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CHICHEN ITZA AND ITS CENOTE OF SACRIFICE

A Comparative Study of Contemporaneous Maya and Toltec

By

ALFRED M. TOZZER

VOLUME XII: REFERENCE MATERIAL AND ILLUSTRATIONS

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 345—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), bottom of column.
 346—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), top of column.
 347—Tula, Main Temple.

REPRESENTATIVE ART: MONSTERS—EARTH MONSTER

- 348—Tlaltecuctli. Codex Borbonicus 33.
 349—Aztec, circular stone, detail.
 350—Quauhxicalli.
 351—Teocalli de la Guerra Sagrada.
 352—Tizoc stone, portion.
 353—Engraved femur, National Museum, Mexico.
 354—Tlalchitonatiuh with Xolotl. Aubin Tonalamatl 16.
 355—Telleriano Remensis 20.
 356—Codex Borbonicus 16.
 357—Bilimec vase, Vienna Museum.
 358—Aubin Tonalamatl 6.
 359—Codex Borbonicus 24.
 360—Codex Laud 38.
 361—Codex Borgia 3.
 362—Codex Borgia 60.
 363—Codex Borgia 13.
 364—Codex Fejervary-Mayer 40.
 365—Codex Vaticanus B 11.
 366—Codex Vaticanus B 12.
 367—Codex Nuttall 1.
 368—Codex Borgia 19.
 369—Codex Borgia 56.
 370—Codex Borgia 71.
 371—Codex Bologna 25.
 372—Codex Nuttall 12.
 373—Teayo, Veracruz, Castillo, "La Chinola" stone.
 374—Monte Alban, jewel.
 375—Codex Fejervary-Mayer 1.
 376—Chuitinamit, Guatemala.
 377—Costa Rica, design from jar.
 378—Codex Paris 23.
 379—Codex Dresden 69a.
 380—Codex Madrid 18a.
 381—Codex Dresden 69a.
 382—Codex Dresden 33b.
 383—Codex Paris 16.
 384—Chichen Itza, Structure 5C7 (Temple of the Owls), painted capstone.
 385—Codex Fejervary-Mayer 42.
 386—Chichen Itza, Structure 2D10 (North Colonnade), Drum 6.
 387—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco.
 388—Chichen Itza, Cenote of Sacrifice, earth monsters on gold disks.

REPRESENTATIVE ART: HUMAN SACRIFICE

- 389—Piedras Negras, Stelae 11 and 14.
 390—Tikal, Altar 5.
 391—Yaxchilan, Lintel 12.
 392—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), south vault, fresco.
 393—Chichen Itza, Cenote of Sacrifice, Disk H.
 394—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), east wall.

- 395—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco.
 396—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), fresco.
 397—Chichen Itza, Cenote of Sacrifice, jade circlet.
 398—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), south vault, fresco.
 399—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), east wall.
 400—Codex Dresden 3.
 401—Codex Madrid 76.
 402—Codex Magliabecchi 70.
 403—Codex Magliabecchi 68.
 404—Codex Magliabecchi 66.
 405—Codex Borgia 42.
 406—Codex Bodleianus 25.
 407—Codex Porfirio Diaz N.
 408—Codex Nuttall 69.
 409—Tikal, graffito.

REPRESENTATIVE ART: JAGUAR-EAGLE CULT

- 410—Tenochtitlan, temple enclosure.
 411—Heart symbols. Codex Fejervary-Mayer, *passim*.
 412—Quauhxicalli.
 413—Codex Borbonicus 18.
 414—Codex Borbonicus 15.
 415—Codex Borbonicus 13.
 416—Tzompantli, Upsala map.
 417—Tzompantli.
 418—Glyph for death.
 419—Chichen Itza, Structure 2D2 (Mausoleum II), tzompantli detail.
 420—Uxmal, sculpture, cemetery group.
 421—Santa Lucia Cotzumalhuapa, Monument 3.
 422—Tula, El Corral, Skull Altar.
 423—Tenayuca, altar fresco.
 424—Incised femur.
 425—Funerary urn.
 426—Pulque vessel, Vienna Museum.
 427—Codex Borbonicus 36.
 428—Codex Magliabecchi 88.
 429—Cholula vase.
 430—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco on outside wall.
 431—Chichen Itza, Structure 2D8 (Temple of the Warriors), band on pyramid.
 432—Chichen Itza, Structure 2D3 (Mausoleum I).
 433—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), north wall.
 434—Chichen Itza, Structure 3D11 (Mercado).
 435—Chichen Itza, Structure 2D3 (Mausoleum I).
 436—Chichen Itza, Structure 5C14 (Temple of the Phalli), dais, south exterior, eagle-man.
 437—Chichen Itza, Cenote of Sacrifice, Disk L.
 438—Chichen Itza, Cenote of Sacrifice, gilded copper disk.
 439—Tulum, fresco.
 440—Santa Lucia Cotzumalhuapa, Monument 17.
 441—Santa Lucia Cotzumalhuapa, Monument 21.
 442—Tula, stone eagle.
 443—Tula, stone with "coat-of-arms."
 444—Tula, stone eagle.
 445—Tula, stone eagle.
 446—Tula, lower half of column.
 447—Codex Borbonicus 13.
 448—Tula, clay tablet.
 449—Malinalco, entrance to Room I.

- 450—Malinalco, Toluca drum.
 451—Detail of design on drum, National Museum, Mexico.
 452—Xochicalco, detail on stones strewn around monument.
 453—Tajin, Great Ball Court, southwest panel.
 454—Mitla, fresco.
 454A—Codex Borbonicus 11.
 455—Codex Selden A 12.
 456—Codex Selden A 12.
 457—Codex Porfirio Diaz I.
 458—Codex Porfirio Diaz I.
 459—Codex Porfirio Diaz N.
 460—Chichen Itza, Structure 2D2 (Mausoleum II).
 461—Chichen Itza, Structure 2D2 (Mausoleum II), south balustrade.
 462—Santa Lucia Cotzumalhuapa, Monument 13.
 463—Totonac yoke.
 464—Totonac yoke.
 465—Codex Magliabecchi 76.
 466—Codex Laud 41.
 467—Codex Borbonicus 10.

REPRESENTATIVE ART: BALL COURT

- 468—Ball court and player. Codex Fejervary-Mayer 29.
 469—Tepoztlan, stone ring.
 470—Codex Nuttall 18.
 471—Yaxchilan, Structure 14 (northwest ball court).
 472—Codex Nuttall 74.
 473—Chichen Itza, Structure 3E2 (Ball Court).
 474—Chichen Itza, Structure 2D1 (Great Ball Court), west side, center panel.
 475—Aparicio, Veracruz, design on palma.
 476—Codex Telleriano Remensis 15.
 477—Codex Fejervary-Mayer 41.
 478—Copan, middle marker from ball court between Structures 9 and 10.
 479—Piedras Negras, Structure K-6, ball-player.
 480—Santa Lucia Cotzumalhuapa, Monument 6, detail.
 481—Alvarado, Veracruz, stone yoke.
 482—Santa Lucia Cotzumalhuapa, Monument 4.
 483—Chichen Itza, Structure 2D1 (Great Ball Court), detail.
 484—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B.
 485—Etzna, Stela 6.
 486—Chinkultic, Chiapas, ball-court marker.
 487—Santa Lucia Cotzumalhuapa, Monument 1.
 488—Santa Lucia Cotzumalhuapa, Monument 4.
 489—Escuintla, design from jar.
 490—Tula, ball-player.
 491—Tula, feet of ball-player.
 492—Tajin, Great Ball Court, northwest panel.
 493—Tajin, Great Ball Court, northeast panel.
 494—Tepatlatxco, Veracruz, stela.
 495—Tajin, Structure 5, Monument T2.
 496—Tajin, palma.
 497—Totonac, Palma 11, detail.
 498—Coatepec, Veracruz, Palma 24, detail.
 499—Veracruz, Palma 12.
 500—Coatepec, Veracruz, Palma 5.

REPRESENTATIVE ART: ARTIFACTS

- 501—Chichen Itza, spindle weights.
 502—Chichen Itza, clay pipe.
 503—Tula, clay pipe.
 504—Chichen Itza, Cenote of Sacrifice, stone points.

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- 505—Tula vase, Vienna Museum.
 506—Chichen Itza, Structure 2D1, name signs.

- 507—Tula, Main Temple, Pilaster 1, name sign.
 508—Tula, Main Temple, Pilaster 11, name sign.
 509—Speech-scrolls.
 510—Acanceh, from façade.
 511—Oaxaca, grave stone.
 512—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 61W, ear ornament.
 513—Chichen Itza, Structure 2D8 (Temple of the Warriors), ear ornaments.
 514—Chichen Itza, Cenote of Sacrifice, jade nose button.
 515—Copan, figure from Altar Q.
 516—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 5W.
 517—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco.
 518—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 57N.
 519—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 39W.
 520—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 16S.
 521—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 16N.
 522—8 Deer. Codex Nuttall 52.
 523—8 Deer. Codex Nuttall 78.
 524—Glyph of the soul of a warrior.
 525—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 14S.

ETHNOLOGY: TOLTEC

- 526—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), Pilaster k4.
 527—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C.
 528—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C.
 529—Chichen Itza, Cenote of Sacrifice, Tula-Toltec headdresses from disks.
 530—Oaxaca, Zapotec stone.
 531—Tula, section of Pilaster 11.
 533—Veracruz, Plaque 3.

ETHNOLOGY: TOLTEC AND MAYA

- 534—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row D.
 535—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 53S.
 536—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 45N.
 537—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row E.
 538—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C.
 539—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C.
 540—Halakal, painted capstone.
 541—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B.
 542—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B.
 543—Tula, details from cacique frieze.
 544—Tula, upper part of atlantean figure.
 545—Tula, warrior figure.
 546—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), conventionalized bird-forms.
 547—Chichen Itza, Cenote of Sacrifice, jade circlet.

- 548—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 16S.
 549—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 53N.
 550—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 18N.
 551—Tula, detail from restored column.
 552—Tula, Stela 1.
 553—Chichen Itza, leg bands and sandals.
 554—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 7S.
 555—Tula, warrior figure.
 556—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C.
 557—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), west wall, fresco.
 558—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 32W.
 559—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 43N.
 560—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B.
 561—Tula, restored column.
 562—Tula, atlantean column.
 562A—Tula, Palacio Quemado, Sala 2.
 563—Tula, lower half of column.
 563A—Tula, Stela 2.
 564—Chichen Itza, Cenote of Sacrifice, jade bead.
 565—Codex Dresden 47.
 566—Oaxaca, incised figure on stone idol.
 567—Teotihuacan, Tepantitla.
 568—Mitla, fresco.
 569—Huastec and Mixtec atlats.
 570—Tula, pilaster.
 571—Tula, Palacio Quemado.
 572—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 47W.
 573—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 11E.
 574—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), part of altar top.
 575—Chichen Itza, Structure 4C1 (Monjas), Toltec Annex, south portico, capital of column.
 576—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 1S.
 577—Chichen Itza, Structure 2D1 (South Temple of the Great Ball Court), Column 4S.
 578—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C.
 579—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 16E.
 580—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 4S.
 581—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 1S.
 582—Tula, tape garters.
 583—Tula, tape garters.
 584—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 6S.
 585—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 17N.
 586—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 24S.
 587—Chichen Itza, Structure 3C1 (High Priest's Grave), bird atlantean.
 588—Chichen Itza, Structure 2D8 (Northwest Colonnade), bird-mask head from northwest corner.

- 589—Chichen Itza, Cenote of Sacrifice, jade.
 590—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 27N.
 591—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 57W.
 592—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 5N.
 593—Tula, sculpture.
 594—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 9N.
 595—Chichen Itza, Structure 2D8 (Northwest Colonnade), two figures from west side of dais.
 596—Chichen Itza, Structure 2D8 (Northwest Colonnade), altar panel.
 597—Chichen Itza, Structure 2D10 (North Colonnade), dais, south side, east part.
 598—Chichen Itza, Structure 3D11 (Mercado), gallery, dais.
 599—Tula, Temple B, section of sculptured dais.
 600—Tula, Palacio Quemado, Sala 2, sculptured frieze.
 601—Tula, section of frieze.
 602—Tenochtitlan, "centro mercantil" stone.
 603—Kabah, Structure 2C6 (Codz Poop), jambs.
 604—Uxmal, Stela 14.
 605—Humboldt stone, center.
 606—Isla de Sacrificios, Veracruz, polychrome vase.
 607—8 Deer. Codex Nuttall 49.
 608—Tula, stone bas-relief.
 609—Tula, Mound B, east side.
 610—Usumacinta, figurine.

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- 611—Chichen Itza, Cenote of Sacrifice, Maya headdresses from disks.
 612—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 613—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 614—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), end of south wall.
 615—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), south column, west side.
 616—Chichen Itza, Structure 2D10 (North Colonnade), capstone.
 617—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), fresco.
 618—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco.
 619—Chichen Itza, Cenote of Sacrifice, Disk M, detail.
 620—Chichen Itza, Structure 3C15 (Caracol), pilaster, left side.
 621—Chichen Itza, Structure 2D10 (North Colonnade), Drum 11.
 622—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 623—Chichen Itza, Cenote of Sacrifice, design on jade bead.
 624—Chichen Itza, Cenote of Sacrifice, jade necklace assembled.
 625—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 626—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B.
 627—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B.
 628—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 629—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 630—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 37E.

- 631—Chichen Itza, Structure 2C3, south column, north side.
 632—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 1E.
 633—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 634—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 635—Yaxchilan, Lintel 45, detail.
 636—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 637—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 638—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 639—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 17W.
 640—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 47N.
 641—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 11S.
 642—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 4S.
 643—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 644—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 645—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 4N.
 646—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 647—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 648—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 4N.
 649—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 4E.
 650—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A.
 651—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 2W.
 652—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 10W.
 653—Tikal, graffito.
 654—Chichen Itza, Structure 4C1 (Monjas), Toltec Annex, south portico, west jamb.
 655—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 10S.
 656—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 4S.
 657—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 4S.
 658—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 1S.
 659—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 51N.
 660—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), south bench.
 661—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 56S.
 662—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 52S.
 663—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 1W.
 664—Chichen Itza, Structure 2D8 (Northwest Colonnade), dais, south side.
 665—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 5W.
 666—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 5S.
 667—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 6W.
 668—Chichen Itza, Structure 3C1 (High Priest's Grave), Column 3N.
 669—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 39S.
 670—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 4E.
 671—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), portion of south bench.
 672—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 12N.
 673—Chichen Itza, Structure 2D8 (Northwest of Colonnade), cornice of dais, south side.
 674—Chichen Itza, Structure 3E1 (Northeast Colonnade), cornice of dais.
 675—Tula, Palacio Quemado.
 676—Tula, Palacio Quemado.
 677—Tula, Palacio Quemado.
 678—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), base of column.
 679—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), north wall.
 680—Chichen Itza, Cenote of Sacrifice, plan of decoration on disks.
 681—Chichen Itza, Cenote of Sacrifice, Disks A-G, I.
 682—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), Toltec and Maya.
 683—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), north wall, east end.
 684—Chichen Itza, Structure 4C1 (Monjas), south room, fresco.
 685—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), west side, detail.
 686—Chichen Itza, Structure 3C15 (Caracol), sculptured stone.
 687—Kabah, Structure 2A3, jambs.
 688—Tekax, Yucatan, jar.
 689—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 37S.
 690—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 33N.
 691—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 32S.
 692—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 33S.
 693—Chichen Itza, Structure 4C1 (Monjas), Toltec Annex, south portico.
 694—Codex Dresden 60.
 695—"Near Teotihuacan," jade.
 696—Chichen Itza, Cenote of Sacrifice, jade.
 697—Jade.
 698—Colipa, near Misantla, Veracruz, jade.
 699—Tenochtitlan, jade.
 700—Tula, shell relief.
 701—Xochicalco, detail of frieze on base of temple.
 702—Tula, Palacio Quemado, stone amulet.
- CENOTE OF SACRIFICE**
 703—Chichen Itza, view from north.
 704—Chichen Itza, Sacred Way, looking south.
 705—Chichen Itza, Cenote of Sacrifice, E. H. Thompson's dredge.
 706—Chichen Itza, Cenote of Sacrifice, plan.
 707—Chichen Itza, Cenote of Sacrifice, section of south side.
- CENOTE CULT**
 708—Sahagun, 1905, Codex Florentino.
 709—Sahagun, 1905, Codex Florentino.

TABLES

TABLE 1—CHICHEN'S TRADITION AND HISTORY: ONE INTERPRETATION

KATUN	CHICHEN I LATE CLASSIC YUCATAN-MAYA	CHICHEN II TOLTEC-MAYA (A)	CHICHEN III (B') (continued)	CHICHEN V: STAGE OF ABANDONMENT
		Quetzalcoatl born 947?? Chichen abandoned by Maya (C I) "Chichen learned about" (T) Toltec at Chichen: Stage A	Toltec abandoned Chichen (C I) Ruled there 200 years Start for Chakanputun Itza leave Chakanputun (C I)	Hunac Ceel episode 1451 Chichen and Mayapan destroyed Some Itza go south
8 Ahau	9.13.0.0.0 (692)	10.6.0.0.0 (948)	10.19.0.0.0 (1204)	11.12.0.0.0 (1460)
		Chakanputun seized (T) "Chichen Discovered" (C I)	"Three immoral rulers" (CP I)	"Good years" Hurricane 1464
6 Ahau	9.14.0.0.0 (711)	10.7.0.0.0 (968)	11.0.0.0.0 (1224)	11.13.0.0.0 (1480)
		Chakanputun seized by Maya (C I) "Sought and Discovered" (C II)	CHICHEN III TOLTEC-MAYA (B') Toltec seize Chakanputun Itza and Kukulcan II arrive at Chichen (CP II) "Then called Itza" (C II)	"Itza seize the land of Ichpaa Mayapan" "Great and Fatal Plague" (CP II)
4 Ahau	9.15.0.0.0 (731)	10.8.0.0.0 (987)	11.1.0.0.0 (1244)	11.14.0.0.0 (1500)
		Oxkintok, Stela 20? Santa Rosa Xtampak? Xcalumkin	Idolatry introduced Time?	Spaniards arrive in Yucatan, 1519
2 Ahau	9.16.0.0.0 (751)	10.9.0.0.0 (1007)	11.2.0.0.0 (1263)	11.15.0.0.0 (1520)
			CHICHEN IV: STAGE OF DISSOLUTION Mayapan "founded" by Itza and Kukulcan Latter apports land Returns to Mexico. Time?	Plague of locusts; Spanish conquest of Yucatan, 1527-46
13 Ahau	9.17.0.0.0 (771)	10.10.0.0.0 (1027)	11.3.0.0.0 (1283)	11.16.0.0.0 (1539)
		Uxmal, Stela 4?		They "cease to be called Maya" Merida founded, 1542
11 Ahau	9.18.0.0.0 (790)	10.11.0.0.0 (1047)	11.4.0.0.0 (1303)	11.17.0.0.0 (1559)
		Etzna, Stela 9? Sayil, Stela 6?	Wars: conquest	Tribute introduced Cathedral founded Hurricane ca. 1560 Landa's <i>auto de fe</i> , 1562
9 Ahau	9.19.0.0.0 (810)	10.12.0.0.0 (1066)	11.5.0.0.0 (1322)	11.18.0.0.0 (1579)
		Oxkintok, Stela 3?	Dissolute conduct of Itza	
7 Ahau	10.0.0.0.0 (830)	10.13.0.0.0 (1086)	11.6.0.0.0 (1342)	
			Itza power greatly increased. Local chiefs unpopular (CP I)	
5 Ahau	10.1.0.0.0 (849)	10.14.0.0.0 (1106)	11.7.0.0.0 (1362)	
			Drought Itza killed off at an unspecified place	
3 Ahau	10.2.0.0.0 (869)	10.15.0.0.0 (1125)	11.8.0.0.0 (1382)	
		10.2.10 (879) I.S. and other dates at Chichen in this katun Last I.S. dates	Toltec abandon Chichen Ruled there 200 years; went to Chakanputun where the Itza were (T, M)	
1 Ahau	10.3.0.0.0 (889)	10.16.0.0.0 (1145)	11.9.0.0.0 (1401)	
			CHICHEN III TOLTEC-MAYA (B') Maya pre-eminent	
12 Ahau	10.4.0.0.0 (909)	10.17.0.0.0 (1165)	11.10.0.0.0 (1421)	
		Tula destroyed 1168?	Uxmal "founded" (T)	
10 Ahau	10.5.0.0.0 (928)	10.18.0.0.0 (1185)	11.11.0.0.0 (1441)	

C I = Chumayel Chronicle I
 C II = Chumayel Chronicle II

CP I = Chumayel Prophecies, Series I
 CP II = Chumayel Prophecies, Series II

M = Mani
 T = Tizimin

TABLE 2—MAYA STRUCTURES IN CHICHEN I*

- Str. 5C14—House of the Phalli: main structure, southern Classic, Late (fig. 8).
- Str. 4C1—Monjas: main structure, east wing, southern Classic, Late.
- Str. 4D1—Akabtzib.
- Str. 3C15—Caracol: first structures.
- Str. 3C7—House of the Deer: range of 3 rooms in line.
- Str. 7B3—Temple of Three Lintels: range of 3 rooms in line.
- Str. 5B2—range of 3 rooms in line.
- Str. 7B2—range of 4 rooms in line (fig. 4).
- Str. 5B7—single room, one projecting on each side (fig. 5).
- Str. 5D2—range of 3 rooms, one projecting on each side (fig. 6).
- Str. 5D4—outer corridor, 2 ranges of 3 rooms behind, one at north end.
- Str. 3C9—Casa Colorada: outer corridor and range of 3 rooms behind.
- Str. 5B25—outer corridor and range of 4 rooms behind (fig. 7).
- Str. 7B4—Temple of the Four Lintels.
- Str. 5C5—House of the Shells (north rooms): Puuc characteristics (G. C. Vaillant).
- Str. 7B1—Temple of the One Lintel (inner doorway only).
- Str. 6E3—Temple of the Hieroglyphic Jamb (jamb only).
- Str. 5C4—Temple of the Initial Series Lintel (substructure and first building, plan undetermined).

From the plan, mainly with the single room, single doorway, and for other reasons, the following structures are possible members of this Maya group mainly for the reason noted:

- Str. 5B3—"Very large band-molding stones: Vaults not venter."
- Str. 5B4—"Jamb large horizontal blocks."
- Str. 5B20—"Jamb large horizontal blocks."
- Str. 5A3—"Jamb large horizontal blocks"; colonnette.
- Str. 6E5—Phallus may have been added later, as in rooms below.
- Str. 5A4—Exclude southern "addition."
- Halakal—Puuc decoration (fig. 9).

*The designations of the buildings follow Ruppert, 1952, on which my fig. 1 is based and from which I have reproduced many of the plans so very kindly and generously placed at my disposal before publication by Ruppert. It should be recognized that many of the Maya structures have fallen or been torn down, the stones re-used or covered by the debris of later building. The Initial Series Lintel, for example, was found in connection with at least two later constructions, but it undoubtedly once served in a Maya building, the remains of which are mostly covered. Morley (1931) attempted a classification of Chichen structures.

TABLE 3—KATUN AHAU DATES

(Thompson, 1950, pp. iv, 199)

	Katun
Lintel from water trough in hacienda, no. 27...	10.1.17. 5-13
Lintel from water trough in hacienda, no. 27...	10.2.0.0.0 (869)
Halakal lintel	10.1.18. 6. 5
Halakal lintel	10.2. 0. 7. 9
Casa Colorado, glyph band, no. 20	10.3.0.0.0 (889)
Casa Colorado, glyph band, no. 20	10.2. 0.11. 3
Casa Colorado, glyph band, no. 20	10.2. 0.15. 3
Yula, no. 1	10.2. 4. 8. 4
Yula, no. 2	10.2. 4. 8.12
Temple of the Initial Series, no. 1	10.2. 9. 1. 9
Temple of the Three Lintels, no. 6	10.2.10. 0. 0
Monjas, lintels, nos. 12, 15, 16	10.2.10.11. 7
Temple of the Four Lintels, nos. 2-5	10.2.12. 1. 8
Temple of the Four Lintels, no. 2	10.2.12. 2. 4
Caracol, stela, no. 21	10.2.17. 0. 0
Caracol, frieze, no. 23	10.7. 0. 5. 1
High Priest's Grave, no. 28	10.8.0.0.0 (987)
High Priest's Grave, no. 28	10.9.0.0.0 (1007)

TABLE 5—QUETZALCOATL AND TULA

	Source A	Source A	Revised
	I, II*	III*	
First ruler of Tollan, Mixcoamaztzin	752	804	856
Quetzalcoatl born	843	895	947
Seeks his father	851	903	955
As a youth: to Tollanzinco	870	922	974
Made king	873	925	977
Flees southward to Tlapallan	895	947	999
Death	895	947	999
Tula destroyed	1064	1116	1168
Huemac died	1070	1122	1174

*I, II = Anales de Cuauhtitlan; III = Ixtlixochitl.

TABLE 4—EARLY AUTHORITIES ON THE TOLTEC

- A. I. History of Tenochtitlan dynasty, including Culhuacan and Tula (1530), written by Franciscans for Juan Cano.
 - a. Relacion Genealogia.
 - b. Origen de los Mexicanos. Both copies of original Chronicles.
 - c. Gomara, 1552: CCVI, CCVII.
 - d. Anales de Cuauhtitlan (Codex Chimalpopoca), 1570.
 - e. Chimalpahin, 1612.
 - f. Torquemada, 1613: I, III, Cap. VII.
- II. Anales de Cuauhtitlan (some source material here that is not in I).
- III. History of the Toltec Empire.
 - a. Anonimo Mexicano: Documentos en lengua Nahuatl relativos a los Toltecas. Goupil Collection. MS. 254.
 - b. Torquemada, 1613.
 - c. Ixtlixochitl, 1568-1648 (Chavero ed.).
- B. Myth and history of Quetzalcoatl.
 - a. Motolinia (1500-68).
 - b. Leyenda de los Soles, 1558.
 - c. Historia de los Mexicanos por sus Pinturas, ca. 1530-51.
 - d. Histoire du Mexique, 16th century.
 - e. Sahagun, 1558-69.
 - f. Mendieta, 1596.
 - g. Herrera, 1601, 4, X, XI.
 - h. Veytia, ca. 1760-80.
 - i. Clavigero, 1780-81.
- C. History of the Tolteca-Chichimeca.
 - I. Muñoz Camargo, Historia de Tlaxcala, late 16th century.
 - II. Historia Tolteca-Chichimeca (Anales de Quauhtinchan), 1545.
 - III. Anales de Cuauhtitlan.
 - IV. Chimalpahin.
 - V. Telleriano-Remensis (Loubat ed.).
 - VI. Vaticanus (A) 3773 (Loubat ed.).
- D. Toltec migrations to Guatemala.
 - Popul Vuh or the Sacred Book of the Quiche.
 - Annals of the Cakchiquel.
- E. Mexicans in Yucatan.
 - I. Books of Chilam Balam.
 - II. Landa's Relacion, 1566.
 - III. Xiu Probanza, etc., 1608.
 - IV. Paxbolon-Maldonado Papers (Acalan-Tixchel), 1618.

TABLE 6—HOUSE OF THE PHALLI SEQUENCE

(Vaillant, 1926)

- I. PERIOD OF ORIGINAL CONSTRUCTION
 - 1. House of Phalli with additional northern room (Str. 5C14) [Chichen I; probably Classic Maya].
 - 2. South Ell House (see Ruppert, 1952, p. 122), rooms north of Str. 5C5 [Chichen I].
 - 3. Colonnades south of Phalli [Chichen III?].
 - "Sub-temple," site of Initial Series (Str. 5C4a) [Chichen II].
 - Temple of the Owls (Str. 5C7) [Chichen II].
 - Temple of the Little Heads (Str. 5C3) [Chichen III].
 - 4. House of the Shells (Str. 5C5) [Chichen I; Yucatan-Maya or Puuc].
- II. PERIOD OF DEBASED CONSTRUCTION
 - 5. East Patio [Chichen III].
 - 6a. West Patio [Chichen II].
 - Structure on top of Phallic Temple (Str. 5C14b) [Chichen II].
 - "Early Temple," site of Initial Series (Str. 5C4a) [Chichen II].
 - 6b. "Stoa" type. Str. 5C15, atlantean columns [Chichen III].
 - "Stoa" type. S.W. corner, columns missing [Chichen III].
 - 7. Looting of East Patio [Chichen IV].
 - Looting of Temple of Little Heads [Chichen IV].
 - Temporary Abandonment [Chichen IV].
- III. PERIOD OF DEGENERATE CONSTRUCTION
 - 8. East Patio [Chichen IV].
 - Burial in chultun [Chichen IV].
 - "Temple of the Initial Series," a shrine (Str. 5C4b); atlanteans in single doorway [Chichen IV].
 - 9. Final abandonment [Chichen V].

TABLE 7—CHICHEN AND MAYAPAN: SIMILARITIES

Buildings:	Chichen	Mayapan
Pyramid temple with four stairways	+	+
Temple with two-column doorway	+	+
Temple with interior shrine	+	+
Portico, colonnade	+	+
Round structure	+	+
Separate shrine	(+) rare	+
Tribune	+	(+) rare
Gallery-patio	+	+
Vapor bath	+	+
Ball court	+	+
Two-room house with benches	+	+
City-wall	+	+
Sacbe	+	+
Special features:		
Round column	+	+
Square column (blocks)	+	+
Interior columns	+	+
Serpent columns	+	+
Atlantean columns	+	+
Square capitals	+	+
Pilasters in door	+	+
Bench	+	+
Sloping back	+	+
Central altar	+	+
Table altar	+	+
Talud-tablero terrace	+	+
Balustrade with vertical block	+	+
Recessed panel	+	+
Bas-relief	+	(+) rare
Sacrificial stone	+	+
Standard bearer	+	+
'Column'-type altar	+	+
Chac mool	+	+
Stelae	(+) rare	+
+ Present.		

TABLE 8—MAYAPAN SHERD COUNT

Period	Mayapan, Inside Wall		Mayapan Environs	
	Number	Per cent	Number	Per cent
Recent	101	...	379	3.0
Postclassic Mayapan	414,133	88.6	635	5.1
Toltec	49	...	4	0.3
Classic, including Puuc	8,425	1.8	6,166	49.5
Formative	5	...	1,229	9.8
Unidentified	44,730	9.5	4,034	32.3
Total	467,443	...	12,447	...

TABLE 9—SITES ROUGHLY SYNCHRONIZED WITH CHICHEN II, III, IV, V

Federal District:	Tula-Toltec Period (1000-1145)	
	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.	Coyotlatelco. Early at Tula; earlier than Mazapan.
State of Mexico:	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Hidalgo:	Tula.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Morelos:	Xochicalco IV.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Puebla:	Cholulteca I ("New Cholula").	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Veracruz:	Castillo de Teayo.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
	Misantla.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
	Cempoala.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
	Sacrificios I.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
	Tajin III.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
	Cerro de las Mesas (Upper I).	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Huastec:	Las Flores and Panuco V.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
	Tamuin.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Oaxaca:	Monte Alban IV.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
	Mixteca (Ceramica Policroma).	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Sinaloa, etc.:	Aztatlan.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Yucatan:	Chichen II (948-1145).	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Guatemala:	Santa Lucia Cotzumalhuapa (stelae).	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Guatemala Highlands:	Zaculeu (Qankyak).	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Tabasco and Chiapas:	A few sites.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Chichimec Period (1200-1300)		
Federal District:	Tlatelolco and Aztec II.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
	Tenayuca IV.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Tlaxcala:	Tizatlan.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.
Puebla:	Cholulteca II.	Atzacapotzalco (Teotihuacan V); earlier than Mazapan.

Veracruz:	Cerro Montoso.
	Cempoala II, III.
	Sacrificios II.
Huastec:	Panuco VI.
Oaxaca:	Mitla.
	Monte Alban IV.
Yucatan:	Chichen III, IV (1145-1460).
	Mayapan (1283-1460).
	East Coast of Yucatan.
	Coba (latest period) and Culebra, Quintana Roo.
	Centla, Tabasco.
Aztec Period ("Culhua Mexica") (1320-1519)	
Federal District:	Aztec III-V.
	Tenochtitlan.
	Tenayuca VI-VIII.
	Culhuacan.
State of Mexico:	Malinalco and Calixtlahuaca.
	Texcoco.
Morelos:	Teopanzalco and Tepoxtlan.
Puebla:	Cholulteca III.
Veracruz:	Cempoala IV, V.
Oaxaca:	Mixtec: Coixtlahuaca, Tilantongo.
	Zaachila.
Yucatan:	Chichen V (1460-1542).
	Mayapan (1283-1460).
British Honduras:	Santa Rita.
Campeche:	Southwest Campeche, etc.
Guatemala:	Zaculeu (Xinabahul).

TABLE 10—CHICHEN-TULA-TENOCHTITLAN: ARCHITECTURAL FEATURES

ARCHITECTURAL FEATURE	CHICHEN					TULA	TENochTITLAN
	Jaguars	Warriors	Northwest Colonnade	Mausolea	Miscellaneous		
Temple and colonnade	..	49	49	..	..	50	32
Gallery-patio	..	..	..	..	..	52	50
Section	..	..	..	..	..	10	..
Batter	85	+	+	+	..	410	..
Panels	+	+	..	..	..	+	..
Dais	..	+	+	..	..	63	+ 410
Bench	..	+	+	..	..	63	51
Roof frets	82	72	77	..	..	78	84
Jaguar procession	85	..	..	..	..	86	599
"Spools"	85	+	..	..	..	+	..
Undulating serpents	85	129	114	+	..	127	602
Rosettes	85	..	..	..	..	90	..
Serpent balustrade	..	120	..	+	..	119	..
Serpent columns	85	+	..	..	..	121	..
Atlantean columns	..	..	..	..	..	3C6	121
Column decoration	85	+	+	..	..	561	..
Chac mool	..	+	..	+	2D10	73	75
Standard bearer	..	70	..	..	..	71	72
Atlantean altar	65	+	..	..	..	67	68
Serpent cornice procession	..	+	+	..	2D10	127	602
Tribune	..	..	..	+	56	+	+
Tribune and chac mool	..	..	..	+	..	+	..

+ Present. Numbers are figure references.

TABLE 11—CHICHEN: MINOR FIGURES ON COLUMNS

UPPER	Sun	Atlantean	Mask	Undetermined	Jaguar-Serpent-Bird
		337	52	40	61	6
LOWER	Jaguar-Serpent-Bird				Trees
		490			6
UPPER	Atlantean	Atlantean	Mask	Undetermined	
	132	16	38		
LOWER	Atlantean	Undetermined	Mask	Mask	
	132	16	38	12	
Total	1376	Jaguar-Serpent-Bird 36%	Atlantean 25%	Sun 25%	Mask 9%

TABLE 12—GEOMETRIC AND OTHER DESIGN: DERIVATION AND DISTRIBUTION

Table with columns for Design, Chichen Mexican Periods (III, II, I), and Maya Late Classic (Uxmal, Puuc, South). Rows include Geometric Design (Split column, Spool, Cross and lattice, Rosette, Shield, Sawtooth zigzag, Double sawtooth, Large fret, Fret and steps, Braid, Fylfot) and Naturalistic Design (Mask panel, Serpent guilloche, Undulating serpent, Astronomical band).

+ Present. Numbers are figure references.

TABLE 13—CHICHEN-TULA-TENOCHTITLAN: GODS, MONSTERS, ASTRONOMY

Table with columns for Feature, Chichen (Cenote Coll., Jaguars, Warriors, Northeast Colonnade, Mausolea), Tula, and Tenochtitlan. Rows include Tlaloc, Feathered Serpent, Tezcatlipoca, Tlalchitonatiuh, Saturn, Xiuhcoatl, Sun disk, Star glyph, Year sign, Jaguar-Serpent-Bird monster.

+ Present. Numbers are figure references.

TABLE 16—CHICHEN: BALL COURTS, SUMMARY

Table with columns for Structure, Types, Orientation, Panels on bench or slope, Rings, Super-structure, End Construction, End Walls. Rows include 2D9, 3C10, 3D4, 3E2, Monjas, Far East Group, Chultun Group, Holtun Group, Great Ball Court.

* In addition a panel is indicated on top perpendicular wall.

TABLE 14—CHICHEN AND OTHER SITES: JAGUAR-EAGLE CULT

Table with columns for Feature, Chichen, Cotzumalhuapa, Tula, Tajin, etc., Valley of Mexico, and other sites. Rows include Jaguar-Eagle, Jaguar, Eagles, Jaguar & Heart, Eagle & Heart, Eagle & Victim, Sacrifice and Knife, Scene in Ball Court, Tzompantli, Quauhxicalli, Dead Warrior, Toltec Players.

+ Present. Numbers are figure references.

TABLE 15—BALL COURT: GAME AND PLAYERS

Table with columns for Feature, Chichen, Cotzumalhuapa, Tula, Tajin, Tepalcates, etc., Copan, Piedras Negras, Chichicastic, etc., and other sites. Rows include Court, Ball shown, Players, Nose bead, Tunic, Yoke, Palma, Figure on back, Arms protected, Glove, Padded knee, Slipper, Sacrifice, Stone knife, Victim's body, Victim's head, Serpents from neck, Sky god, Articulated death figures, Speech by sacrificer.

+ Present. Numbers are figure references.

