARRATOR: This is the sign for stone, or *tun* in Maya. Some think the glyph represents a stone cave, with water dripping from a stalactite and splashing on the floor.

The whole glyph read *u sak lak tun*, “his white stone incense burner”, followed by a name. Another case of name-tagging. And there would be more...

A few days later, David found himself staring at a huge altar or throne found in a residential section of the city. Its front was carved with the face of a monster.

HIGHLIGHT *KIN* SIGNS IN EYES.

It had *kin* or sun signs for eyes...

HIGHLIGHT MAT OR THRONE SIGN ON FOREHEAD.

...and a royal mat or throne on its forehead.

MEDIUM SHOT, INSCRIPTION ON BACK OF THRONE.

In the inscription on the back of the monster's head, Stuart found a reference to the throne itself:

CLOSE-UP GLYPHS E2-F2. HIGHLIGHT *KINICH* GLYPH.

...the royal title *kinich* or "sun-eyed"...

HIGHLIGHT THRONE GLYPH.

...followed by the mat or throne symbol carved on the creature's forehead...

HIGHLIGHT *TUN* GLYPH.

...and the sign for stone, *tun*.

HIGHLIGHT ALL THREE GLYPHS.

David read the title as "sun-eyed throne stone". He had found both a glyph for throne...

MONSTER FACE ON FRONT OF ALTAR U, WITH "SUN" EYES AND "THRONE" FOREHEAD.

...and the name of this specific object: "the sun-eyed throne stone."

ANIMATED GRAPHIC
WITZ GLYPH MORPHS THROUGH SEVERAL VARIANTS.

David also discovered the logogram for *witz* or "mountain" in the texts of Copán. It had the tell-tale "stone" markings of the *tun* glyph, with a curly border. It fit with everything he knew about the symbolic language of Maya art.

DRESDEN CODEX
PAGE 66C. HIGHLIGHT GOD CHAK IN CENTER ILLUSTRATION; THEN HIGHLIGHT *WITZ* HEAD HE IS SITTING ON.

In one of the illustrations of the Dresden Codex, the god Chak sits on a head with the same stone markings. The text calls it, phonetically, a *witz*, or hill.

EXT. PALENQUE SITE, DAY
TABLET OF THE FOLIATED CROSS: TILT DOWN FIGURE OF KAN BALAM TO *WITZ* MONSTER HE IS STANDING ON.

In the Temple of the Foliated Cross at Palenque...

HIGHLIGHT "STONE" MARKINGS.

...Kan Balam is standing on the same symbolic mountain god.

The tell-tale stone markings are on its forehead and nose....

HIGHLIGHT MONSTER'S CORN 'HAIR'.

Ears of corn curl from its forehead, crops growing on the mountain....

CUT TO CLOSE-UP OF MONSTER'S RIGHT EYE; HIGHLIGHT SIGNS AS THEY ARE NAMED.

The hieroglyphs that form the pupil of the monster's right eye read *wi... tsi... na... la...*, *witznal*, or "hill place".

ARCHIVAL PHOTOS

MEN PRAY IN FRONT OF CROSSES
OUTSIDE ZINACANTAN, CHIAPAS.
BEYOND THE CROSSES LOOMS A
PYRAMID-SHAPED MOUNTAIN.

EXT. COPÁN SITE, DAY

CORNER OF TEMPLE 22, WITH TWO *WITZ*
MONSTERS.

A DOORWAY IN THE FORM OF A HUGE
GAPING JAW. TRACK FORWARD INTO
DARKNESS WITHIN.

ARCHIVAL PHOTO

STEVE HOUSTON AND DAVID STUART,
CIRCA 1986.

EXT. COPÁN SITE PLAZA, DAY
A FOREST OF CARVED STELAE.

A LINTEL...
A STAIR...
A TEMPLE...
A VIEW PAST COPAN TO THE
MOUNTAINS.

HIGH ALTITUDE PANORAMA IN THE
MOUNTAINS ABOVE COPÁN, DAYARCHIVAL PHOTOS

LINDA WORKING WITH PROJECT
ARCHAEOLOGISTS, CIRCA 1986.

Anthropologist Evon Vogt had pointed out years before that the modern highland Maya regard mountains as holy places, homes of the ancestors, and put altars with elaborate crosses in front of them, just as the ancient Maya put stelae in front of their temples.

At Copán and many other cities, the temples themselves are adorned with the head of the *witz* monster. David realized that for the Ancient Maya, the temples were symbolic mountains.

Entering the temple, like entering a mountain cave, was to pass through the jaw of the *witz* monster into the world of the ancestors, the underworld, the holy place of visions and altered states.

At a conference in Guatemala earlier that year, Stuart had met the young epigrapher Steve Houston. Houston had suggested that many features of the Maya landscape and environment might be named in the glyphs.

Now, Stuart began finding names all around him. He found a glyph for the stelae or standing stones of Copán, now read as *lakam tun*, “great stone” or “banner stone”. And the stelae, too, had individual names.

Over the next few years, it would become apparent that dozens of features of Maya cities and landscapes were named in the glyphs: *U Pakab*, his lintel... *Yebal*, his stair... *Sak Nuk Na*, White Great House... *Mo Witz*, Macaw Mountain.

For the ancient as for the modern Maya, the landscape was alive with gods. The temples and stelae of ancient Copán, like the mountains and crosses of the highland Tzotzil, were living, holy beings.

As they explored the sacred landscape of Copán that eventful summer, Stuart and Schele were also working with the archaeologists to piece together the city’s history.

The royal history of Copán seemed to have extended over a span of about three hundred years, from the sixth to the ninth centuries. During this time half a dozen kings had left dated monuments and sometimes royal portraits.

EXT. COPÁN SITE, DAY
VIEW OF TEMPLE 16 FROM COURTYARD.
TILT DOWN TO COPY OF ALTAR Q (SEE
FIGURE 15).

CLOSER VIEW OF ALTAR.

ALTAR Q (ORIGINAL), NIGHT
SEATED FIGURE OF YAX PASAJ.

CLOSE-UP OF NAME GLYPH YAX PASAJ
IS SEATED ON. HIGHLIGHT
COMPONENTS AS NAMED.

TWO SHOT, YAX KUK MO HANDING YAX
PASAJ THE SCEPTER.

CLOSE-UP OF DATE. HIGHLIGHT
COMPONENTS AS NAMED.

WIDE SHOT, FRONT OF ALTAR. THE
TWO KINGS WITH SCEPTER ARE
SURROUNDED BY OTHER FIGURES.

SHOT ROTATES SLOWLY AROUND THE
ALTAR.

ALTAR FROM ABOVE, SHOWING
INSCRIPTION ON TOP SURFACE.

HIGH ANGLE CLOSE SHOT OF ALTAR Q
INSCRIPTION. MOVE DOWN FROM A1-B1
TO A5-B5, HIGHLIGHTING GLYPHS AS
THEY ARE NAMED.

YAX KUK MÓS NAME GLYPH.
HIGHLIGHT COMPONENTS AS NAMED.

But at the very center of Copán's acropolis, in front of one of the city's most imposing temples, is a large carved stone known as Altar Q. It bears the portraits of sixteen seated men.

Scholars early in the century saw it as a congress of astronomers, gathered at Copán to discuss matters of the calendar. This fit the prevailing notion of the Maya as a people ruled by peaceful astronomer-priests.

But in the 1970s, scholars identified one of the sixteen figures as the last great king of Copán, who built most of the visible city.

He is seated on his own name glyph, now read phonetically *Yax... Pa... saj*, or "First Dawn".

Another man is handing him a scepter of office.

Between them is the date of Yax Pasaj's inauguration: 6 Caban, 10 Mol.

All the other figures, except the mysterious man with the scepter, were seated on glyphs that gave their names. Were they *Copanecos* attending the ceremony?