TABLE 17—CHICHEN II AND III: DISTRIBUTION OF SOME TRAITS

Table with columns for Trait, Chichen II (A), Chichen III (B', B''), and other sites. Rows include Mask on column, Atlantean on column, Spear and oblong shield, Leggings, Mosaic cape, Very long necklace, Maxtlatl, Jaguar seat, Earth monster, Serpent columns, Sun disk on columns, Jaguar-Serpent-Bird, Atlantean on pilasters, Atlatl, Curved stick, Anomalous Toltec, Maya priests.

* On pilaster. S Found sparingly. + Present. † See Table 23.

TABLE 18—NAME SIGNS IN TEMPLE OF WARRIORS GALAXY

Table with columns for Structure, Toltec (Number, Per cent), and Maya (Number, Per cent). Rows include Northeast Colonnade, Chac Mool, Northwest Colonnade, Warriors, Total.

TABLE 19—SPEECH-SCROLLS IN TEMPLE OF WARRIORS GALAXY

Table with columns for Structure, Toltec (Number, Per cent), and Maya (Number, Per cent). Rows include Northeast Colonnade, Chac Mool, Warriors, Northwest Colonnade, Total.

TABLE 20—BODY PAINTING ON FIGURES ON COLUMNS IN TEMPLE OF WARRIORS

Table with columns for Painting, Toltec, and Maya. Rows include Yellow body, Red body, Blue body, Red stripes, vertical, Red stripes, horizontal.

TABLE 21—BIRD SIGNS AND NAME SIGNS IN TEMPLE OF WARRIORS GALAXY

Table with columns for Structure, Name alone (Number, Per cent), Bird alone (Number, Per cent), Name and Bird (Number, Per cent), and Total. Rows include Chac Mool, Warriors, Northwest Colonnade.

TABLE 22—TOLTEC AT CHICHEN AND TULA *

Table with columns for Trait, Chichen (A, B', B''), and Tula (Tula, Tula Vase). Rows include Names, Speech-scrolls, Ear: circular disk, Ear: disk and bead, Ear: torn, Ear: square bead, Nose: bead, Nose: pendant, Nose: button and disk, Nose: disk, Check: button, Beard, Speech-scrolls, Headband mosaic, Band with point, Bird or Bird in hat, Feathers on hat, Bird on breast, Pectoral and bead, Breast: flat disk, Knee and ankle roll, Tape garter, Heeled sandal, Left arm protection, Arm showing through, Round shield, Draped shield, Back-shield, Atlatl, Darts, Curved weapon, Bird warrior, With star skirt, With feather shawl, Atlantean altar, Falling Toltec, Crossed-arms figure, Processional.

* In this table only a single reference in each category is given for Tula. There are, of course, many more in over half the features studied. No record of similarities is given in the table as found on the Tula Vase (fig. 505) and very few of those easily noted on the square and the atlantean columns (figs. 561, 562). Practically all recognizable identities and parallels are given in the text.

+ Present. Numbers are figure references; capital letters denote gold disks from Sacred Cenote.

TABLE 23—"PRIESTS," MOSTLY MAYA, IN CHICHEN III *

"Priest"	B'											North Colonnade Dais
	Little Tables	High Priest's Grave	North-east Colonnade	Chac Mool			Warriors		Northwest Colonnade		Xtoloc	
				Column	South Bench	Column	Fresco	Column	Dais			
Priest with spear.....	2	4	10	6	..	..	..	1	..	..	..	..
Warrior-priest .....	..	..	2	3	5+	6	3	..	10	4	..	4
Sorcerer .....	..	..	1	1	..	..	5	4	8	..	..	1
Donor	5	5	2	3	3	2	4	3	10	..	..	..
Priest with bone.....	..	1	..	1	..	..	..	..	..	..	..	..

* A few figures are counted in more than one category: Column 45 in the Temple of the Chac Mool and Column 51N in the Northwest Colonnade are both sorcerers and donors.

TABLE 24—"CHICHEN MAYA": COMPARISONS

TRAIT	PETEN		USUMACINTA					YUCATAN											Maya Codices	Chichen
	Tikal	Naranjo	Palenque	Piedras Negras	Yaxchilan	Bonampak	Seibal	Coba	Uxmal	Oxkintok	Kabah	Labna	Sayil	Xcalumkin	Halal	Ezma	S. R. Xtampak	Halakal		
Ear, circle & beads.....	+	+	..	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	611	611
Nose bead .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	614	614
Long simple loincloth.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	615	615
Beard .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	614	614
Mask .....	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	622	622
Bar bead necklace.....	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	625	625
Long bead necklace.....	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	625	625
Shell pectoral .....	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	620	620
Collar or cape.....	..	..	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	633	633
Gaiter-puttee .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	633	633
Sandal .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	634	634
Shield, rectangular .....	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	633	633
Shield, flexible .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	634	634
Shield, round .....	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	637	637
Spear .....	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	635	635
Spear, openwork handle.....	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	625	625
Stone knife .....	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	647	647
Bladed club .....	..	..	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	650	650
Pronged "bag" .....	?	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	646	646
Atlatl, unusual form.....	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	638	638
Fan .....	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	667	667
Donor, netted skirt.....	..	?	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	..	671	671
Encounters .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	61	61
Gesture of resignation.....	..	..	+	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	684	684
Prisoner-slave .....	..	+	+	+	+	..	..	..	..	..	..	..	..	..	..	..	..	..	689	689
Total different features.....	5	13	5	8	11	8	7	3	8	12	8	3	3	6	3	4	4	7	9	9

+ Present. Numbers are figure references.

TABLE 25—MAYA AND TOLTEC IN CHICHEN A, B', B"

A		B'		B"		Total	
M	T	M	T	M	T	M	T
137	345	88	84	176	497	401	926
28%	72%	51%	49%	26%	74%	30%	70%

TABLE 26—MAYA AND TOLTEC: LOCATION AND STATUS

PERIOD	LOCATION	SUPERIORITY		INFERIORITY	
		Toltec	Maya	Toltec	Maya
II (A).....	Castillo	On all columns, pilasters, jambs	.....	Possible prisoners	Small atlanteans on all columns etc.
	Jaguars Jaguars fresco	On all jambs, pilasters Victors	.....	Atlantean altar	Atlanteans Defeat in battle "Surrender" Human sacrifices Column atlanteans "Surrender" Sacrifice On jambs Atlanteans On jambs (2)
	Lower Jaguars North Temple	Most prominent Visitors in conference, etc.	.....	.....	.....
	South Temple Ball Court benches Gold disks	On all columns (24) Victors on 4 panels Victors	Victors on 2 panels	.....	Defeated Human sacrifice
III (B').....	Chac Mool	.....	Shrine	Outer room and pilaster Majority "surrender"	Small atlanteans
	Chac Mool benches Northeast Colonnade Northeast Colonnade dais	.....	Majority On all altar columns (16) Mainly	.....	27
	Xtoloc High Priest's Grave Little Tables	.....	On columns and jambs (11) On columns (15) Shrine	1 1 Portico below and pilaster in outer room	Small atlanteans on columns Small atlanteans on columns
	Str. 2B2 Str. 6E1	.....	All (8) All?	.....	.....
III (B'').....	Warriors	Shrine (28) figures Outer (36) Toltec and sun disk	.....	.....	Shrine (4) Outer (12) Atlanteans on pilasters Defeat in battle Human sacrifice 30 and 30 prisoners
	Warriors fresco	.....	.....	.....	.....
	Northwest Colonnade	Large majority (160) Toltec and sun disk	.....	.....	.....
	Northwest Colonnade dais	27	.....	.....	4
	North Colonnade North Colonnade dais	Large majority (48) 26	.....	.....	4 + some figures of drums 4
	Mercado Mercado dais	6 on pilaster? Executioner	.....	.....	.....
	Mercado Ball Court bench	8 conduct	.....	.....	Sacrifice of 2 18 Maya (?) prisoners 8 prisoners
	Monjas Annex: Toltec Monjas Annex dais Wall Panels	6 conduct Toltec (25) 25±	.....	.....	6 prisoners 19 prisoners? Sacrifice? 19±prisoners
	Big Tables Jaguar Atlantean Columns	All Toltec (20) All Toltec (26)	.....	.....	Small atlanteans Small atlanteans
	Sculptured Jambs Str. 5B16 Str. 2C3	All Toltec (10) All Toltec (26) All Toltec (5)	.....	.....	Small atlanteans
	Caracol Stone	Toltec conquerors (5)	.....	.....	"Surrender" (6)

TABLE 27—DISPOSAL OF HUMAN BODY

(Sotuta-Homun Testimony, Ca. 1562)

	Number	Per cent
Thrown, already dead, into 15 different cenotes.....	113	67.2
Thrown, alive, into Sacred Cenote at Chichen.....	9	5.3
Buried after varied methods of sacrifice.....	26	15.4
No data on disposal of body.....	20	12.0
Total sacrificed	168	

ENDNOTES

INTRODUCTION

1. For details of the conquest, see Chamberlain, 1948a, 1949. Burland (1950a) has revived an old theory that Yucatan was discovered by Juan Diaz de Solis and Vicente Yañez Pinzon, who sailed along the coast of the peninsula in 1508.
2. The derivation of the word *Itza* is given by Barrera Vasquez and Rendon (1948, pp. 53-56): "Itzá is composed of two elements: *its + d*. The first *its* we take to mean sorcerer or magician and *d*, water. The name *Itza*, then, is translated 'the sorcerer of the water.'" They then enter into an extended discussion of the etymology of the name.
Itza (according to Mediz Bolio, 1949, p. 13) means "shower of water" . . . and is the totem of the caste, symbolically in the nomenclature of the clans or Maya families. . . . The Itza call themselves 'shower of water,' the expression of their spiritual and superior quality and of their divine origin. . . . 'I am the shower from the sky, I am the moisture of the clouds,' (this) we know was said by Itzamná, the incarnate god who founded the religion and the culture and established the caste or the Itza order among the Maya of the peninsula in mythological times."
See J. E. S. Thompson, 1950, p. 111, for discussion of the meaning of the word *ch'en*.
3. Landa is, of course, mistaken in assuming that man made even some of these openings, such as cenotes, to the water.
4. See Cole, 1910, with bibliography. Roys (1939, pp. 4, 5) describes these wells and gives a map of their distribution in the Cupul area. Early accounts of cenotes are in the two volumes of the *Relaciones de Yucatán* (hereinafter RY), 1:47, 210, 266; 2:100, and in Noyes, 1932, p. 306. A discussion of the fauna found in them appears in Pearse, 1936, and Allen, n.d. Caves are discussed by Mercer, 1896, 1897; Hatt and others, 1953.
5. Oviedo (1851-55, 2:32) also describes these ocean springs. Ober (1884, p. 141) quotes Humboldt on the same subject.
6. Stephens (1843, 2:208-13, 217, 224-28, 248-51) describes several aguadas and shows a Catherwood drawing of one of them, together with a section of the aguada at Jalal, the storage capacity of which had been increased by excavating artificial wells, casimbas or chultuns, into the bottom.
7. Novelo Erosa (1941) and Anonymous (1845) mention ancient wells extending from Teabo to Xkinel, from the ruins of Chacchob to Chaczilil. See also V. M. Martinez Hernandez, 1940.

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1. In northern Veracruz, around the Tampico region, was a Maya-speaking people, the Huastec. Linguistically, the Chicomultec in southern Chiapas were related to them. Were the Huastec a small group which had migrated northward from the main body of the Maya or did they form the northern range of a once solid area of those speaking the Maya language which, at one time, extended along the entire western coast of the Gulf of Mexico? Later, according to the latter theory, which is the one generally accepted, the eastern movement of the Nahuatl- and Totonac-speaking tribes reaching the gulf coast from the west, broke through the Maya tribes, thus isolating the Huastec from the main mass of Maya-speaking peoples to the south.
This migration must have been earlier than the development in the south of the Maya culture as we know it. Hieroglyphic writing is absent in the north, and Huastec archaeology is quite different from that in the main Maya terrain. Linguistics alone bind the two areas together. For language in the north see Sapper, 1897; Schuller, 1925. For archaeology in the Tampico region see Ekholm, 1944, etc.
2. Mason, 1940, 1948; Johnson (1940), with map and references. Halpern (1942), arranging the Maya languages on phonemes corresponding to certain sounds, has I, Huastec; II, Yucatan-Guatemala group with (a) Yucatec, (b) Quiché with Kekchi and Pocom, and (c) Mam with Aguacatec and Jacaltec; III, Chiapas group, "perhaps" subdivided into Tzeltal-Tzotzil, Chontal-Chol-Chorti, Chañabal, and Chuj. Tozzer (1921c) has an annotated bibliography of the vocabularies, grammar, and texts in the Maya dialect as spoken in Yucatan. This has been kept up to date in manuscript form.

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- Thompson (1950, p. 16) considers that the inventors of the Maya hieroglyphic writing spoke a language very close to modern Yucatec and to Chol-Chorti-Mopan. "To judge by the dated monuments, Maya hieroglyphic writing spread later to the territories in which Tzeltal, Tzotzil and Chaneabal now live, and never reached the highland peoples." See his map, fig. 1.
3. The most satisfactory maps of the Maya area are in Spinden, 1913, 1928; Scholes and Roys, 1948, Maps 1 and 3; Ricketson and Blom, 1924-25. The last entered a second (1929) and a third edition (1940), appearing in six proof sheets. An archaeological atlas, by Mexican states, was published by the Instituto Pan-Americano in 1939.
4. Palacios (1945b) and Ruz (1945a) discuss the geographical distribution of the Maya ruins. See also J. E. S. Thompson, 1950, pp. 3-5, who considers the geography and the environment of the several regions.
5. Tozzer (1941, p. 297) discusses the question of social classes and slavery. Roys believes that slavery was, of course, present but he seriously doubts that there was ever a large enough number of slaves to constitute a significant factor in the public construction that went on. He feels the commoners were servile and socially insignificant.
6. Dr. Barnum Brown of the Sohio Oil Company reports the discovery on the Rio de la Pasion in Guatemala of large numbers of petrified bones of fauna belonging to the Upper Pleistocene. One of the bones has three sharp V-shaped cuts. Shook, in describing this find (1949, p. 223), writes, "If the cuts were made by man, as Dr. Brown thinks, this is the first evidence found in Guatemala of man associated with extinct fauna." See also Shook, 1951.
7. Merrill, 1948; Arnold and Libby, 1949, 1950; Libby, 1952; Johnson, 1951. The research project on this most important problem started under the direction of W. F. Libby at the Arnold Institute of Nuclear Studies at the University of Chicago. Since then many other centers of research have taken up the problem.
8. Wauchope (1954) discusses the implications of radio carbon dates from Middle and South America and concludes that "three dates from Monte Alban . . . check with the known stratigraphy; three readings from Teotihuacan, however, do not."
9. This is the archaeological stage called "Pre-Maya" by Morley (1946); "Middle" by Vaillant and Kidder; "Formative" by J. E. S. Thompson, Kroeber (1948), Brainerd, Wauchope, Willey, Armillas, and others. Steward (1948) substitutes "Basic or Inter-areal Developmental" for Formative. A. L. Smith (1950) speaks of Early and Late Developmental. "Pre-Classic" is the name given this period by Proskouriakoff, Shook, Wauchope, and others. Wauchope (1950) divides the period into "Village Formative" and "Urban Formative." His figure 2 shows trait associations and figure 3, the chronological phases of various sites. Bernal (1952) has a "Teorico," marked by the first appearance of agriculture, followed by an "Arcaico," and an "Epoca de Desarrollo" where architecture first appears and in which he places La Venta, Tres Zapotes, and the Cuicuilco horizons.
Strong (1951) prefaces his Formative, first with a Pre-Agricultural and second with an Incipient Agricultural-Pre-Ceramic Period. Caso (1953) revives the term Archaic, "so out of style," but he limits the use "only to the first part of what has recently been called 'the Formative horizon.'" In this "are survivals from the Primitive." The truly formative are Teotihuacan I and Monte Alban II, which lead to the great classic cultures.
Armillas (1948) starts with a "Basic Period," corresponding to the horizon of agriculture without pottery recently discovered in Peru but it has seldom been reported in Mesoamerica.
Porter (1953) discusses in detail the culture of Tlatilco in relation to that of all the other pre-Classic sites of the New World, including comparisons with the southeastern United States and the Andean area.
10. W. H. Holmes (1895-97) was the first to illustrate a stratigraphic cut (see Lothrop, 1927, pp. 168-70) in Valley of Mexico and pre-Aztec pottery. This paper represents the actual discovery, but it was not followed up. Nuttall, working not on pottery vessels but on figurines, later gave impetus to the excavations of Gamio, Boas, and Tozzer.

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11. This Classic or Great period has been called "Classic," "Great Empire," "First Empire," "Old Empire," "Initial Series Period," "Clasicismo y Barroquismo" by Bernal, and "Florescent" by others. Armillas uses both Classic and "Teocratica." Spinden and Morley have previously used the term "Great Period" as the third subdivision of the epoch called here "Classic or Great" or, by Morley, "Old Empire." Spinden dates his "Great Period" from 9.15.0.0.0 to 10.3.0.0.0; Morley, from 9.16.0.0.0 to 10.8.0.0.0. The Classic period or stage is probably the best term and it will be used here interchangeably with the Great period and recognized as covering the highest development of civilization in this area. Proskouriakoff defines the Classic period as "that characterized by the style of most monuments with Initial Series or by cultural traits associated with Initial Series inscriptions." Her subdivisions will be given later. See Spinden, 1913; Adams, 1943; and Proskouriakoff, 1950 and 1951.

The Classic period here is more or less contemporaneous with the following in Mexico: Teotihuacan II-III, Cholula II-IV, Xochicalco II-III, Chupicuaro, Monte Alban III A, B; in the Huasteca, Panuco III-IV. Certain elements of El Tajin belong here, also upper Middle and Upper Tres Zapotes, Ranchito de las Animas, and Lower Cerro de las Mesas.

Drucker (1952a) sums up the La Venta-Olmec situation. The Olmec style can be traced back to the later Archaic in the Lower Tres Zapotes period. The site of La Venta, "on the basis of its ceramic remains . . . appears closely linked temporally to the Middle horizon of Tres Zapotes, and thereby may be placed as approximately contemporary with the Tzakol period of the Maya. This La Venta horizon is a segment of the remains of a particular culture, that designated here 'Olmec,' whose chief locale was a limited region of southern Vera Cruz and western Tabasco."

Caso (1953) includes in the Classic in western Mexico, Chametla I, Huatabampo, Tuacacueco, Los Ortigas, and the Delicias and Apatzingan phases in Michoacan.

As already indicated, the name pre-Classic has been used for that stage called here Archaic. Some, however, have limited this term or Proto-Classic to phases of culture coming just before that commonly called Early Classic. Some or all of these sites have been included in the Proto-Classic or the Late Archaic: Teotihuacan I, Xochicalco I, Chupicuaro, Monte Alban I and II, Lower Middle Tres Zapotes, and Holmul I.

MacNeish has kindly furnished me with the following sequences for the Huasteca and the Tamaulipas highlands: Pavon and Ponce, cross-dating Mamom and Early Tres Zapotes; Aguilar and Chila (Ekholm I) aligning with Chicanel followed by El Prisco (Ekholm II), and Laguna of Tamaulipas; Pithaya (Ekholm III) and Eslabones; Zaquil (IV) in both regions, Las Flores (V), Panuco (VI), and Los Angeles of Tamaulipas.
12. At Uaxactun, Stela 9 has an Initial Series reading, 8.14.10.13.5 (A.D. 327) and one on Stela 12 reading 10.3.0.0.0. The earliest date in the Initial Series, now generally accepted, is that on the Leyden Plate, 8.14.3.1.12 (320); the latest is that inscribed on a jade bead from Tzibanche, Quintana Roo, 10.4.0.0.0 (909). Formerly, the earliest date from the Maya area was considered to be that recorded on the Tuxtla Statuette, 8.6.2.4.17 (162), but this inscription is now generally regarded as non-Maya. J. E. S. Thompson (1941, pp. 8-10) gives a complete bibliography on this stone and discusses its dismissal as an object of importance in Maya history.
13. Tozzer (1941, pp. 16-17) lists those who have been writing on the correlation problem. To this should be added Makemson, 1946. See J. E. S. Thompson, 1950.
14. In the classification, based mainly on the data of Uaxactun (A. L. Smith, 1950), Early Classic, Vault I, runs from 8.12.0.0.0 to 9.8.0.0.0; Late Classic from 9.8.0.0.0 to 10.3.0.0.0 "or a little later." Thompson (1945) divides his Initial Series period into the First Half (about 8.14.10.0.0 to 9.9.15.0.0) and the Second Half (to 10.3.5.0.0).
15. If Spinden's Transitional period is accepted, the sites of Rio Bec and Los Chenes come after the end of his First Empire and before the beginning of his Second Empire which includes the Puuc. He originally called these cultures "Secondary Sites." As so little is known about this region, this term is questionable.
16. Ruppert and Denison, 1943; Ruz, 1945. At Tajin, Vera Cruz, Edificio A has a center structure and a divided nonfunctional stairway with a usable one between (Garcia Payon, 1949, pp. 581-95). Compare with Str. I, Becan (Ruppert and Denison, 1943, p. 67).

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17. This elaborate façade may either represent a single open-mouthed creature or be composed of a mask at the top and another mask in profile on either side of the door below. The temple at Rio Bec B (Hay, 1935) shows the single mask at the top of the door and no lateral profile designs below.

Seler (1916) associates this type of mask-façade with Quetzalcoatl. Thompson (1939, 1942) has pointed out that Motolinia (1540), in treating of two types of round buildings, shows that one is low and had an entrance in the form of a serpent's mouth and that the other was a high structure, dedicated to Quetzalcoatl. Gomara (1552) misquoted Motolinia and said that the serpent-mask entrance was erected in honor of Quetzalcoatl. Hence many, including Seler, perpetuated Gomara's mistake. Hissink, in her study of masks (1934), identifies the open-mouthed façade with the entrance to Mictlan (the lower world) but relates it to Quetzalcoatl. Thompson associates this type of design with the Jaguar-Eagle cult of the Dead Warriors and, more directly, with the terrestrial and celestial monsters (*los xiucouatl*) who have the power to convert themselves into Monsters of the Earth and the Sun in addition to being gods of the heavens, making trips each night into the underworld. These "earth monsters" seem to be distributed over a great part of Middle America, from Mexico to Costa Rica. They will be considered in Chapter III-71.
18. Even with the extension of 100 years beyond the end of the Great period, 10.3.0.0.0 (889) to 10.8.0.0.0 (987), I have always found it difficult to understand the almost simultaneous development of the three architectural styles of Rio Bec, Los Chenes, and the Puuc, each evolving in very much the same geographical area.

If Spinden's Second Empire, in which he places the Puuc sites, followed his old Transitional, in which he has the Rio Bec and Los Chenes, there would be opportunity for these three to have been developed at different times. The architectural and ceramic situation, however, seems definitely to place these three all in the second half of the Great period. Morley has the Puuc in Period I of his New Empire.
19. In addition to the date at Xcalumkin, already mentioned, Thompson (1945) suggests two other dates in this area, neither of which is in the Initial Series: that on the nose of a stone mask at Labna, 10.1.13.0.0 (862), and that on a capstone at Uxmal, 10.3.17.12.1 (905).
20. Proskouriakoff (1951, pp. 174-77) considers that Stela I at El Baul, the Izapa carvings and those at San Isidro Piedra Parada are non-Classic but they have a "fairly early date." She places Monument 12 at El Baul and all the sculpture at Santa Lucia Cotzumalhuapa as "non-Classic late" and adds, regarding the 13 stelae and other sculpture at the latter place, that if "we attempt to correlate [the style] with the Maya sequence, we find combined traits from the whole range of Classic sculpture as well as some similarities to the Toltec period at Chichen Itza."

Thompson (1941, pp. 10-13, 21-24) considered El Baul and Santa Lucia as Mexican, that they belong together in point of time and are related to the Tula-Toltec period at Chichen Itza, "datable as between A.D. 1100 and A.D. 1450." The same author (1943, 1948, 1950), who illustrates the Santa Lucia and El Baul bas-relief and carvings in the round, now tentatively dates Cotzumalhuapa at 600-900, which agrees essentially with the ideas of Proskouriakoff.
21. Berlin (1952) gives two phases of post-Classic here as Ayampuc and Chinautla.
22. This early literature, as we shall see, is also abundant in Mexico. This hand-aiden to archaeology justifies Armillas (1948) in using the term "Historica" for the period following the Classic period and extending to the time of the conquest, both in Mexico and in the Maya area. He associates the idea of defense with many of the sites of this period. A natural, easily fortified position is chosen, or one made so by walls or palisades. Armillas points out that *tenango* means in Nahuatl, "walled" and we find this word a part of the following place names: Quetzaltenango, Chimaltenango, Chichicastenango, Momostenango, and Jacaltenango. He also considers fortified places in Mexico.
23. Spinden (1928) sets the League of Mayapan period from 964 to 1191, followed by the period of Mexican Influence from 1191 to 1457. Morley (1949) has his New Empire I, called the Maya Renaissance, the League of Mayapan, and the Puuc period, from 1007 to 1191; his New Empire II, the Mexican period, from 1204 to 1441.
24. Caso, Armillas (1951), and others have called it, quite correctly, the Historic period. Chichen Nuevo has also been used. Armillas at

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- one time (1948) called it the Militaristic Era; Strong (1951) used the term Fusion for the Mexican Occupation, with Imperial or Militaristic for what is here called Mexican II. Willey and others have called it Expansionism. Pollock (1952) uses the phrase Period of Foreign Domination.
25. The word "Aztec" was unknown to Cortés, to Bernal Diaz, and to Tapia. The "Aztec Empire" is not mentioned by Sahagun, nor by Motolinia. There were people living at a place called Aztlan who left their island home and passed over to Culhuacan. Here their god Huitzilopochtli came to them. It was he who ordered them to change their name from Atzlaneca to Mexica. The Culhuaca seem to have reached the Valley of Mexico before the latter people. The Mexica and the Culhuaca may indeed have been the same people. Barlow suggests that "the Empire of the Culhua Mexica" be substituted for the "Empire of the Aztecs." The latter term "originates, apparently, with Clavigero and was diffused by Prescott, a mere 100 years ago. The latter speaks critically of 'the ancient Mexicans,' or Aztecs as they were called."

Palacios (1928) has an excellent article on this subject, on which there is much confusion. He states that no place name has been found for Mexico. In the Anales de Cuauhtitlan, Acamapichtli was elected the Tenochca King. "This was the period of *el imperio de Mexico o de los mexitlan*."
26. After the Mexican Era, Thompson (1945) has the "Period of Absorption" from 10.19.0.0.0 (1204) to 11.16.0.0.0 (1539) meaning by this, that the foreign elements disappeared to a great extent: they were "absorbed by the resurgence of Maya ideas which tended to re-assert themselves and Mexican concepts and deities are modified or dropped." Pollock (1952) prefers the term "Maya Resurgence."

Kroeber (1948) after his "Transitional Period" (889-987) begins his "Retractile Period" subdivided into three phases, the first (987-1194) showing Mexican influence, the second (1199-1441) "Intensified Mexican Influence," and the third (1441-) "Disintegration."

Brainerd uses the term "Disintegration" to define the time following the main Mexican influence which ended about 1200. Morley uses the same nomenclature and he also calls the period New Empire II, but he runs the Mexican era from 1194 to 1441. "Disintegration" for him begins in 1441. Armillas (1948) calls all the era beginning in Yucatan about 1000 to the Spanish conquest the "Historical Period." Caso gives the name "Nuevo Yucatan" to the cultures of the same era. Bernal (1952, 1953) considers "the Historic" begins at the end of the Toltec horizon. Andrews (1943) has his Toltec period from 1200 to 1350 and his Mayapan-Tulum from 1350 to 1450. Finally, Strong (1951) places his Imperialistic-Militaristic Era as following that of the main Mexican occupation. This would be contemporaneous with our Chichen III.
27. This corresponds to Kroeber's and Pollock's "Disintegration," to Bernal's "El Horizonte Final," and, roughly, to Andrews' (1943) "Mixtec-Aztec" period. This name he derives from a comparison of various designs on the Santa Rita frescoes in northern British Honduras (Gann, 1897-98) and similar ones in various Mixtec-Zapotec codices. He dates the remains here from 1450 to 1525. Morley has his New Empire III, Decadence and End, from 1441 to 1697.
28. Tozzer (1941, pp. 250-51) gives an outline of these early voyages along the coast as recorded by Bernal Diaz and in the letters of Cortés. The early Spanish history of the country has been admirably covered by Scholes and Roys, 1948.
29. The katuns ran 8, 6, 4, 2, 13, 11. The last katun included the period of the final conquest of Yucatan (1541-1546) and the foundation of the capital of the country on January 6, 1542, on the ruins of T'ho giving it the name of Merida, "because on its site is found buildings of lime and stone, worked and with many moldings as those which the Romans built in Merida in Spain" (Chamberlain, 1948, p. 213).

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1. See Tozzer, 1941, p. 283, for references to the "burning of books," especially the one dated 1805 where "27 rolls of signs and hieroglyphs on deer skin" are enumerated among other objects destroyed by the priests. The original authority for this is still unknown.

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2. Thompson (1950, pp. 23-36) has wisely called them from the city where each is presumably located at the present time. He describes their contents and gives a bibliography. See also Spinden, 1913, and Tozzer, 1941, p. 283, for many references to these manuscripts.
3. See Barrera Vasquez and Rendon, 1948; Barrera Vasquez and Morley, 1949. Roys (1933) has a monumental work on the Chumayel manuscript, with a translation and numerous notes and appendices, which is freely used here. Solis Acala (1949) has a similar work on the Perez Codex. See also Brinton, 1882; Martinez Hernandez, 1909, 1913, 1927; Roys, 1949, 1949a, 1949c; Thompson, 1937, 1950. No mention is made here of the extensive use of these manuscripts or that of the Xiu in the attempt to establish a correlation between Maya and Christian chronology (Morley, 1920, App. II). Attention is also called to Roys' study on Maya history outside the Chronicles (1948).
4. A treatise on the Prophecies by Avendaño, "Explicacion de varios vaticinios de los antiguos Indios de Yucatan," has disappeared (Roys, 1933, p. 184n).
5. Quoted by Roys, 1949, p. 157. See also his 1933, App. D; Tozzer, 1941, pp. 42-43; Barrera Vasquez and Rendon, 1948.
6. Most of these accounts are traditions and do not form a reconcilable historical series. For example, Roys does not agree with the data as shown under Chichen I. He points out that the Tizimin Chronicle starts with an account of the Xiu, jumps to the "discovery" of Chichen in an 8 Ahau, and ends with a Katun 1 Ahau, when certain people settled at Chichen went to Chakanputun, which I have placed in the Chichen II column.
7. Jakeman (1945, pp. 77-105) has an appendix on the "Historical Recollections" of Gaspar Antonio Chi, with Spanish text and English translation. This is a very useful compilation of the various *Relaciones* which can be traced back to this single source. They contain names, such as Hun Uitzil Chac, Kakupacal and Uilu, and Kukulcan which form the connecting link between Landa and the Chronicles.
8. I have chosen this date in the Long Count for this particular Katun 8 Ahau as the most probable one. Others have placed it differently. This choice is possible for all katun dates that follow.

All references to the Chumayel are in Roys, 1933; those to the Mani and Tizimin in Brinton, 1882, pp. 100-05, 144-49. Barrera Vasquez and Morley, 1949, give the combined text.
9. In one of the katun prophecies, we read, "The Katun is established at Uuc-yab-nal, in Katun 4 Ahau. At the mouth of the well, Uuc-yab-nal, it is established." Roys (1933, p. 133, note 7) comments on this passage: "We know nothing of Uuc-yab-nal beyond what is stated here. In the prophecy for this same Katun 4 Ahau, . . . it is said to be established at Chichen Itza, and here Uuc-yab-nal is said to be 'at the mouth of the well' (*tu chi cteen*). We can only conclude that Uuc-yab-nal was the ancient name of the old city of Chichen Itza before the Itza came and called it 'the mouth of the well of the Itza.' *Uuc* means seven, and *Abnal* is still a well-known Maya family name."
10. Barrera Vasquez and Morley (1949, fig. 1) give a map showing "the eastern descent" from the "Old Empire," ending in the 10th century, and "the western descent" as migrations of Maya and Mexicans northward from the 10th to the 12th centuries. This is quite different from the modern reconstruction of Yucatan history. The authors would have a League of Mayapan composed of Uxmal, Chichen Itza, and Mayapan, extending from about A.D. 1000 to 1204, implying contemporaneous existence for three cities which, as we shall see, belong to three different periods.
11. The design on its under side, together with one from the stone of the hacienda water trough (Proskouriakoff, 1950, p. 170): ". . . present the same motif of the figure sitting in front of a flaring vessel. The position is something like that of the figure on Stela 12 at Piedras Negras (9.18.5.0.0) [795]. . . . Thompson gives 10.2.0.0.0 [869] and 10.3.0.0.0 [889] as the dates of these lintels." This would place the stones at the very end of the latter half of the Great period. Beyer (1932, 1937) considers the forms of many of the glyphs on the Akabtizib lintel as representing the earliest forms of any found at this site. In his hypothetical reading of some of the dates at this city, he regards that on this lintel as the earliest. Ruppert has made a special study of this structure and discusses its core and the various accretions.
12. For the Tun-Ahau reckoning, see Bowditch, 1910; Morley, 1924; Spinden, 1924, pp. 280-85; Beyer, 1937. For the Katun-Ahau system, see Thompson, 1937, 1941a, and 1950, pp. 197-203; Weitzel,

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- 1945, 1947; and Satterwaite, 1942. For criticism of the Thompson suggestion, see Beyer, 1941, who (1937) illustrates many of the Chichen inscriptions.
13. The recognition of Tula, Hidalgo, as the Tula of the ancient sources was made as early as 1844 (see Krickeberg, Jimenez Moreno, and Linné). This identification has not, however, been universally accepted. Plancarte was the first to associate Tula with Teotihuacan. Palacios (1941) quotes Sahagun about the "great buildings, the very strong and rich city, with a vigorous and intelligent people. Tula is its name." Palacios adds, "This is, of course, the metropolis Teotihuacan. . . . Tula is a generic name, used for district capitals. . . . So San Juan Teotihuacan is also Tula." The latest author to suggest that the ancient Tula is Teotihuacan is Séjourné (1954, 1954a). Among other arguments to prove her point, she cites Sahagun and considers that "Teotihuacan is the only site in Mesoamerica where" one can localize with certainty the existence of the representation of Quetzalcoatl, thus making it "the home of the god and the capital of the Toltecs."
14. In an interpretation by Jimenez Moreno, Mixcoamaztzin, on his death, became the god Mixcoatl. He was said to have been the leader of an invading force who, after conquering the Otomi and a number of pueblos north of the Valley of Mexico, went to the south of Culhuacan and either to Huitznahuac or Mixcouatepetl. Here, according to one myth, the victorious chieftain met a woman, named Chimalma, who belonged to another tribe. They had a son named Ce Acatl Topiltzin Quetzalcoatl. His mother died at his birth and he was brought up by his maternal grandparents.
15. It is usually considered that Huetzin and Totepeuh were two separate kings but some authorities regard as more plausible the theory that they represent two different names assigned to Quetzalcoatl's father.
16. Preceding this in the annals we find, "According to the Texoco *relación*, in the year 2 Acatl (883) Quetzalcoatl died."
17. Tlapallan (Tlillan, Teotlixco, Tulapan), "land of the black and red color," "land of the writing," "place of the burning," also called Nonoualco (Noual, Onoualco), "land of the foreign tongue," "land of the dumb," "where the language changes." This place is generally identified as on the sea coast near Laguna de Terminos, on the border of Tabasco and Campeche. This was the general region to which, later, the Mexicans gave the name of Acalan, and which maintained trading relations with Tabasco and Xicalango, and as far north as the Valley of Mexico and, southward, the interior of Guatemala, Gulfo Dulce, and as far as the Isthmus of Panama.
18. If the Chumayel Chronicle I is accepted, the end of the 200 years of the Toltec regime was in a Katun 8 Ahau (1204), the beginning would be about 1000. According to the Tizimin and Mani accounts, on the other hand, the end of the first Toltec regime, the "abandonment" of Chichen, was in a Katun 1 Ahau, running from 1125 to 1145. Counting back 200 years, we arrive at 928-948 as the beginning of the advent of the Mexicans.
- If the southern dispersal is interpreted as having taken place about the time of the "destruction" of Tula in 1168, this would accord roughly with the beginning of the second Toltec period or Chichen III (B), placed in our reconstruction of the history of the site as suggested here, in a Katun 12 Ahau, following a Katun 1 Ahau, marking the "abandonment" of the site. It should be pointed out here that this period, called B', seems to be marked by the resurgence of the Maya in importance. This is discussed later.
19. The possibility that these "discoveries" might be assigned to the Katuns 8, 6, and 4 running from 672 to 731 in Chichen I has been dismissed. Another suggestion is that they be placed in the same katuns which ran from 1185 to 1244.
20. Thompson (1945, p. 20) considers that the three or four brothers may have been different leaders who came from Mexico, one the Itza, another the Itza under Kak u Pacal who seized Izamal and Mayapan, the third the Xiu of Uxmal, and the fourth "might be identified with a certain Zacal Puc who founded towns on the northeast coast." Roys suggests that the three brothers, together with Kukulcan, may have been the four clan ancestors of the "Zuiva" or "Chikin Zuiva" or Itza people who came north from Peten Itza during the last years of the Maya nation.
21. The reference by Landa to the Castillo in connection with the three lords is obviously incorrect. This pyramidal temple and the "many and magnificent buildings" probably belong to Chichen II, at a time before the advent of the "brothers."
22. Roys suggests for the beginning of the last sentence, "They became confused (or demoralized) and abandoned the land."

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23. The Maya words *kuyan uinicob*, translated "holy men" may mean, according to Roys, "twisted men." He points out an analogy in the Chumayel (p. 169) where there is a passage, obviously referring to the Itza, "They twist their necks, they wink their eyes. . . ."
24. Barrera Vasquez and Morley (1949) believe that "the Itza [were] an Old Empire people from the south, who introduced Maya culture into Yucatan from the southeast." Kelley (1950) and others also regard them as Maya.
25. The phrases in the two extracts quoted above "to seek homes again" and "in search of their home a second time" may be explained, as Roys ingeniously points out (in a personal communication): "Does it mean 'again at Chichen, their home' or does it mean 'again their home, after losing their previous home at Chakanputun? It might be taken either way; but I prefer the latter interpretation."
26. These four divisions appear in connection with a previous Katun 4 Ahau which is one of three references to the "discovery" of Chichen, probably in connection with the first appearance of the Toltec. "Four divisions of the town" are referred to in Chronicle III when Tanchah Mayapan was depopulated. "The head-chief Tutul (Xiu) departed with the chiefs of the town and the four divisions of the town."
27. Morley (1938), in discussing this recurrence of a Katun 8 Ahau in Itza history, speaks of a "chronological coercion" which today, it may be suggested, might be called "a mass compulsion neurosis," urging the Toltec and the Itza to do something "when the times were ripe for change." This pattern is true for the records under A-III in Table 4. In the Quetzalcoatl history (Table 5) it will be noted that Quetzalcoatl was born in the year 1 Acatl; his flight and death also occur on the same 1 Acatl.
- Exactly the same pattern is seen in Aztec traditional history where the year 1 Tecpatl repeats itself. We have already seen that this was the day when Tula was destroyed. Nicholson points out to me that Caso (1946) approaches the recurrent pattern as Morley did and speaks of the Aztec "choosing" years beginning with 1 Tecpatl for important events. "We are dealing here," he writes, "with *ex post facto* priestly systemization stemming from religious conceptions."
28. Thompson (1950, p. 182) points out the association of the Itza with the Katun 4 Ahau and, characteristically, goes on from there: "The association of the Itza with Katun 4 Ahau would have caused that katun to have been lucky for them, but the unpopularity of the Itza due to their arrogant and sinful behavior, perhaps at first not evident, may have caused their special katun to become baleful for other groups in Yucatan."
29. It should be noted that the 8 Ahau pattern is broken here in the selection of the "abandonment" of the city in a Katun 1 Ahau (1125-1145).
- 29a. Roys points out to me that in a Tizimin prophecy for 4 Ahau there is a passage which reads, "Shall arrive Kukulcan with the Itza for the fourth time." We shall see that in a sentence which follows, he "shall come with them for a second time."
30. Spinden (1928, 1952) speculates as follows: Nacxitl Quetzalcoatl established the Toltec Era in 1168, "promoted the worship of Venus and founded the League of Mayapan" which was set up about 1178 before Quetzalcoatl became the Emperor of the Toltecs, in 1185. In 1191 Chichen was attacked and the Itza expelled by Hunac Ceel, alias Quetzalcoatl. Returning to Mexico, the Itza founded Tula of Hidalgo, about A.D. 1220. "He started a year count," according to Spinden (1940) "in 1168 with a day 1 Tecpatl giving its name to a year 1 Tecpatl and in the year 2 Acatl (1194-95) he instituted a new Fire Ceremony to be celebrated every 52 years. He died on April 5, 1208 and on April 15, eight days later, his soul arose in the East as the Morning Star."
31. For the relations between the Toltec and the Olmeca, see Jimenez Moreno, 1942; Kirchhoff, 1940; Krickeberg, 1950.
- Kelley, accepting the "Anonimo Mexicano" that Quetzalcoatl was the last ruler of Tula, has a very different interpretation. He extends the flight to Tlapallan from 999 to 1215 and considers that Tula was destroyed at this time. The date of 1168 he changes to 1312 and considers that this marks the time of the dispersal of the Toltec-Chichimec. The 1215 date would accord well with the theory advanced here that the Itza and Kukulcan arrived in the Katun 4 Ahau, running from 1224 to 1244. This author would eliminate entirely a Quetzalcoatl-Kukulcan coming about 1000.
32. Brainerd suggests to me that part of the main tower of the Caracol may have fallen in Chichen II, and that Landa couldn't have seen it. He bases this on the fact that an unbroken Plumbate jar was found in the talus slope of the debris from the tower.

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33. It is of interest to note the lack of idols at one period in the ritual of the Maya-speaking Chol to the south. Thompson (1938, pp. 593-94) suggests the probable character of the Maya religion before the advent of the Mexican influences when he writes: "The explicit statement that the Manche Chols did not have idols is of particular interest, as according to early sources, the Mayas of Yucatan similarly lacked idols until they were introduced by Mexicans. . . . Instead these Chols sacrificed to woods, very high and rough mountains, dangerous passes, cross roads, and great whirlpools in rivers, believing that from these came everything needed in life."
34. In central Mexican sources which treat of Quetzalcoatl, the most constant association is with penance and the ritual of bloodletting. It seems possible that the idols, even in the Mayapan days, were personal possessions of individuals. This was certainly the case in some of the rituals described by Landa. See Tozzer, 1941, p. 313, under Idols and Idolatry.
35. Herrera (4, 10, I) says of this visit to Champoton: "And he stopped a while in Champoton where in memory of his journey he built an edifice within the sea which can be seen to-day [1601]." Shook and Proskouriakoff (1951, p. 239) write: "The temple referred to [by Landa and Herrera] is undoubtedly a small construction still to be seen opposite the mouth of the river on a tiny island almost submerged by water. Two or three well cut blocks of stone remain *in situ*, but most of the foundation is in large amorphous masses of fill, solidified by lime and broken and scattered by the action of the sea."
36. Landa (1941, pp. 132-33) writes, "They used as a guide by night, so as to know the hour of the Morning Star, the Pleiades and the Gemini." But there seems to be no direct reference in Yucatan sources to Kukulcan's reincarnation as god of the Morning Star as we find in the Mexican accounts.
37. On the fresco of both the Temple of the Jaguars and the Temple of the Warriors there are poles which carry decorations. These may possibly represent the "magnificent banners." On the other hand (Chapter III-8), they may show a connection with human sacrifice.
38. See Tozzer, 1941, pp. 157-58, where Roys and others suggest survivals of this ritual in Yucatan and Guatemala. Regarding this annual festival Roys (1933, p. 192) states that ". . . only members of those families in which certain Toltec traditions had been handed down were eligible to chieftainship. It is uncertain whether such families were actually of Mexican descent, but confirmation of the long-standing Nahua affiliations of the ruling families is found in Landa's account [Tozzer, 1941, p. 329] of the annual festival in honor of Kukulcan, or Quetzalcoatl, at Mani, the capital of the Province of the Xius."
39. In commenting on the pottery from the Sacred Cenote, Brainerd considers that the use of the well for ceremonial purposes, "marked by Coarse Redware (Vaillant's Red Lacquer and Mayapan Fine Orange) came late."
- In discussing the jades from the pool, two of which seem respectively to record the dates 690 and 706, Thompson (1954, p. 113) wonders whether these and others were family heirlooms "or whether the cenote cult was already active during the Classic Period. Personally, I am inclined to think it was in full swing before the Itza arrived, but received fresh impetus under the Itza." He adds that "the Classic Maya buildings at Chichen Itza are farther away from the cenote than those of the Mexican period." He goes on (p. 114) to suggest "that the Mexicans chose Chichen Itza as their principal city because the cenote cult had already given the center renown throughout Yucatan."
40. Kelley points out to me that the Annals of Quauhtitlan (par. 63) state that this arrow sacrifice was introduced at Tollan in the year 8 Rabbat or 9 Reed by female devils, associates of Huemac, and that the captives were Huastec.
41. Part of a wooden bow has been identified as coming from excavations at Uxactun (A. L. Smith, 1935, p. 117). Thompson (1954, p. 124) considers the bow and arrow "appeared in the Mexican lowlands during the domination of Mayapan, introduced by Mexican mercenaries in the pay of the rulers of that city."
- For Maya weapons of war and the hunt, see Follett, 1932, and Tozzer, 1941, pp. 288, 301. For Toltec and Maya implements of war, see Chapter IV of this work.
42. Mape Quinatzin, Histoire Tolteco-Chichimeque pp. 15, 24, 25 (Boban, 1891, pls. 49, 50); Histoire Mexicaine B (Boban 1891, pl. 61); Vaticanus A, 60, 66-71; Telleriano-Remensis 25x-28x are all post-Columbian manuscripts. No bows or arrows appear in the

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- Maya codices but they are shown in the Aztec and Mixtec manuscripts. The bow and arrow together with the *atlall* are pictured as carried by the same person in Codex Nuttall 10. The blowgun is mentioned in the Popul Vuh. The only evidence of this weapon, so far noted, is on a beautiful polychrome plate said to be from Quintana Roo (Blom, 1950).
43. The Carnegie Institution started ceramic investigations in 1926 with the work of G. C. Vaillant, continued from 1930 to 1935 by H. B. Roberts. In 1939 G. W. Brainerd began to study Chichen pottery, mainly on that collected by Roberts. See Roberts, 1927-35; Brainerd, 1940-42, 1941, 1948.
- 43a. [Presumably Brainerd meant Chichen IV.-T. P.]
44. Much of the detail in this section is obtained from Ruppert, 1952. I am also greatly indebted to Ralph L. and Lawrence Roys, ardent and astute students of the Maya, who have placed at my disposal pictures and notes taken by them at Chichen on various features of wall and other construction. They also had suggestions as to what might possibly be dated from Chichen III.
45. Thompson considers the possibility of a sequence: after the second story of the Monjas come the two Castillos, the Chac Mool and the Warriors, the Jaguars, Wall Panels, and the High Priest's Grave; then the atlantean columns of the last temple on the site of the Initial Series.
46. The notes on this building were taken by Lawrence Roys: "Interior walls show heavy layers of *sahcab* and spalls between stones; stones hardly even moderately well fitted. They are poorly squared and require many spalls. . . . whole thing resembles group [Str. 3D10] to east of the Mercado. Reused decorated corner stone on left side; outer jamb only slightly battered." R. L. Roys remarks, on the character of the two interior atlantean figures with disarranged loin-cloths, that, "This type of figure may well come in this period." Vaillant reports that the room had a double vault running north and south.
47. "As the absolutely final bit of construction in the whole Warrior galaxy, stands the stairway leading from the *cul-de-sac* between the pyramid and the North Colonnade." In the fill behind the stairway "an astonishing amount of discarded sculpture was found; parts of six atlantean figures etc. and possibly the remains of a sculptured altar." (Morris, 1931, 1: 177.)
- Drums from the dismantled West Colonnade which some think may date from the period of the Castillo and Chichen II were found beneath the floor of the Northwest Colonnade.
48. At Tulum there is an interesting case of repair. In Str. 25 is a room 17 feet wide, the ceiling of which was of beam construction. It "started to collapse before the abandonment of the city" and both a round column and a masonry pier were built under the sagging timbers (Lothrop, 1924, p. 106).
49. This is, of course, by no means synonymous with phallicism, a type of worship introduced into the country perhaps at the time of the first arrival of Mexicans and usually associated with a period earlier than that considered here. It will be discussed in Chapter III-7E5.
50. To R. L. Roys, who has collected much of the data on this personage (1933, App. C; 1949b, pp. 45-53), we owe not only the translations from the Maya of many of the documents but also the enlightened comments upon "one of the most interesting and puzzling episodes in Maya history." Both his translations and his interpretations are used here.
51. The *Plumeria* flower in its erotic and nonerotic significance is discussed by Roys (1933, p. 121), who seems to associate it, in its sinful capacity, with the introduction of certain evil practices by the Toltec. The Itza have already been mentioned in this connection. See Roys' index under *Plumeria* for many references to it in the Chumayel manuscript.
- Sanchez de Aguilar (1937, p. 207) writes, "In this city of Merida it is publicly known that there exists several Indian sorceresses, who by using certain words can open a rosebud before it is time for its opening, which is given to the one they wish to attract to their lascivious desire."
- Among the Lacandon, Tozzer (1907, p. 93) notes: "Two flowers, *chacnicte* (*Plumeria rubra*) and *sacnicte* (*Plumeria alba*), are considered the father and mother respectively of Noho Chak Yum. . . . His power is wholly beneficent."
52. The reference to Ah Nacxitl Kukulcan where one would expect the name of Hunac Ceel may have been due to the latter's identification with the founder of Mayapan. This might be the third or the fourth Kukulcan to appear in the history of Chichen. Roys

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- (1949b, pp. 48, 51-52) suggests that Cetzalcaut, noted later, and this Ah Naxit Kukulcan may be associated with the time of Montezuma, also mentioned in the same account, or that it is a reference to one of the Cocom leaders who claimed descent from Quetzalcoatl-Kukulcan. This may possibly be an example of the use of Kukulcan as a title.
53. Roys (1933, p. 180) wonders whether "this fabulous snake actually ate the son of the ruler of Izamal," or was it "an idol at Chichen Itza to which the people of Izamal were sacrificed or . . . a title of an important personage . . . at Chichen Itza who was maintained in state by tribute from Izamal?" In the tun prophecies (Roys, 1954, p. 171), Hapay Can arrived "because it was its katun." Thompson (1954, p. 118) has another interpretation of the obscure reference "to feed and nourish Hapay Can." This "is the name of a Maya deity, and as sacrificial victims nourished the gods, one can be reasonably sure that Izamal had to supply sacrificial victims, presumably because of its defeat, to nourish the god." Tozzer (1907, p. 94) notes that among the Lacandon, at the end of the world Nohochchacayum, one of their main gods, will wear around his waist as a belt the body of Hapikene (Hapay Can) "a very bad spirit in the form of a snake who draws people to him by his breath" and thus slays them.
 54. Mediz Bolio (1949, p. 16) says that Hunac-eel was an adopted son of Ah-Meex.
 55. Cogolludo, 1688, 9, XIV, translated by Roys, 1949, p. 48. It is also given by Villagutierrez, 1701, 1, V. Fancourt, 1854, pp. 56-59 and others give partial quotations from Cogolludo.
 56. Thompson (1927, 1927a) once suggested that the abandonment of Chichen came in 11.12.0.0.0 (1441-60), which is essentially the date we have given. In his later writings this idea has not survived.
 57. Roys (1949, p. 171) points out that Chac-xib-chac is shown by Landa to be one of the names of the red bacab, or red rain god, living in the east; here we have the head-chief of Chichen Itza bearing his name (see also Tozzer, 1941, pp. 137-38). The insignia mentioned here are more difficult to explain. Roys (1933, p. 67) writes that the Maya word is *canhel*, translated by Beltran as "dragon," and he thinks "there are reasons for believing that this *canhel* is the ceremonial staff carried by the God Impersonators of the fresco in the Chac Mool Temple" (see his fig. 2).
 58. Roys (1933, p. 197) suggests that the *tecuhtli* or so-called "lords of the Aztecs" were symbolized by animals. He calls attention to the emblems of the warrior class shown in the reliefs of the Temple of the Jaguars and the Temple of the Warriors at Chichen. Many, especially the jaguars and the eagles, as we shall see in the discussion of this cult, carry human hearts in their claws.
 59. There may be some connection between the reference to smut and the custom of the Maya to use "black soot with which they covered themselves when they fasted." This was especially the case with those who made idols (Landa, 1941, p. 293).
 60. Three hundred years from the katun when the Itza arrived at Chichen (1224-44) would include the date when the Spaniards were at Chichen.
 61. Gaspar Antonio Chi or Xiu in his *Relación* of 1582, as reconstructed from Cogolludo's text by Roys (Tozzer, 1941, p. 230) places the foundation of the city in 1160 and its destruction 260 years later, or in 1420. Brainerd places the late Mexican settlement from "at least as early as 1244" and the destruction of Mayapan in 1441 or 1446.
 62. Spinden originally (1913) had the period of the League extending from 960 to 1195, with the Mexican era running from 1195 to 1442. He now has his Renaissance period, with the hegemony of Chichen Itza extending from 984 to 1192, when according to the accounts given here Chichen Itza ruled alone for 200 years; he places the coming of a new Mexican contingent under Quetzalcoatl-Kukulcan, the Great, the founding of Mayapan, and the inauguration of the League about 1200, and his Mexican period as before, roughly 1200 to 1450. He bases much of this on a statement in the Tizimin that the League began 14 katuns from the time Mayapan was destroyed.
 63. There is noted in several places a "joint government" (*mul tepal*), which refers to the Cocom and the Xiu at Mayapan at the time of its fall. They will be mentioned later.
 64. Roys (1933, App. E) has found in a chapter in the Chumayel some excellent criteria of people of Mexican origin in the peninsula. There are references to the "language of Zuyua." This "is inseparably connected with the Toltec penetration of Yucatan, which left a number of Nahuatl words in the Maya language."

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- He also found indications "that only members of those families in which certain Toltec traditions have been handed down were eligible to chieftainship."
65. Landa (1941, p. 35) made this original statement. The Spanish text here clearly reads *iacos fuertes de sal y algodón*. Brinton (1887) was the first to note that "strong jackets of salt and cotton" means nothing. He makes the important point that Landa mistranslated the Maya word *tab*, meaning "salt," for *taab*, meaning "twisted cord." Herrera follows Landa. This body armor of quilted cotton was, of course, the *ichcauipilli* of the Aztec and Toltec.
 66. There is a somewhat obscure reference to the "joint government," at the fall of Mayapan, in one of the tun prophecies (Roys, 1949, p. 173): "In the 13th tun is when 13 Muluc is on 1 Pop. On 1 Oc is the time of his rule. Then the mat shall descend, the throne shall descend. The 13th Katun [tun] it would be, at the time of the joint government, in the remainder of the rule of the sky." Roys notes that in the Perez MS, p. 153, he finds, "13 Muluc was when occurred fighting with stones in the fortress [of Mayapan] in the 7th [tun] of 8 Ahau."
 67. The Chumayel III (p. 142) puts the destruction of Mayapan in Katun 1 Ahau: "It was in the first tun of Katun 1 Ahau that the head chief Tutul (Xiu) departed with the chiefs of the town and the four divisions of the town. This was the katun when the men of Tancab were dispersed and the chiefs of the town were scattered." Roys thinks that the 17th-century scribe or compiler of this manuscript confused this event with the earlier depopulation of Chichen Itza in a Katun 1 Ahau, according to the Mani and Tizimin.
 68. Roys records this reference as dealing with Ichpaa Mayapan and not Mayapan. He finds it difficult to believe that, 40 years after the Itza were driven out of Chichen, they went off to Lake Peten and returned and seized some of the land formerly belonging to Mayapan without some reference to it either in Landa or in the *Relaciones*.
 69. For the current archaeology of this site, see Andrews, 1942; Year Books of Carnegie Institution since 1951 and their excellent *Current Reports*, beginning December 1952, including the map of Mayapan (Jones, 1952).
 70. Brainerd (1942, p. 256) found "only a small fraction of 1 per cent" of Mexican-Chichen type of pottery here.
 71. Jakeman has ingeniously made a combined text of all the *Relaciones* in the writing of which Gaspar Antonio seems to have had a part, and offers a translation of these. A *relación* by Chi, dated 1582, was found by F. V. Scholes in the Archives of the Indies at Seville and is translated and annotated by Roys (Tozzer, 1941, App. C). See Tozzer (p. 270) for a more complete outline of the history of the Xiu.
 72. Landa, 1941, p. 172; Lizana, 1, IV; also Landa, 1864, pp. 356-65; *Relación* on Ponce (1932, p. 329); Cogolludo, 4, VIII. For modern descriptions of the city and history of the Chel, see Tozzer, 1941, pp. 173, 274.
 73. This account appears in part or entire in at least four of the *relaciones* signed by Gaspar Antonio Chi. Jakeman (1945, p. 96) lists these and gives the various ways the proper names are spelled. One or more of the accounts appear in Roys, 1933, pp. 141, 169; 1949a, p. 15.
 74. Kinich Kakmo's name means "sun-eyed fiery macaw." Roys (1933, pp. 111, 141) recalls "the legend of the divine macaw which brought down from heaven the fire to consume the sacrifice to Kinich Kakmo, the sun god at Izamal." He was a protector against disease (Cogolludo, 4, VIII).
 75. This corresponds roughly to Kroeber's "Disintegration"; Brainerd's "Interregnum" (1450-1540), characterized by figurine incensarios; the end of Thompson's "Mexican Absorption," of Bernal's "El Horizonte Final," and the Andrews' "Classical Mixtec-Aztec" or "Mixtec Santa Rita." Thompson (1937, p. 90) has a period of "Maya Revival" from 1457 to 1539, marked by the introduction of hieroglyphic writing with the year bearers—Kan, Muluc, Ix, and Cauac—as given by Landa. This stage seems to have ended at the conquest.
 76. Anyone who has traveled through Yucatan and the regions to the south realizes the truth of these statements. Ruins of stone buildings, mounds, and chultuns appear nearly everywhere, especially along the ridges over which the present trails usually pass. (See Tozzer, 1913 pp. 149-50.)
 77. Roys considers that this refers to the military order of the Jaguar-Eagle cult, which will be discussed later (see his 1933, App. F).

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78. Spinden (1921) thinks this "pestilence" is yellow fever and places the origin of the disease in America. Connor (1922) agrees with him. Shattuck (1933, pp. 335-39; 1938) accepts the theory, usually advanced, that yellow fever was brought to the New World from Africa. As the date of this malady precedes the arrival of the white man, *maya cimil* does not signify yellow fever.
79. This is definitely an Old World disease. The first outbreak in America was in the West Indies in 1507. Yucatan was perhaps exposed in 1517 by the men of the Cordoba expedition. Bernal Diaz (7, CXXIV), in describing the expedition of Pánfilo de Narvaez, sent by the Governor of Cuba to Mexico in 1520, writes: "Let us return now to Narvaez and a black man whom he brought covered with smallpox, and a very black affair it was for New Spain, for it was owing to him that the whole country was stricken and filled with it, for which there was great mortality, for according to what the Indians said they had never had such a disease." Spinden (1921) gives some illustrations of persons with smallpox taken from the post-Columbian codices. He states that the Mexican "Emperor," following Montezuma II, Cuiclahuac, ruled only 80 days, dying in 1520 of smallpox. Gage (1648, in Tozzer, 1941, p. 42) describes what seems to be the same disease in Guatemala.
80. In his visit to the ruined towns in this area, Roys found standing walls only at Chichen, Yaxuna, Dzibiac, Yula, Halakal, San Juan, and San Francisco. "The lands of this area belonged to the five towns of Ebtun, Kau, Cuncumil, Tekom and Tixcacalcupul. . . . no ruins were known about near the five towns . . . although early reports tell of a temple-pyramid at Valladolid and several at Uayma" (1939, p. 4).
81. Thompson (1951) has gathered the material from the early sources, given here later under the Spanish conquest of the Peten, and has presented an excellent picture of "The Itza of Tayasal."
82. Roys notes a few Aztec words in use, such as *tepal*, *xiu*, some plant names like *chicam* (*xicama*), also *pan* (*pendon*, *panli*). He gives (1943, pp. 17-23) an excellent account of the towns and buildings remaining at the time of the conquest.
83. Herrera (4, 10, 1) correctly has Don Francisco Montejo lead this retreat. See also Cogolludo, 2, IX; Molina, 1896, pp. 495-98; Chamberlain, 1948.
84. Montejo had been accompanied by two members of the secular clergy (*clerigos*)—his own chaplain and the chaplain of the armada—and one regular clergy (*religioso*), a Carmelite.
85. The following résumé has been taken mainly from Means (1917), who in turn used, principally, Villagutierrez (1701), Cogolludo (1688), and, for the later history, the manuscript of Avendaño, *Relación de las dos Entradas que hizo a Peten Ytza*. Means gives long quotations from the translation of this latter account by Charles P. Bowditch but, as pointed out by Thompson, "omits much ethnographical material." Photographs of the original manuscript (in the Ayer Collection, Chicago) and the Bowditch translation are in the Peabody Museum. See also Means, 1930.
86. Stone (1932) discusses in detail the Cortés travels into this country. She also enters in the record the entrada of Alonso Davila in 1541 "who wandered about, barely touching the Lacandon country, but, nevertheless, making the first *entrada* among them." She describes a *relación* of 1639 by Antonio de Leon Pinelo, "On the pacification and population of the provinces of Manche and Lacandon, etc.," relating to the entrada under Padre Moran which was made with the idea of opening a road from Yucatan south to Guatemala. Other early travels into this part of the country which she discusses are the entradas by José Delgado of 1674-75, 1677, and 1682-95, those of Jacinto de Barrios, of Fray Pedro de la Concepción among the Lacandon in 1695, and of Juan Diaz de Velasco who detached himself from the party of President Barrios in Comitán in 1694 and took Fray Augustin Cano with him to the Lacandon country.

CHAPTER III

1. To the Department of Archaeology, Carnegie Institution of Washington, and to H. E. D. Pollock, its Director, are owed abundant thanks. Ruppert's plans and De Harport's photographs of many hitherto unrecorded carvings have greatly extended our knowledge of this site. Proskouriakoff's study of Maya art has been in constant use.
2. Most of this material has been obtained from Lothrop (1924). Some information came from Yde (1932), Holmes (1895-97, pp. 52-78), Fernández (1941), and Andrews (1939-41).

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3. Lothrop (1924, pp. 121, 135) seems to think that the two sites of Tancab and Xelha are earlier than Tulum and most other sites on this coast. Shrines here are usually on high-terraced substructures. There are roof combs and "flat ceiling" buildings of the palace type. Stone columns and the batter are not found. The three-member Maya molding is not seen at Tulum, but there are four examples at Tancab and it occurs at Xelha.
4. Thompson (1941a) has attempted a comparative study of some of the material included here. He discusses (p. 21) the Santa Lucia and other monuments in detail. See his bibliography and Habel, 1878.
5. For purposes of record it is interesting to note that in 1866 the Peabody Museum paid Berendt \$352.50 for expenses in making archaeological collections in Central America. In 1870 eight boxes arrived at the Museum, containing *braseros* and other pottery from the ruins of Centla (First Annual Report, 1868, p. 18; Third Annual Report, 1870, p. 7).
6. Marquina (1951, Chart, p. 924) and Noguera have been of great aid. The data on the various sites were originally collected from several sources. Much of this has been republished or superseded in the most elaborate study of Mexican and Maya ruins as a whole by Marquina (1951), aided principally by Garcia Payon and by others of his colleagues. I acknowledge here my thanks to all these Mexican scholars and to Thompson for his comparative study, 1941a. Individual recognition has not always been paid.
7. Villacorta and Villacorta (1930) published a most useful copy of all three codices.
8. Burland (1951) divides the Mexican codices into those dealing with the magical *tonalpohualli*, such as the Aubin Tonalamatl, or the Laud with complex time counts; the mythologies, best represented by the Borgia and Vaticanus B; and the histories. The last he subdivides into the Aztec, such as the Boturini, and those restricted to the Mixtecs and kindred peoples of western Mexico.
9. Long, 1926; Spinden, 1935, 1940; Nouroutny, 1948; Caso, 1949, 1950; Burland, 1947, 1951; Kelley, 1950. Except for the Waecker-Götter, the first four manuscripts give dates before 800; the latest dates are Nuttall, 1350; Vienna, 1350; Bodleian, 1519; Selden I, 1556.
10. Mrs. Nuttall (1902) was the first to recognize this warrior chief. 8 Deer was married five times, according to the Vienna. J. Cooper-Clark (1912) traced the main events of his life in the Colombino and other Mixtec manuscripts: the kindling of the sacred fire, his appearance in a ball game, his receiving the title of Jaguar Claw, his making an offering to a sacred tree, his conquests, his nostril pierced so he could wear the Yacaxiutl or sacred nose ornament, and his death.
11. In the text, reference is often made to the Mexican codices which refer to most of the groups, just outlined, but excluding the Maya.
12. Landa (1941, p. 178) describes this structure and gives an unsatisfactory plan. He also mentions (p. 172) and gives the diagram of a pyramidal temple with a single flight of "very grand steps" at Izamal, a much earlier site.
13. The only exception is the upper figure on the western balustrade on the eastern stairway which has a design difficult to place.
14. These examples, together with one at the Xtoloc Cenote, are cited by Proskouriakoff (1950, p. 167) as showing a technique perhaps originating in the Chenes type of architecture found in the Palace at Santa Rosa Xtampak.
15. There is an excellent reference on this point in the *Relaciones* (RY, 1:125): "Usually the Indians make their houses of wood and poles covered with straw and palm leaves; although they could make them of stone, since there is much in the land. They say that they make them as they do on account of its being healthier to live in houses of straw than (to live in houses of) stone. . . . In many parts of the province there are many buildings well constructed of lime and stone, and some so curious that the mortar at the juncture of the stones scarcely appears."
16. In the inner shrine-room of the Castillo, the bas-relief on most of the columns was almost obliterated by a thick coating of plaster. This may have been a late attempt at destroying the significance of the design and may be in the same class as knocking off the heads of stone figures. This pre-Columbian desire to mutilate is considered later.
17. This section considers the architectural plan only; special features have already been pointed out in connection with structures belonging to Chichen III. In the section on Representative Art, designs such as masks and monsters on columns will be taken up. Finally, an ethnological survey of Maya and Toltec (Chapter IV) as found in the various structures is discussed.

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18. See Morris, 1931, pls. 140, 145, 151, 157 and fig. 321 for parts of buildings.
19. In the region of the Puuc and that to the south, this type of structure is not common. There are often buildings with several rooms in line. Some of these have two round columns at the entrance or alternate with a room with a single doorway. At Labna, Zayi, and Chacmultun, this kind of entrance column is found, usually in the multiroom "palace." At Peor es Nada and at Pechal it also occurs (Ruppert and Denison, 1943).
20. A fresco on the east wall of the Temple of the Jaguars shows a structure with rounded roof and an entrance formed by what might well be two wooden columns.
21. There are the remains of such a structure on top of the House of the Phalli (Str. 5C14), which certainly dates from Mexican times. This has at least one room with columns.
22. Roys, in a personal communication, comments on the fact that the columns at Tulum are more like those at Chichen than at Mayapan.
23. This type of entrance is noted at several sites dating from Classic times. Among these are Str. A-VII at Uaxactun, Strs. S17 and S18 at Piedras Negras, and at Yaxchilan. In place of stone drum-columns, however, there are masonry piers, wider than they are thick, made by breaking the wall, as in the Palenque temples and palaces.
- The porticoed house seems sometimes to find a survival in the modern domestic structure in the Maya area. This is built of wood, with a straw or palm roof with a piazza. The wooden posts supporting the overhang of the room correspond to the stone columns. Wauchope (1938) shows a house at Jocotan, Guatemala, with three back rooms opening on a corridor, with a transverse room at the end running the whole width of the house. The front gallery is open and the roof is supported by six beams, suggesting the portico of olden times. He shows a house site at Chichen (fig. 3.e) which may be a similar structure. He calls attention to the quotation already given by Landa.
24. Clavigero (1780 [1826 ed.], 1:376-78) gives us information on the habitations of Mexico: "The houses had no doors, believing without a doubt that the inhabitants had no need of protecting themselves other than from the severity of the laws; but, in order that those passing by should not cast their indiscreet glances inside, the opening was closed by a curtain, on which was hung a bell which warned the inhabitants of the house when a stranger lifted the curtain in order to enter. No one was permitted to come into the house without the permission of the master." Holes bored through the corners of the door jambs seem to have been used for cords to hold curtains.
- Tozzer (1941, p. 175, note 913) writes in connection with tie-holes at the sides of doorways in Maya structures: "It is commonly supposed that some sort of curtains were used to close door openings. . . through the corners or at the side of the stone door jambs well-worn holes or projecting stones or small pillars are frequently seen, presumably for attaching hangings. (See Selser, 1908, 5:205, 213, 234.) Tozzer (1913, p. 178) found at Nakum a tie-hole in the wall through which runs a stick placed vertically and probably used for tying curtains. Thompson (1939, p. 27) found at San Jose, British Honduras, thirteen 'curtain sash holders or tie-holes' like the one at Nakum 'except that all rods at San Jose were of bone, and in two cases were horizontal.'"
25. There is a doorway in the back wall allowing access to the great court on the east. This seems to be an unusual feature at Chichen but is sometimes found at Mayapan.
26. Arnold and Frost (1909) give an inadequate plan of two colonnades here, reprinted in Lothrop. R. E. Merwin, on a Peabody Museum expedition of 1913-14, visited the island. His notes and plans were worked up by Yde (1932).
27. The type of colonnade that is open on both sides is seen in Str. R7 at Piedras Negras. Piers here take the place of columns. These suggest the four rows of 13 columns with no surrounding walls at Ake, a site which seems clearly to belong, with Izamal and Acanceh, in the pre-Puuc period in the peninsula. The two latter centers, however, resemble the East Coast in the presence of stucco figures and design.
28. Ruppert, who is the authority on this type of edifice, writes (1950, p. 254): "No new information has come forth to justify any assumption respecting the use of these structures. A number of uses have been suggested: as Palaces of Justice; as Markets for the sale of produce, slaves or offerings for the temples or shrines; as Living

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- Quarters for dignitaries, pilgrims to the city, sacrificial victims or prisoners; as Gymnasiums or Robing Quarters for persons in processions and ceremonies or for contestants in games. It is doubtful if we shall ever know with certainty, but the excavations of several of the structures may possibly throw some light on this question." See also Ruppert, 1943, 1952.
29. Ruppert (1943, p. 230) comments on the name: "The Spanish word *mercado*, meaning market or market place and only recently applied to the structure, is a purely local one and probably has no significance. Excavations have not shown any features that would suggest the specific purpose for which it is used."
30. Pollock (1936) presents an exhaustive study of this type of structure, covering archaeology, early accounts, pictorial data from the codices, bas-reliefs, and frescoes. This work has provided much of the material used in this section. See also Tozzer, 1941, p. 307.
31. It is difficult to understand why the Bishop should speak of the uniqueness of the building at Mayapan unless he failed to see the tall round Caracol at Chichen. It may, of course, have been masked by vegetation when he visited this site.
- The structure at Mayapan is described by Stephens (1843, 1:135-37) and illustrated by Catherwood. The drawing is reproduced by Brasseur de Bourbourg (1864), Pollock (1936), and Gates (1937).
32. Tozzer (1941, p. 287) discusses the wooden houses of the natives and their sleeping customs (see especially his Note 363 where he takes up the question of bed versus hammock; Thompson, 1930).
- The house in Mexico is described by Clavigero (1780 [1826 ed.], 1:376): "Ordinarily, the houses [of reeds] had only one chamber. . . If the family was not too poor, it had two or three chambers, an *ayauhcalli* or *oratorio*, a *temaxcalli* or vapor bath and a small granary."
33. Selser (5:330) shows the round-roof dwelling as in the Mexican codices for the Aztec day, *calli*, "house."
34. In the stone façades of the north and south ranges of the Monjas at Uxmal and at Labna, the domestic thatched hut is represented. For illustrations of these examples and others, see Wauchope, 1934; for domestic architecture of the present Maya, see Wauchope, 1938, 1940.
- It was thought possible to obtain some information on the location of the domestic house at Chichen by a study of the distribution of the *metate* and *mano*. Stromsvik (1931) classified these domestic utensils, but he found comparatively few—five in or near the Temple of the Wall Panels.
35. Among the Chol Maya the men's house apparently served also as a place where idols were kept (Thompson, 1938, p. 596; see also Adams, 1952).
- The *telpuchcalli* of the Aztec, as described by Sahagun (Bk. 3, App. IV, V, VII, IX), seems to have functioned as the men's house. "Each district had ten or fifteen such *Telpuchcalli*" where boys were educated and where they slept. Those destined for the priesthood, "when they reached the necessary age" lived in the Calmecac, the convent or monastery, where the statue of Quetzalcoatl stood and where they were educated by "the priests and ministers of the idols."
36. Ruppert (1943, p. 230) notes that this court may have been an open market place. "This is suggested by the presence of a great number of small platforms, flagged and stone-outlined areas, perhaps stalls, booths, or stands, extending in four great rows from north to south. It is reasonable to suppose that the function of the market may have spread into the colonnades on the north, west, and east."
37. Bernal Diaz (XCII) gives a famous description of the Mexican market. So important was it that "a very large building like a Court of Justice was near it where there are always ten or twelve men sitting as judges and delivering their decisions upon all cases which arise in the markets." Cortés (Second Letter) also has a description of the Aztec market.
38. Ruz (1951) considers that Chichen joins various cities in northern Yucatan and other places in being a walled site. He has probably used the parapet, already described as a wall, as his evidence. There were, as we have seen, various openings in this parapet. This newly discovered gateway strengthened the idea of an entrance through a wall. The parapet, however, seems not to have been in the nature of a defense.
39. In connection with the elaborate exploration and reconstruction of the Temple of the Warriors group, Morris (1931, pp. 177-78) writes: "The buildings herein considered yielded a surprising quantity of minor artifacts. Now and then a blade of flint or obsidian, a pottery spindle whorl, or a few potsherds would come to light. . . ." The only complete pottery vessels recovered were the