Epigrapher Berthold Reise showed that Yax Pasaj is elsewhere given the title "sixteenth successor", and concluded that these sixteen figures were all kings of the Copán dynasty.

Most archaeologists rejected this out of hand. It would push the city's royal history back at least a hundred and fifty years. There was no archeological evidence at the time to support the idea that Copán was more than a village in the fifth century.

Then, working from drawings a few months before his arrival at Copán, David Stuart found two fifth century events on the inscription of Altar Q.

TRANSLATION VOICE: "On 5 Caban 15 Yaxkin / he displayed the God K sceptre / the founder, Lord Yax Kuk Mo. On 8 Ajaw 18 Yaxkin / he arrived, the founder /Sun-eyed Yax Kuk Mó."

NARRATOR: Who was this Yax Kuk Mó? His name began with the *Yax* sign, meaning "blue green", and then combined the head of a quetzal bird or *kuk* with the distinctive eye markings of a macaw or *mó*.

EXT. COPÁN SITE, DAY
WIDE SHOT OF COPÁN FROM TOP OF
TEMPLE 11.

PAN TO VIEW DOWN INTO COURTYARD,
WITH ALTAR Q IN FRONT OF TEMPLE 16.

ALTAR Q (ORIGINAL), NIGHT
MEDIUM SHOT, FRONT OF ALTAR.

CLOSE-UP, HEAD OF YAX K'UK MO.
HIGHLIGHT "MACAW MARKINGS"
AROUND THE EYE OF THE BIRD ON HIS
HEADDRESS.

LINDA SCHELE INTERVIEW
ALTAR Q (ORIGINAL), NIGHT
YAX KUK MÓ'S HEADDRESS.
HIGHLIGHT *K'IN* SIGN AS IT IS NAMED.

LINDA SCHELE INTERVIEW

DAVID STUART INTERVIEW

ALTAR Q (ORIGINAL), NIGHT
FRONT OF ALTAR; MOVE IN TO CLOSE-
UP OF HANDS PASSING SCEPTER.

EXT. COPAN SITE, DAY
FAÇADE OF TEMPLE SIXTEEN. SLOW
TILT UP.

LINDA SCHELE INTERVIEW

According to the text, he seemed to have arrived in Copán and founded the dynasty in early September of AD 426.

But was he an historical figure, or a mythical founder like the founder-gods of Palenque?

LINDA SCHELE: I will never forget the day that I was taking a group of Earth Watchers around, I squatted in front of the beginning of this series of 16 figures...

...and looked at the bird that was on the back of the first figure's head and realized that I could see the little dots of the macaw eye.

And I just stood up and screamed, "David come here!" And he came over, and I showed him the dots and then he looked up on top of the head and said, "My God, there's the *k'inich*!"

And in that moment, we recognized that first figure was the founder, and that his name was Yax K'uk Mo.

DAVID STUART: We just looked at it, and I don't think a word was exchanged, and we looked to each other, and did a high five or something, because we both saw what it was. It was the quetzal bird, the dots around the eye of the quetzal, and the *yax*, and the *k'in*. It was all there.

NARRATOR: David and Linda now believed they understood the imagery of Altar Q: The sixteenth successor, Yax Pasaj, is showing his succession, through an unbroken line of predecessors, from the founder of the dynasty, K'inich Yax Kuk Mó, who is shown passing him the scepter of office at the moment of his accession.

The front of the temple behind Altar Q, called Temple 16 by archaeologists, has been reconstructed in the site museum. It is covered with death-heads and funerary symbols in the style of Teotihuacan, the vast metropolis far to the West in the central valley of Mexico. Yax Kuk Mó's inscriptions said he arrived from the West. And Yax Kuk Mós name glyph and symbols were found on top of the temple.

LINDA SCHELE: And so everything just accumulated, that that axis under the temple was likely to be an incredibly important axis.

BILL FASH INTERVIEW

BILL FASH: So we did all these tunnels into the Acropolis, and we wanted to see if there was in fact, archaeological evidence for these hieroglyphic kings, if there were monuments that dated to the time of these, as one person put it—somebody wrote this really nasty line about these supposed kings— "putative kings," that was it. If there were these putative kings, what kinds of monuments would be there?

ARCHIVAL FOOTAGE OF TUNNELING,
COPAN ACROPOLIS

NARRATOR: Deep beneath a temple at the north end of the Acropolis, Fash and his team found a fifth century monument describing a major ceremony celebrated by K'inich Yax Kuk M6.

MOTMOT MARKER, WITH PORTRAIT OF
YAX KUK MO

Tunneling still deeper, they found a floor marker commemorating the same event. This time there was a portrait of the founder. The early history of Copan was emerging from beneath the earth, and it matched the epigraphers predictions.

ARCHIVAL PHOTO
AGURCIA TEAM EXCAVATING THE
ROSALILLA TEMPLE

In 1991, a team led by Honduran archaeologist Ricardo Agurcia discovered a series of nested structures inside Temple 16.

TUNNELS UNDER TEMPLE 16
TRACKING SHOT ALONG TUNNEL
REVEALS HUGE QUETZAL-MACAW
RELIEF, IN FULL COLOR.

Finally, in 1995, at the heart of the temple, a University of Pennsylvania team found what seem almost certainly the tombs of Yax Kuk M6—and his queen. The facade of the innermost temple bore the huge, intertwined figures of a quetzal and a macaw. Each had the "yax" or "blue-green" sign above it. And each had the head of the sun god, *kinich ajaw*, in its mouth. It was a single, stunning hieroglyph: *Kinich Yax Kuk M6*, Sun-eyed Blue-green Quetzal Macaw.

DETAILS OF THE GIANT GLYPH.EXT. COPAN SITE, SUNSET
WIDE SHOTS OF THE CENTRAL
ACROPOLIS.

As the dynastic histories of Maya cities emerged from the glyphs, scholars began to broaden their view to the relationships between those cities. For many years it was widely believed that all were independent city-states of roughly similar structure and status. Maya cities, large and small, had emblem glyphs, and kings whom they called "holy lords"; they all erected monuments with similar royal imagery. When they met, it was assumed, they met as equals. But in the early 1990s, this image would be transformed.

SERIES OF LORDS ON STELAE IN THE
PLAZA.

FADE OUT. FADE IN SECTION TITLE OVER BLACK:
"BRINGING IT ALL BACK HOME". FADE OUT; FADE
IN:

SITE OF CALAKMUL. DAY
HUGE BUILDINGS, VAST COURTS, ALL
HEAVILY DECAYED AND SURROUNDED
BY JUNGLE.

DETAILS OF ERODED INSCRIPTIONS ON
STELAE WRAPPED IN VINES.

CANCUEN PANEL
ZOOM IN ON SNAKE HEAD EMBLEM
GLYPH OF CALAKMUL.
HIGHLIGHT EMBLEM GLYPH.

ARCHIVAL PHOTO
SIMON MARTIN, CIRCA 1990.

ORIGINAL GRAPHIC SEQUENCE
U KABHI GLYPH. HIGHLIGHT
COMPONENTS AS NAMED.

CANCUEN PANEL
FOUR GLYPH PHRASE. HIGHLIGHT
EACH GLYPH AS IT IS NAMED.

MAYA RELIEF
LORD WITH SUBORDINATE LORD.

3-D MAP OF MAYA REGION
SLOW MOVE IN TO CENTRAL MAYA
LOWLANDS. TIKAL, UAXACTUN AND
CARACOL ARE MARKED.

ADD "WAR ARROW" FROM CARACOL TO
TIKAL. THEN ADD CALAKMUL TO MAP.
THEN ADD NARANJO, DOS PILAS AND EL
PERU TO MAP.

WAR ARROW FROM CARACOL STRIKES
NARANJO.

WAR ARROW FROM CALAKMUL
STRIKES DOS PILAS.

NARRATOR: Discovered in 1931 deep in the
rainforest of southern Campeche, the vast ruin of
Calakmul had long been the great blank spot of Maya
history. With more than six thousand structures, it is
the largest of all Maya cities. But its soft stone has
suffered terrible decay, and few of its monuments are
legible.

Even the emblem glyph of Calakmul was uncertain.
But monuments at other sites referred with deference
to an unidentified city whose emblem glyph was the
head of a snake. By the end of the 1980s it was clear
that this city was Calakmul.

Then, in the early 90s, the picture of Maya politics and
the role of Calakmul was profoundly changed by the
work of a young British graphic designer and self-
taught Mayanist named Simon Martin.

Martin deciphered a mysterious verb, often linked to
the Calakmul emblem glyph, to read *u... kab...hi*,
meaning "he oversaw it" or under the auspices of".

TRANSLATION VOICE: "He was seated in rulership
/ the king of Cancuen / He oversaw it / The king of
Calakmul."

NARRATOR: This meshed with Steve Houston's
insight that the title *ajaw*, or lord, the title for rulers of
cities, could be modified by a possessive: *y-ajaw*, or
HIS lord. This meant that the ruler of one Maya city
could be subordinate to the ruler of another city.

Working with Nikolai Grube, Martin developed a
dramatic new picture of Maya political history. Tikal
dominates the Early Classic period from the fourth to
sixth century, conquering Uaxactun and holding sway
over Caracol and other nearby towns.

Then, in the year 562, Tikal suffers a calamitous
defeat, "under the auspices" of Calakmul. As new
cities spring up to the West, Tikal spends the next
hundred and fifty years diplomatically isolated and at
war with its major neighbors—all allies or vassals of
Calakmul.

HEADLINE VOICE #1: December 24th, 631: Caracol
conquers Naranjo—under the supervision of Calakmul.

HEADLINE VOICE #2: December 13th, 677: Shield
Skull of Tikal driven out of Dos Pilas by the King of
Calakmul.

TRAVEL ARROW FROM DOS PILAS
EXTENDS TO NARANJO.

WAR ARROW FROM TIKAL STRIKES
CALAKMUL.

TIKAL SITE, DAY
SHOTS OF MAJOR ARCHITECTURE.

CALAKMUL SITE, DAY
OVERGROWN TEMPLES, STELAE
TANGLED IN VINES, COLLAPSED
MOUNDS.

COPÁN ALTAR L
SOUTH SIDE: U CIT TOK RECEIVES
SCEPTER FROM YAX PASAJ.

NORTH SIDE, HALF CARVED.

ARCHIVAL FOOTAGE
CENTRAL YUCATÁN: DON REYMUNDO
COLLI AND HIS SONS, THE YUCATEC
FARMERS WE SAW PLANTING AND
HARVESTING CORN AT THE BEGINNING
OF PART ONE, CUT A NEW FIELD OUT
OF THE MILPA.

AT A CORNER OF THE NEW FIELD, DON
REYMUNDO PRAYS BEFORE A GOURD
OF CORN GRUEL PLACED AS OFFERING
IN THE CROTCH OF A TREE. HIS PRAYER
IS IN YUCATEC; HIS WORDS ARE
SUBTITLED.

HEADLINE VOICE #1: August 27, 682: Lady Wak-
Kanal-Tzuk of Dos Pilas arrives at Naranjo, to
establish a new royal line—under the patronage of
Calakmul.

HEADLINE VOICE #2: August 5th, 695: Calakmul
defeated! Major victory of Hasaw Chan Kawil of
Tikal over Jaguar-paw of Calakmul.

NARRATOR: As if in celebration of this triumph,
Tikal embarked on a century-long building program,
producing most of the major architecture seen at the
site today.

But despite Tikal's rejuvenation, the days of
superstates were numbered. Previously silent cities
began to claim their own royal dynasties, and warfare
intensified.

As political and environmental exhaustion
overwhelmed the region, the great cities of the
southern lowlands finally collapsed.

On the last dated monument of Copán, Yax Pasaj's
successor U Cit Tok receives the scepter of office from
Yax Pasaj himself: the symbolic founding of a new
dynasty. But this new dynasty never got started.

Before completing his carving the sculptor walked
away, leaving the monument unfinished. The city
could no longer sustain either kings or artists.

But Maya farmers didn't disappear. They retreated
into the *monte*, the forest, cut new fields and returned
to life as they had lived it for thousands of years. They
continued making the prayers and offerings that kept
the universe in order, as they had since long before the
first great cities were built.

DON REYMUNDO COLLI: At virgin daybreak
I leave this in the palms of their hands
Men-jaguars walk my fields, talking and whistling
At this virgin hour as the sun appears
May they share this, may they taste it
And grant my request for permission to work.

MONTAGE OF TEXTS AGAINST BLACK
A STONE INSCRIPTION.

A CONCH SHELL INSCRIBED WITH
HIEROGLYPHICS.

A MAYA VASE WITH A LONG TEXT.

INT. PALENQUE TEMPLE 19, LAMP LIGHT
DAVID STUART LYING BY HALF-BURIED
THRONE IN PALENQUE TEMPLE 19,
READING GLYPHS WITH A FLASHLIGHT
AND DRAWING THEM IN HIS NOTEBOOK,
AS ARCHAEOLOGIST KIRK STRAIGHT
REMOVES DIRT FROM A CARVING AT
THE FOOT OF THE THRONE.

INT. COE FARMHOUSE, NIGHT
COE HAS SOME MAYA TEXTS SPREAD
OUT ON HIS DINING TABLE, AND IS
WRITING BY LAMPLIGHT. HE LOOKS UP.

EXT. COPAN SITE, SUNRISE
VIEW OF STELAE ON THE GREAT PLAZA.

PAN TO ONE SIDE UNTIL A CARVED
INSCRIPTION COMES INTO CLOSE-UP,
GLOWING IN DAWN LIGHT.

FADE OUT. ROLL END CREDITS.

A focus on Maya grammar is replacing broad paraphrases with precisely nuanced translations. The thousand-year-old language of the glyphs has now been specifically identified, by details of grammatical structure, as an ancestral form of Cholti, a Mayan language of Eastern Guatemala. Scholars can now detect regional dialects in the texts on Maya vases, a level of subtlety that would have been inconceivable a decade or so ago.

It is almost certain that in the years to come, as newly discovered texts solve old mysteries and create new ones of their own, many of the translations of Maya glyphs you have heard in this program will be revised or refined; a few perhaps will be proved dead wrong. This is not because decipherment is guesswork; it is because decipherment is science.

MICHAEL COE: The first time I ever saw a Maya text was in 1947. I was an English major at Harvard, and I went to Yucatán for Christmas vacation. At Chichén Itzá there were all these lintels carved with strange characters. As I was wondering if archeologists knew how to read them, a photographer from Hollywood appeared. Before my eyes he ran his hands over the glyphs and told me what they said. I was dumbfounded. What a genius he must be!

But when I got back to Cambridge I found out it was all balderdash. Nobody in the world could read those texts.

NARRATOR: If you should go to a Maya site today and meet someone reading the inscriptions aloud, in a real Mayan language, you have no reason for disbelief.

Through one of the great intellectual achievements of our time, the writing of the ancient Maya scribes has begun to speak once more.