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- eight cylindrical jars already mentioned and a clay pipe from a trench in the north part of the Northwest Colonnade.
40. Cylindrical vases, round bowls, an incense burner and shell ornaments were found in the investigations of this structure. Ruppert, 1931, pl. 17.
41. Tozzer (1941, pp. 278, 325) gives many references to burials noted in the early records and encountered in archaeological work. Ricketson (1925, 1931) and Thompson (1939a) are among others who have written on Maya burials. No mention is made here of the many interments in tombs in the Classic stage, especially in Guatemala. Among the most elaborate burials in Middle America are probably those in the cruciform tombs at Mitla and those at Monte Alban. The newly discovered tomb under the Temple of Inscriptions at Palenque with its contents will be mentioned later.
42. In general, the construction in a court in front of a temple has been called a platform mound or a tribune, thus limiting the use of "altar" or "dais" to a table-like mass of concrete or a stone table inside buildings, but distinct from the bench. The Aztec term *momoztli* was a stone seat or altar often erected along the roads in honor of Tezcatlipoca.
43. Selser calls it a Karyatid or Trägfigur.
44. Some of the images, already identified, and others not classified are shown by Selser (5:276 and pl. 23), who found them in a group near Mausoleum I where they had evidently been left "in an attempt to carry them off." No. 5 was the most interesting, a figure whose hair was dressed in a long queue.
45. Selser (5:143) describes these as "a framework of poles with a high flat upper part resembling paper and a kind of wall-less canopy standing clear," which is decorated with loose white paper-like strips." All this is explained by him as a sanctuary or a place of worship beside a sacrificial stone.
46. A. A. Morris (1931, pp. 179-80) illustrates these and some of the ones from the Temple of the Jaguars. She calls them "way signs" and quotes Landa (1941, p. 5): "There is 'a great lagoon . . . so full of little islands that the Indians place signs on the trees in order to know which way to go, in coming and going by water from Tabasco to Yucatan." Blom (1932) interprets the same passage as suggesting that there may have been lighthouses on the islands.
- On a Chacmultun fresco, the same canopy appears before a temple (E. H. Thompson, 1904, pl. 8). On graffiti at Tikal are several (Maler, 1911, pp. 12, 14).
47. A kind of canopy-flag from the Magliabecchiano is shown in fig. 402 (see also pp. 67, 69, and 72 from this manuscript). Flags and insignia, in connection with warriors, mainly from Sahagun, are described by Selser (2:509).
48. Le Plongeon (1900, pl. 57) shows a jaguar, "a dying leopard with a human head, a veritable sphinx; the prototype, may be, of the mysterious Egyptian Sphinx," on top of this tribune, which is incorrectly restored in his drawing. He shows the same spotted animal in pl. 62. This may have been the red jaguar found over his Chac Mool.
49. These 14 chac mools are listed by Ruppert, 1952, App. V. Others will undoubtedly come to light.
50. Torquemada (6, XXIV) describes what may be a chac mool at this site: "In the city of Tula, there was preserved in the great temple, an image of Quetzalcoatl . . . he was figured as lying down, as going to sleep . . . out of reverence the image was covered with mantles or cloths. . . They said that when sterile women made offerings or sacrifices to the god Quetzalcoatl he immediately caused them to become pregnant. . ."
51. A. L. Smith (1950) reports evidence of roof silhouettes on Str. A-5, Stages 5-8, at Uaxactun. See also Proskouriakoff, 1946, pls. 32-35.
52. Proskouriakoff (1946, pl. 23) shows them along the top of the roof comb of the Casa Colorada and along the two upper members of the Caracol.
53. There is a striking parallel (fig. 83) often pointed out in a design on the breast of a figure on an altar at Tajin. At Tula is a design very similar to these (fig. 443) showing crossed spears and, at its center, a conventionalized heart. This will be seen in connection with the Jaguar-Eagle cult.
- Totten (1926, pl. 54), in his restoration of the North Building of the Big Ball Court, uses the same roof decoration. Ornaments are provided both for the north and south structures in Marquina (1951, pl. 265). For these and other frets at Chichen see Ruppert, 1935, fig. 246; 1943.
54. The first attempt to draw a restoration of this building was by Le Plongeon (1896, pl. 35); the atlantean altar, found here and

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- buried by him, is shown. Maudslay (1889-1902, vol. 3, pl. 35) has an excellent restoration; Totten (1926) follows with another. Next comes a drawing of the façade published by Dieseldorff (1926-33, vol. 3, pl. 1). He was the first to show the altar in place since the time of Le Plongeon. Except for the absence of the altar, the Angel Fernandez drawing is the best, and on it was based the magnificent restoration, by the Mexican Direccion Arqueologia. The drawing was published by Marquina (1928) and again with additions (1951, fig. 860). This rendition, with a few changes, is given here. Selser (5:259) analyzes this façade.
55. Beyer (1924-27) considers this subject, with many illustrations. Many of the illustrations used here have been derived from Proskouriakoff (1950, fig. 35) and Marquina (1951). Attention should be called to Enciso (1947), as many of the designs which follow appear also on pottery stamps, generally from central Mexico. Only a comparatively small number of sites where the designs are found will be noted.
56. The stepped meander, the double meander and steps, and the curved meander and steps, are all shown in illustrations of the decoration of shields and *mantas* (Magliabecchiano 5, 6; Codex Mendoza). No attempt is made to treat exhaustively the distribution of these geometrical designs. Many of them are also found in South America. Proskouriakoff (1950, p. 35) considers many of these figures.
57. Thompson (in Kidder, 1947, pp. 22, 24) considers that "with three exceptions [these incised flints] depict gods or symbolic attributes of gods." He thinks "it is a fairly safe assumption that these plaited designs incised on the obsidian symbolize the god Itzamna." One of these inscribed flakes "which does not fall into the above classification is a god with a sun glyph." This is now in Peabody Museum.
58. Selser (4:679-95) and Tozzer and Allen (1910, pp. 310-18) discuss and illustrate the serpent in Maya art. Proskouriakoff (1950, pp. 32-50, figs. 11-15) illustrates types of reptiles, scrolls, etc. See Lothrop (1926, pp. 146-62). Spinden (1952) places the jaguar and serpent among the most important "power animals" in Maya art. He also lists the man-eagle, "equipped to be a patron of war and warriors for Toltecs, Incas and other peoples."
59. On several of the gold disks (D, E, I) from the Cenote the rattlesnake is represented realistically, without feathers. On the two columns at the entrance to the Lower Temple of the Jaguars are figures associated with featherless serpents and no rattles.
60. The spiral design along the bodies of these two animals Selser (5:340) explains as cloud forms. Hence the serpent itself is *itzac mixcouatl*, the "white cloud serpent" of the Mexican myths.
61. It is obvious that the term "balustrade," which is practically always used, is not the proper one for this edge element of a stairway. In trying for a substitute, an architectural friend suggests, "a low ramping stairway parapet." It is thought best, however, to persist in using the former indefinite designation.
62. John Glass has pointed out to me that this column, many times published, has undoubtedly been put together incorrectly. The drums of the feathered shaft are upside down and the rough block at the bottom is probably where the tail of the serpent was broken off. The capital usually shown in the picture obviously does not belong there.
63. On the processional grouping of animals or of serpents Roys (1949, p. 170) quotes from a passage in the Tizimin and Mani Prophecies: "They follow one another, nose to tail, the serpents; they follow one another thus."
64. There is an excellent example at Palenque of a tortuous reptile held by two priests in House D. One carries a club with an elaborate stone point, typical at this site.
65. Caso and Bernal (1952, pp. 164-69) give many examples of this upper gullet of the serpent on pottery figures from Oaxaca.
66. In some cases a miniature figure emerging from a shell is found at the head and feet of the figure (Selser, 5:321).
67. At Sayil, on the center lintel of Str. 4B1, is a figure that is one of three with grotesque heads who seem to be dancing. They are marked "Late Yucatan variant." A serpent issues from the upper leg of the figure. The edge of these lintels has a mask with "long fillets drooping from the eyes." This we have seen at Yaxchilan, on columns in the Lower Temple of the Jaguars, and in other places at Chichen. It furnishes another link with the past (Proskouriakoff, 1950, fig. 102.b). This serpent is quite different from the flames which issue from one leg of the figures representing Tezcatlipoca in the Temple of the Warriors galaxy.

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68. Roys (1931, p. 331) gives the Maya names *chac bolay*, *chac mol*, *chac ekel*, *zac bolay*, and *zac ekel* for this animal. The puma (*coh* in Maya, *miztli* in Nahuatl) is treated along with the jaguar by Seler (4:467-74). The latter plays a small part compared to that of the spotted jaguar. For details of the jaguar appearing in the codices, see Seler, Tozzer and Allen (1910), and Spinden (1913).
69. Although to name resemblances between Maya and Peru is outside the field of this study, Spinden (1935, p. 28) writes, "The ancient civilizations of Peru and Mexico can now be linked as early as the sixth century after Christ by a common belief in a Sky God." He then goes on to cite the Copan Jaguar Stairway as one of the evidences of a common symbolism in the two regions 2000 miles apart.
70. Saenz (1952, fig. 13) thinks this came from a platform in front of the Governors. As already noted, this tribune probably dates from the Mexican period. Borbolla (1953, fig. 93) shows it set up on the restored platform.
71. We learn in the Chumayel manuscript, "Canul (occupied) the jaguar-mat." Roys (1933, p. 66) tells us that the mat (*pop*) was the seat of authority in a Maya council. "Consequently the statement that one of the Canuls occupied the jaguar-seat accords with both the archaeological and historical evidence." According to the Tizimin manuscript, Roys points out that the skin of the jaguar in the market place was a symbol of war, famine, and pestilence.
72. Roys (1933, p. 69), who gives one of these figures, believes that they represent the guardians of the gate at Mayapan mentioned in the Chumayel manuscript as follows: "Ah Kin Coba was their priest there in the fortress [of Mayapan]. Zulim Chan was at the west [gate]. Nauat was the guardian of the south gate. Couoh was the guardian of the east gate. Ah Ek was his companion."
73. Seler (5:261) and Caso (1941, fig. 3) give other jaguars from this temple.
74. The print I owned was one of several loose sheets in a portfolio with no titlepage but with the stamp of Alfredo Chavero inside the cover.
75. Excellent seated jaguars from Classic times are shown on the polychrome cylindrical vase from Uaxactun and on one held in the hand of a stela figure from Xultun (Morley, 1946, fig. 40, pl. 87). A procession of animal-headed figures on a Chama vase shows a jaguar in human form (Dieseldorff, 1926, pl. 22).
76. On a Bonampak fresco (Room 2) are excellent examples of the entire pelt of the jaguar worn over the shoulders of three of the figures.
77. Seler (4:552-645) and Tozzer and Allen (1910, pp. 324-26, pls. 15-27) consider in great detail the birds connected with Middle American archeology, with special reference to the manuscripts. See also Spinden (1913, pp. 77-82). In Chapter IV-2 Toltec bird-warriors are discussed.
78. A most elaborate and painstaking study, *The water lily in Maya art*, has just been published by Rands (1953). The author finds in stone, ceramics, and the codices over 260 examples of flowers and foliage which he classifies as water lilies. Except those in the manuscripts and at Chichen, most of them are found in Classic sites. It is not possible to accept some of his selections as representing this flower. He divides the elements and the treatment into five groups and many types, and gives six tables presenting the data by site, time, association, and anatomical source. He also shows the mythical and glyphic association "of probably water lilies."

The subtitle of this work is *A complex of alleged Asiatic origin*, a subject considered at the end under "Resemblances to the lotus in Indian art." His main discussion here centers mainly on Heine-Geldern and Ekholm (1951), and the striking parallels they show, particularly between the panel arrangement at Amaravati, India, and those at Chichen and at Palenque. "It is difficult, however," Rands (pp. 121-22) writes, "to reconcile such an origin with the chronological trends in the development of the Maya water-lily motif. Its earliest examples are the least Indianlike, the late examples of Chichen Itza [after 1000] being most like the Indian lotus. The elaborated Chichen treatment of the water lily could not have moved in as a full-blown complex from outside the Maya area, for it is too deeply rooted in earlier artistic and symbolic conventionalizations. . . . To explain the elaborated water lily as of Asiatic derivation, it would appear necessary to postulate a complex series of waves of fundamental influence which accounted for new traits on various time levels. This seems, in fact, to be the position taken by Heine-Geldern and Ekholm. No middle course, which might admit the possibility of a superficial artistic

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- overlay but nothing more, seems possible. At the same time, the water lily seems as basically Mayan as do perhaps most other elements of the culture." He ends by citing several points of 0retical interest which suggest why considerable similarity might be expected between the water lily in the art of the Maya and the lotus as depicted in India. To all of this, I heartily agree.
79. For studies of fish as represented in the Maya area, see Seler (4:701-12) and Tozzer and Allen (1910, pp. 307-08, pls. 5, 6).
80. Thompson (1950, p. 73) gives a reference to the water lily in the account of creation in the Tizimin (p. 21): "Then sprouted the red deep calyx, the white deep calyx, the black deep calyx, and the yellow deep calyx, the water lily face upward, the water lily that sways (on the surface of the water), the budding water lily" (Roys and Thompson translation).
81. Beyer (in Gamio, 1922, 1:281) suggests an analogy between some vegetation on a fresco at Teopancalco (Teotihuacan) (pl. 34) and the lotus vine at Chichen and at Palenque.
82. Seler, 4:702-05. See also Tozzer and Allen, 1910, pp. 307-08, pl. 6. Thompson (1944) considers the fish as a Maya symbol for counting.
83. Seler (4:653-72) and Tozzer and Allen (1910, pp. 321-23, pl. 14) discuss turtles as seen especially in the manuscripts.
84. Thompson (1950, p. 116) gives Maya legends connecting the tortoise or turtle with the sun, and points out that in the Mixtec codex, the sun is shown wearing the shell of a turtle. He states that Seler, Gordon, and Tozzer and Allen interpret the month sign for Kayab as a turtle, whereas Spinden thinks it is a blue macaw.
85. Tozzer and Allen (1910, pp. 296-98, pl. 1), Seler (2:752-53), Thompson (1950, fig. 21) and Spinden (1913, fig. 108) give illustrations of shells. The last is reproduced in fig. 170 here.
86. There is a very remote possibility that the "bleeding fingers" on the Bonampak fresco are red beads and were used for payment of money. It should be noted that in the fresco the red "drops" do not ever reach the ground and there is also no indication of injury to the fingers.
87. The interpreter of Vaticanus A is quoted by Thompson (1950, p. 133): "They placed on its [the moon's] head a marine shell to denote that just as the [shell] fish issues from the shell, so emerges man from the womb of his mother."
88. Lothrop (1952) gives references to these specimens, mainly from Kidder, Jennings, and Shook, 1946.
89. In an elucidation of a land register of Santiago Guevea (1540), on the Tehuantepec River, Oaxaca, Seler (3:177-78) identifies one of the pictures as showing a mountain, on whose summit there is a tall column, "At the base of the mountain [is] a tree. . . . From the shape of the fruit I would like to express the opinion that this is intended for a ceiba . . . which the Mexicans called *pochotl*, the Maya *yax-ché* the 'green tree' or 'tree of the beginning,' the Zapotecs *yaga-xéni*, the 'broad tree' . . . which like the *yax-che* of the Yucatecs was for them too the 'tree of the origin' to which also the dead returned, the tree of Paradise, in whose shade they reposed after the toils of life." The author then refers to the passage just quoted from Landa.
90. Woodford (1953), who cites the two Palenque crosses, considers that "the tree of life" is shown on Lintel 2 at Yaxchilan. This composition is a "tree" or cross held in the hand of each of the two figures, with a bird flying downward at the top of the cross. Lintel 5 has a figure holding a double-armed cross, probably with a bird at the top. See also Jakeman, 1953.
91. The early references to the origin of the Mixtec in two trees is pointed out by Burland (1951), who writes of a story told to Father Burgoa, "When the world was made, the Ancestors came out of a tree." The author goes on to suggest that the tree in Vienna 37 and the one in Selden 2 may be the Mixteca tree: the first, showing the survivor of the previous human race, and the second, the "heavenliness of the tree." In Burgoa (1674, XXIII [2d ed., 1:274]) the origin of the Mixtec is attributed to two lofty trees on the edge of a river. The trees prospered as the result of floods in the river and brought forth the first *caciques*, man and woman. Generations were born and the kingdom grew in size. Burgoa goes on to cite a different account of the origin of the people by Torquemada.
92. Chapter IV consists of the detailed study of the representations of Maya and Toltec personages, the places they occupy in the structures at Chichen, and their counterparts in Late Classic Maya and at Tula.
93. Seler (5:298) points out that these occur on the west side of the columns and thus "face the region called by the Mexicans *ciuat-*

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- lampá*, 'the region of women,' because the west, where the crescent of the new moon is seen, was considered by these races the land of birth and of growth, the home of deified women, that is, of the souls of dead women."
94. In Dresden 3 is a naked woman who has been sacrificed. Her arms and her feet are tied together. In Paris 19 there is another nude dead woman.
95. Thompson cites, as writing on phallicism in Mexico, Genin (1900), Leon (1903), Batres (1908), and Lombardo Toledano (1931). To these should be added Mena (1926) and Magain (1942). He adds, "The representation in gold and the occasional exhibition of genitals on 'Totona' onyx vases shows that this cult was flourishing after the eleventh century."
96. For other ideas on death, the other world, and rituals, see Tozzer (1941, pp. 309, 325), Spinden (1913, pp. 85-87), and Thompson (1950). Death as it appears in the representations of the underworld, human sacrifice, and the cults of the Jaguar-Eagle, the Dead Warrior, and the Ball Game are given in Chapter III-7I-8-9.
97. The "maggot" sign, which often looks like a cross, occurs frequently on masks which refer to the underworld of the dead. Among other places, the mask (fig. 345) at the base of each of the two columns of the Lower Temple of the Jaguars at Chichen has four of these signs above the eyes and other emblems of death on either side: the lotus, fish, turtle, and pelican.
98. Thompson (1934, 1939, 1950) goes into many of the phases of Middle American deities and the religious beliefs, most of which are not covered here. He lists (1934, pp. 239-40) Maya and Mexican parallels of gods, mythologies, and rituals. Tozzer (1941, pp. 306-11) gives an outline of various features of many of the gods. Mateos Higuera (1946) has a useful synoptic chart of the Mexican pantheon. See also short articles on deities by him, Noguera, Palacios, and Caso in *Mexico prehispanico* (1946).
- Table 13 shows the distribution of gods in structures at Chichen, at Tula, and at Tenochtitlan.
99. Thompson, who has most generously placed at my disposal much data and many illustrations which he has gathered on this deity, finds that his appearance in the Maya Great period runs from 9.11.15.0.0.0 (667) at Piedras Negras, Lintel 2, to 10.3.0.0.0 (889) at the Monjas and Adivino at Uxmal. He shows seven distinct types of Tlaloc. Proskouriakoff (1950, fig. 35) gives other representations of this god from Copan, Seibal, Cancun, Yaxchilan, and Piedras Negras.
100. Shook (1945, p. 211, figs. 2,c; 6,d) suggests that possibly the earliest occurrence of a Tlaloc appears on a cylindrical vessel from Miraflores, an Archaic site on the Pacific coast of Guatemala. The vessel shows "a stylized face strongly suggesting that of the god Tlaloc."
101. The two circles appearing on the hat of atlanteans and other figures has never been satisfactorily explained (Seler, vol. 5, pl. 20, no. 6; 21, no. 4). This feature is also seen on heads of figurines from Teotihuacan.
- Seler (3:451-53), writing on "Mixed Forms of Mexican Divinities," shows two stone heads from Mexico which have one eye encircled by the body of a serpent with its head near the mouth. He considers this half of each face to represent Quetzalcoatl.
102. The famous Tepezintla stone from Tuxpan has been considered by Moedano as a representation of this god along with the Jaguar-Serpent-Bird seen at Chichen and at Tula.
103. The position of the figure and the object carried are somewhat suggestive of the sun and moon enclosed figures on Stelae 1 and 2 and on Lintel 39 at Yaxchilan (Maler, 1903, pls. 65, 69, 70). See also Seibal, Stela 10 (Maler, 1908, pl. 10).
104. Seler's identification (5:349-50) of one as the sun god and the other as the moon, or morning star or Quetzalcoatl, is not acceptable.
105. Thompson identifies the victim of sacrifice in the Temple of the Warriors fresco (fig. 395), with long yellow hair interwoven with jade beads, as Tlachitonatiuh, as are other personages in the paintings with the same type of hair (Morris, 1931, pls. 146; 147, b-d). He points out that "the Toltec painted the bodies of victorious warriors yellow and their faces red." Whereas the figures identified as this god on the façade of the Warriors and on Mausoleum I are quite definitely Toltec, the victims of sacrifice are more probably Maya, and thus it is difficult to see how they could impersonate a Mexican god.
106. Thompson (1939, pp. 156-60), who has made an exhaustive study of these "celestial snake monsters," their connection with the world directions, their colors, and their aspects both in Mexico

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- and in the Maya area, points out a possible connection between the Maya god Itzamna and the sky monsters. "This evidence," he writes, "although inconclusive, points to Itzamna and the sky monsters being one and the same."
- That this figure represents Itzcoatl, "the obsidian snake," is an explanation put forward by Seler (1902) and by Krickeberg (1949, p. 192). Seler goes so far as to identify the "saw-toothed zigzag band" design (fig. 87,f) on the Monjas, the Iglesia, and the Castillo *sub* as representing "the obsidian serpent."
107. Thompson (1939, p. 160) uses these in connection with his discussion "of the Itzamna theory" and the sky monster.
108. Thompson quotes Pedro Armillas' opinion that this Xipe is distinguished from those found at Teotihuacan.
109. The exceptions are possibly some figures at Yaxchilan, one of a late style at Ucanal "suggesting Yucatan figures" (Proskouriakoff, 1951, fig. 76,a), a façade decoration at Sayil, and two figures at Acanceh, an eagle and a human (Seler, 1911, nos. 16, 20). The celestial monster on the so-called "Quetzalcoatl façades" is another exception (Thompson, 1942).
110. An elaborate figurine with diving god from Carmen, Campeche, is reported in the National Museum, Mexico (Thompson, 1941).
111. Fernandez (1941, fig. 56) shows two stucco reliefs from the Temple of the Frescoes at Tulum which suggest figures falling from heaven.
112. See Tozzer, 1941, p. 289, for apiculture and the bee ritual with parallels among the Lacandon; Roys, 1933; and Thompson, 1950.
113. Redfield in a letter to Roys writes of a *U hanli cab* ceremony of the modern Maya which is propitiatory to the gods of the bees. One native priest explained that "the Muzencab-ob were a class of supernatural bees dwelling at Coba."
114. Thompson (1934, p. 228) speaks of Seler as having been the first to identify the sky bearers with these "demons." He also quotes from the early authorities and gives references in the Toltec and Aztec codices.
115. Thompson (1934, p. 235; 1950, p. 85), with a suggestion from Blom, identifies two types of shell. "These, so far as one can judge from the drawings, can be classified as a fresh-water shell probably belonging to the genus *Planorbis*, and another shell resembling somewhat a conch, but possibly belong to the *Helix* genus of land snails. There are also certain ornaments which suggest that they might represent the bee." Seler (5:293 and *passim*) has attempted to explain these figures, including some (pp. 360-61) which seem to be women. See also Charlot, 1951, p. 238.
116. The only anomaly seems to be the west figure on the south column who has a bird on the front of his hat.
117. At Tikal, on the south side of Stela 1, the main figure stands on a mask; at the rear of this is a circle with a serpent's head at four points. The sun symbol cannot be made out.
118. See Table 11 for the distribution of these and other top designs. This arrangement of the sun at the top and Mictlan beneath is highly suggestive of designs from Yaxchilan. Butler (1937) calls attention to the sun and moon at the top, and to what may be an earth monster at the bottom of Stela 1.
119. Could this represent a custom noted by Landa (1941, p. 129)? "Once dead, they put them in a shroud, filling their mouths with ground maize . . . and with it they placed some of the stones which they use for money, so that they should not be without something to eat in the other life." (See Tozzer, 1941, note 606.)
120. Another association between this region and Cotzumalhuapa is a seated figure holding a long paddle on Monument 9 (Habel, 1878, pl. 4) and one with a round paddle from Cerro de las Mesas (Stirling, 1943, pl. 22a).
121. One of the most extensive celestial bands forms the border around the carved top of the stone casket found under the Temple of the Inscriptions at Palenque (Ruz, 1952).
122. A second stone of this type (fig. 540) was found at the neighboring site of Halakal. Above and below the figure was a line of glyphs not of astronomical significance.
123. Thompson informs me that this design is fairly common in central Mexico and appears at Teotihuacan II and III and on figurines labeled "Period IV."
124. Spinden (1924, fig. 32) has a collection of figures on "The Maya origin of Tlaloc and the imbrication year symbol" in which he has seven examples from Copan (five of which are reproduced here), two from Uxmal, and one each from Yaxchilan, Piedras Negras, and Chichen. Those from Uxmal have been reproduced in figs. 208 and 209. Joyce (1914, fig. 86), Caso (1928, fig. 22), Garcia Payon (1939), Rickards (1942), and Andrews (1943) are among

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- others who have collected examples of the year sign mainly among the Maya, Mixtec, Toltec, Totonac, and Aztec.
125. It is on this monument that we find an assemblage of features of wide distribution in time and place. The head of the god or priest is in the mouth of a monster with bifurcated tongue. In addition to the year sign at the top, he carries a bag with a woven design; below it are an inverted head (possibly a trophy) and, at the end of the apron, the cross with flames or frets.
 126. Caso (1940) calls attention to these stones and the ritual in the last month of the year Tititl, as shown in Borbonicus 35 and 36. He also examines a *xihmolpilli* in the National Museum which has several dates. He explains the year 2 Reed on this stone. See Peñafiel (1910, pls. 86-87) for other dates upon it and for (p. 36) Fernando Ramirez's interpretation of them. Seler (2:137) writes in connection with one of the so-called "dates" at Xochicalco: "I, with other savants, formerly considered (this) as a sign of the binding of the year."
 127. Pavon Abreu (Moedano, 1947), in making a study of this panel, gives an interpretation of the design in connection with Venus and the year 1506.
 128. Lothrop (1952, p. 69) discusses the distribution of this "minor art motive," the double tongue, in the New World from Mexico to the Chavin and Paracas cultures in Peru.
 129. In connection with Figure 7 on the Tamuin fresco, Du Solier (1946) recognizes a relationship with this monster as probably a representation of Xolotl in the character of Venus as it appears in Borgia 10. He also points out that Moedano considers that the Chichen Jaguar-Serpent-Bird monster is Tlauricauhtli, along with the Tepetzintla stone of Tuxpan.
 130. It should also be pointed out that the double noseplug is also found in Classic times. Proskouriakoff (1950, fig. 24.0-x) shows mask-like faces taken from the "fully developed serpent-fret apron" which have this type of nose ornament. Among the places represented are Copan, Quirigua, Piedras Negras, and Naranjo. The monuments run from about 9.10.0.0.0 (633) to 10.0.0.0.0 (830).
 131. Spinden (1913, pp. 119-24) has made a study of the development and the changes in the form of the mask. Hissink (1934) has studied in detail these panels in the Yucatan-Maya period.
 132. This type of mask has been cited (Thompson, 1939, p. 154, note 76) as an example of the sky monster associated with Itzamna, rain, and probably the bacabs. All the other instances of this monster noted here by this author are from the Classic period.
 133. The vine coming from the eyes is also seen on Stela 7 at Yaxchilan and on the center panel of Str. 401 at Seibal.
 134. A difficulty arises in associating these crosses almost exclusively with masks of Chichen II and III. Although they are generally absent in Maya Chichen (I), they do occur at Uxmal in the Adivino in the building on the ground level under the west addition (Seler, 1917, 90-91.) It is on this façade that we find the fine examples of types of stepped frets and knots (*ibid.*, pp. 84-85).
 135. The underworld complex, according to Thompson (1950, pp. 72-73, 279-80), consists of water lilies, fish, maize foliage, conch shells, the color black, the hair set with eyes of the death god (jade beads), the dog, bones, three circles in a row, and various numbers. He works out in great detail the association of these elements with the day sign Imix, the earth crocodile, and the jaguar as symbols of the earth and its interior. He illustrates (fig. 12) the occurrence of these elements at Copan, Palenque, Ixkun, Piedras Negras, and other places.
 136. Proskouriakoff connects this with Tajin (E. Spinden, 1933, pl. 18), Stela 6 at Yaxha, and the altars of Stelae 7 and 8 at Tikal.
 137. Much the same curves and scrolls are shown by Proskouriakoff (1950, fig. 12) who marks Stela 10 (dated 10.1.0.0.0) as "Decadence."
 138. Tozzer (1941, pp. 318-21) gives an outline and references to the subject. Lothrop (1926, *passim*; 1952, pp. 52-53) discusses it in South and Middle America. For other writers on human sacrifice see Capitan, 1909, 1920; Séjourné, 1950. And see Chapter VI of this work, where the subject is considered in detail.
 139. Thompson (1950, pp. 64-65) suggests that the figures grouped at the bottom of Stela 12, Piedras Negras, may be captives destined "to play their dire parts as sacrificial victims. The number of the captives leads to the suspicion that they are being groomed to impersonate the nine lords of the underworld. . . ."
 - Lizardi Ramos (1948) shows one of the glyphs of death identified by Schellhas and found in Dresden 3a in connection with human sacrifice. The author identifies a glyph at Copan and at Chichen and argues for the presence of human sacrifice in the two periods (see Thompson, 1950, p. 13).

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140. Willard (1933, p. 122) shows "a gruesome sacrificial scene" in fresco which he claims he saw in the large room on the second floor of the Monjas. This would have been added in Mexican times, as was the fresco in the same room which was copied by Breton.
141. A head lying on a plate is being offered by a figure on Temple 11 at Copan.
142. Table 14 shows the distribution of certain features of this ritual at Chichen, Cotzumalhuapa; Guatemala; Tula, Hidalgo; Tajin, Veracruz; and, to a far lesser extent, at Malinalco and in Oaxaca.
143. I am indebted to Salazar (1952) for much of the data given here.
144. Caso (1940) shows pages 35-36 from the Borbonicus, which portrays ceremonies in the last month of the year, Tititl, and a temple to Huitzilopochtli. He considers that many of the carvings and other representations of skulls and bones, some of which I have mentioned, are not *tzompantli* but altars in which the stone figure (*xihmolpilli*) representing the binding up of the 4×13 years of a cycle is buried, as already noted.
145. See Tozzer, 1941, note 684, where he discusses the offering of human hearts between bowls or plates, and p. 321 where he considers the degradation or substitution of hearts of bread or of animals for human sacrifice.
146. One of the two stones shows other carving, possibly a serpent's head, on the end under the one with the design just described (Ruppert, 1943, fig. 12.b).
147. Acanceh is generally placed in the Classic period in Yucatan and, therefore, not in the epoch of the Mexican cult now being described. There are, however, some features of the stucco decoration on the upper zone of the façade here which are of interest. A speech-scroll comes from the mouth of two animal-like figures, as already mentioned, and also from that of an eagle. A large-scale eagle's wing occupies the entire ends of the upper zone (Seler, 5:2, 4).
148. This conventionalized heart is a breast ornament on an urn from Chilpancingo, Guerrero (Caso and Bernal, 1952, fig. 97). Attention is called to the pectoral of a jaguar urn from Suchilquitongo, Oaxaca (*ibid.*, fig. 98), which is somewhat similar in form. The authors identify the ornament as blood; more likely it is a heart being eaten by eagles. The same shape is on the "Piedra de Coatzin" (Peñafiel, 1890, vol. 2, pl. 203).
 - It should be remembered that figure 443, except for the center design, is very similar to the shield used at the Temple of the Jaguars at Chichen as a roof ornament (fig. 82) and at Tajin as an altar figure (fig. 83).
149. On several of the columns in the Temple of the Warriors group at Chichen are figures either with bird head and feet or with bird feet alone. These are Toltec and are taken up in Chapter IV.
150. There is a faint suggestion that, instead of his left arm being protected as is common among the Toltec, the wrapping below the stone point of the spear may be similar to the covering of the upper part of many of the spears in the Bonampak frescoes.
151. Blom (1932a, p. 495) points out that from *uollic*, a round thing in Maya, was derived the Nahuatl *olli*, Spanish *hule*, rubber. On this he bases his theory that the ball game originated, so far as Middle America is concerned, in Classic times in the Maya area. Then, he says, it traveled to Mexico, returning to Yucatan and especially to Chichen in the Toltec period. He argues for the term *pok-ta-pok* as applying to the game among the Maya.
152. Among the works are Blom, 1932; Acosta, 1940; Satterthwaite, 1944; Acosta and Moedano, 1946, for nomenclature and types; Grace, 1954; Stern, 1948; Krickeberg, 1948. The last two contain excellent bibliographies.
153. In relation to Mounds 13 and 14 Maler (1903, p. 134) writes, "Did these two incomprehensible structures once enclose a playground like those of the Yucatec cities?" His map of the site (pl. 39) carries the label "Plaza de Juego" between the two parallel mounds.
154. The Anderson and Dibble translation (1951, p. 27) from the Aztec text is essentially the same as that given here. It is not clear in either account where the mock battle took place. As it occurred after Paynal had left the court and had killed a slave in each of "certain places" or "in each quarter," it does not seem as if the two factions had their fight in the ball court.
155. Grace (1954, p. 1) estimates that the ball used in the Great Court at Chichen weighed about 25 pounds, equivalent to 80 baseballs. He rightly questions the possibility of bouncing this ball on the hip and reaching the ring 24 feet "up in the air." The difficulty is greatly increased, of course, when the ring is at the top of a sloping wall too steep for the player to negotiate.

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156. Grace (1954, pp. 10, 48-49) gives the dimensions of several rings as well as Marquina's data on the rings now in the National Museum in Mexico; also examples of a ring attached to a shaft, designed to stand vertically in the ground. These have been found at Tecpan, three at La Soledad, one at Petatlan, and possibly one at Uxmal.
157. Markers or altars were first identified with the ball court by Merwin in 1914 in the Peabody Museum expedition to Lubaantun, British Honduras. Called "Ball Court stones" in his notes, they are now in the Peabody Museum (Morley, 1937-38, pls. 162, 96.b).
158. According to Bolles (n.d.), along the north-south center line are three rectangular unsculptured slabs which seem to have been placed there in the first of the three periods of construction. They seem to be markers of some kind.
159. On some courts in the Guatemalan highlands the top wall projects slightly beyond the upper line of the slope. The outline of the two courts on the Tajin panels shows the bench with a sloping front, the usual great slope, and the top wall, the edge of which is inclined outward.
160. Another type of ball game, played by hitting the ball with a club, is shown on a fresco at Tepantitla. It does not seem to belong with the game now being described.
161. Bolles' report (n.d.) and personal communications have furnished the information on the Monjas court.
162. To Miguel Angel Fernandez we are indebted for his drawing of the center panel on the west side and other portions of this precious document. Parts have been published by Palacios (1937, 1945a), Fernandez (1937), Mariscal (1937) and Marquina (1951). The sacrifice scene on the center panel on the east side has been beautifully drawn and reproduced by Proskouriakoff (1950).
163. These features are described at length in Chapter IV.
164. Other examples of the turban are cited in Chapter IV.
165. Garcia Payon (1948-49), who describes and pictures the *palma*, also shows a crude figurine from a late grave in Cempoala, where six serpent heads project from the headdress, and two others, one from the Huastec and the other from Tajin. All undoubtedly represent the god Chicome Coatl.
 - In some of the manuscripts (Aubin) this goddess stands opposite Tlaloc as one of the rulers of the seventh week of the *tonalpuhualli*. Her picture shows no serpents, but she carries ears of corn in each hand. In Vienna 5, with her head in the jaws of an animal, she faces 4 Snake, who has one serpent issuing from his mouth, one lying in his headdress, and a third resting on his back-ornament.
 - A figure who has lost his head but who has two serpents emerging from his neck is pictured in the Telleriano-Remensis (fig. 476). A headless warrior carrying *atlatl* and darts and showing one serpent coming from his neck appears in the Fejervary-Mayer (fig. 477).
166. Among the many explanations offered for these objects is that they are symbols of the dead and of eternity.
167. The sculptured panel (fig. 479) from the West Ball Court at Piedras Negras depicts two players each with protected knee; the yoke worn by at least one of them is of some flexible material tied at the back.
168. Ekholm has kindly furnished me with a photograph of a stone yoke (fig. 481) given him by Covarrubias. It clearly shows oblong depressions which may correspond to those on the figures from Santa Lucia.
169. Shepard (1948) has made a most exhaustive study of this ware. She gives both in the text and on a map all the recorded appearances of Plumbate and has done much to settle this "Mesoamericanists' enigma."
170. Brainerd writes me (1950), "I am increasingly convinced that the Fine Orange pottery at Chichen has definite stylistic links with Aztec I."
171. The Lacandon make cigars out of the first tobacco of the year, light them symbolically, and offer them at the sacred braziers together with a prayer (Tozzer, 1907, pp. 142-43, 188).