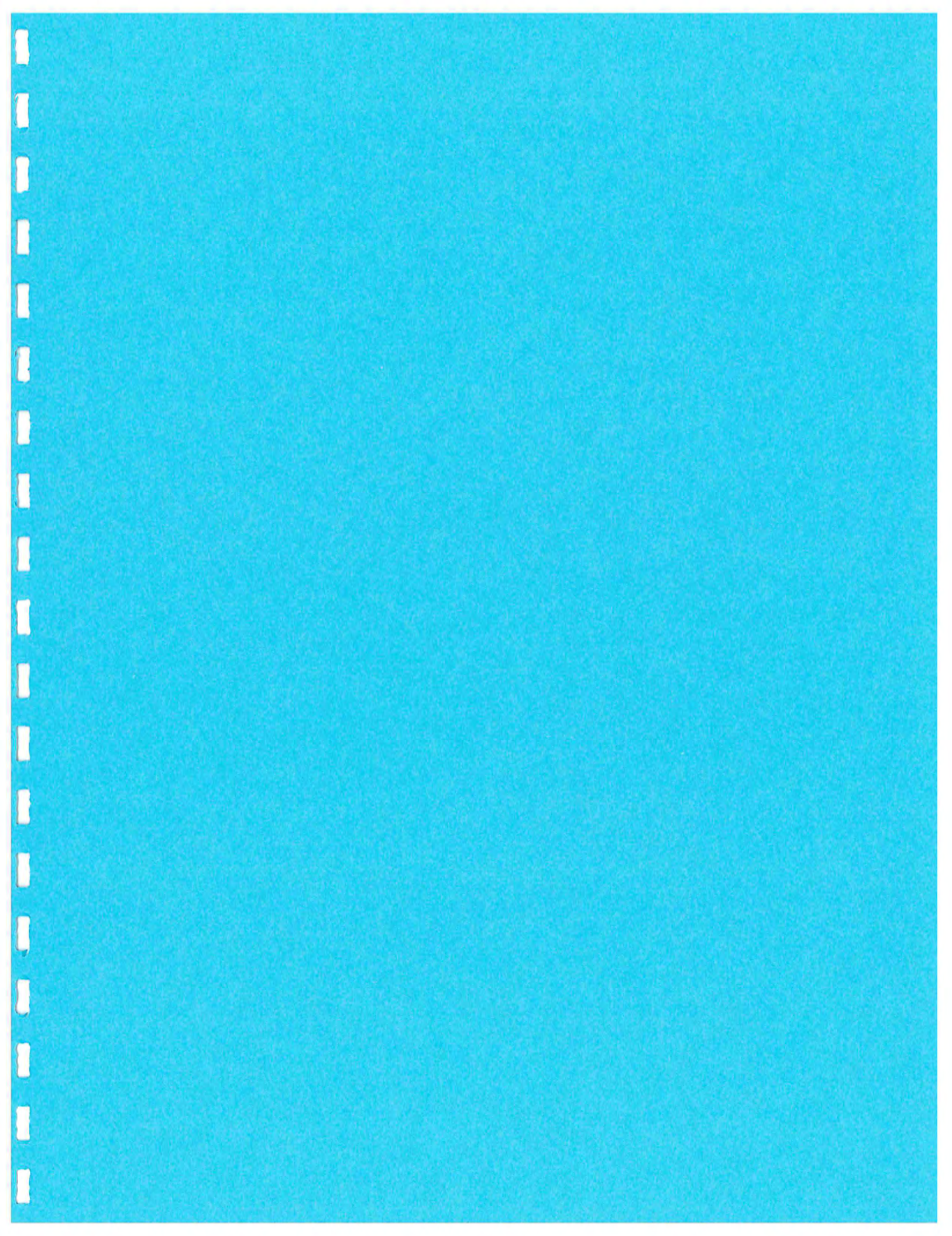




FIGURE 1. A friar visiting Tonina, Chiapas in 1710 wrote one of the first European descriptions of a Maya stone inscription:

“Among these buildings there are many coats of arms made of very hard stone... All about their circumference there is a fringe, and in this fringe many characters of various figures and ciphers, which Father Garrido says are Chaldean letters. More than letters they seem to me like ciphers or hieroglyphs, meaning actions and events; because each of these figures is placed in its little house, and each house has too much labor to be a single letter.”

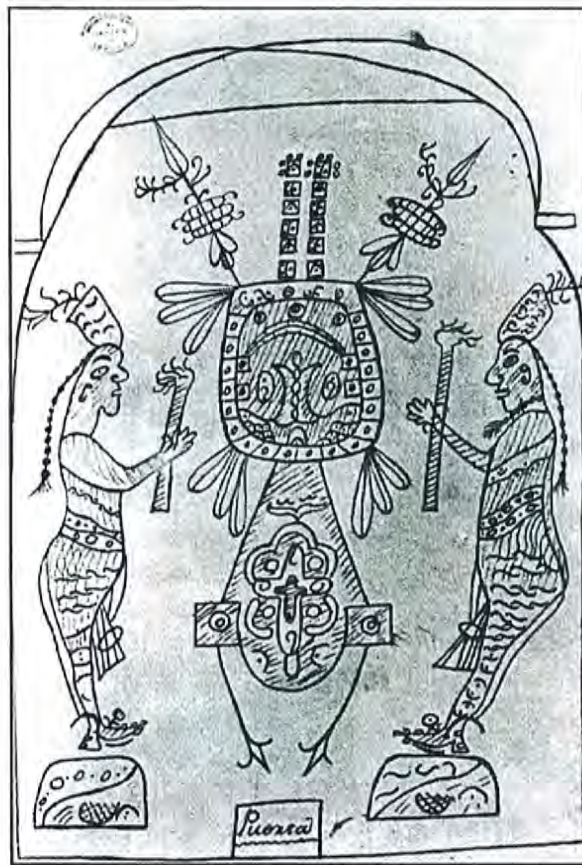


FIGURE 2. First drawing of a Maya Inscription: The Tablet of the Sun, Palenque, by Jose Calderon, 1784.

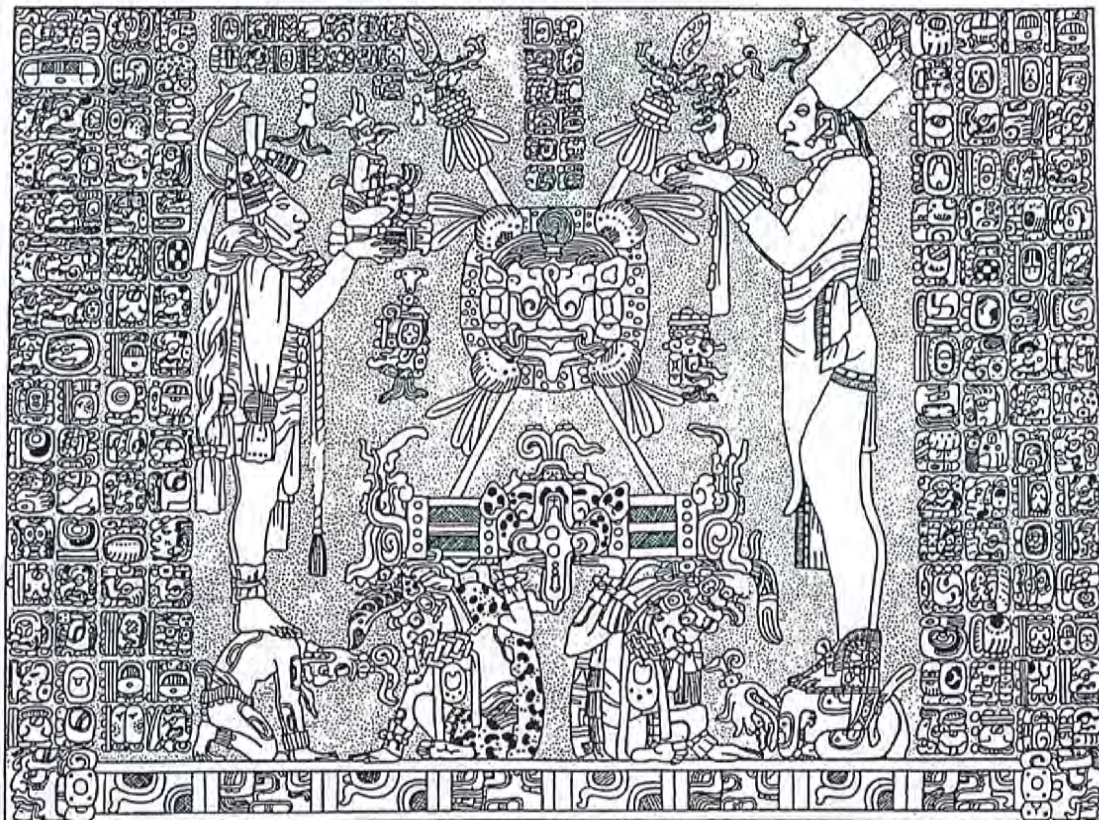


FIGURE 3. The Tablet of the Sun, Palenque, in a modern drawing.

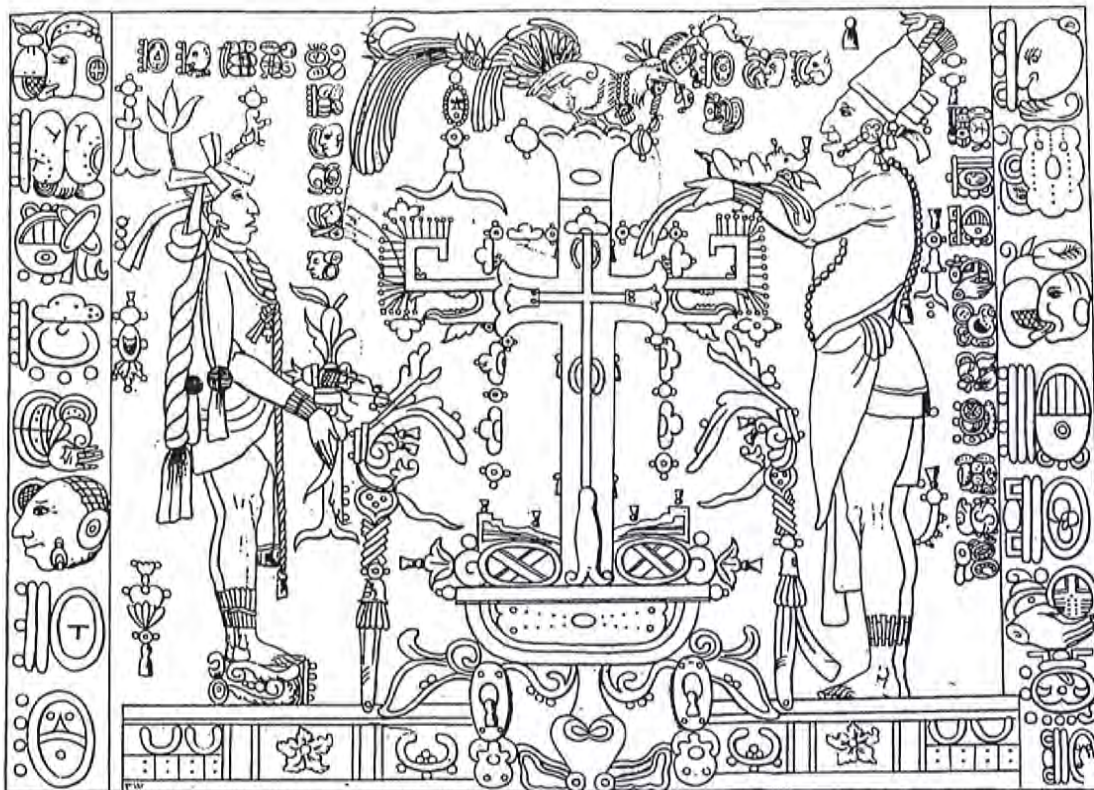


FIGURE 4. The Tablet of the Cross, Palenque, by Ignacio Armendariz, 1787. Early scholars had to base their theories of the glyphs on charming but inaccurate renderings like this. Compare the hieroglyphs with those in the picture below.

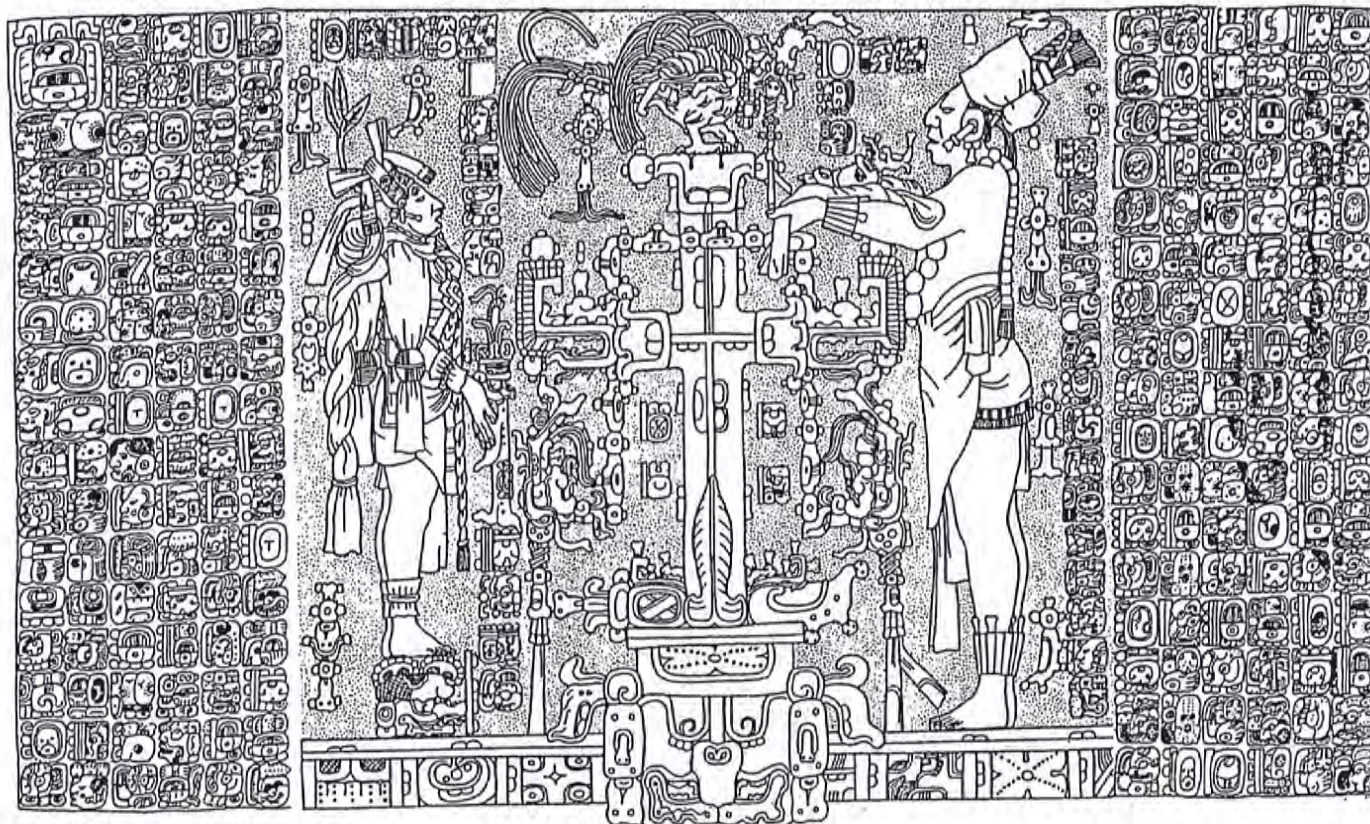


FIGURE 5. The Tablet of the Cross, Palenque, in a modern drawing.