CHAPTER IV

1. This study is based largely on Maudslay (1889-1902, vol. 3); Seler (1909, 1915); Morris, Charlott, and Morris (1931); Ruppert (1931, 1943, 1952); Proskouriakoff (1950); and on many new photographs taken by D. L. DeHarport for Carnegie Institution of Washington. To these should be added a paper by E. B. Ricketson (1927); new

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- material by Marquina (1951) with drawings by Angel Fernandez; and photographs of recent excavations at Tula kindly furnished me by Acosta. I mention especially the study of the metals from the Cenote of Sacrifice by Lothrop (1952), whose discussion and illustration of the figures on the disks add immensely to our knowledge of the Toltec and the Maya.
2. Both panels appeared in Brasseur de Bourbourg (1866, pl. 46) with the caption, "Vase en terre cuite du Musée de Mexico." The illustrations in this volume, mostly of Palenque, were drawn by Waldeck, who was in Mexico from 1834 to 1836. After comparing his Panel A with Lehmann's (1933, p. 117), one can only remark that the much maligned Waldeck's reputation for inaccuracy is, in this case at least, not justified. Panel B was published by Führmann (1923, fig. 84).
 - Branz Mayer, Secretary of the American Legation in Mexico City in 1841-42, published (1846) what are presumably his own drawings of the two panels, much inferior to those of Waldeck. It is clear that Mayer knew the books by Stephens (1841, 1843), as he speaks in his introduction of the "beautifully delineated" drawings in these works. His illustrations do not in any way come up to those of Catherwood, but many of the famous early stone antiquities, now in the National Museum, can be recognized. He also gives one of the first modern descriptions and plans of Teotihuacan. He states that he saw in the museum this vase "of a beautiful yellowish clay, tempered almost as finely as porcelain, and perfectly smooth and hard. It is 9¼ inches high. . . . It was found in the Cerro del Tesoro, or 'hill of the treasures,' in the prefecture of Tula and Department of Mexico [*sic*]."
 3. The ideal way of comparing Toltec features at Chichen and at Tula would be to illustrate them side by side, but this has not been practicable. A single picture from Tula, therefore, must serve to illustrate a feature discussed in several places throughout the text. Table 22 brings together some of the amazing identities and similarities of Toltec traits at the two sites.
 4. In the highlands of Chiapas there were mines of yellow topaz (stone amber) from which nose and lip beads were made and exported to Tabasco (Scholes and Roys, 1948, p. 29).
 5. Haberland (1953) has an elaborate study of the distribution in the Classic Maya of ornaments for neck, nose, ear, arm, wrist, leg, and ankle.
 6. A jade nose or cheek button (fig. 514), recovered from the Sacred Cenote, may have been introduced through an opening made in the side of the nose. Through the hole below the face carved on the jade a pendant may have been attached (see Smith and Kidder, 1951, fig. 58.b).
 7. A gold breast ornament in the National Museum shows this type of nose decoration (Pijoan, 1946, p. 234).
 8. This half-moon is a symbol of the Mexican pulque god (Seler, 2:925-73). It appears often in the Bologna Codex.
 9. These figures have already been mentioned in connection with the god Tlalchitonatiuh. Thompson considered them to represent the bodies of victorious warriors who are painted yellow.
 - One of the figures (B11) in the Lower Temple of the Jaguars (fig. 542) seems to wear beads in his hair. Beads are also used in connection with the turban on another figure (B12) and as part of the feather headdress.
 10. Lothrop (1952, Table XX) gives the number of spears carried by many of the Tula-Toltec warriors at Chichen.
 11. Proskouriakoff suggests that the mosaic effect might have been obtained on the stone columns by the use of paint. The mosaic-like cape, however, is clearly seen on the frescoes on the south bench of the Temple of the Chac Mool.
 12. This is the "mosaic bird," the totem of the Cocom, according to Maler. The ornament, worn on the breast by a Tula warrior (fig. 555), certainly indicates a mosaic. The design has sometimes been called *xihuhtool* or "the turquoise bird." Seler (4:939) and others say it is possibly a butterfly.
 13. It is mainly due to Breton (1912) and Miguel Angel Fernandez (in Marquina, 1951, pp. 865-68) that we have an adequate picture of the extensive bas-relief on the columns and on the three sides of this structure. Many years ago Edward H. Thompson molded some parts of this design, but unfortunately casts were never made from these paper molds, which are at the Peabody Museum.
 14. On women in the Maya codices the serpent appears as a headdress (Dresden 9c, 15b; Madrid 30b). Note the interlocked serpents as part of the headgear on Stela 1 at Seibal. A turban with interwoven beads seems to be part of the covering of one of the heads in the round found with the newly discovered tomb at Palenque.

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15. An interesting chac mool from Salvador with the conventionalized bird as a breast ornament is shown by Weber (1922).
16. This type of breast decoration is worn by many of the figures on the Tizoc stone.
17. This may be similar to the *chalchih-cozcapetlatl*, "necklace of precious stones," worn by the Aztec.
18. A similar ornament is noted on Stela 17 at Uxmal and on a graffito at the same site (Seler, 1917, p. 146).
19. Proskouriakoff (1950, fig. 28.a) shows a similar decoration from Uaxactun, Stela 5.
20. Lothrop (1952, fig. 66.a) shows a heelpiece, made of copper, from the Sacred Cenote. He also illustrates another example from the Cenote, where the heel was evidently secured by thongs.
21. Brinton (1887) wrote that the Spanish text, *iacos fuerte de sal y algodón*, means nothing and that Landa had mistranslated the Maya *tab*, "salt," for *taab*, "twisted cord."
22. The nearest approach in the Classic period to arm protection is a small round shield worn on the wrists, seen at Yaxchilan and Ixkun (Proskouriakoff, 1950, fig. 32.p-r).
23. There may be some justification for calling this a shield. On Nuttall 38 a warrior is carrying a round shield with an interior red circle surrounded by a blue field with dots; on 40 almost the same type, shown in profile, is worn at the back of the waist.
24. A similar personage from Tlaxcala wears the shield (Seler, vol. 5, pl. 16). It is noted also on a stone figure from Tututepec, Oaxaca (Berlin, 1947) and on many warriors in Mixtec manuscripts.
25. Studies and illustrations of this and other weapons are numerous: Seler, 1890; Nuttall, 1891; Saville, 1925; Charlot, 1931; Follett, 1932; Tozzer, 1941, pp. 288, 301.
26. This weapon seems to be carried by a Maya figure on the two panels of a carved cylindrical jar from the Ulua Valley (Lothrop, 1936a, fig. 3).
27. The famous knife with a wooden handle composed of two intertwined serpents, recovered from the Sacred Cenote, may well have been used in the rite of human sacrifice. In connection with this ceremony, the knife is held by a Toltec in the lower panels on both jamba of Str. 2C6 at Kabah. One of the most interesting examples of this weapon is at Cotzumalhuapa where it is carried by an executioner, a speech-scroll issuing from it.
28. Morris (1931, p. 477) shows several vessels taken mainly from the Temple of the Warriors.
29. Birds in general are considered in Chapter III-7c3.
30. It has been suggested by E. Spinden (1933) that this stone figure resembles pottery figurines from southern Veracruz which represent birds or men dressed as birds. These and bird-men statues from Nicaragua all probably represent, according to Thompson (1941a), participants in the *voador* ceremony.
31. An almost identical specimen is noted at Tarros and at Pantaleon, Guatemala (Thompson, 1948, figs. 12.c; 17, g.h).
32. This torch is common in the codices. God B (Dresden 34b) carries one in both hands, as does an animal (Dresden 39a). God B carries an axe (Dresden 32b) in one hand and an inverted flame in the other. Death carries the flaming torch (Madrid 14b).
33. Similar figures appear in Dresden 49a and Madrid 39c. The jaguar warriors in the Nuttall should also be mentioned.
34. On Stela 9 at Tikal there is a Maya personage who has an elaborate feather garment hanging from his shoulders. This is one of many in the Classic stage.
35. Two figures on the left seem to belong to another group which starts on the west side wall (Breton, 1915, pl. 4, fig. 5). In the same way, the house on the right may belong with the scene on the east wall (*ibid.*, figs. 6, 7).
36. Moedano (1947a, p. 130) illustrates two of these designs, one from the procession on the frieze on the stone of Santa Teresa at Tenochtitlan. He considers (p. 127) that the central figures of the Chichen designs symbolize the League of Mayapan.
37. Moedano (1947a) has made a careful analysis of the figures and compares the frieze to ones at Chichen and in other places. Some details at Tula are shown in fig. 543.
38. The best illustrations of the Mercantil and this stone are in Peñafiel, 1910.
39. Among the many who list similarities between Tula and Chichen are: Charnay, 1857; Brinton, 1868, 1887; Garcia y Cubas, 1873; Reynolds, 1904; Seler, 1909; Spinden, 1913; Lehmann, 1922, 1938; Lothrop, 1924, 1952; Tozzer, 1930; Morley, 1931; Morris, Charlot, Morris, 1931; Linné, 1934, 1942; Thompson, 1934, 1941; Caso, 1940, 1941; Acosta, 1940, 1941; Palacios, 1941, 1945; Jimenez Moreno, 1941; Marquina, 1941, 1951; Ekholm, 1941; Ruz, 1945; Wray, 1945;

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- Noguera, 1946; Vivo, 1946; Pijoan, 1946; Moedano, 1947; Weitzel, 1947; Armillas, 1950; Ruppert, 1952; Willey, 1953c.
40. Thanks to Carnegie Institution, and especially the work of D. L. DeHarport, the corpus of figures from Chichen has been greatly increased, although not nearly complete. Practically every stone carving found at Tula fits into this comparative study. I record my indebtedness to the work of the Mexican Government directed by Acosta.
41. Proskouriakoff describes the monuments at various sites in Yucatan as "Decadent," "Late Yucatan, variant," "Late Yucatan (Quality X)." In most cases they date from a period preceding the Toltec.
42. Kirchoff (1950) considers that both Tenochtitlan and Tlatelolco were established in 1369-70. Among other late centers are Cem-poala, Calixtlahuaca, Malinalco, and the two Morelos sites of Teopanzolco and Tepoztlan.
43. Moedano (1947a) writes on these monuments; his newspaper articles (1944) discuss the Toltec at Tenochtitlan. He also mentions a manuscript, "La procesión de los señores," by Beyer (1917).
44. Seler (3:408, fig. 4), who goes into great detail in identifying the sides and front of this stone with its image of Death, considers the figure on the back as representing Quetzalcoatl guiding the sun in its journey in the underworld.
45. The roped figure and the back device are somewhat suggestive of the kneeling captives on the jamba of Str. 2A3 at Kabah. The garters on two of the Malinalco personages show the typical Toltec roll, from which hang what seem to be bells, not unlike those on some of the gold disks from the Sacred Cenote at Chichen.
46. Seler (5:583), who shows these two vessels and a third which represents a Tlaloc, considers "they were intended to represent the personages powerful in the three realms—Tlaloc . . . who hurls his weapon from the cloud; Xipe Totec, the god of vegetation . . . finally the deer-god, the spirit of the dead . . . who of course has his place in the underworld."
47. This lintel is dated by Thompson as 10.3.0.0.0. Another lintel, found at Chichen but probably from Halakal, just to the northeast, is dated 10.2.0.0.0. A second lintel from this site, dated "somewhat more uncertainly as 10.3.0.0.0," has three figures on it and is placed in the "Chichen Itza Maya" category.
48. Rands (1954, p. 281) speaks of the "rather unexpected connections between the art of the Toltec period at Chichen Itza and that of the late Great period in the Classic centers to the south. Inferentially, this may indicate the approximate contemporaneity of the Chichen Itza Toltec and the late Classic Maya." He refers to Proskouriakoff (1950), Lothrop (1952), and Rands (1953) but does not mention Tozzer (1930) and Wray (1945).
49. See Tozzer, 1941, p. 293; Blom, 1934, p. 9; Hooton, 1940.
50. This personage wears on his back a large turtle shell, similar to those on the small atlantean bas-reliefs. On either side are profile jaws of serpents with double nose plugs and, near the top, a lotus and fish. The figure on the north wall is somewhat similar. The shell seems to be shown on the south side of the south column (Seler, 5:132).
51. The hair on the figures on Stelae 8, 10, and 11 at Seibal is somewhat similar although not so long.
52. See Stela 21 at Oxkintok (Proskouriakoff, 1950, fig. 88.a).
53. The same mask or decoration is probably seen on two of the three figures on the Halakal Lintel (Proskouriakoff, 1950, fig. 106.a) and on one of the two figures in the upper part of each of the two jamba from Codz Poop at Kabah (fig. 603). Here the design around the mouth is extended to encircle the eye. See also the Tlaloc head from the same site (Pijoan, 1946, p. 475). It is possible that somewhat the same face decoration is shown on Stelae 8, 10, and 11 at Seibal, on Stelae 13 and 21 at Naranjo, on Stela 4 at Piedras Negras, and on Stela 51 at Calakmul.
54. This covering is worn by the Maya in the Classic stage. It is found on Stela 35 at Piedras Negras and on Stelae 10 and 11 at Seibal. In the recently opened tomb at Palenque the buried chieftain or priest almost certainly wore a cape or collar of jade beads. Proskouriakoff (1950, pp. 59, 64) describes and illustrates these "collars."
55. The ornament at the end of the two long necklaces just illustrated is not unlike that worn by a few Toltec. It is also noted on collars from Yaxchilan and Xultun.
56. An additional round bead at the end of the tubular one, and three smaller tubular ones attached at each end to the cup form are noted on Stelae 6 and 10 at Piedras Negras and on Stela 1 at Coba.
57. Stela 3 at Seibal shows this in Classic times. The pendant on B11 suggests an ornament worn by a figure in Vaticanus B 30.

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58. In the Magliabecchiano, several personages have as a breast ornament what is seemingly a circular gold ornament.
59. In pattern these two plaques differ markedly from the others. The presence of the eagle seems to indicate a phase of the Jaguar-Eagle cult. The feather decoration is seen on a *graffito* at Tikal (Maler, 1911, fig. 13).
60. This "beaded tassel of plumes" or the device of stringing a feather through a bead is primarily Maya and dates generally from the Late Classic stage. Proskouriakoff (1950, fig. 16) gives examples from Copan, Piedras Negras, Ucanal, Naranjo, and Halal.
61. The victim of human sacrifice, a Maya, on the Temple of the Warriors fresco wears jade beads in his yellow hair. This headcovering is thought by Thompson to be a wig, worn by the god Tlalchitonatiuh; it is seen also on the outer wall of the Temple of the Warriors.
62. This is a very common decoration on figures in the Maya manuscripts. An excellent example is on a Toltec on one of the Chichen vault stones (fig. 540).
63. The puttee type of gaiter is noted at El Palmar in southern Campeche, at Xcalumkin, and on Stela 4 at Sayil (Proskouriakoff, 1950, figs. 59.a; 84; 85; 94.e).
64. This type is illustrated by Proskouriakoff (1950, fig. 29), with examples from Etzna, as early as 9.12.0.0.0 (672) and from Oxkintok. Laced leggings occur on the Halakal lintel, on each of the dominant figures on the jamba of Str. 2A3 at Kabah, and at Labna, Sayil, and probably at Xculoc.
65. Proskouriakoff (1950, p. 81) remarks: "In the post-Classic Period in Yucatan . . . the early form [a strap over the instep] with slight modifications returns to use." She gives several illustrations of examples at Chichen. The puff at the instep is seen also at Seibal and Comitán.
66. They also recall those hanging on the "rare necklace" from Lintel 9 in Str. 2 at Yaxchilan (Proskouriakoff, 1950, fig. 22.y) and on Stela 7 at Piedras Negras. The rectangular shield is seen at Bonampak.
67. Proskouriakoff (1950, p. 89) notes the rectangular shield in the Classic area only along the Usumacinta. The earliest, at Lacanja, is dated about 600; the latest, among several (Stelae 26, 34, 35, Lintel 2) at Piedras Negras, about 735. Note also Stela 2 at Cancuen and Stela 2 at Naranjo. Rectangular shields are noted on Stelae 15 and 21 at Oxkintok; on Stela 15 at Etzna, and, without feathers, on the Halakal lintel.
The rectangular shield, decorated at the bottom with feathers, and spears are noted from Xochicalco (Peñafiel, 1890, vol. 2, pl. 194; Moedano, 1947, p. 124).
68. The flexibility is evident in the Lower Temple of the Jaguars (fig. 634), at Yaxchilan (fig. 635), and at Bonampak (Proskouriakoff, 1950, fig. 32, d', e').
69. This shield is not greatly unlike the ones borne by Maya on Stela 11 at Yaxchilan; on Stelae 11, 19, and 21 at Naranjo; on Stela 1 at Itzimte Sacluk; on Stelae 1 and 2 at El Caribe; and on Stela 89 at Calakmul. At Sayil a round shield has a plain center but a partial fringe. The round buckler, usually with a face, appears at Santa Rosa Xtampak, Xcalumkin, and Oxkintok. The lintel at Kanki has a Tlaloc face in the center of a round shield; see also the shield on the wooden lintel at Tikal. The round shield seems to be carried by a figure from Mayapan (Proskouriakoff, 1950, pp. 92-93, fig. 105.f).
70. In the Temple of the Frescoes at Tulum are two lines of shields with circles around the center and a notched border.
71. At least two Toltec warriors on the west wall of the Temple of the Jaguars frescoes have draped shields.
72. It may have been part of a wooden bow that was found in excavations at Uaxactun (Carnegie Inst. Wash., Year Book 34, p. 117).
73. This stone-pointed spear is by no means unknown in the Late Classic period. It occurs on Stelae 7, 8, 35 and Lintels 2 and 4 at Piedras Negras; on Stelae 10, 15, 18, 20 and Lintel 8 at Yaxchilan; on Stela 21 at Naranjo; on Stela 15 at Oxpemul; on Stela 24 at Calakmul; and on Stela 21 at Oxkintok (Proskouriakoff, 1950, pp. 96-99).
Among many places in the Maya codices the spear with bead occurs in Dresden 60b and 67a, along with the round shield. See also Madrid 32a, 52-55.
74. This type is best seen on Stelae 18, 19, and Lintel 8 at Yaxchilan. There are variations at Piedras Negras (Follett, 1932, pp. 381-83).
75. This type of handle is seen on Stela 1 at Itzimte Sacluk and on Stela 1 at Bonampak. Stela 8 at Naranjo probably shows the same type. These are all very typical of Late Classic. A modification of the handle may be shown in Dresden 25-28, 34a and in Madrid 20c.

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- The trellis type of handle is carried by one of the Maya on the Halakal lintel which is "Late Yucatan, variant." This design in stone, according to Proskouriakoff (1950, p. 170, fig. 106.a), is the "Chichen Itza Maya" type, which reveals "the trend of decadence more strongly expressed than on the monuments at Kabah and Uxmal which show Toltec influence."
76. This type is possibly seen on Stela 1 at Seibal.
77. This is somewhat like the spear on Stela 4 at Ucanal. Three short spears are carried by one of the figures on the Codz Poop jamba at Kabah.
78. The stone knife is fairly common in Classic times. It is carried by one of the figures on Altar 5 at Tikal. The one on Lintel 26 at Yaxchilan seems to have a handle. The knife also occurs on the Halal jamb, "Late Yucatan, variant" (Proskouriakoff, 1950, fig. 104.a), and on Stela 15 at Oxkintok. Proskouriakoff (1952) reports that "two sacrificial knives like those recovered from the Cenote at Chichen Itza" were found at Mayapan.
79. Gann reports finding the wooden handle of what is probably one of these weapons in British Honduras. Follett (1932) pictures this.
80. The four-flint-bladed weapon is found on one of the "Maya" jamba of Str. 2D3 at Kabah. There is a three-flint-bladed club on Stela 5 at Uaxactun and one with two flint blades on Stela 11 at Seibal, Lintel 42 at Yaxchilan, Stela 1 at Jaina, Stela 14 at Uxmal.
The clublike weapon with a single flint, usually wielded by God B, occurs over a score of times in the Dresden and in the Madrid. A ceremonial hatchet with a single point is carried by figures at Palenque, but this type has not appeared at Chichen.
A figure on Stela 26 at Oxkintok carries an axe (Proskouriakoff, 1950, fig. 81.d).
81. The earliest examples are on Stela 5 at Uaxactun and on the fresco in Str. B-XIII. Another, dated "Late Classic," appears on Stela 3 at Bonampak (Proskouriakoff, 1950, fig. 34.t,u). A *graffito* on the walls at Tikal (fig. 653) shows one being carried. The two just mentioned in the Lower Temple of the Jaguars are not greatly unlike those used by some of the figures on the Codz Poop jamba at Kabah (fig. 603). A minor figure, seemingly Maya, carries an unusual throwing-stick on the Toltec-like Stela 14 at Uxmal.
82. Similar forms are noted on Stela 1 at Santo Ton and on Stela 30 at Naranjo. A variation is seen at Etzna on a monument dated about 670. This may be the object (fig. 390) observed on Altar 5 at Tikal which Proskouriakoff (1950, p. 96) regards as an eccentric flint. This pointed affair may be carried by one of the traders on a Nebaj vase (Joyce, 1914, pl. 24).
83. A fan is carried by an animal-headed god in each of the pages in the Dresden (25-28) devoted to the four Dominical Days. See also Madrid 21d and 88b; the object on Madrid 67a is surely a rattle.
Proskouriakoff (1950, p. 96) writes: ". . . fans [are] particularly popular in representations at Yaxchilan, where they sometimes assume enormous proportions." She shows examples (1950, fig. 33.s,t) from Yaxchilan and Naranjo.
In Room 3 at Bonampak at least four of the 10 personages with the extended wings of the skirt carry circular fans, two of which have a human hand in the center.
84. Very elaborate banners are carried on long poles by two figures in Room 1, Bonampak, and by three others in Room 2 as part of the battle scene.
85. The many "ribbons hanging down to the ground like tails" are shown on the priests' dress in the upper section of Dresden 25-28, devoted to the rituals of the Uayeb days (Tozzer, 1941, p. 330). In each case the priest is carrying a staff and a fan or rattle. The staff of the Dresden picture may possibly be represented by the Priest of the Hunt on Column 6W of the Temple of the Chac Mool. On the other hand, it may belong to the trellis type of spear.
86. The data supplied by Landa on the sorcerer of his time are given in Chapter VI.
87. Dresden 66a may show the sorcerer. He grasps a serpent and carries a shield and axe. His curved headdress suggests one on some of the reclining figures with spotted skirt on the North Temple of the Great Ball Court (Seler, 5:307).
88. Figure 660 is a composite of IV and V made by Ann A. Morris (1931, fig. 305) and republished by Roys (1933, fig. 2). It has an added serpent coming from the mouth as in the original.
89. These five figures are identified by Roys (1933, p. 67) as the five Maya rain gods, wearing the mask and headdress of God B, who are found at the four cardinal points and "at the center of the heavens." One of these figures the author illustrates as Chac-xib-chac, who was a governor of Chichen Itza and has the name of the

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Red Bacab. These same figures appear in many other places at Chichen.

Charlot (in Morris, 1931, p. 455) also considers that these figures are associated with God B or the Long-nosed God. He identifies the staff, "beyond all reasonable doubt, as a vestigial form of the Manikin Sceptre, a curious and highly stylized staff prevalent in Old Empire sculpture." It may be added that of the 30-odd examples of the ceremonial axe, only three end in a serpent's head.

An elaborate "axe," the handle ending in a reptile's head, is carried by at least one figure in the Tamuin fresco (Du Solier, 1946).

90. In a fragment of fresco from the Temple of the Warriors (Morris, 1931, pl. 157, *b*) the stone-pointed spear is carried by a figure with a mask headdress that suggests one worn by the priests (IV, V) on the south bench of the Temple of the Chac Mool.

91. His fan and staff have already been mentioned. A haunch of venison appears frequently as an offering (Dresden 28a). In the Merida Museum there is a curious but interesting scene in stone of two figures carrying home a deer.

92. On the Camara vase, now in the Bliss Collection, we see a hunt and what is evidently a priest carrying an animal bone (see Tozzer, 1941, p. 326) for hunting rituals. Carved longbones were recovered from the Cenote.

93. The Classic Maya donor with netted skirt is found on Stelae 3, 24, 29, 31 at Naranjo; possibly with spotted skirt, on Lintel 7 at Yaxchilan. A seated figure with short netted skirt appears on Stela 1 at Cancun, and a similar garment on Stela 8 at Piedras Negras. The skirt, usually worn by one evidently worshipping a deity or offering him something, is common both at Piedras Negras and Yaxchilan; see especially Lintels 5, 13, 14, 26, 32, 43 at Yaxchilan. The famous personage wrapped in a long robe on Lintel 1 at Piedras Negras may be making the gesture of submission or defeat; see also Stela 1 at Cancun, Stela 1 at Itzimte Sacluk, and numerous stucco figures at Palenque. Two skirted donors appear on Stela 2 at Bonampak; on Stela 24 at Oxkintok there is also probably a skirted figure who is making an offering.

One of the best representations of donors is painted on the northeast gallery of the Palace at Palenque (Ruz, 1952a).

A cylindrical jar in Vienna with carved decoration (fig. 273) also has two robed, kneeling figures presenting gifts to two seated personages.

On Temple 11 at Copan, a figure is offering a dish in which there is a human head.

In a fresco at Tulum an offering, in a bowl, of a Kan sign topped by the head of a turkey is similar to figures in the codices—Dresden 28c, etc. (Fernandez, 1941, pl. 53, *b*).

94. The heavy flat hat suggests that worn by the figure on Stela 14 at Uxmal (fig. 604). Proskouriakoff (1950, fig. 19, *c*) shows a hat of a donor (Temple of the Warriors, Column 12S) with upturned brim and notes (p. 51) that this caplike form occurs in 9.17.10.0.0 (786) at El Caribe. "It is also apparently a Yucatecan form, for we see it at Oxkintok and again at Chichen. . . ." This type of hat appears in Room 1 at Bonampak, worn by one figure and above the headdress of three others. In the latter case it may have been a sign of office or a title.

It is worthy of note that the cuff on the dress of both the donors and the warrior-priests on the south bench of the Temple of the Chac Mool, together with the donor-sorcerer in the same structure (Column 4S) are, as pointed out by Charlot, similar to the cuff and the anklet on many of the gods in the Dresden Codex. One of the donors (Temple of the Warriors, Column 12W) wears a turban formed of a coiled snake, suggesting the same type of headdress worn by so many of the women in the codices (Dresden 9c, 15b; Madrid 30b). The snake turban is also seen on the seemingly Toltec figure on Pilasters D and E of the Chac Mool.

The Paris Codex has many pages (2-11, 18) where the main event pictured is a figure making an offering.

95. This offering seems to appear again in the hands of a skirted figure, undoubtedly a woman, in Dresden 15b.

96. Sahagun (2, XXV [Bandelier, 1932, p. 90]) may describe this type of offering when he writes of "incense in the shape of sugar cones" or, "Then the priests began to offer before the hearth little balls of dough, each one offering four of them."

For a late example of offering in a bowl, see Gann, 1900, pl. XXX. For other examples of offering, possibly copal, being made to the gods, see Dresden 11b, 12a. The gifts shown in the Madrid (104c, etc.; Tozzer and Allen, 1910, pls. 2, 11) are associated with

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the bees and have usually been considered as representing honeycomb. See Tozzer (1907, p. 125) for copal offered by the Lacandon.

Two Maya figures sit on either side of a bowl of offerings on a South Court lintel at Xcalumkin. This is described as "Yucatan variant" by Proskouriakoff (1950, fig. 95, *d*). From Guatemala there is a terracotta whistle of a woman who seems to be offering a bowl of copal nodules (Saville, 1924).

97. The same type of figure is common on the *tepetlacalli*, the stone box with cover, common in Aztec archaeology. Many of them have the *zatacapayolli* on one face and a chief cutting his ear on the other three.

Moedano (1947, p. 127) uses the bowl illustrated here from the Chichen Northwest Colonnade as an example of a *zatacapayolli*. Selser (2:717) believes these were burial boxes of chiefs who were killed in war.

98. A headcovering of the same shape is seen in Dresden 66a on God B who, it has been suggested, may represent a sorcerer. Among other things, he carries a serpent.

99. Higher up on the same bas-relief is a standing figure, surrounded by flames and wearing a feather headdress and spotted garments. He seems to be a Toltec, with nose pendant and the curved stick. Presumably he is an individual of some importance, or possibly an idol, with a kneeling (?) Maya before him and seated Mexicans on either side (Marquina, 1951, p. 866). Above, on the vault, is a figure with spotted skirt, presumably a Maya and possibly a prisoner with his wrists tied together (*ibid.*, p. 868).

100. A skirted figure is found on the southwest panel of the Lesser Ball Court at Tajin and also at Tajumulco, Guatemala.

101. Figure 681 shows the center designs on Disks A-G and I (see Lothrop, 1952, pp. 29-36, 44-57). The scene on Disk H is a human sacrifice (fig. 393); Disks L and M concern the Jaguar-Eagle cult (fig. 437); Disk J may depict two Maya; Disk K is a single figure.

102. There are difficulties with this admittedly fanciful arrangement of the data. We can assume that most of the records cited were probably not contemporaneous. The Ball Court, a Toltec structure, was obviously erected before the Temple of the Jaguars. Its bench, or its scenes where Mexican and Maya seem to be shown, may have been erected or carved long after the court itself was completed.

103. It is interesting to compare the figures here, doubtfully assumed to be Maya and Toltec fighters, with the corresponding soldiers in the Jaguars fresco, where there is less difference between the two groups. The Toltec, however, with his garter and ankle pads in the Jaguars conforms with the Mexican on the bas-reliefs. Both troops in the Jaguars use the *atlatl*; in the Warriors, in general, both use the curved weapon.

104. On the north vault of the North Temple of the Great Ball Court there is a thatched-roofed house beside a temple with three-member moldings which suggest the same era.

105. Spinden (1913, p. 22) writes, "The human overlord as the agent of the god is shown . . . wearing the mask of a grotesque god who threatens with his baton several bound captives kneeling before him."

106. Spinden calls this scene a "Memorial of Conquest."

107. Selser, 1909; 1915, pp. 328-29. Villagutierrez (2, II) writes: "Then the two Itax Captains addressed the two Religious according to their custom which was to throw the right hand to the shoulder, as a sign of peace and friendship." See Tozzer, 1930.

In connection with Don Francisco Montejó meeting the natives, Cogolludo states that the gesture of peace was raising the joined hands and then placing the fingers on the ground.

108. Proskouriakoff suggests that at this period the Toltec at Chichen may have ruled people of the same nationality from other centers who are represented here as having surrendered.

109. On the so-called Tula vase (fig. 505) one Toltec is evidently rebelling at being grasped by the other. In the Tarascan area in Colima there is a seated figure in clay, showing depression; his left arm is on his right shoulder (Medioni and Pinto, 1941, p. 155).

110. Thompson (1950, p. 64) writes on the design on Stela 12 at Piedras Negras: "This has been identified as the commemoration of a conquest, but can we be sure that it is not a scene preceding some important ceremony, in which the captives are to play their dire parts as sacrificial victims? The number of captives leads to the suspicion that they are being groomed to impersonate the nine lords of the underworld. . . . The attitude of the main personage is not that of an arrogant conqueror, but of a person intent on the scene being enacted beneath him."

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111. At the base of a stela from Dzilam, now in the museum at Merida, are two captives, each with arms tied in this way.

112. There are some excellent examples of prisoners with their arms bound to their sides in the Teotihuacan figurines from the Valley of Mexico.

113. Ruppert (1943) states that one of the prisoners (no. 2) probably has a bird headdress and that another (no. 18) has a back-shield. This would, of course, class them as Toltec. The long breechcloth of one of the leaders (no. 10) would, on the other hand, seem to make him a Maya. The author refers to Gann (1900, fig. 66, *b*) who shows seven figures tied together with a rope.

114. Copan is not listed here although the nose pendant and some other features are found there. Uaxactun, Itzimte, and Motul de San Jose are among other sites mentioned in the text as having a few similarities with features at Chichen.

115. Proskouriakoff has made the following suggestion which may explain why Naranjo seems to be practically the only site which figures largely in this comparison, along with the Usumacinta centers. "In general bas-relief on monuments in the Peten during the Late Classic are few except at Naranjo."

116. Yaxcopoil, Ichmac, Maxcanu, Dzitbalche, and a few others, although furnishing a few characteristics of interest, are excluded from Table 24 but are usually mentioned in the text.

In Chapter I the various "schools" of art and that which can be dated, as defined by Proskouriakoff, are discussed.

117. Proskouriakoff (1950, p. 169) considers that there is "a direct transition from Classic to Toltec forms" in the wooden lintel from this site and the two sets of jambs.

118. Other than the lintel in the Akabtib and that once in the trough of the hacienda, there are no bas-reliefs here dating from Chichen I.

119. At Santa Rosa Xtampak the north panel of the Palace has a figure carrying one.

120. To complete the record, Proskouriakoff (1950, p. 157) lists the "non-Classic motifs" found in Yucatan. In addition to the "Maya" figures at Chichen and the Toltec which have been discussed here, she also mentions the winged figures (Jaina), the figures with depressed disk (Sayil), the small figure in a feathered garment with extended abdomen (Oxkintok), and phallic, death, and female figures. Only the last three are described here as they alone occur at Chichen.

121. It should be pointed out that the three Maya in Rows F and G resemble the atlantean wearing the necklace with shell pendant. It is difficult to say whether or not they have their hands above their heads.

122. There is a reference in a Katun Prophecy (CPI) under 5 Ahau (1342-62), which states that the power of the Itza was greatly increased and that the local chiefs (probably Toltec) were unpopular. This would come in the fourth katun after the "founding" of Mayapan and far too long after the beginning of Chichen III to refer to a Maya "resurgence" contemporaneous with the erection of the Chac Mool temple.

123. It should be noted that this is the only large series of Toltec in Group B'. In view of the unusual arrangement of the two columns rising from the altar itself, the possibility of the erection of the platform around the columns already standing there was examined. This would then have placed it in Group B" along with the other five altars. There was, however, no evidence of the presence of the same Jaguar-Eagle-Bird mask at the base of the two columns under the floor of the altar, as is seen as the lowest part of the design on the two columns in front of the dais.

124. It is somewhat difficult to understand why, in view of the suggestion advanced here, we find the Maya who seems to be shown as a prisoner on an interior column (4).

125. These are located on two columns at the south end of the peristyle in the first row: Column 4 has three or four sorcerers; Column 8 has a single magician and three warrior-priests. The same combination of personages in a group of Maya figures is on Column 52 near the south end of the structure. Column 56 shows four warrior-priests; at the very end, Columns 59 and 60 have eight skirted figures making offerings. Two sorcerers are on Column 48, one on Column 51.

126. Linné (1934, p. 99) discusses and illustrates "Maya style" pottery from under the floors at Xolalpan, a Teotihuacan site, and calls attention to the jade noted here, and to the Tula carved shell.

127. Willard (1941, p. 218) shows a drawing of a jade which has a figure in much the same position as those just described. Its importance

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is due to the fact that the author claims it was "hidden more than a thousand years ago beneath the buried Itza pyramid" (the Castillo). I have never seen the jades found in the Castillo *sub*.

CHAPTER V

1. "Talking idols [among the Peten Itzas] clearly were of considerable importance," writes Thompson (1951, p. 392). "Pakoc was an idol 'who speaks to them very frequently.' Martin Can, nephew of Canek, during his cross-examination, said that he supposed that the attack on the Spaniards had been ordered by the demons who were in the idols, and added that they had spoken to him many times. Fuensalida says that the idols used to speak to the people and dance with them in their sacrificial dances. This suggests priests dressed to represent the gods, but it may well be that idols, placed on litters, took part in their dances."

2. For a full discussion and many other references to the early authorities on this episode, its use in the study of the correlation of Maya and Christian chronology, together with Cogolludo's differing account, see Morley, 1920, pp. 472, 478; Tozzer, 1941, pp. 54-56, 272-73; Solis Acala, 1949.

3. Pilgrimages to sacred lakes in Colombia will be mentioned later.

4. Some of this material was taken from an unpublished manuscript of H. J. Spinden.

5. Stephens (1843, 2:xvi, xvii) and Gatherwood (1844, pls. 21, 22) cover Chichen Itza. Numerous editions of both works of Stephens have been issued. See the excellent books of Von Hagen on Stephens (1947) and on Gatherwood (1950), Gropp (1941) for a bibliography of Stephens, Spinden (1920), Helidoro Valle (1950), "Los Mayas Antiguos" (1941), and Tozzer (1941a). Tozzer points out the importance of Stephens and quotes Rodriguez Beteta (1950), who calls Stephens "El Padre del Mayismo y Descubridor de la Cultura Maya." He also describes the many favorable and some skeptical comments on the reports and pictures of Stephens and his English friend. See also Dauterman (1939) and Pollock (1940, p. 185).

6. Bancroft (1888, 4:146-47) thought that Friederichsthal probably preceded both Stephens and Norman in Yucatan. From Von Hagen's statement and from a letter to Prescott, dated September 24, 1841, we learn that Stephens had given the Austrian traveler a "carte du pays" for Yucatan. He was thus in Yucatan between Stephens' first visit to the peninsula, which was limited to Uxmal, and his second, which covered Chichen Itza and many other Yucatecan sites.

7. The results of his second trip were published (see bibliography) in 1880-82, 1882, 1884, and 1885. In addition to the folio plates of mounted photographs published in 1863 and 1864, there is a set of pictures, on quarto-size cards, of ruins, among which pls. 93 to 21 are of Chichen. There is another collection in five volumes of about 164 plates, six of Chichen and 21 of Tula.

There was a famous and unexpected meeting between Maudslay and Charnay at the site now generally called Yaxchilan. The description of this chance encounter is given by Charnay (1887, pp. 435-36) and repeated by Tozzer (1931, p. 405). The Englishman called the ruin Menche; the Frenchman, Lorillard City, after his patron; a few years later, the German, Maler, renamed the site Yaxchilan.