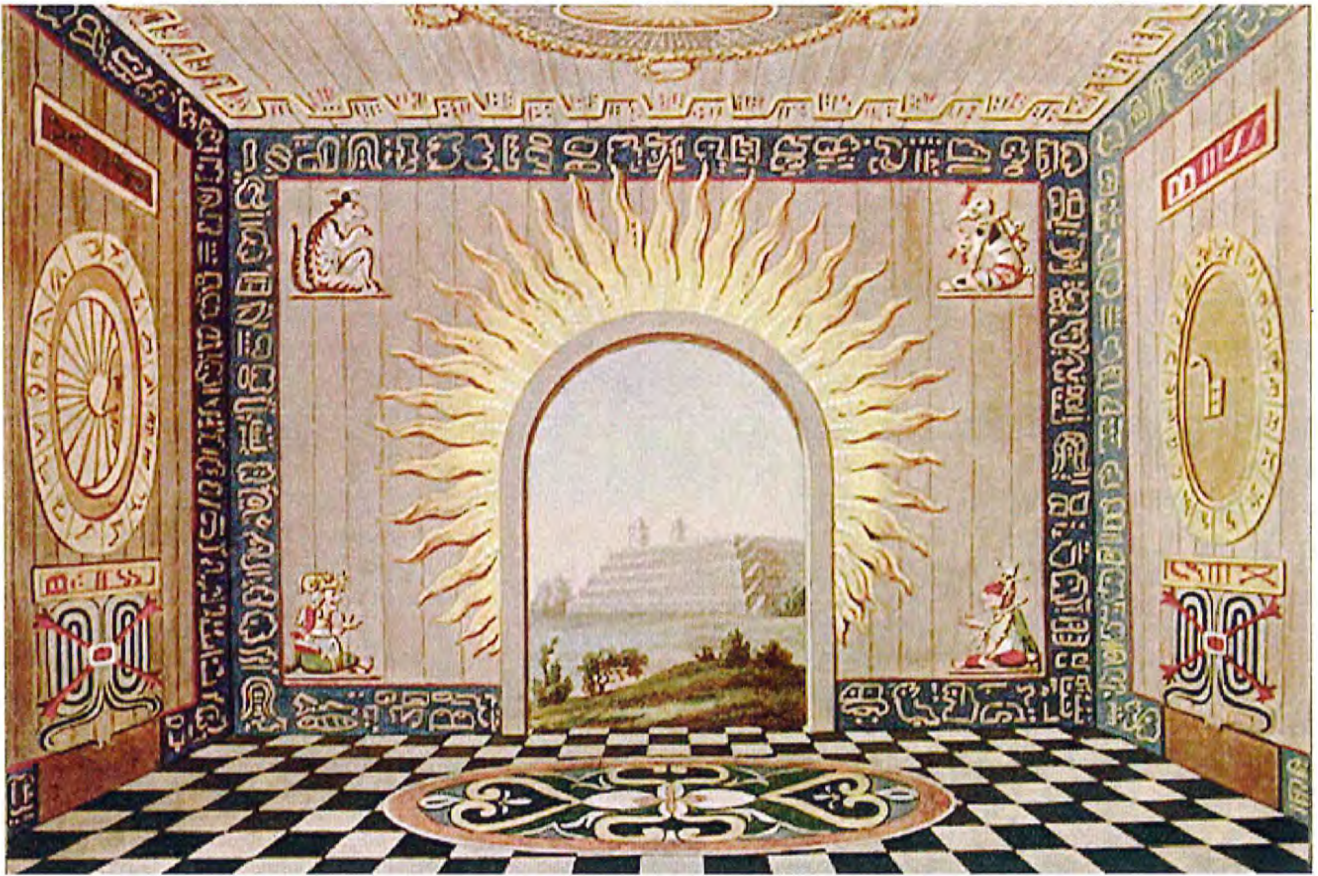


FIGURE 6. Baron von Racknitz' image of "A Room in Mexican Taste" includes the first portrayal of Maya writing in a printed book. Racknitz must have seen the Maya codex in Dresden (below).



FIGURE 7. In 1810 Alexander von Humboldt printed five pages from the Dresden Codex, one of the three surviving Maya books in Europe.

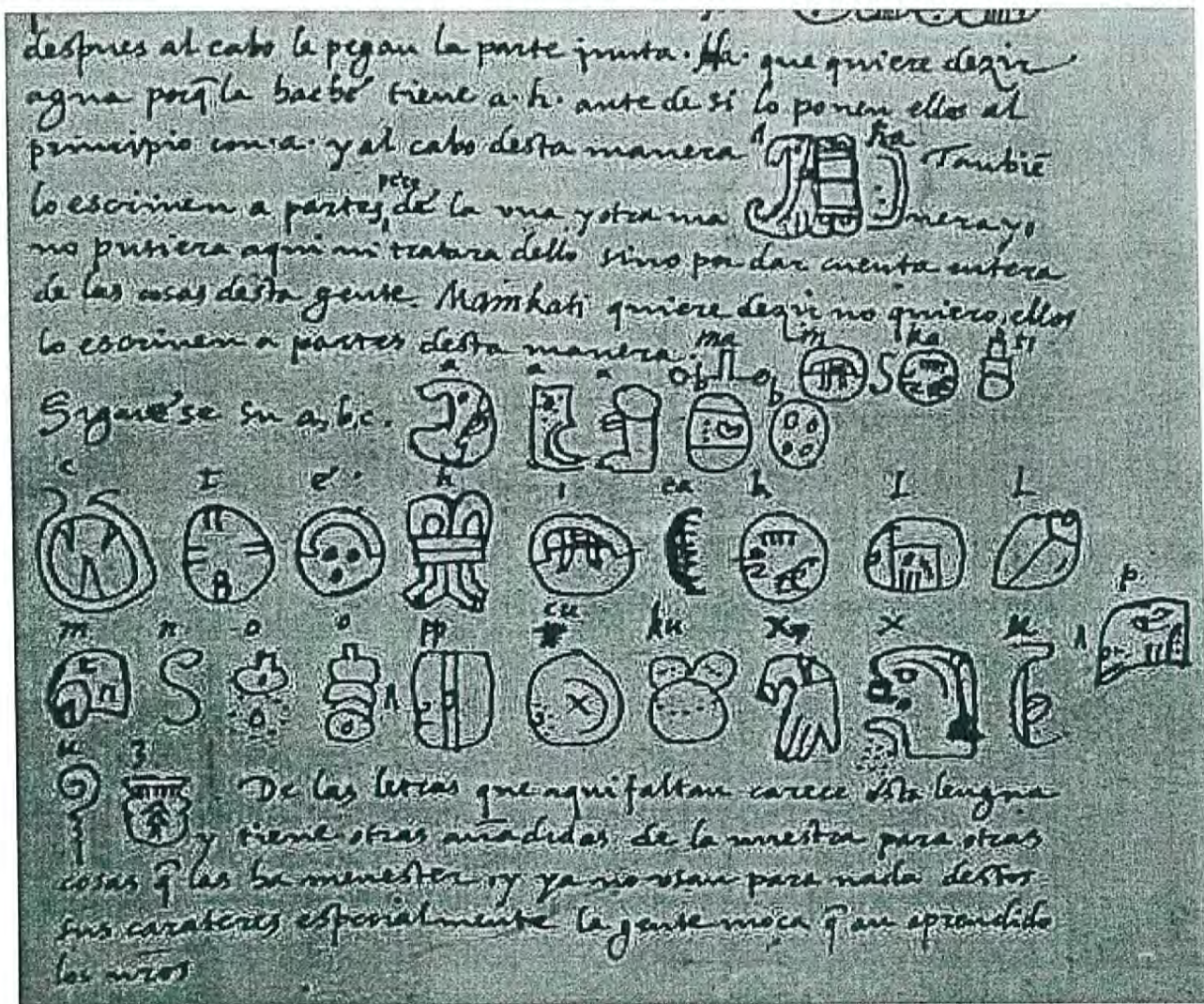


FIGURE 8. A page from the manuscript of Diego de Landa's *Relacion de las Cosas de Yucatan* showing the Maya "alphabet" as drawn by Gaspar Antonio Chi.

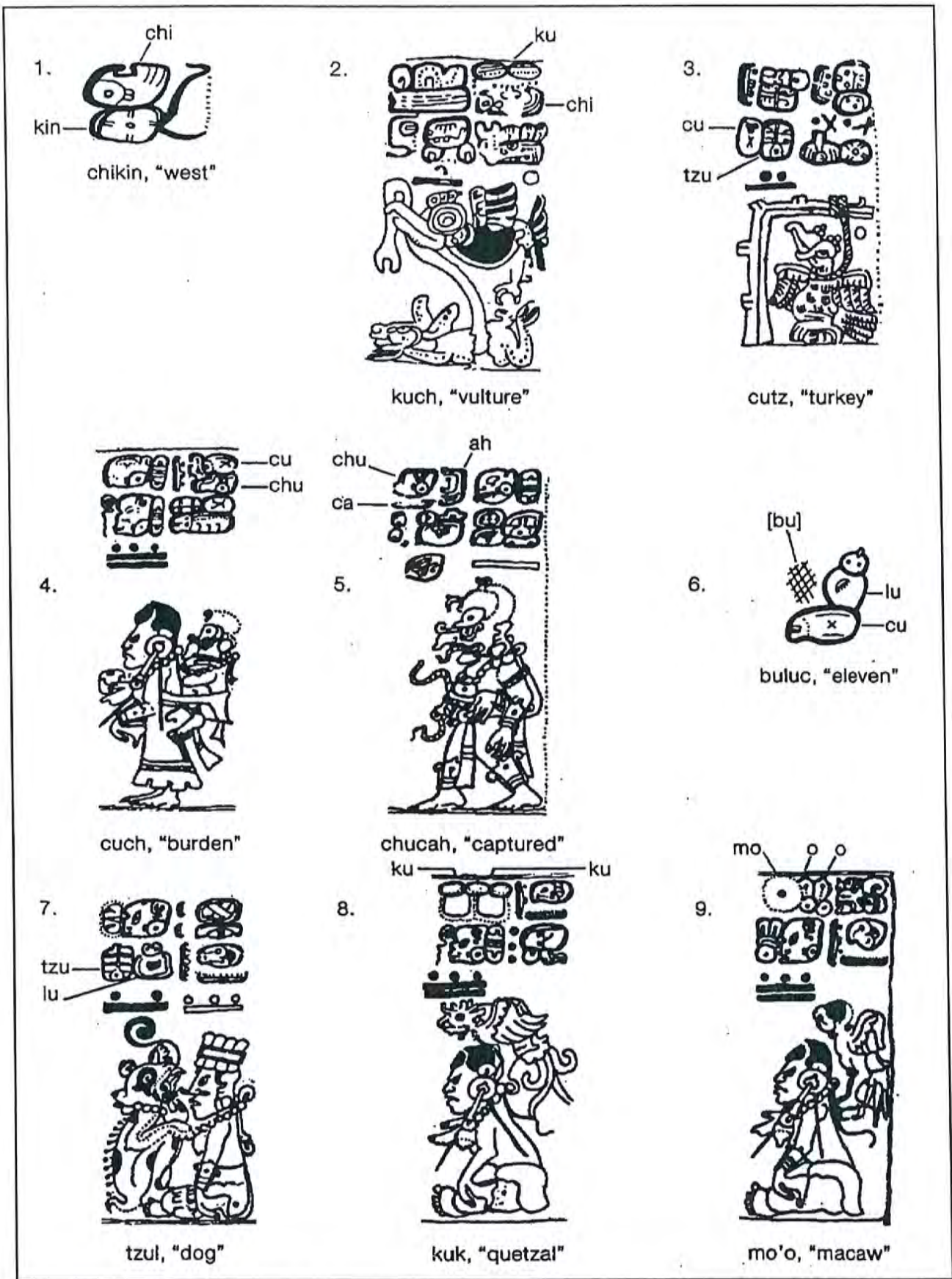


FIGURE 9. Nine examples of Yuri Knorsov's phonetic decipherments.

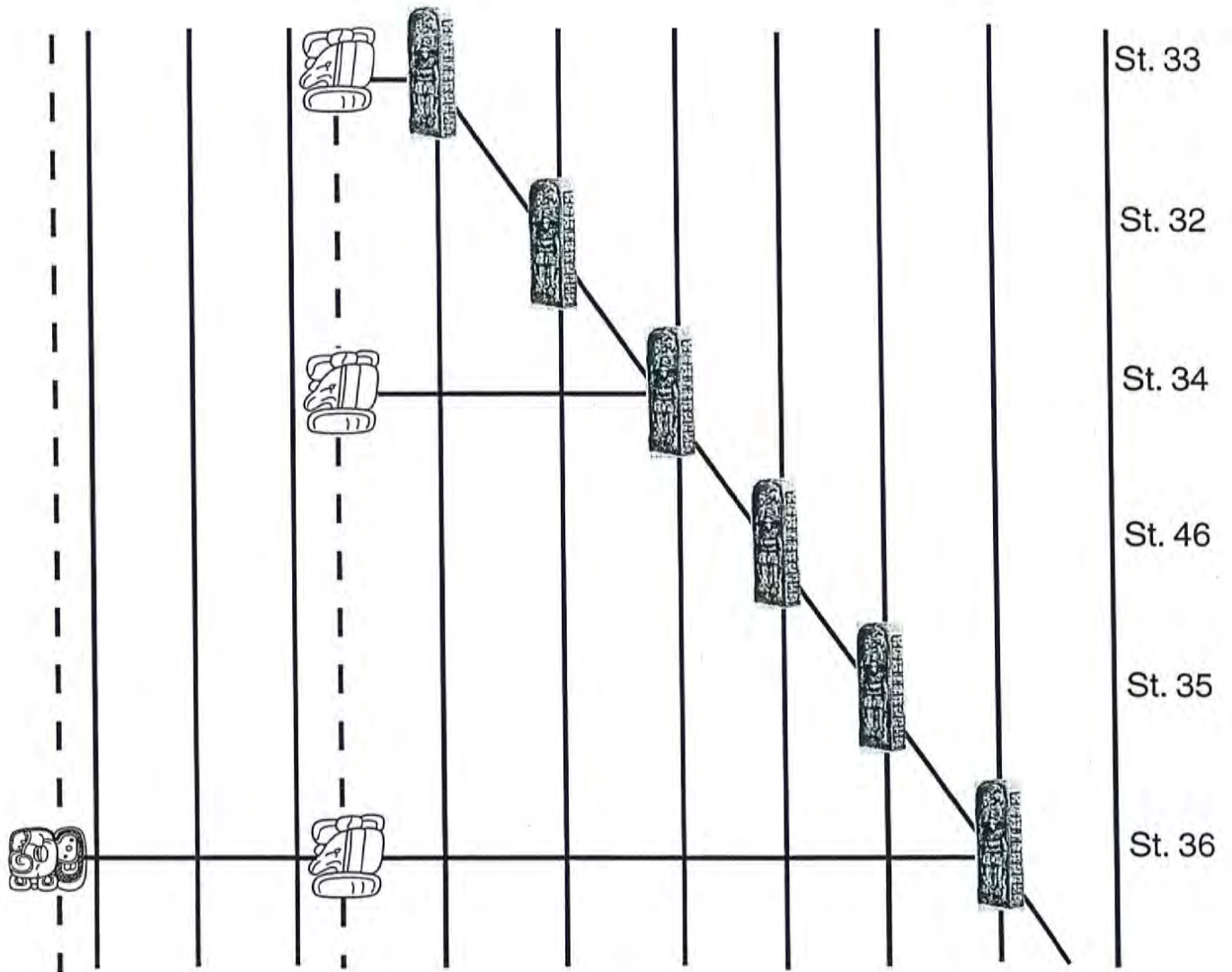


FIGURE 10. Tatiana Proskouriakoff's analysis of the stelae at Piedras Negras: Within each series, stelae were dedicated at regular five year intervals. An event just prior to the dedication of the first stela is described by the "toothache" glyph and celebrated repeatedly. But the earliest date mentioned in each series falls twelve to thirty years earlier, and is described by the "upended frog head" glyph. Proskouriakoff concluded that the "toothache" event was the inauguration of a king whose rule is portrayed on the stela, and that the "frog" event was his birth.