8. See Tozzer (1941a, p. 45), where Agassiz writes to his wife from Merida, on January 2, 1882: "I met here Charnay, the Frenchman sent out by Lorillard, who starts tomorrow on an expedition to Chichen where some of the finest ruins are to be seen and I am going with him to spend there a couple of days." After reading this letter, Charles Eliot Norton, who considered that art and archaeology began and ended with the building of the Parthenon, wrote to Agassiz, "I am especially glad that you have so good an opportunity to see the ruins of Chichen. No other living American, so far as I know, whose report could be trusted has visited them." This was in 1882. He evidently considered Stephens' account on some of the ruins which had been available for 41 years and that of Chichen Itza for 39 years, also as untrustworthy. In a letter to Thomas Carlyle, dated July 26, 1880, Norton writes, "I don't care much for our American Archaeology (though as President of the Society [Archaeological Institute of America] I must say this under my breath), but it is worthwhile to try to get what exact information we can about the semi-barbarians concerning whom so many wild fancies have been current ever since the days of the Spanish Conquest, fancies which the amiable Prescott confirmed by his pleasant romantic narrative. But I do care for the

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- Greeks." I may add that, almost 75 years later, Norton's view of American archaeology is still held by a majority of Classical archaeologists.
- Many of his writings and those of his wife which touch on Chichen Itza are listed in the bibliography. The vogue of Le Plongeon lasted for many years, and his data have been used by many who have written on Chichen Itza. I have personally known Le Plongeon and his wife and all subsequent archaeologists working at Chichen, except for a few Mexican students in recent years.
 - See Tozzer, 1931, on the life and work of Maudslay.
 - See the bibliography for his writings. The above data were mainly from Meier's *Konversations-Lexikon* (1906), furnished by Ernest Strothmann of Merida and Ing. Vicente Molina (1949, 1950) of the same place. See also Charnay (1904) and Maler (1932), which carries his picture; also Kutscher (1944) and Brehme (1950). His bust adorns the entrance of the Museo Arqueológico at Merida. His name alone appears on the monument. Above his grave we read: "Los restos mortales de Teobert Maler descansan en la tierra del 'pais de los faisanes y de ciervos' que tanto amara y que llegó a ser para él una segunda patria."
 - His first article on Chichen Itza was probably written soon after the end of his first trip to the ruins. This was republished in 1932. The first illustrated contribution concerning Chichen was published in *Globus* (1895), and used extensively by Selser (1909). He was a frequent contributor to the newspapers in Merida, Yucatan. A set of these writings from *La Prensa* was republished as a pamphlet in 1910 entitled *Historia de las Ruinas de Chichen Itza*. This is an uncalled-for diatribe mainly on E. H. Thompson and his work. On the appearance of Willard's book in 1926, the articles were partially republished (1926) in *La Revista de Merida*.
 - Reviewed by Baum (1899). A painting by Carlos Vierra based upon Holmes' perspective view was exhibited at the Panama-California Exposition at San Diego and was reproduced in Morley, 1917, pl. 5*b*; Totten, 1926, pl. 29. See Tozzer, 1932a, for a short life of Holmes.
 - Other works touching on Chichen Itza are 1890, pp. 386-87; 1895, p. 597; 1901, p. 820; 1903; 1906; 1909; 1916. The greater number of the articles in his *Collected Works* were translated into English for Charles P. Bowditch. These and other translations of Selser are now in the Peabody Museum. A selection of these was made, edited, and published in mimeograph form by J. Eric S. Thompson and Francis B. Richardson.
 - Miss Breton's writings are listed in the bibliography. Several drawings in color of specimens freshly taken from the waters of the Cenote of Sacrifice were made by her on the spot. Toscano (1946) reports a "more faithful and beautiful copy" of the war scene in the Jaguars than that of Breton and published by Totten. This, presumably by Lehmann, is in the Ethnographical Museum in Berlin. Our fig. 60, the battle scene, was taken from Willard (1926). Most of the original paintings, drawings, sketchbooks, and her library were left to the City Museum, Bristol, England. The Director, Dr. E. S. Wallis, and the Curator of Anthropology, G. R. Stanton, have kindly added a complete list of her archaeological drawings and paintings, now in the Bristol Museum, from over 65 sites in Mexico and Central America. A copy of this is in the Peabody Museum.
- Miss Breton furnished to me, at my request, an account of her activities at Chichen. For purposes of record, this is printed below in full. I had the good fortune to be at Chichen for part of three winters when she was working there.

CHICHEN DAYS

[1900] "February 20 to April 1. Nearly died of fever, ticks and hunger. Took the Maudslay plates of sculptured Chamber E and coloured them, the colour being often visible in the hollows of the reliefs, or sunk into the stone where the surface is weathered. It also varies according to the light.

"In Temple A [Jaguars] traced and coloured the southern part of west wall frescoes and the piece over the door. Went over carefully the Maudslay plates for corrections and compared the inscription in Casa Colorada with the plate. Made a careful coloured drawing with full details, of the façade of the Monjas Annex. Stayed part of the time in the Akab Tzib. (Visited Uxmal.)

[1901] "(To Izamal and Ake) At Chichen Jan. 24 to March 8. Continued copying colours and correcting Maudslay plates. Stayed in Akab Tzib. Pisonillas awful. Traced and coloured garden scene, east wall of fresco. Worked at improving Maudslay's plates

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- of the lintel and drew the under side. Many visitors and talking, and did little except a coloured drawing of the Door, looking outwards. (Stayed ten days at Uxmal, and visited Labna and Loltun.)
- [1902] "At Chichen Feb. 4 to May 2. Cleaned west wall of fresco, traced and coloured copy. Also part of east side. Lived in cottage from Feb. 22. Mrs. Nuttall and her daughter came on April 2, leaving with Tozzer on the 7th. Traced and coloured fresco in vault of long upper chamber, Monjas, with scaffold. (Visited ruins at Oxkintok near Maxcanú, and Chacmultun.)
- [1902-03] "At Chichen Dec. 23 to May 4, in same cottage. Used 36 yards of paper 27 in. wide, doing fresco. Photographed North Building of Ball Court and began copying reliefs. Did south wall of fresco, having cleaned out the bats. This wall required much time to clean and study, especially the Sacrifice Scene in the vault. Drew and coloured (two views each) the fifteen caryatid figures found by Bolio in the outer chamber, buried by Dr. Le Plongeon who found them standing there, buried in rubbish on fallen roof. They were then taken to the National Museum in Mexico. Also I made out and drew the sculptured table (not all found) that rested on the figures. Photographed them in their right positions, they having had the numbers painted on them by Dr. Le Plongeon who photographed them as found (see his 'Queen Moo'). Dr. and Mrs. Selser came for a few days. She photographed the figures, not in position. (See Dr. S.'s paper in Vienna Congress of Americanists 1908.)
- [1904] "At Chichen, in Temple A, April 9 to June 9. Traced and coloured north wall of fresco, very hard to make out, finished other bits. Worked at North Building reliefs, putting details on enlarged photos. and making drawings of them (see Washington Congress 1915). Copied objects from Cenote, brought by Mr. Thompson. Suffered greatly from the huge flying chinchies.
- [1907] "Ten days at Chichen, correcting drawings. (Five weeks at Acanceh, tracing and colouring painted reliefs.)"
- A. C. BRETON
- The Year Books of Carnegie Institution of Washington from 1914 onward contain reports of the work of the Institution in the Maya area; those for 1924-40 and 1946 recount the work at Chichen (see Morley, 1913 and 1946, p. 468, for a list of Carnegie News Service Bulletins on Chichen; Gomez Rul, 1923).
 - In the Introduction and in other places I have acknowledged my great obligation to Carnegie Institution, without whose contributions, both in archaeology and in early history, much of this work could never have been written.
 - Other archaeological investigations and publications within the peninsula of Yucatan undertaken by the Institution include works by J. E. S. Thompson, Pollock and Charlot (Coba), S. K. Lothrop (Tulum), Ruppert and Denison (Campeche, etc.), and E. Willys Andrews (Mayapan and Campeche).
 - Other buildings examined by the Institution are listed below. Most of these and many others structures are described by Ruppert (1952), who cites references for each building: Northeast and West Colonnades (Strs. 3E1 and 3D1), Southeast Colonnade (Str. 3D10), Sweat House (Str. 3E3), Xtoloc Temple (Str. 3D13), Temple of the Grinding Stones (Str. 3C5), Temple of the Interior Atlantean Columns (Str. 3C6), Casa Colorada Ball Court (Str. 3C10), Temple of the Initial Series (Str. 5C4), Temple of the Little Heads (Str. 5C3), Temple of the Owls (Str. 5C7), and the Court of the Thousand Columns. Ruppert (1952, Appendix III) lists the more common names that have been applied to the structures at Chichen, reproduced as an appendix to the present work.
 - Attention is called to the architectural drawings by Andre Remondet of the Castillo, the Casa Colorada, and the Temple of the Three Lintels (the last in Ruppert, 1952). These were done under the auspices of Carnegie Institution, who deposited most of them in the Peabody Museum.
 - This was kindly placed at my disposal by Pollock.
 - The writings of these archaeologists which concern Chichen or Tula are given in the bibliography. Mention should also be made of Bernaldino Tun of Pisté, who has an intimate knowledge of the ruins.
 - The "stages" or platforms have been called "theatres" in most translations of this passage.
 - As noted by Roys (1933, p. 5): Sanchez de "Aguilar also tells us how in their assemblies the Indians read the fables and histories contained in the books. Some of the contents were chanted to the accompaniment of a drum; old songs were sung; and the dramatic representations, the names of which we find listed in the Motul dictionary, were enacted."

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- Maler (1932, pp. 30-35) and Selser called them Mausolea I and III; Maudslay's numbers are 13 and 14; Carnegie Institution designated them Strs. 2D3 and 2D4. The Chac Mool tomb (Mausoleum I) and part of Mausoleum II are illustrated in Proskouriakoff (1946, pl. 23), Alice Le Plongeon (1896a, p. 121; 1902, p. 41), and Le Plongeon (1896, pl. 57). The sculptures are shown in several places: Selser (1910, pp. 357-61, pls. 37-79), Salisbury (1879, p. 65), Alice Le Plongeon (1910, p. 129), and Barrera y Alvarez (1950). Peabody Museum has a small number of objects obtained by Le Plongeon from this ruin (Selser, pl. 40). The Temple of the Cones (Mausoleum III) has several sculptured serpents, cones, and bas-reliefs; these are shown by Selser (pp. 364-77, pls. 42-43) and Maudslay (vol. 3, pls. 52-53).
 - Some translations substitute "gods" for "buildings." Herrera (4, 10, II), before naming Chichen Itza, speaks of structures in which are found "idols in honor of all the buildings, lions, jugs, and other things." There is an interesting quotation (Tozzer, 1941, note 545) in which we learn that, as a preliminary to a human sacrifice, they brought idols from Chichen Itza.
 - For pictures of the ruins of this structure see Willard, 1933, p. 238, and Lothrop, 1952, fig. 2*a*.
 - Tozzer (1941, pp. 261-62) gives accounts of his life, work, and writings.
 - This report (RY, 2:24-26), signed by Juan Bautista de Vargas, Francisco Picon, and Alonso Villanueva, was written in answer to a questionnaire sent to the Indies by order of the Spanish King in 1577.
 - See Tozzer (1941, p. 256) for data on Lopez Medel and the bibliography for his writings. Ternaux-Compans adds that the body was drawn up and buried in a neighboring grave. The comparatively small number of skeletons recovered from the Cenote may perhaps be explained by the fact that some of the victims were removed from the water and buried.
 - In commenting on this cenote, Andrews (1942, p. 261) writes: "My recollection is that it is not a cenote, but a dry impression with steep walls, not very deep. In this is an entrance to a sloping cave, in which I was told there is water. I surmise he confused this cave with the sacrificial cenote at Chichen Itza." In view of the number of other cenotes used for sacrifice, it is very probable that victims were offered here.
 - See Scholes and Adams, 1938, and Scholes and Roys, 1938, who discuss the history of the investigations and the validity of the testimony. Tozzer (1941, pp. 258-65) gives an outline of the ecclesiastical history of the country and the inquisition in Yucatan, including the Landa-Toral controversy, down to the death of Landa in 1579.
 - Part of Herrera is given in Tozzer (1941, Appendix A). This author seems, in many cases, to have copied directly from the manuscript of Francisco Cervantes de Salazar (1560), of which Chapters XXV-XXIX are also given by Tozzer (Appendix D). Landa undoubtedly had access to the same material. Compare Herrera (4, 3, III-IV and 4, 7, IV) with Landa.
 - For an account of Bowditch and his Maya interests, see Tozzer, 1921a, 1922. Previously Salisbury had been a patron of Le Plongeon.
 - See the bibliography for most of his archaeological writings. Among the paper molds he made for the Museum were those of the following bas-reliefs at Chichen Itza: the sculptured lintels of the Monjas and the Akabtzib, the glyph band of the Casa Colorada, the walls and pillars of the North Temple of the Great Ball Court, and the north end of the Lower Temple of the Jaguars. He also took plaster molds of some of the atlantean altar supports. For the American Museum of Natural History in 1911 he made paper molds of the front and west façades of the Temple of the Jaguars.
- More extended accounts of Thompson's work appear in the two books noted below. Willard writes in the preface of his *The City of the Sacred Well* (1926), "This book is primarily an attempt to recount the many thrilling experiences of Edward Herbert Thompson in his lifelong quest for archaeological treasures in the ancient and abandoned city of Chichen Itza, for centuries buried beneath the jungle of Yucatan. . . . if I do not write down the things he has told me they will never be written, for Don Eduardo will not do it. Therefore I have asked and received his permission to write, from memory and from his notes and my own, this book which he has read and corrected." Many of the specimens, though not definitely stated, are implied to have been taken from the well. Additional accounts of Thompson's work are in Willard, 1933. See

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- Tozzer, 1926, for a review of Willard's first book. In 1932 Thompson wrote a popular book on Yucatan, *People of the Serpent, Life and Adventures Among the Maya*. He and Willard do not always agree in detail.
- The question was raised in regard to Thompson's ownership of the Cenote of Sacrifice. The Supreme Court of Justice rendered a verdict (published March 10, 1944) that to the heirs of Edward H. Thompson belonged the hacienda of Chichen on the grounds of which is located the Cenote of Sacrifice. See Rosado Ojeda in *Enciclopedia Yucateca*, 2:166-67.
- In this letter he writes, "While excavating in the Ceremonial Court directly beneath the Temple of the Jaguars for the material of the façade, I came upon the front wall of a sub-terrace, narrow and long, over thirty feet of which are covered with very fine figures in even deeper relief than the figures upon the famous Xtol Chamber. I consider this deeply carved wall section to be fully as valuable as the 'Chamber of the Bas-relief.'" This seems to be one of the earliest references to the benches at the Ball Court.
 - A rather flamboyant passage, written by Thompson, occurs in a foreword of Willard's *Kukulcan, the Bearded Conqueror* (1941): "And with all the precious objects I have taken by force from the rain god at the bottom of the sacred well I am very sure I have wrested from him not a tenth of his jealously held treasure. There are many, many more golden ornaments hid away in the uneven floor of the pit, and many many things even more priceless than gold to the antiquarian."
 - Thompson (1950, Index under "Jade") gives its associations and its possible hieroglyphs. Kidder (1946, pp. 19, 104-24, fig. 154*c,d*) has an excellent section on jade and jade working, and describes the boulder found at Kaminaljuyu.
 - See especially Spinden (1913, pp. 146-50); Proskouriakoff (1950, Ornate Phase of the Late Classic period); Tozzer (1941, pp. 290, 329).

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- This chapter is essentially an assembling in a continuous account of many items, references to which are given in the Syllabus of Tozzer (1941) under the headings of Priesthood (p. 311), Sacrifices and Offerings (p. 315), Human Sacrifice (p. 318), and Rituals of Rain (p. 327) with special emphasis on Cenote Rites (p. 328).
 - Suggesting a greater age for rites at the Cenote, Roys, in a personal communication, writes: "The rain-god cult is certainly a very old one and probably fundamental in Yucatan, just as I imagine the Tlaloc cult was in Mexico. The cults introduced by the Mexican invaders of Yucatan seem to have disappeared very early in Colonial times, while the fundamental popular religious ideas tended to hang on. My chief evidence of this is that the Spanish missionaries rarely, if ever, complain of the worship of Kukulcan, but they do mention Itzamna, the rain god, and others. Consequently the invocations to the cenotes in the prayers recorded in Redfield and Villa (1934) suggest to me that some sort of a cenote cult was an old Maya heritage and, in itself, not a new part of an intrusive Mexican culture. This is not to imply that they threw objects of value into the cenote originally or that human sacrifice was necessarily a part of that original cult, i.e., in Yucatan."
 - Tozzer, 1907; Redfield and Villa, 1934, p. 349; Scholes and Roys, 1938, p. 615. Redfield (1950, p. 114) writes, "The major ceremony of this (pagan) cult, the rain ceremony (cha-chaac) was performed by the people of Chan Kom (in eastern Yucatan) on July 20, 1935; it was held once in 1946 and twice in 1947; and in many of the summers between 1935 and 1946." See also Roys, 1943, pp. 81-83.
 - The Maya text as translated by Roys (1949, p. 165) runs, "At that time there are rabbit-sky Chacs, standing erect at the muddy pond, standing erect at the end of the water ditch." See Thompson, 1950, Index under "Chac," "Bacab," and fig. 41. Tozzer (1941, pp. 307-09) gives references to notes on Chacs, Balams, Bacabs, Cauahs, Uayeb rites, etc.
- The name Chac is given to the four assistants to the priests. We have seen them holding the victim of sacrifice on one of the Cenote disks (Tozzer, 1941, p. 312).
- Thompson (1939) associates Itzamna with Ix Chel, the center of whose worship was at Cozumel. He regards Itzamna as the spouse of Ix Chel and identifies him with the sky monster and water symbols appearing in Maya design. See also Thompson, 1950, Index under "Itzamna"; Tozzer, 1941, p. 306.

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6. The ceremonies for rain in behalf of the Aztec rain gods, *Tlaloc* or *Tlalogue* and the Zapotec *Cocijos*, furnish many points in common with the Maya rain gods and their rituals. Tlaloc and his representations have been mentioned under Mexican gods. Later a more definite comparison of the cenote rites and those of the sixth month of the Aztec year will be made.
7. Caso (1937, pp. 131-33) considers the proper term for *tonalamatl* is *tonalpohualli*. Another spelling is *tonalpouhualli*. The corresponding Maya word for this period is unknown. *Tzolkin* has been used probably incorrectly. See Tozzer, 1941, p. 322, for references to prophecy, omen, sortilege, etc.; Thompson, 1950, pp. 66-103, and his discussion on the "Farmers' Almanacs," pp. 258-61.
8. Dresden 60 (fig. 694) may show the *nacom* or *chilan* being conveyed as a god on the back of an individual. A vase from Ratinlixul, Guatemala (Mason, 1927, p. 378; Blom, 1936, pl. 11; Villacorta, 1938, p. 299) shows a man borne on a litter who may well be the *nacom* or *chilan*; below him is the dog "spotted with the color of cacao." In *graffiti* at Holmul and at Tikal men carried on palanquins may illustrate Landa's statement (Merwin and Vaillant, 1932, p. 90, fig. 31.e; Maler, 1911, p. 59, fig. 12, no. 3). In the frescoes at Bonampak (Room 3) there is an important personage who seems to be carried on a litter supported by at least eight bearers. See also the Magliabecchiano Codex, Nuttall ed., p. 23. Tozzer (1941, p. 311) gives references to the *chilan* or sorcerer.
9. It is possible that the groups shown in Tro-Cortesianus 58b and 59b represent the *chilan* "lying prostrate" with "the god or spirit perched on the ridgepole of the house." Compare Dresden 35a. The *chilans* were undoubtedly the ones who read the *tonalpohualli*.
10. This is probably the tempest of 1560 which is referred to several times in the testimony given in 1562 (Scholes and Adams, pp. 94, 95, 98, 102). See also Herrera, 4, 10, III.
11. Tozzer (1941, pp. 311-13) gives references to priesthood in many of its aspects. Toltec and Maya priests are described and pictured in Chapter IV of this work.
12. There are no actual priests now among either the Maya or the Lacandon. In Yucatan there is a class of men called *h-men*, from the root of the word "to know." They claim to understand how to cure, as well as how to read the future. They are reported as generally ignorant and unintelligent. Among the Lacandon, healing is done by the head of the family along with the ritual of the renovation of the *braseros* or idols. (Redfield and Villa, 1934, pp. 160-80; Rejon Garcia, 1905, pp. 52-57; Tozzer, 1907, pp. 121-23, 134-35.) Redfield (1950, p. 115) writes, "It is the *h-men* who today, as seventeen years ago, plays the important role in maintaining the religious tradition." Marcos de Chimay (1950) writes that in addition to the *ah-kin* and the *h-men* there are, among the present Maya, the *h-naot* or diviner "who uses the crystal or divining stone," the *h'pulyaah*, the witch, and others.
13. See Roys (1933, Appendix D; 1949, p. 157; 1954) for various types of prophecy.
14. This individual may be pictured in Magliabecchiano 77-78 and in Borbonicus 21.
15. Scholes and Roys (1938, p. 605), who review all the evidence of the role of the *ah kin* in human sacrifice, write: "Only once local priests are named as taking part in human sacrifices at the pueblo of Sotuta, but we find three assisting priests from Yaxcaba and Tixcaltuyu also taking part. At Kanchunup six priests are named, at Mopila five, Yaxcaba four, Tibolon four, Usil two, and at Sahcaba only one. All but two at Mopila had Christian names and had evidently been baptized; and one of the Usil priests, Juan Pech, had learned his profession while acting as schoolmaster, an office which he still held."
16. There seems little doubt that this is pictured in Tro-Cortesianus 100d and 111b. The triple representation of the rattles (Tozzer and Allen, 1910, fig. 8) shows the moment when it was shaken. It is possible that certain carved wooden scepters with hollow tops, recovered from the Cenote, may have been the handles of sprinklers. Thompson (1950, p. 193, fig. 33, 4-8) notes that one of the names given the *Chacs* is *Ah hoyoaob*, "the sprinklers," because they rained water upon the earth, and he identifies a glyph which may represent a hand from which drops of water fall.
17. In the first month of the Aztec year, Sahagun (2, I, Bandelier ed., pp. 51, 54, 72) tells us: "In this month they killed many children; they sacrificed them in many places on the top of mountains [or in certain places of the lake of Mexico] tearing out their hearts in honor of the gods of rain, so that they might grant them abun-

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- dant rain. They adorned the children thus to be sacrificed with many ornaments and carried them on their shoulders in litters. These were adorned with plumes and flowers and they played musical instruments, sang and danced in front of them. If the children who were to be killed cried a great deal and shed many tears they were glad of it, for they took it as a prognostication of a great deal of rain for that year."
- Another account of this first month reads: ". . . they celebrated a great festival in honor of the gods of water which they called Tlalocues (Tlalocs). For this they searched for a great many infants, buying them from their mothers and choosing especially those who had two twisted tufts of hair on the head and were born under a lucky sign, saying that those were a more agreeable sacrifice to the gods to make them grant water at the opportune time. They carried these infants up to the high mountains to kill. . . . There, on those mountain-tops, they tore out the hearts of some of the infants, while with others they did it in certain places of the lagune of Mexico . . . [called Pantitlan] and once dead, they cooked and ate them [p. 72]."
- "Thus they killed a few in the first month called Quavitlco [or Atcaualo], others in the second called Tlacaxipealitzli [Tlacaxipeualitzli], others in the third, Tocoxtontli [Tozoxtontli], and again some in the fourth Veytocoxtli [Veitoxoztli] [p. 54]."
18. The sacrifice of children may have been called *cim chich*, reconstructed by Roys as *cim ch'ich'*, tentatively translated as "kill the little ones" or "kill the birds" (Scholes and Roys, 1938, p. 612).
19. E. H. Thompson (1914) speaks of "prisoners and beautiful maidens" as having been cast into the well. Willard (1926, pp. 53-54), G. Mason (1927), Murray (1943), and Mediz Bolio (1950) are among many who follow the same line. At the Panama-California Exposition in San Diego, among a series of bas-reliefs, there were three which attempted to depict "the sacrifice of the virgins," showing "the procession" to the well, "the sacrifice," and "return from the oracle" (Hewett, 1915, p. 96).
20. Sahagun (Troncoso ed., vol. 5, pl. IX) shows slaves about to be sacrificed. See also fig. 404.
21. Among many examples are Kidder, Jennings, and Shook, 1946; Lothrop, 1937; Shook, 1949; Ruz, 1952, 1953.
22. The Bishop fails to mention a major anniversary event. After each of the four dominical days which began their year had run through the numbers from 1 to 13 (4x13), a cycle of 52 years ended. Among the Aztec, at the end of this period a renovation rite of great importance took place. Major changes in the temples, enlargements, the covering of the old by a new structure, may well have occurred at this time. Few pyramidal temples excavated in the Maya area have failed to reveal an earlier interior structure. (Vaillant, 1938; Thompson, 1933; Tozzer, 1941, p. 329.)
23. Roys (1931, p. 309) identifies the first tree as probably *Sapindus saponaria* Linn. and the second as a sort of figtree, *Ficus cotinifolia* H.B.K. (Standl.). This may well be the tree from which the Lacandon made their clothes and obtained their fillets (Tozzer, 1907). There are many references to decorating, with the branches of trees, altars, temples, and sacred places in Mexico. Compare, for example, this act in a ceremony to Tlaloc in the month *Etalqualitzli* as given by Torquemada, 10, XVII.
24. Tozzer (1907) describes and illustrates the little board of the incense nodules used by the Lacandon; some are identical to a type of copal ball rescued from the Cenote.
25. It is possible that the four *Chacs* holding the cord are represented in Madrid 19b. Lothrop (1936) illustrates a carved vase found at Zacualpa which may show the same act. In the lower zone are four seated figures, each holding part of a twisted rope. (See Cogolludo, 4, VI; Thompson, 1930, p. 71.)
26. Certain figures whose bodies seem to be painted black sometimes appear on vases, especially of the Chama type. Were these fasting priests or were they, as is more probable, warriors who, we are told, were also painted black?
- There seems to be a political connotation in the use of soot. In the Chumayel (p. 99) there is the reference, "After that he was despoiled of his insignia and his smut"; also in the Tun Prophecies, "the day of taking the smut from the great rascal." Roys (1949, p. 169) comments on the above, "Removing the smut, apparently a black body paint, implied a loss of power and prestige."
27. Of one of the rain ceremonies carried out by the modern Maya, Redfield and Villa (1934, p. 139) write, "At noon on this first day all the men went with the *h-men* to get 'virgin water' from a cenote situated in the depths of the forest some kilometers from Chan Kom."

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28. The Maya had a goddess *Suhui hak* (virgin fire), the spirit of the new fire and goddess of healing (Cogolludo, 4, VIII). This new fire, made with a fire-drill, is shown in the Madrid 38b,c, 51a. See Borbonicus 34 for an interesting illustration of the new fire rite. Sahagun (Troncoso ed., vol. 5, pl. 44, no. 16) shows new fire being made on the breast of the victim of human sacrifice. Among the Lacandon (Tozzer, 1907, pp. 133-34, pl. 25, no. 2) virgin fire is also made with a fire-drill.
- Of special interest in this connection is the New Fire kindled ceremonially at the end of every 52 years by the Aztec (Sahagun, 7, XI).
29. Sahagun (Troncoso ed., vol. 5, vol. 5, pl. 31, no. 80) shows a man spreading these leaves. Among the Lacandon, the same custom is found: "A carpet of palm leaves covers the ground on the western side of the hermita. . . . During the celebration of a rite, the sacred ollas are arranged in a row along the carpet of leaves" (Tozzer, 1907, p. 113; pl. 20, no. 3).
30. Thompson (1938, pp. 593-94) suggests the probable character of the Maya religion before the advent of the Mexicans. He writes: "The explicit statement that the Manche Chols did not have idols is of particular interest. . . . Instead, these Chols sacrificed to woods, very high and rough mountains, dangerous passes, crossroads, and great whirlpools in rivers, believing that from these came everything needed in life." Later (1939, p. 127) he divides the religious concepts of the peoples of Middle America into two types; one based on a primitive personification of nature and the other "seemingly the outcome of the ideas of a professional or semi-professional priesthood, fused with the incidents of a non-primitive mythology."
31. Tozzer (1941, pp. 313-14, 330) gives an outline of the types of idols and the elaborate rites centered around their manufacture and consecration.
32. Tozzer (1907) discusses the Lacandon custom of manufacturing *braseros*, at stated intervals, and of making a pilgrimage to the ruined sites to deposit the "dead" ones.
33. There is no evidence of the persistence of idols made of more perishable material than wax. Among the Aztec we learn of "images . . . made of a dough called *tzolli* in human shape," with teeth of pumpkin seeds and eyes of black beans. The account continues: "To these figures they offered the paper they make, . . . onto which they dripped a great many drops of the gum called *ulli*, which they melted first. This paper they would hang around the neck of the image. . . . Similar papers dripped all over with *ulli* they would hang on strings . . . in front of the images, and the wind would shake them, for these strings of paper were tied at each end to canes stuck in the ground" (Sahagun, bk. 1, XXI; Bandelier ed., pp. 45-46).
34. Thompson, 1930, *passim*; Tozzer, 1907, *passim*. See the latter, also, for braziers in which the copal is burned. A chant from the Lacandon follows: "I am restoring my offering of copal to you for you (in turn) to restore it to the father (your master), for you to raise it up to the father. . . . See me making any gifts to you, Oh god. May not fall (upon me) fever. . . . See, I am making my gift to you for the health (of) my children."
35. Tozzer (1941, p. 75) gives references to archaeological specimens of copal and of rubber, and a list of illustrations of the two objects as shown in the codices and in other places. Figure 384 shows bowls, seemingly of copal, offered by the donors at Chichen.
36. In the codices, various offerings are noted on altars with blazing balls of copal, and rubber. Maize, represented by the Kan sign, seems to have been the most common form of gift to the gods shown in the manuscripts. This sign alone or combined with the body of an iguana or the head of a turkey appears in small dishes, with pictures of a haunch of venison and a fish (see Tozzer and Allen, 1910).
37. The gods descending from on high have already been discussed and illustrated in figs. 254-56.
38. It was not the root but the bark of the *balche* tree (*Lonchocarpus longistylus* Pittier; in Spanish, *pitarella*).
39. On intoxication demanded as part of the ritual, see Villagutierre, 8, XII; Sanchez de Aguilar, 1892, ed. p. 101. For similar customs among the Quiche, see Ximenez, 2, XII. Lothrop (1926, 1: 55-56) quotes at length from Oviedo (2, XII) on drunkenness in Nicaragua. See Magliabecchiano 73-74 for a representation of ceremonial intoxication. Tozzer (1941, p. 316) gives many details concerning religious inebriation.
40. In a letter of Fray Juan de Buenaventura, Sept. 7, 1614, and mentioned by Scholes and Roys, 1948, p. 286.

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41. This blue is probably *Indigofera anil* Linn. See Tozzer, 1941, p. 315. Roys (1931, p. 238) quotes from two *relaciones* (RY, 1: 55; 2: 147): "There is the wood or plant from which indigo is made, which the natives of these provinces formerly employed for a blue dye or paint, hence the Spaniards availed themselves of it and started large plantations. . . . Eight years ago it was carried to Spain, from which his Majesty derived great profit." Further, "These Indians, it is understood, have diminished in number because of a certain profitable business in indigo which has been discovered in this land."
- See Spinden (1949, p. 7) who discusses the use of "Maya blue" from the 6th century until the coming of the Spaniards. There is a reference "to paint with blue" in one of the Katun prophecies (Barrera Vasquez and Rendón, 1948, p. 144).
42. Tozzer, 1907, pp. 169-89. See also Redfield and Villa, 1934, pp. 339-56.
43. This type of Maya head deformation has been noted on the stone bas-reliefs and on many of the carved jades, both dating generally from the Great period (see Spinden, 1913, p. 23). Tozzer (1930) points out the difference on the gold disks at Chichen between the Maya with their flattened foreheads and the Mexicans with their undeformed heads. Of the 50 skulls recovered from the Cenote of Sacrifice only one shows a marked frontal deformation. For other references to this custom, see Tozzer, 1941, p. 293.
44. There are many illustrations in the codices and stone bas-reliefs of shedding of blood (see Madrid 96b). Running a cord, studded with thorns, through the tongue is seen on Lintel 24 from Yaxchilan (Maudslay, 2: pl. 86) and recalls a rite performed by the Aztec in the fifth month, Toxcatl, when the high priest drew through a hole made in his tongue 405 "of the little sticks which were also newly made and of the thickness of a thumb or even thicker. . . . These castigations were repeated after 20, 60, and 80 days." Compare the account by Las Casas (CLXXII) where the Aztec chief, to set an example of piety, slits his tongue and passes 450 sticks of various sizes through the opening. This was repeated every 20 days, the number of sticks and the size decreasing as the time of the fast approached. The rope through the tongue is seen also on Stela 14 at Naranjo. See Nuttall (1904) for other early descriptions and illustrations of this sacrifice in Mexico. Note especially her fig. 1, the famous stone of Huilicintla from Tuxpan, Veracruz. See also Motolinia, 1, IX. For other references, see Tozzer, 1941, p. 318.
45. The most detailed account of this operation is given in Ximenez (5, XXXI) among the Maya Manche Chol, quoted by Thompson (1938a, p. 594). Fray Delgado speaks as follows: "In Vicente Pach's (Pech's) ranch I saw the sacrifice. They took a chisel and wooden mallet, placed the one who had to sacrifice himself on a smooth stone slab, took out his penis, and cut it in three parts two finger breadths (up), the largest in the center, saying at the same time incantations and words I did not understand. The one who was undergoing the operation did not seem to suffer, and did not lose a drop of blood." Thompson adds, "The statement that no blood was lost would appear dubious." He calls attention to a late 17th-century account of the Mopans (Ximenez, 5, LVIII) where a similar rite may be inferred.
46. The "drain" at Pantitlan is also mentioned as one of the seven different places where children were sacrificed in the first month of the year. The other six are all mountains around the valley (Sahagun, 2, XX, Bandelier ed., pp. 72-73).
- This account is taken from the Spanish version of the Florentine Codex of Sahagun by Carlos Maria de Bustamante (1829-30) and translated into English by Fanny R. Bandelier (1932). The English translation, directly from the Aztec version, of the passage given here by Anderson and Dibble (1951, bk. 2, pt. 3, p. 84) has far fewer details.
- The "sink" surrounded by poles is shown in the Sahagun picture (fig. 708), also the "priests playing their trumpets and shells standing upright in the bow of the boat," "The bowl with the hearts" (fig. 709), and "the priests washing off the blue paint" which earlier, after they had fasted, they had put on their heads."
47. Noguera calls my attention to a quotation by Seler in his "Excavations on the site of the principal temple in Mexico" (1901, Coll. Works, 2:769) which may refer to a "drain" as a spring formerly near the center of Tenochtitlan. We read: "The center of the city was formed by a lofty pyramid . . . which bore on its upper platform the sanctuaries of Uitzilopochtli, the national god, and of Tlaloc, the rain god. According to the old myths, this was erected on or near a spot where amid the reeds on the shore of the lake,

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- a clear spring of fresh water bubbled up. This spring—called Tezpelatl, "water of the color of yellow ornamental feathers,"—played a leading part at the feasts and in the ceremonies. It was filled up by the Spaniards, but opened again in 1528 and for a long time was used at the little place called today Empedradillo [the present street Monte de Piedad] in front of the west side of the cathedral, but later it was filled up again. Also in connection with the present work in the Calle de las Escalerillas [now Avenida Guatemala] [and also during explorations carried more recently] a large bubbling spring of clear drinking water was again found at a depth of seven meters."
48. Tozzer (1941, p. 115) suggests that the "beams" may have been carved wooden stelae. There is every reason to suppose that wood may have preceded or sometimes taken the place of stone as the material for these standing stones.
49. At Chichen in the Temple of the Warriors and in Str. 4B1, 3E7, 5B13, 5C4, and 6E6, Ruppert reports "sacrificial stones." One carved on three sides was found on the third story of the Monjas along with stones dating from earlier times used in the construction of this superstructure, all probably used in Chichen II or III. In addition to the sacrificial stones shown in the actual immolation in fresco and on the disks at this site, other stones are shown in figs. 396 and 397.
50. The Mexican sacrificial stone (*techcatl*) is described and pictured by Beyer (1918).
51. In this respect, he seems to have corresponded to the *Ueza-eche*, "the sacrificers" of the Zapotec, who were held in light esteem (Seler, 1895, Eng. ed., p. 276, after Burgoa, 1674).
52. The latest of many descriptions of this type of sacrifice is given by Acosta Saignes, 1950, pp. 23-32.
53. A sacrificial knife of flint with wooden handle carved to represent two intertwined serpents was recovered from the Cenote of Sacrifice. This knife (shown by Willard, 1926, facing p. 140) is the only object of all those pictured by Willard as coming from the Cenote which is in the collection from this well now in the Peabody Museum. This knife is also pictured in imaginary colors by Gates (1937, p. 49); there are no colors left on the original. See also Morley, 1946, p. 238; Follett, 1932, p. 392. Thompson (1950, pp. 86-87), in discussing the Maya day sign Etz'nab, which corresponds to the Mexican day Tecpatl, "flint knife," goes into detail regarding its use and association, especially in Mexico.
54. Herrera (4, 10, IV) gives essentially the same account. This type of putting to death seems, also, to have been used as a common penalty for adultery for the wife's paramour (RY, 1:80). In a grafito at Tikal there is a representation of this form of sacrifice (fig. 409). There is, unfortunately, no way of dating these wall scratchings. The design may have been made after Tikal flourished in the early Great period (300-900). For other illustrations, see those pictured in Codex Becker No. 1 (MS. du Cacique, X); Codex Nuttal 84; Histoire Toltec-Chichimèque, pls. 15, 24, 25, 35 (Boban, 49, 50, 57, 61); Codex Fernandez Leal, pls. 5, 10.
55. Scholes and Roys (1948, p. 346) state that "within twenty years after the Spanish conquest crucifixion sometimes became a part of human sacrifice." Roys (1938), commenting on this method of death, points out that crucifixion was associated with the worship of the rain gods and the cenote cult and that Francisco Hernandez (1545, 1921 ed., p. 209), one of the first missionaries, reported that the cross was adored as a god of water or rain. Roys (1939, p. 362) gives a document of 1814 where there is a personification of the cross (*Ca Yum Santa Cruz*), "Our Lord, the Holy Cross." He also points out that Gann (1918, p. 41) states that in eastern Yucatan for a long time after the War of the Castes in the middle of the 19th century, the natives carried on a kind of travesty of the rites of the Church which centered around what was known as the "Santa Cruz," a wooden cross supposed to be gifted with the power of speech and which acted as a sort of oracle. Here there is a suggestion of the idol oracle of ancient times at Cozumel (see Tozzer, 1941, p. 320).
56. See Sahagun (Troncoso ed., vol. 5, pl. XXII) for this type of sacrifice among the Aztec. Tozzer (1941, p. 320) gives an outline of the different modes of killing the victim. Lothrop (1954) discusses suicide, sacrifice, and mutilations in burials in Panama.
57. For an excellent representation of this among the Aztec see fig. 402.
58. It will be remembered that the Lacandon place the offerings of food and drink "in the mouths" or "on the snouts" of the heads on their braziers. These incense burners may be much the same as some,

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- at least, of the clay idols of an earlier time. Tozzer (1907, pl. 15, no. 2) shows the snouted face of a Lacandon brazier and (pl. 16, nos. 1, 2; pl. 17, nos. 2-4) incense burners found at the ruins of Labna, Cozumel, and other places.
59. In the excavation by Carnegie Institution beneath the floors of temples at Uaxactun, many cists were found. Several of these contained two plain dishes of a red ware with flaring rims, one overturned and covering the other. Between these dishes were bones, including skulls. If human hearts had been included in the offering as in Landa's time, all remains of these have disappeared (Ricketson and Ricketson, 1937, pp. 150-53). On the famous polychrome vase from the same site (A. L. Smith, 1932, pl. 5) a seated jaguar holds a bowl covered by another, both tied together with a cord. Thompson (1939, p. 196) reports a burial in San Jose, British Honduras, where there are "three lateral-ridged subtype dishes. One had been inverted over a skull with lip supported by stones. The skull rested on [the] second which had been inverted over [the] third."
- Among the Aztec, conventionalized human hearts are most frequently seen in the stone carvings and the codices (fig. 411), and many examples of the *quauhxicalli* or heart box of stone (fig. 412), sometimes called "the vase of the eagle warriors," have been found. Among the Maya the heart does not seem to have been commonly represented. On Mausoleums I and II at Chichen (Seler, 1909, pls. 37, 38, 41) jaguars and eagles hold hearts of the fallen warriors in their claws (figs. 432, 435); on the sculptured bands on the outside of the Temple of the Warriors (fig. 431) jaguars, bears, eagles, and an unidentified animal hold in one paw or claw a human heart. Much the same thing is seen at Cotzumalhuapa and Tula in connection with the Jaguar-Eagle rites.
60. The parallel here to the Aztec rite in the sixth month of the year, when the hearts of those sacrificed were thrown into an enclosure made in a lake, has already been noted.
61. From the Sacred Cenote a skull was recovered with the crown cut away, eye sockets filled with wooden plugs, and remains of rubber and painted plaster over the face, evidently giving it, in its original condition, a lifelike appearance. Motolinia describes another type of preservation for captured "señores or important people" (see Note 64).
62. This rite is probably shown in Madrid 34, where a dead man, the only one on any of the four pages of this section of the codex, is sitting beside a jar of offerings. Compare the corresponding page in Dresden 27, where a figure of the death god (A) is making the offering of the headless turkey. In Dresden 28, at the top of the page, the death god is being carried on the back of the dog-headed priest. In Madrid 28b and 36b, a black vulture is eating the corn (kan). See Tozzer and Allen, 1910, p. 333.
63. The Lacandon preserve in their idol houses the lower jaws, especially of deer, monkey, and wild boar. They may have served as signs or counts of their sacrifices (Tozzer, 1907, p. 11). Sapper (1891, p. 893) observed the same custom.
64. Carved human longbones have been recovered from the Cenote and may well have been used as trophies. Trophy heads at Chichen are taken up in Chapter III-8. Altar 5 at Tikal shows what is evidently a ritual held over a human skull resting on the longbones (fig. 390). Clavigero (1826, 1: 257) reports that the Mexicans preserved the heads of victims of sacrifice if they were prisoners of war. Motolinia (1, IX) gives us more information: "The heads of those sacrificed, especially those taken in war, are flayed and if they are señores or important people captured, they are flayed with the hair and dried to preserve them. There were many at first and if it had not been that they had some beards no one would know but what they were the faces of boys of five or six years and they caused them to be preserved, dried and cured." Torquemada (1, XII) has a parallel passage.
65. Cists containing burials and foundation offerings have been described. Urns or dishes with cremated remains and other grave offerings have appeared in several archaeological investigations. The vaults and the covered bowls at Holmul are excellent examples (Merwin and Vaillant, 1932; Thompson, 1940, p. 132; Wauchope, 1942).
66. It is worthy of note that small wooden statues or idols have been recovered from the Sacred Cenote, and that in the back of at least one of them there is a hole which might well have been filled with part of the cremated remains of a "father of position."

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67. In the Cotzumalhuapa area two stones of the god's head were found. Saville (1929) has an excellent discussion of this Mexican god, giving early references, especially Sahagun, and he shows illustrations of the god as represented by stone and other figures and in the manuscripts. See also the description of the Aztec rite to Xipe, called *Tlacaxipehualiztli*, "the flaying of men," coming in the second month of the year, as given by many authorities and discussed in detail by Seler, 1899b, pp. 76-100. See also Acosta Saignes, 1950, with excellent references. A late modification of the rite in Nicaragua, from Oviedo (42, XI), is given by Saville and by Lothrop (1926, 1: 81-85).
68. This was probably one of the customs introduced from Mexico accompanying human sacrifice. Clavigero (Bk. 6), writing of ceremonial cannibalism among the Aztec, tells us that if the victims of sacrifice were not prisoners of war, their legs, thighs, and arms were eaten, the rest of the body was burned. Among many accounts of this custom in Mexico is that by Bernal Diaz (XCII). After describing the entrance to an idol house formed by the open mouth of a monster, he continues: "... a little way off was a place of sacrifice all blood-stained and black with smoke [of the incense], and encrusted with blood, and there were many great ollas and cántaros and tinajas of water inside the house, for it was here that they cooked the flesh of the unfortunate Indians who were sacrificed, which was eaten by the priests."
- For representations of these acts among the Aztec, see Magliabecchiano 67, 72, 73 and Sahagun, Troncoso ed., vol. 5, pls. 24, 31.
69. See Tozzer (1941, p. 294) for further references to musical instruments, actual specimens, and representations of them, mainly in the manuscripts. "The long thin trumpets," the turtle-shell drum, and rattles are among the instruments represented in the Bonampak murals.
70. Tozzer (1907, p. 146) writes that among the Lacandon the old braziers and other utensils used in their rites are carefully deposited in some sacred place, usually an ancient ruin. "It is," he adds (*ibid.*, p. 122), "one of the obligations of a feast that everyone shall eat and drink every particle of the offering contained in the gourd given him by the leader. The inside of the *jicava* is even cleaned by rubbing the hand around it, and the spoon is treated in the same way until not a drop of the offering remains unconsumed." Thompson (1930, p. 71) states that everything used in the rites of the Maya of British Honduras to cure disease that is not consumed is carefully taken and left outside the town. There is a somewhat similar idea among the Kekchi (Sapper, 1895) where there is a belief that Tzulacca will be angry and no game will be forthcoming if any particle of an animal which is edible and which has been caught for food is thrown away.
71. The sacrifice of a heart made of dough suggests in some ways the Aztec offering in the tenth month Xocotlvetzi (Sahagun, Bandelier ed., p. 109) of "a statue resembling a man and made of a dough of wild amaranth seeds."
- In the center of one of the many balls of copal recovered from the Cenote of Sacrifice was a very well shaped human heart made out of some vegetable substance, possibly maize.
72. The sacrifice of a turkey is shown in Dresden 25-28. Gann (1918, p. 45), LaFarge and Byers (1931, p. 177), and Redfield and Villa (1934, pp. 127, 135) are among many who mention the turkey sacrifice among the present Maya. See Tozzer (1941, pp. 145, 316) for an extended discussion of animal sacrifice, also Tozzer and Allen (1910).

CHAPTER VII

1. For a discussion of trade and monetary units of the Maya, see Blom, 1932a. See also J. E. S. Thompson, 1929; Tozzer, 1941, pp. 302-03; Roys, 1939, 1943; Scholes and Roys, 1948; Chard, 1950; Lothrop, 1926, 1936, 1950, 1952; Kidder, 1950. In the questionnaire sent out by the King of Spain in 1577, Question XXXIII relates to trade, and much information can be obtained by looking at the answers to this section in the various *relaciones* (RY, 1 and 2). Carrillo y Ancona (1897) has an article on commerce in Yucatan before the Conquest. See also Behrman, 1875. Clavigero (Bk. 7) has an excellent description of Aztec trade, houses for traders, and rules for the conduct of the women left at home. Sahagun (Bk. 9) gives an extensive account of Aztec merchants and their rituals. Bancroft (2: XII), who devotes a chapter to the commerce of the Nahua nations, furnishes references to the subject.

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2. The famous vase from Ratinlixul, Guatemala, now in the University Museum, Philadelphia, shows a chief or a merchant carried in a litter (Mason, 1927; Kelemen, 1943, pl. 130). A man carried in a litter appears in a grafito at Holmul (Merwin and Vaillant, 1932, p. 90). On the lower row of figures in the bas-relief of the Lower Temple of the Jaguars at Chichen Itza, Seler (1898, 1: 688) identifies "fisher folk from the coast of the Olmeca in Tabasco."
3. Vases of the Chama type are shown by Gordon and Mason (1925-40, pls. 8, 30) and Joyce (1914, pl. 24). Lothrop (1936, pl. 7) publishes a vase of the same type with a similar scene from Zacualpa. See also Spinden, 1913, p. 140. Blom and LaFarge (1926-27, pp. 385-86) describe a Maya-Tzeltal trader and give a drawing from the Laud Codex of an Aztec trader.
4. "The region which the Spaniards called the Province of Tabasco . . . extended roughly from what is now Laguna Tupilco (on the Gulf of Mexico) to Tenosique on the Usumacinta River. . . . The Aztec called the country Anahuac Xicalango and included it among certain areas known as Nonoualco, 'the place where the language (Nahuatl) changes (to Maya),' although the latter term is said to have covered a part of Yucatan as well. Tabasco was no doubt the land which the Yucatan Maya chronicle of Mani calls Nonoual" (Roys, 1943, p. 98).
5. For more extended discussion of cacao, the ritual connected with its cultivation, its use among Mexicans and Maya, and its Maya name, see Tozzer, 1941, p. 380; Thompson, 1930, pp. 185-86.
6. Thompson (1950, pp. 144-45) discusses the many uses of the word *tun* and writes, "The symbolic form of the *tun* as used in the Initial Series almost surely contains the sign for jade." See also his p. 274 and figs. 8, 1-7, 9-11; 17, 14-22.
7. Boekelman (1935a) discusses at length shells for tribute, gaming, decoration, etc., and gives a map of the "archeo-conchological culture zones of Middle America." See also Thompson, 1950, Index under "Shell."
8. See Villa, 1934, bibliography; Thompson, 1929, 1930; Bennett, 1930; Saville, 1930, 1935; Thompson, Pollock, and Charlot, 1932; Spinden, 1950. Morley (1946, pl. 56) shows a stone road roller. Modern descriptions of other ancient roads are in Stephens, 1843, 2:341; Brasseur de Bourbourg, 1867, p. 47; Alice Le Plongeon, 1879; Saville, 1930; Bennett, 1930; Blom, 1946.
9. Compare the Lacandon town which "has four trails leading to it, corresponding to the four cardinal points" (Tozzer, 1907, p. 39). See also Villa, 1934; Redfield and Villa, 1934, p. 114.
10. There were several important maps of the colonial period, the earliest of which is the map accompanying the Mani land treaty of 1557. Tulane University has a 1596 copy of this manuscript, which is described by Gropp (1941, pp. 260-62) who gives the map. Among other publications of this map is that of Roys, 1943, p. 177. A map of the Province of Mani also accompanies the *Xiu Probanza* or *Cronica de Oxkutzcab*, and is reproduced by Roys, 1943, p. 176. Tulane owns an early map of Sotuta which is also given by Roys. The Aztec were famous for their maps.
11. The two best modern maps of the Maya area are in Scholes and Roys, 1948. See "Maps" in Index of Roys, 1939, 1943, and Scholes and Roys, 1948.
12. Roys (1943, p. 52) also speaks of the existence "of a regular route on which cacao was packed overland from Ucum on the lower Rio Hondo to the Xiu towns at the base of the sierra, a distance of 235 km. by air and much farther by the winding trail."
13. For illustrations of many of these objects, see especially the Aztec tribute rolls (Peñafiel, 1890). There is a well-known passage on Mexican trade in Sahagun (1, XIX, Bandelier ed., pp. 41-43): "It is supposed that Yiacatecutli, god of merchants, was the one who started trading among those people, and that for this reason the guild of the merchants adopted him as their god and honored him in different ways, one being to offer him paper with which they covered his statues wherever they found them. They also venerated the cane (stick) with which they walked, which was a solid cane called utatl (also ootate). They have still another kind of cane or walking stick made of a solid light black cane without a knot, and which looks like reed such as is used in Spain. All merchants used that kind of canes on the road. When they reached the place where they were to spend the night, they would gather all their canes and tie them into one bundle, which they then stuck at the head of the sleeping place or camp. They would sprinkle blood in front of this bundle, which blood they obtained by bleeding their own ears, tongue, arms or legs. Then they offered incense by building a fire and burning copal in

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front of this bundle of sticks, which they considered as the image of the god Yiacatecutli, and by this means they asked him to protect them from all danger. These merchants traveled over the whole land, bartering, trading, buying in some place and selling in another what they had purchased. They also travel through towns, along the seashore, and in the interior. There isn't a place they do not pry into and visit, here buying, there selling; it is neither too hot for them in this place nor too cold in that one. They don't shun a road because it is too rough nor too difficult to search for whatever is there, either pretty or valuable or advantageous to buy and sell again. These traders suffer great hardships and are exceedingly daring; they go anywhere, even if it should be an enemy's domain and they are very sly in their deals with strangers, in learning their languages, as well as in their tactics, attaining through kindness what they want, thus gaining their confidence. . . .

"Whenever these traders or merchants left for such a voyage to foreign lands they took leave of their relatives amid great ceremonies, in accordance with ancient rites. They remained absent many years, and when they returned they brought back great riches (many treasures). In order to display what they had and to give an account of the countries they had visited and the things they had seen, soon upon their return they would invite all the traders (merchants), especially the principal ones, as well as the chieftains of the town, and arrange a great festivity for them. These festivities they called 'washing of feet' . . .

"All these traders, after returning from one of their voyages, as they now were wealthy, would buy male and female slaves, whom they offered to their god on his feast, this generally being Yiacatecutli, who had five brothers and one sister, all being held as deities, and according to the size of their devotion, they would sacrifice slaves to each one of them separately on his personal feast, or to all together, or to the sister alone. . . . There was a regular fair in a town (village) called Azcapotzalco, at two leagues from Mexico where slaves, men and women, were sold."

14. "Hibueras," Roys (1943, p. 113) tells us, "was the coast region from the Rio Dulce to the Uluva River and included the Uluva and Naco valleys; the name Uluva was sometimes loosely applied to the entire district. Honduras extended along the coast from a point about 10 leagues west of Trujillo to Cape Camaron. The hinterland was not very well defined." (See Roys' map, p. 114.)
15. Lothrop (1924, p. 13) notes a letter written by Bartholomew Columbus in 1505, where it is stated that this canoe came from a "certain province called Maia or Yucatan." Lothrop points out that

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Brinton (1882, p. 10n.) states, on the authority of Berendt, that "or Yucatan" was a later interpolation. Lothrop adds, "As the north coast of Honduras, less than 30 miles from Guanaja, was called 'Maia,' there is no necessity at all of connecting the canoe with Yucatan."

16. Blom (1932, p. 548), in commenting on this passage, suggests, "For the water traffic, there was even an established 'light-house' service."
17. Both of these quotations are given by Blom, 1932. There is a famous description of an Aztec market in Bernal Diaz, XCII.
18. Lothrop has been good enough to send me a quotation from his diary concerning the market in Tecpan, Guatemala, in 1928. "In the Jusguardo, I was much impressed by the Indian Alcalde, a big strong man whose slightly deformed head rose in an unbroken curve from the tip of his big nose; in profile he might have posed for the stone tablets at Palenque. . . . Seeing him deal with the quarrels arising in the well-filled market gave more of a glimpse than I have ever had of how these Indians controlled their complex civilization in the past. Restlessly swinging a chain and key ring, he rapidly settled case after case. With some he was mild and gentle, especially with an old woman who knelt before him and poured forth her troubles in the high falsetto demanded by etiquette. Again he would jump to his feet, neck veins swollen with rage, and order some unfortunate out of the market in a deeply roaring voice heard beyond the door and outer corridor. Between times he devoured with gusto untold yards of sugar cane and politely asked me about the tall buildings of New York. Virile, assured, well poised, ruthless but just, he was well endowed to be a Cakchiquel King—as he might have been under other circumstances." McBryde (1934) and Redfield (1939) are among others who have described modern Maya markets.
19. Compare a similar rite in Mexico. "Before a merchant went to a journey he brought by night to the fire god, the god of earth, the god of travelling merchants (*Yacatecutli*) a sacrifice of papers, spattered with rubber, copal and food" (Seler, 1899a).
20. See Tozzer, 1941, p. 327, for the ritual for travelers and additional data on Ek Chuah, and Tozzer, 1907, pp. 147-48, 183, 189, for the Lacandon ritual and appropriate prayers when a journey is undertaken. A possible survival of Ek Chuah may be the Black Christ of Esquipulas (Lothrop, 1927a).
21. The Kingsborough Codex gives illustrations and descriptions of the tribute demanded of the natives of Tepetlaoztoc, Mexico. This is one of several native petitions protesting against the heavy demands of the Spaniards. See Tozzer, 1941, p. 258.

APPENDIX

(Ruppert, 1952, p. 164)

SOME OF THE MORE COMMON NAMES APPEARING IN LITERATURE THAT HAVE BEEN APPLIED TO STRUCTURES AT CHICHEN ITZA

Akabdzib: 4D1	Mercado: 3D11
Atlantean Columns, Temple of the: 5C15	Monjas: 4C1
Ball Court, Great: 2D1	North Colonnade: 2D10
Ball Court, Red House: 3C10	North Temple of the Big Ball Court: 2D1
Ball Court, Thompson's: 3E2	Northeast Colonnade: 3E1
Ball Court, Warriors: 2D9	Northwest Colonnade: 2D8
Big Tables, Temple of the: 2D7	Nunnery: 4C1
Bird Cornice, Temple of the: 5A1	Observatory: 3C15
Caracol: 3C15	One Lintel, Temple of the: 7B1
Casa Colorada: 3C9	Osario: 3C1
Castillo: 2D5	Owls, Temple of the: 5C7
Castillo of Old Chichen: 5B18	Palace: 4C1
Chac Mool, Temple of the: 2D8	Phalli, House of the: 5C14
Chac Mool, Tomb of the: 2D3	Portal Vault, Caracol South Annex: 3C15
Chichanchob: 3C9	Portal Vault, Initial Series: 5C16
Columnos Confundidos: 2C3	Quetzalcoatl, Temple of: 2D5
Cones, Terrace, Temple, or Platform of the: 2D4	Red House: 3C9
Dark Writing, House of the: 4D1	Round Tower: 3C15
Deer, House of the: 3C7	Sculptured Jambs, Temple of the: 4B1
Eagles, Terrace, Temple, or Platform of the: 2D3	Shells, House of the: 5C5
Four Lintels, Temple of the: 7B4	Skulls, Temple, Terrace, or Platform of the: 2D2
Grinding Stones, House of the: 3C5	Snail: 3C15
Gymnasium: 2D1	Snails, Temple of the: 5C5
Hieroglyphic Jambs, Temple of the: 6E3	South Temple of the Big Ball Court: 2D1
High Priest's Grave: 3C1	Southeast Annex of the Monjas: 4C1
Iglesia: 4C1	Southeast Colonnade: 3D10
Initial Series, Temple of the: 5C4	Sweat House: 3E3
Interior Atlantean Columns, Temple of the: 3C6	Sweat House, Caracol South Annex: 3C15
Jaguar Atlantean Columns, Temple of the: 5B21	Tennis Court: 2D1
Jaguars, Lower Temple of the: 2D1	Thompson's Temple: 3D9
Jaguars, Upper Temple of the: 2D1	Three Lintels, Temple of the: 7B3
Jaguars and Shields, Temple of the: 2D1	Turtle, Temple of the: 5B2
Kukulcan, Temple of: 2D5	Tzompantli: 2D2
Little Heads, Temple of the: 5C3	Tzumpelche: 3E3
Little Tables, Temple of the: 3D8	Wall Panels, Temple of the: 3C16
Maudslay's No. 6: 3C11	Warriors, Temple of the: 2D8
Mausoleum I: 2D3	West Colonnade: 3D1
Mausoleum II: 2D2	Xtoloc Cenote, Temple of the: 3D13
Mausoleum III: 2D4	

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Abbreviations: LTJ, *Lower Temple of the Jaguars*; NC, *North Colonnade*; NEC, *Northwest Colonnade*; NTBC, *North Temple of the Big (or Great) Ball Court*; NWC, *Northwest Colonnade*; STBC, *South Temple of the Big*

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(or Great) Ball Court; TCM, *Temple of the Chac Mool*; TJ, *Temple of the Jaguars*; TLT, *Temple of the Little Tables*; TW, *Temple of the Warriors*

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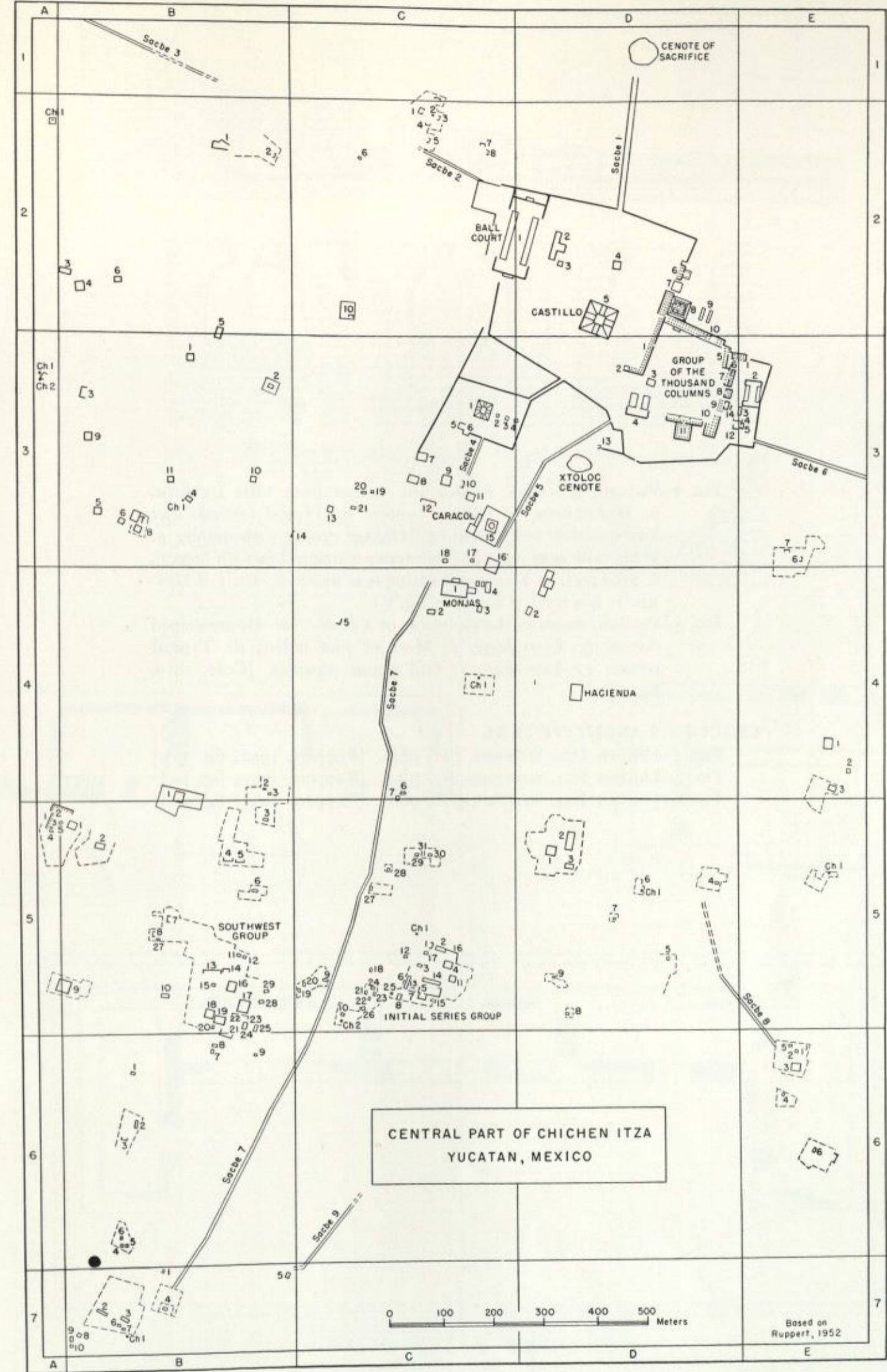
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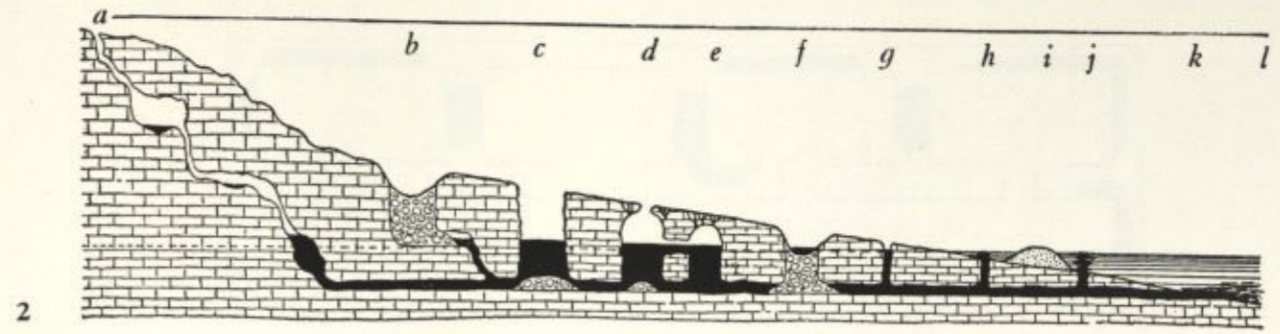
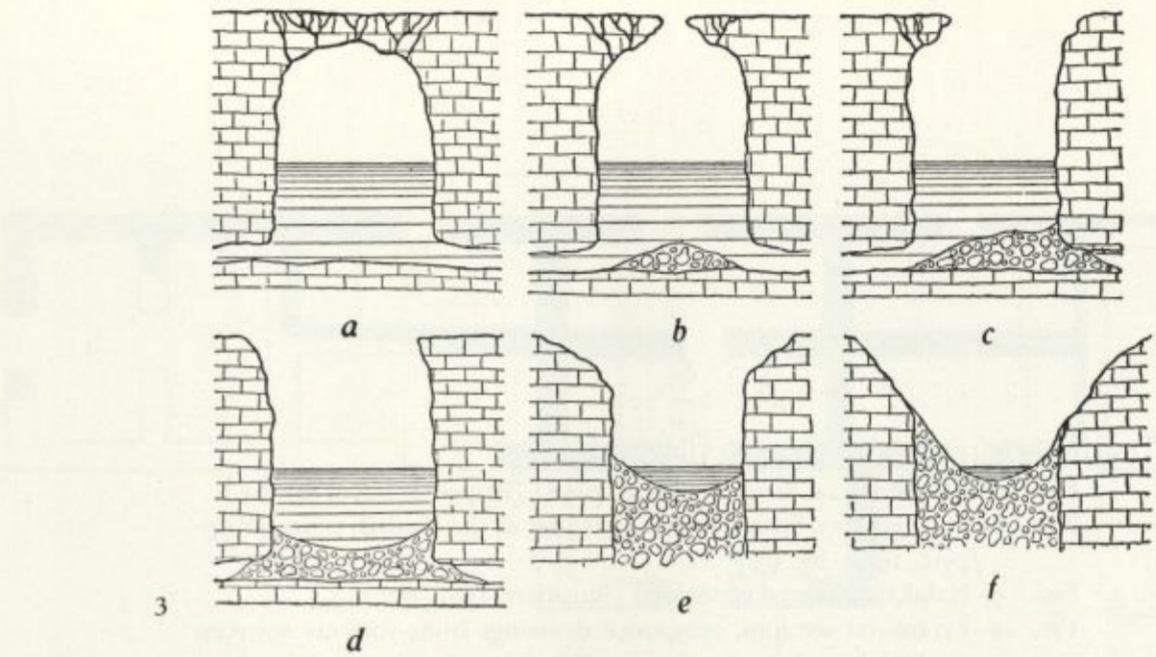


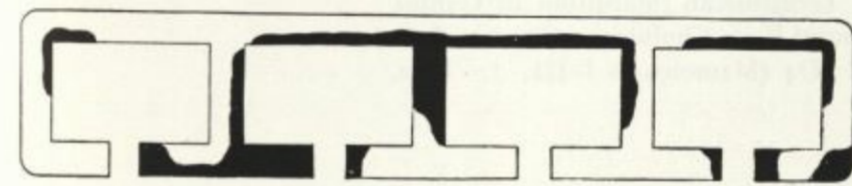
FIG. 2—Yucatan, schematic north-south section from hills to coast. *a*: Hill cavern. *b*: Old-age cenote. *c*: Typical cenote. *d,e*: Young cenote and cavern. *f*: Old-age cenote with water. *g*: Water hole near coast. *h*: Fresh-water spring in brackish lagoon. *i*: Sand reef. *j*: Fresh-water spring near shore. *k*: Gulf of Mexico. *l*: Sea level. [Cole, 1910, fig. 8.]

FIG. 3—Yucatan, stages in the evolution of a cenote. *a*: Dome-shaped cavern. *b*: Later stage. *c*: Most of roof fallen. *d*: Typical cenote. *e*: Late stage. *f*: Old cenote (*aguada*). [Cole, 1910, fig. 2.]

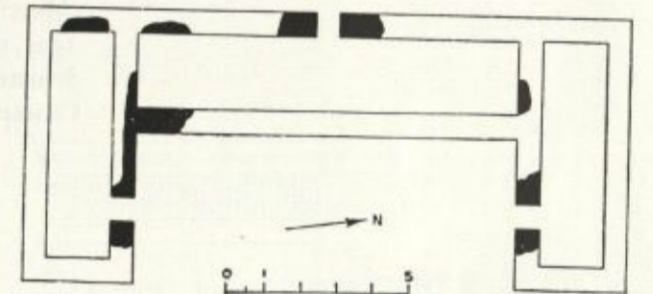


CHICHEN I ARCHITECTURE

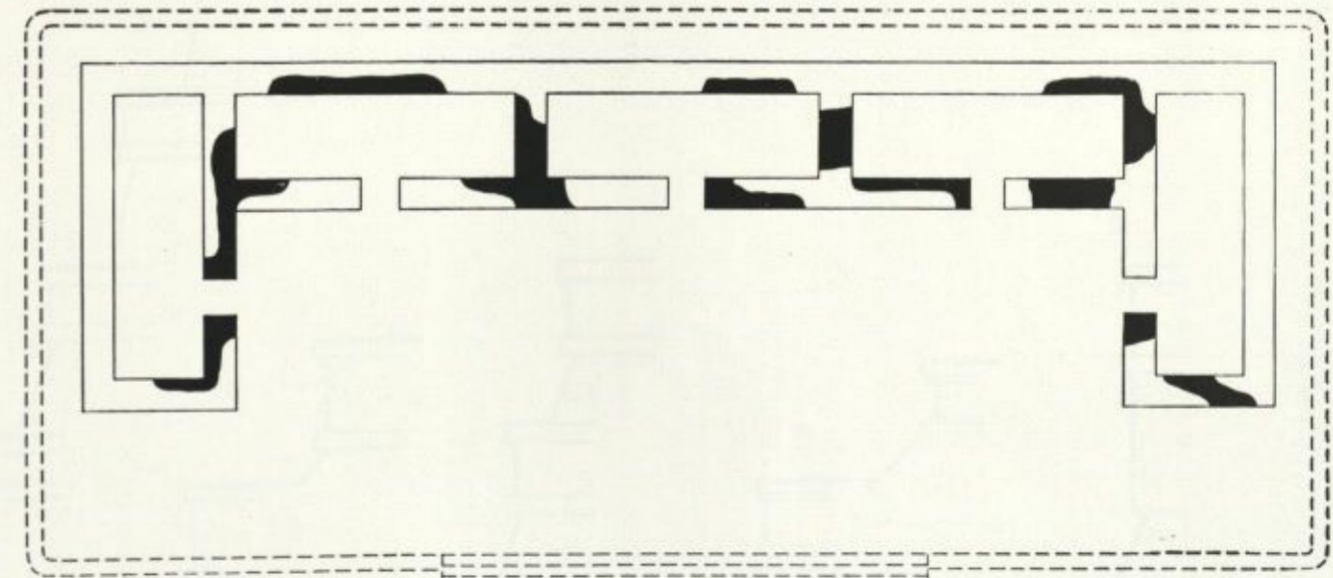
FIG. 4—Chichen Itza, Structure 7B2, plan. [Ruppert, 1952, fig. 107.]
 FIG. 5—Chichen Itza, Structure 5B7, plan. [Ruppert, 1952, fig. 70.]
 FIG. 6—Chichen Itza, Structure 5D2, plan. [Ruppert, 1952, fig. 96.]