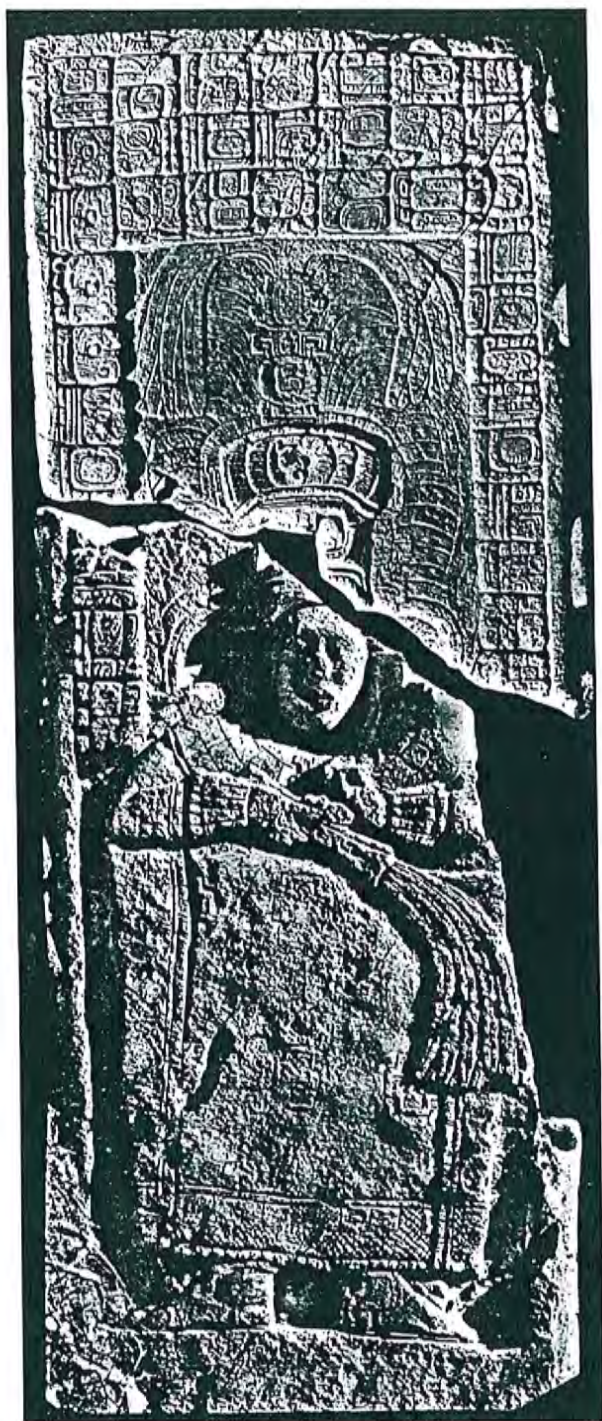


FIGURE 11. Piedras Negras Stela 1:
Wife of Ruler 3 at age 33



FIGURE 12. Piedras Negras Stela 3: Wife
of Ruler 3 at age 38, with three year old
daughter.



FIGURE 13. Tablet of the 96 Glyphs, Palenque



WAS SEATED IN
KINGSHIP

SUN-EYED [RULER NAME]

HOLY LORD
OF PALENQUE

FIGURE 14. Heinrich Berlin's analysis of three phrases from the above tablet.

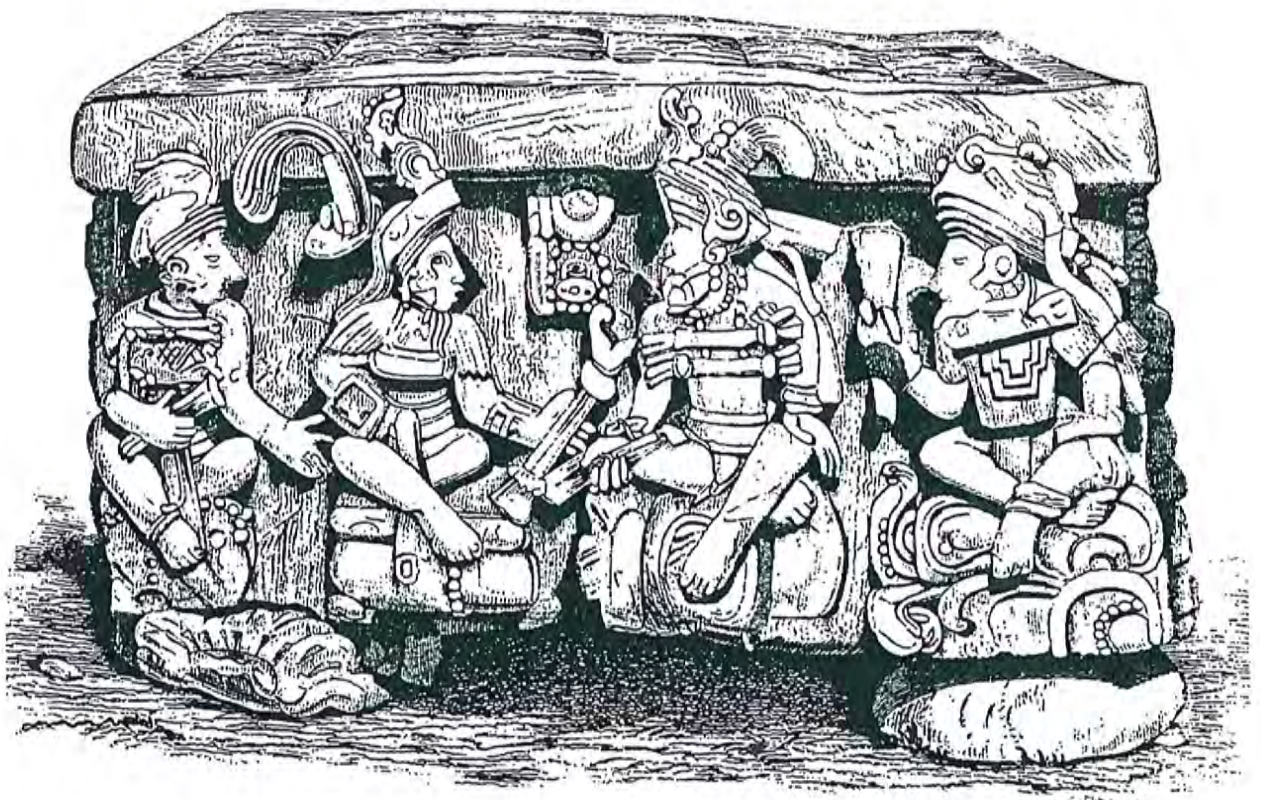


FIGURE 15. Two views of Copan Altar Q, as drawn by Frederick Catherwood: Once thought to show a congress of astronomers, now known to represent the sixteen kings of the Copan dynasty. Dynastic founder Yax Kuk Mo, top center left, hands the scepter of office to his sixteenth successor, Yax Pasah.