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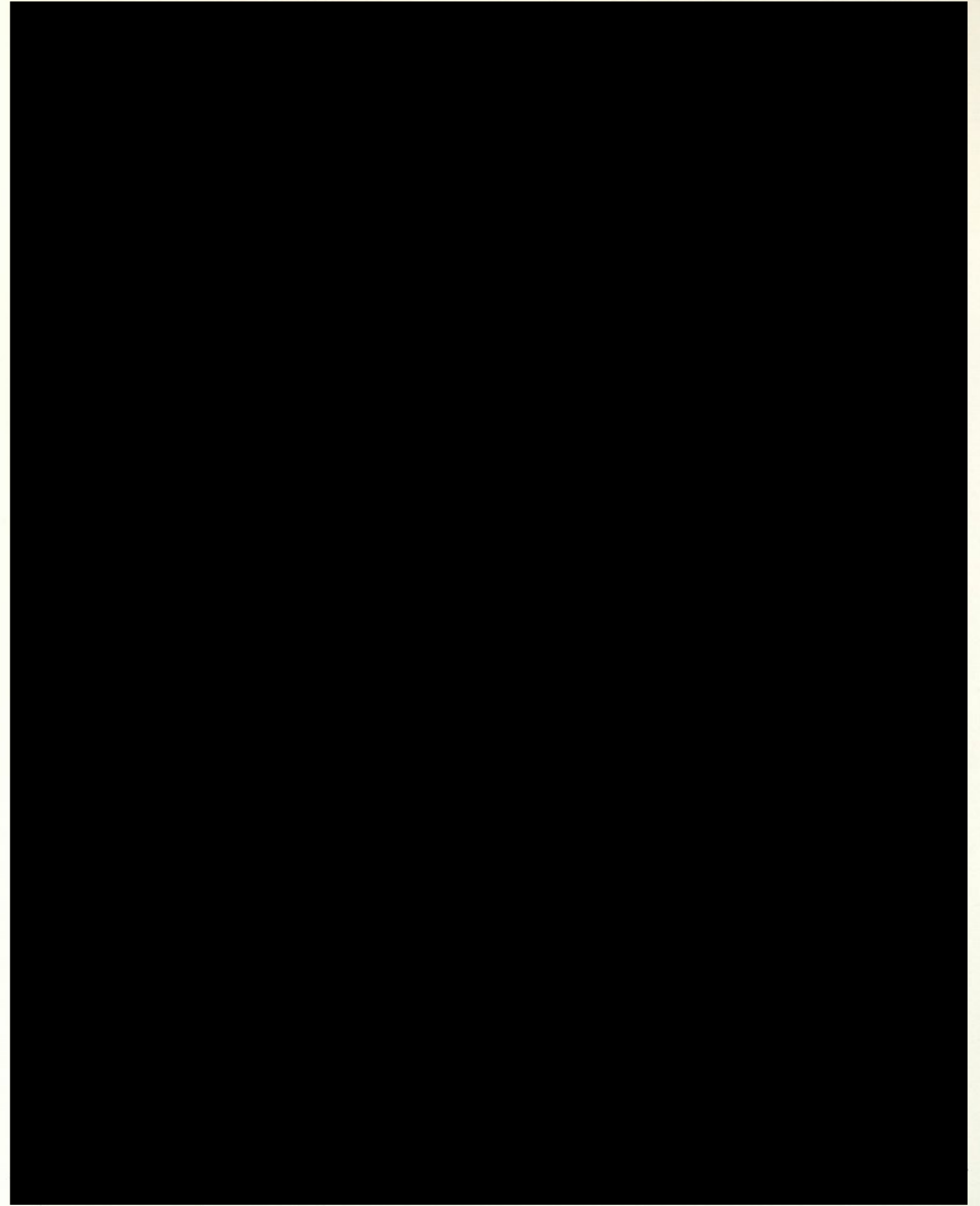
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CHICHEN II-III ARCHITECTURE

- FIG. 7—Chichen Itza, Structure 5B25, plan. [Ruppert, 1952, fig. 81.]
 FIG. 8—Chichen Itza, Structure 5C14 (House of the Phalli), plan. [Ruppert, 1952, fig. 93.]
 FIG. 9—Halakal, restored elevation. [Ruppert, 1952, fig. 115.]
 FIG. 10—Pyramidal sections, composite drawings from various sources.
a: Chichen Itza, Structure 2D8 (Temple of the Warriors) [Morris, 1931, pl. 4]. *b*: Teotihuacan [Marquina in Gamio, 1922, pl. 16]. *c*: Tula, Mound B. *d*: Cholula. *e*: Chichen Itza, Structures 2D3, 2D2, and 2D4 (Mausoleums I-III). *f*: Tula, Coatepantli.



CHICHEN III ARCHITECTURE

FIG. 11—Chichen Itza, Structure 5C4 (Temple of the Initial Series),
plan and sections. [Ruppert, 1952, fig. 85.]

FIG. 12—Chichen Itza, Structure 5C3 (Temple of the Little Heads),
plan. [Ruppert, 1952, fig. 84.]

FIG. 13—Chichen Itza, Structure 3E7, plan. [Ruppert, 1952, fig. 55.]

FIG. 14—Chichen Itza, Structure 5B1, plan. [Ruppert, 1952, fig. 64.]

FIG. 15—Chichen Itza, Structure 1D2, plan. [Ruppert, 1952, fig. 3.]

FIG. 16—Chichen Itza, Structure 2C10, plan. [Ruppert, 1952, fig. 14.]

CHICHEN III ARCHITECTURE

FIG. 17—Chichen Itza, Structure 5C9, plan. [Ruppert, 1952, fig. 90.]

FIG. 18—Chichen Itza, Structure 5C7 (Temple of the Owls), plan. [Ruppert, 1952, fig. 88.]

FIG. 19—Chichen Itza, Structure 3C11 (Maudslay's No. 6), plan. [Ruppert, 1952, fig. 34.]

FIG. 20—Chichen Itza, Structure 2C3, plan. [Ruppert, 1952, fig. 8.]

FIG. 21—Chichen Itza, Structure 5B14, plan. [Ruppert, 1952, fig. 75.]

FIG. 22—Chichen Itza, Structure 5B18 (Castillo of Old Chichen), plan and detail. [Ruppert, 1952, fig. 77.]

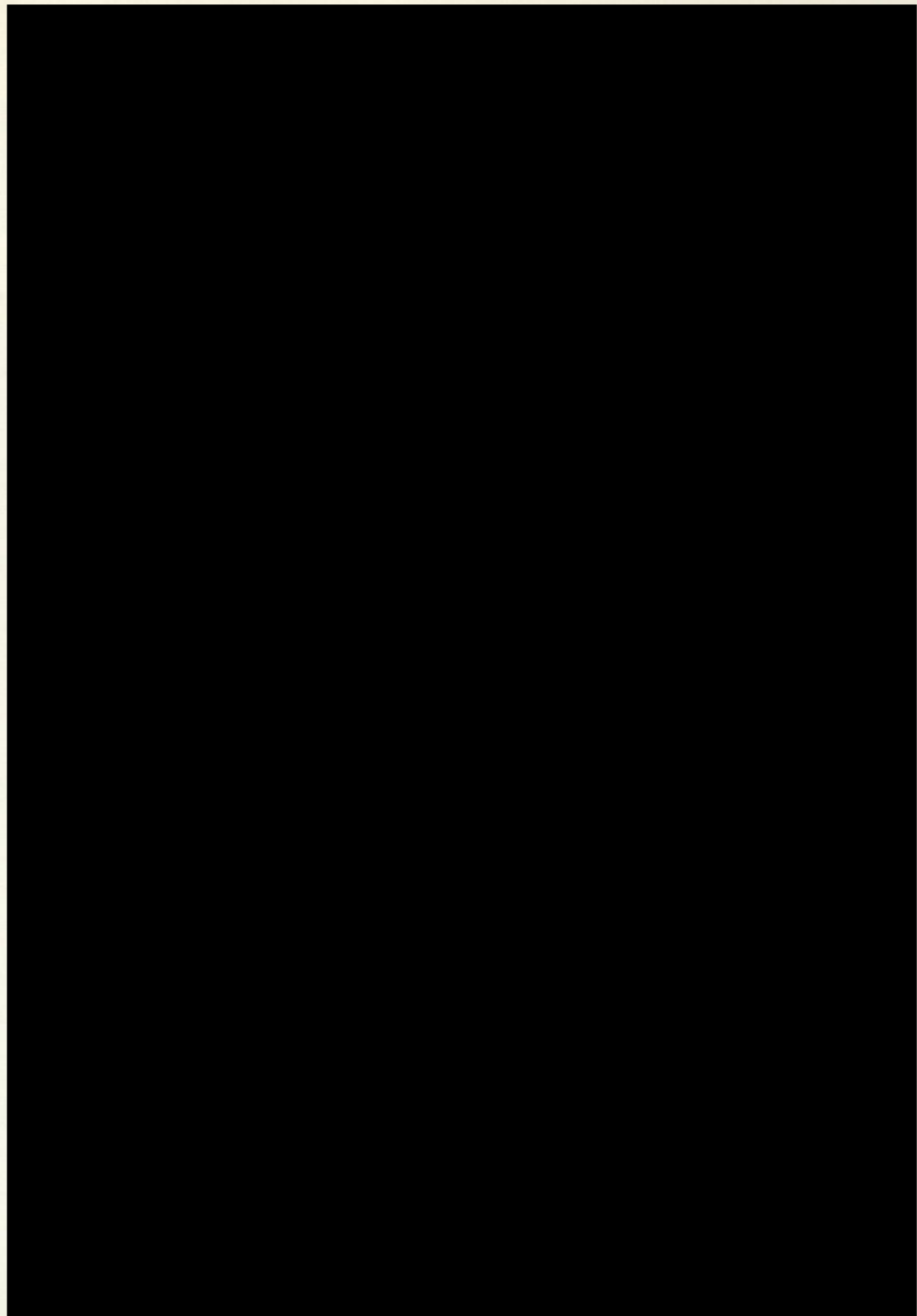
FIG. 23—Chichen Itza, Structure 2C1, plan. [Ruppert, 1952, fig. 7.]

FIG. 24—Chichen Itza, Structure 2C7, plan. [Ruppert, 1952, fig. 12.]

CHICHEN III ARCHITECTURE

FIG. 25—Chichen Itza, Structure 2D7 (Temple of the Big Tables), plan.
[Ruppert, 1952, fig. 15.]

FIG. 26—Chichen Itza, Structure 3D8 (Temple of the Little Tables),
plan. [Ruppert, 1952, fig. 42.]



CHICHEN III ARCHITECTURE

FIG. 27—Chichen Itza, Structure 3C1 (High Priest's Grave), plan. [Ruppert, 1952, fig. 24.]

FIG. 28—Chichen Itza, Structure 3B2, plan. [Ruppert, 1952, fig. 18.]

FIG. 29—Chichen Itza, Structure 3B5, plan. [Ruppert, 1952, fig. 20.]

FIG. 30—Chichen Itza, Structure 5B10, plan. [Ruppert, 1952, fig. 73.]

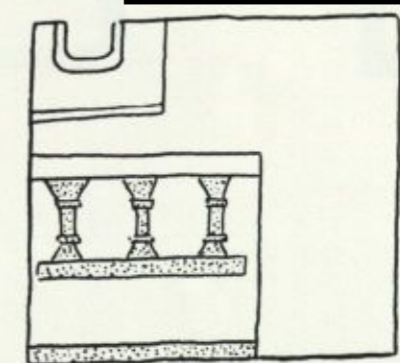
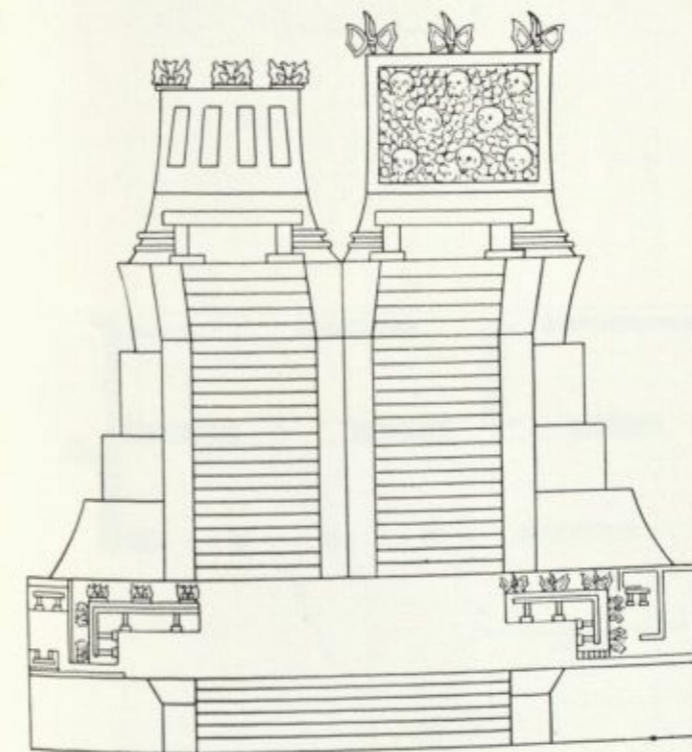
FIG. 31—Chichen Itza, Structure 3E6, plan. [Ruppert, 1952, fig. 54.]

TENOCHTITLAN ARCHITECTURE

FIG. 32—Tenochtitlan, Great Temple. Codex Ixtlilxochitl. [Boban, 1891, pl. 71.]

FIG. 33—Tenochtitlan, temple and colonnade. [Histoire Mexicaine, pl. 45.]

FIG. 34—Tenochtitlan, colonnade. [Boban, 1891, pl. 34.]



CHICHEN III ARCHITECTURE

FIG. 35—Chichen Itza, Structure 2B5, plan. [Ruppert, 1952, fig. 6.]

FIG. 36—Chichen Itza, Structure 2C6, plan. [Ruppert, 1952, fig. 11.]

FIG. 37—Chichen Itza, Structure 3C5 (Temple of the Grinding Stones) and Structure 3C6 (Temple of the Interior Atlantean Columns), plans. [Ruppert, 1952, fig. 27.]

FIG. 38—Chichen Itza, Structure 5C10, plan. [Ruppert, 1952, fig. 91.]

FIG. 39—Chichen Itza, Structure 5B23, plan. [Ruppert, 1952, fig. 80.]

FIG. 40—Chichen Itza, Structure 6B1, plan. [Ruppert, 1952, fig. 99.]

CHICHEN III ARCHITECTURE

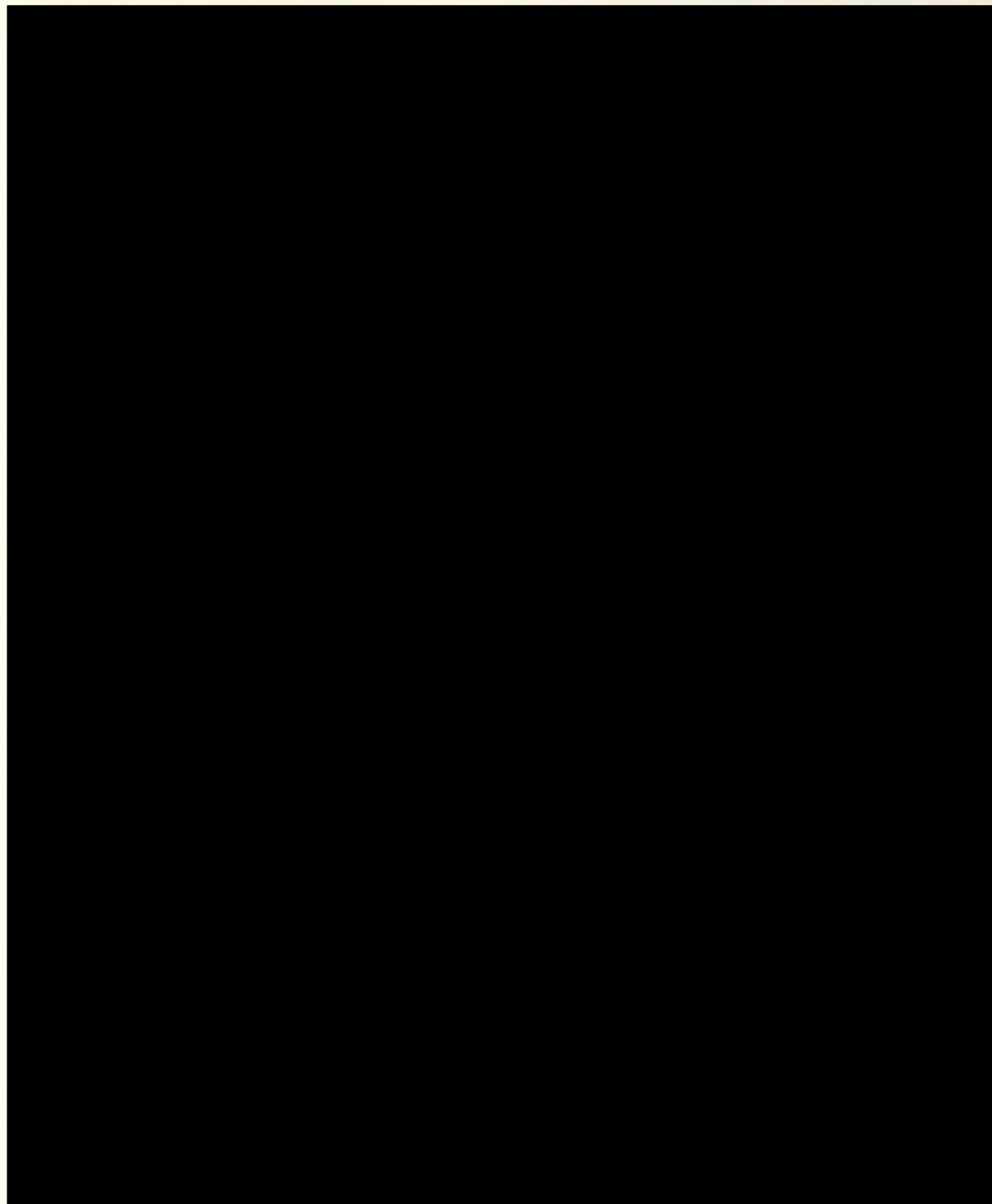
- FIG. 41—Chichen Itza, Structure 5B2 (Temple of the Turtle), plan. [Ruppert, 1952, fig. 65.]
- FIG. 42—Chichen Itza, Structure 4C3, plan. [Ruppert, 1952, fig. 58.]
- FIG. 43—Chichen Itza, Structure 5B21 (Temple of the Jaguar Atlantean Columns), plan. [Ruppert, 1952, fig. 78.]
- FIG. 44—Chichen Itza, Structure 3D1 (West Colonnade), plan. [Ruppert, 1952, fig. 37.]

CHICHEN III ARCHITECTURE

FIG. 45—Chichen Itza, Structure 2D10 (North Colonnade), plan. [Ruppert, 1952, fig. 17.]

FIG. 46—Chichen Itza, Structure 3D7, plan. [Ruppert, 1952, fig. 41.]

FIG. 47—Chichen Itza, Structure 3D10 (Southeast Colonnade), plan. [Ruppert, 1952, fig. 44.]



CHICHEN III ARCHITECTURE

FIG. 48—Chichen Itza, Structure 3D13 (Xtoloc Temple), plan. [Ruppert, 1952, fig. 47.]

FIG. 49—Chichen Itza, Structure 2D8 (Temple of the Warriors and portion of the Northwest Colonnade), plan. [Moedano, 1947a, fig. 2.]

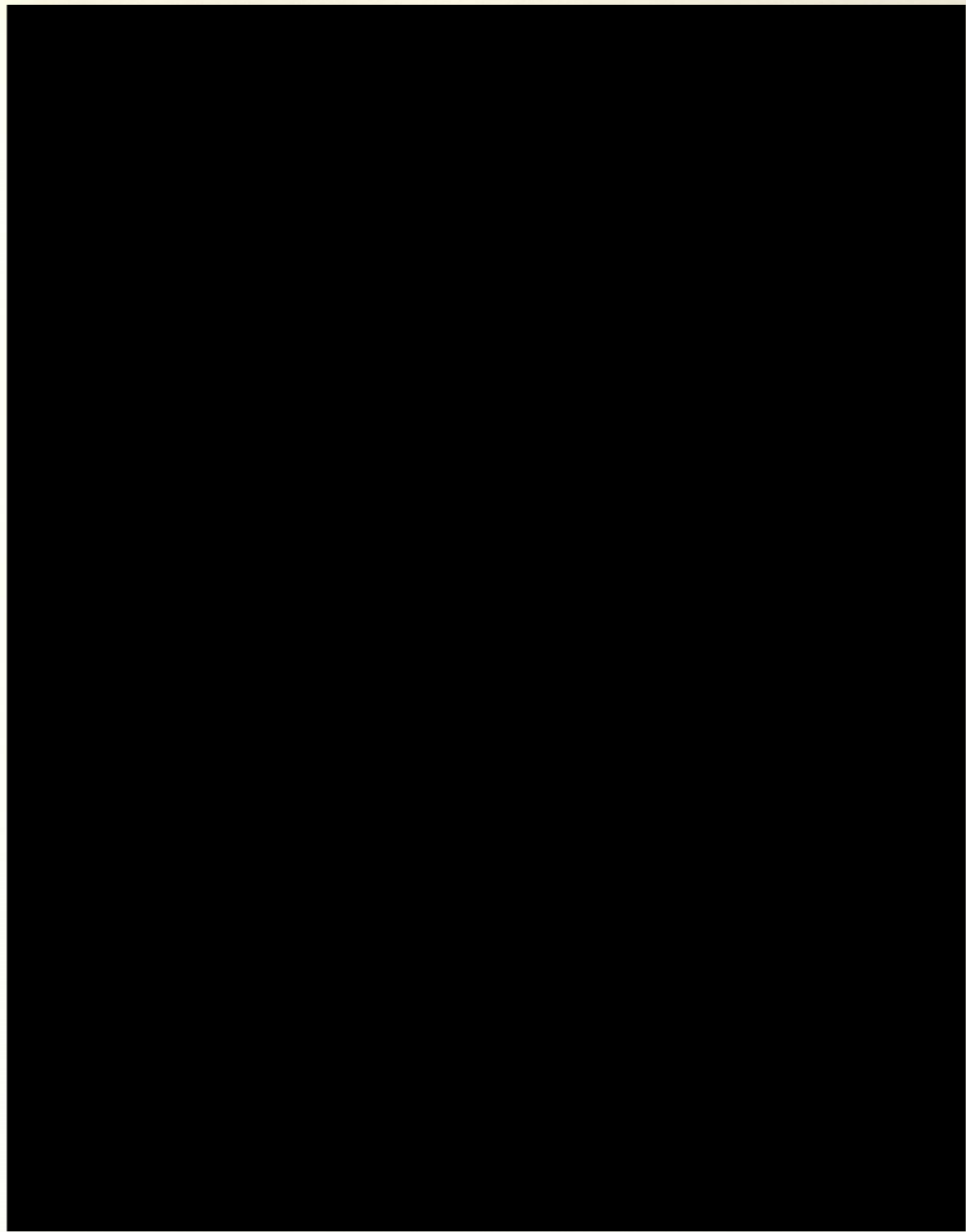
FIG. 50—Chichen Itza, Structure 3D9 (Thompson's Temple), plan. [Ruppert, 1952, fig. 43.]

TULA ARCHITECTURE

FIG. 51—Tula, Main Temple, plan. *a*: Main Temple (Mound B). *b*: Colonnade or vestibule. *c*: Edificio 1. *d*: Coatepantli. *e*: Palacio Quemado (Edificio 3), Sala 1. *f*: Same, Sala 2. [Marquina, 1951, pl. 45.]

CHICHEN III ARCHITECTURE

- FIG. 52—Chichen Itza, Structure 3B8, plan. [Ruppert, 1952, fig. 22.]
FIG. 53—Chichen Itza, Structure 3B3, plan. [Ruppert, 1952, fig. 19.]
FIG. 54—Chichen Itza, Structure 3D11 (Mercado), plan. [Ruppert, 1943, fig. 1, detail.]
FIG. 55—Chichen Itza, Structure 3C13, plan. [Ruppert, 1952, fig. 36.]
FIG. 56—Chichen Itza, Structure 3C3, plan and elevation. [Ruppert, 1952, fig. 25.]

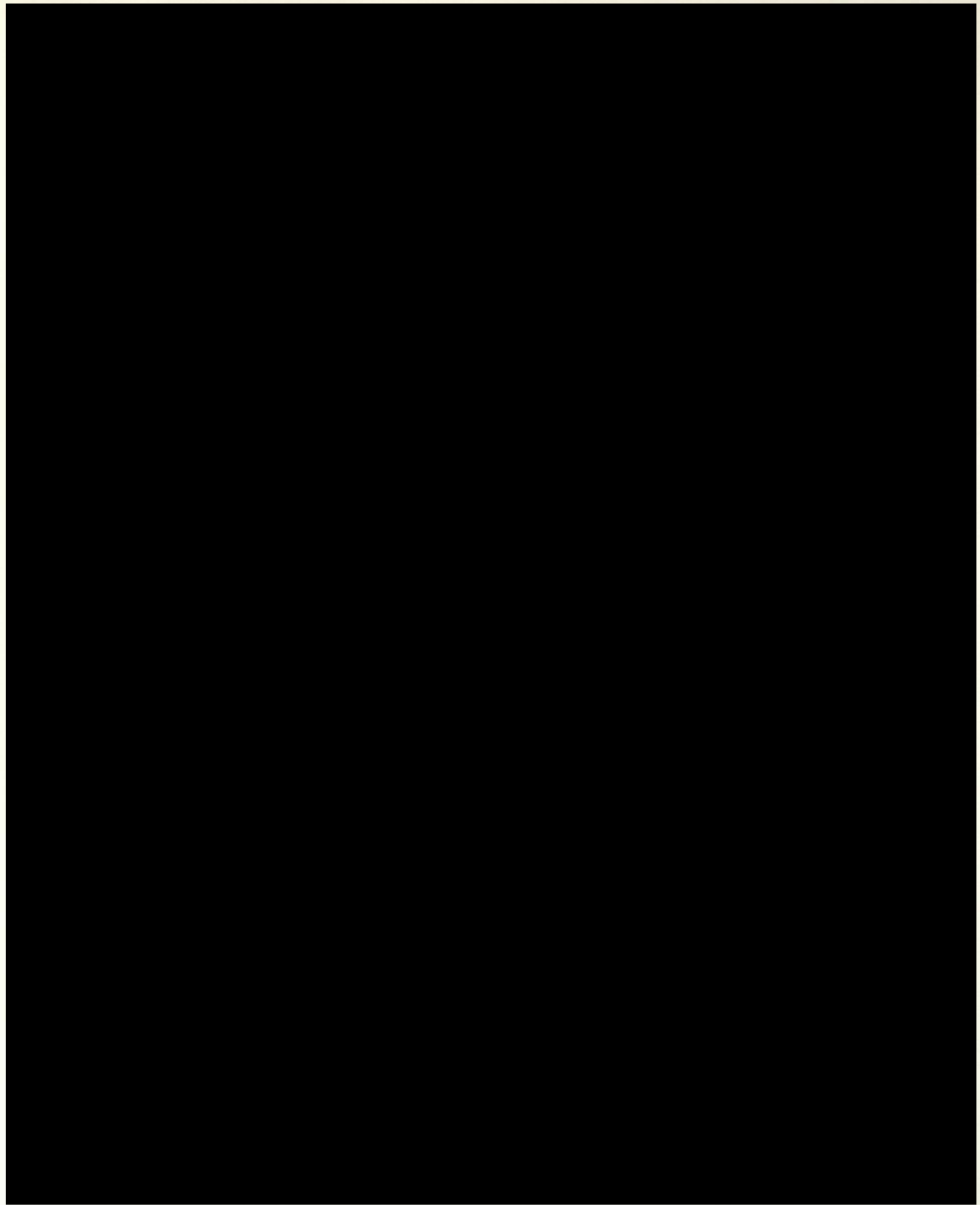


CHICHEN III ARCHITECTURE

FIG. 57—Chichen Itza, Constructions in the Court of the Thousand Columns, plans. [Ruppert, 1952, fig. 45.]

FIG. 58—Chichen Itza, Structure 3E3 (Sweat House), plan. [Ruppert, 1952, fig. 50.]

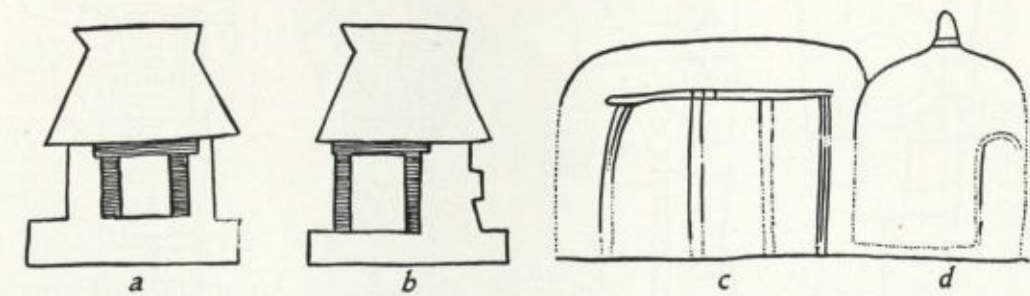
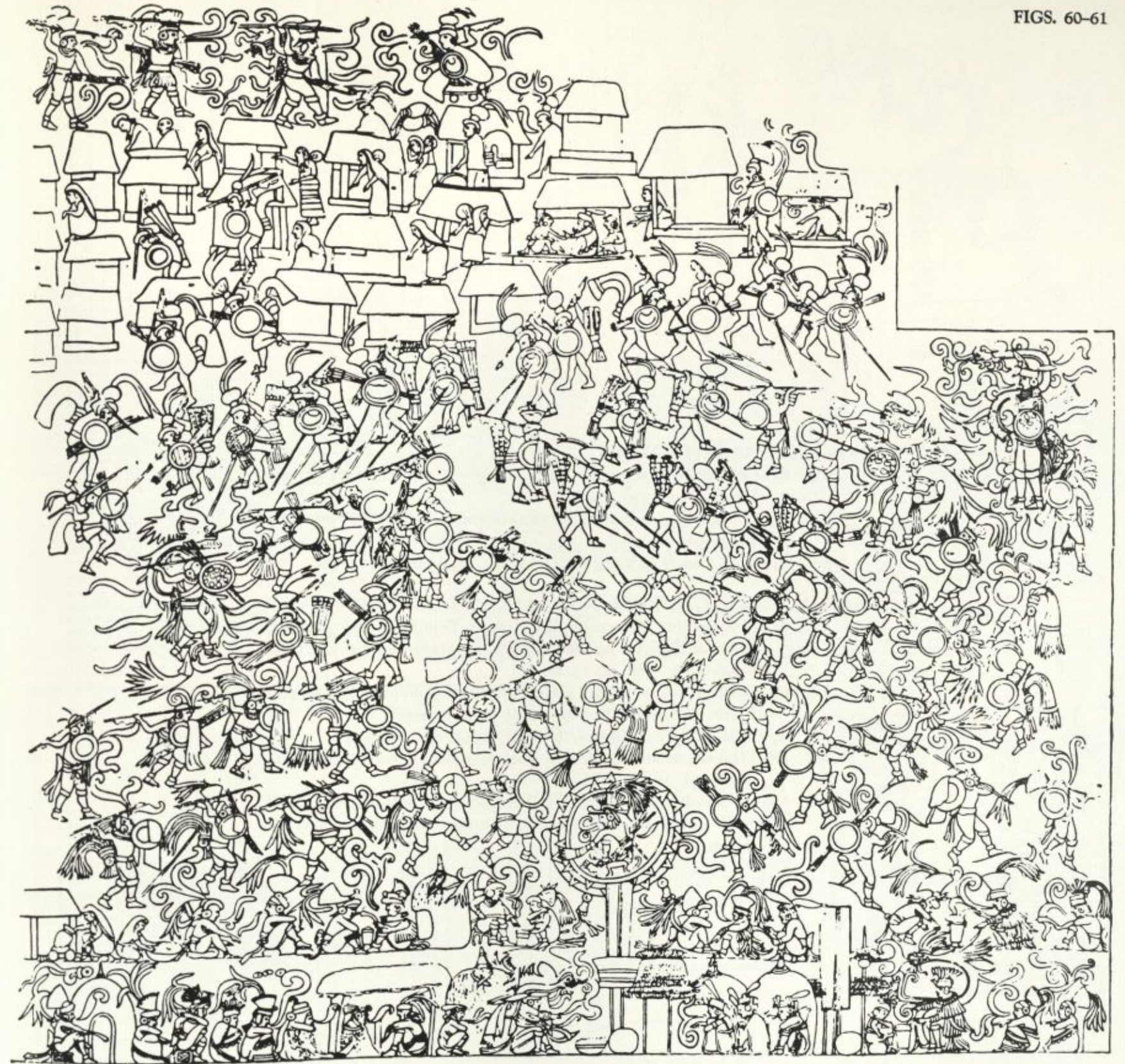
FIG. 59—Chichen Itza, Structure 1D1 (Cenote of Sacrifice Shrine), plan and elevations. [Ruppert, 1952, fig. 2.]



DOMESTIC ARCHITECTURE

FIG. 60—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), west wall, south section. [Willard, 1926, facing p. 216.]

FIG. 61—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), fresco. [Spinden, 1913, fig. 136.]

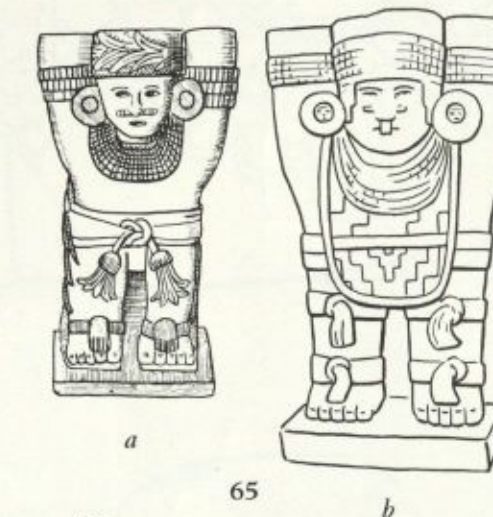


DOMESTIC ARCHITECTURE

- FIG. 62—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco.
[Morris, 1931, pl. 159.]
FIG. 63—Chichen Itza, Structure 3D11 (Mercado), gallery. [Proskouria-
koff, 1946, pl. 26.]
FIG. 64—Tula, bench in vestibule. [Acosta, 1945, fig. 21.]

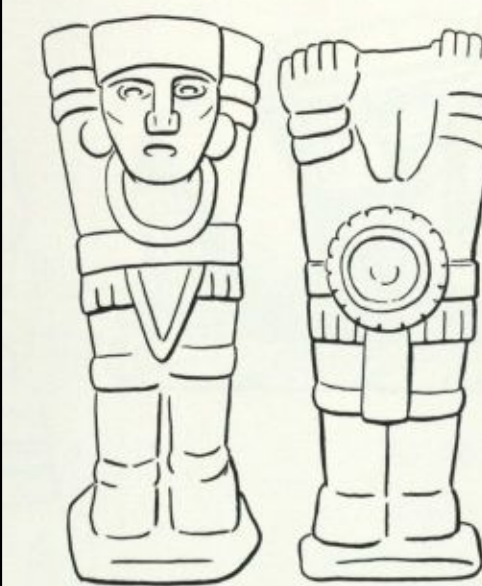
ARCHITECTURAL SUBSIDIARIES: ATLANTEAN FIGURES

- FIG. 65—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars),
atlantean figures. [*a*: Seler, 1902-23, 5:272, fig. 99. *b*: *ibid.*,
following p. 388, pl. 17, no. 5.]
FIG. 66—Chichen Itza, Structure 3D10 (Southeast Colonnade), atlantean
figure. [Carnegie Institution of Washington.]
FIG. 67—Tula, atlantean figures. [Acosta, 1944, figs. 32, 33.]
FIG. 68—Tlaxcala, atlantean figures. [Seler, 1902-23, vol. 5, following
p. 388, pl. 16, *a*, fig. 22.]
FIG. 69—Chichen Itza, Structure 4B1 (Temple of the Sculptured Jambs),
detail from base of south jamb. [Carnegie Institution of Wash-
ington.]



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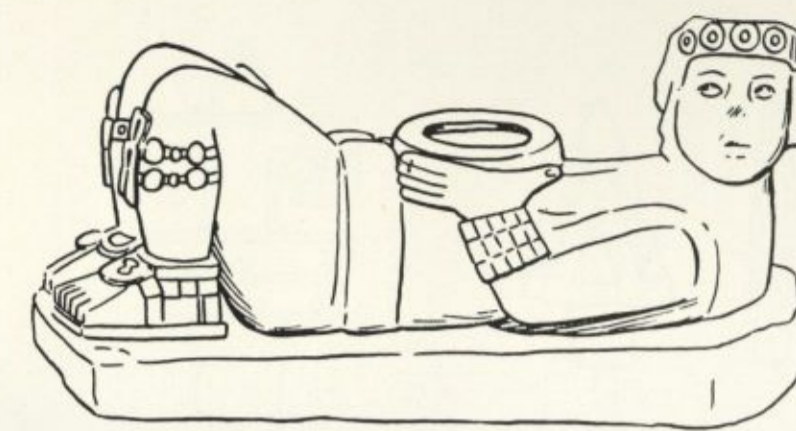
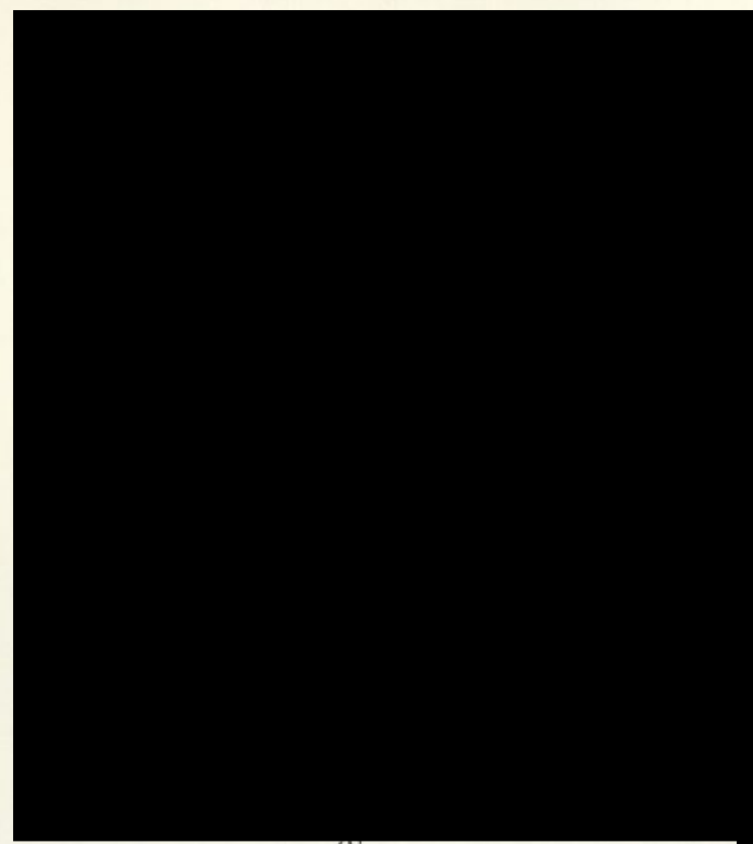
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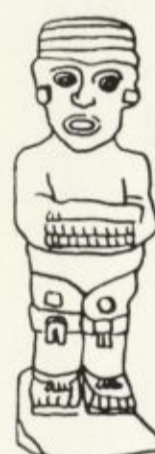
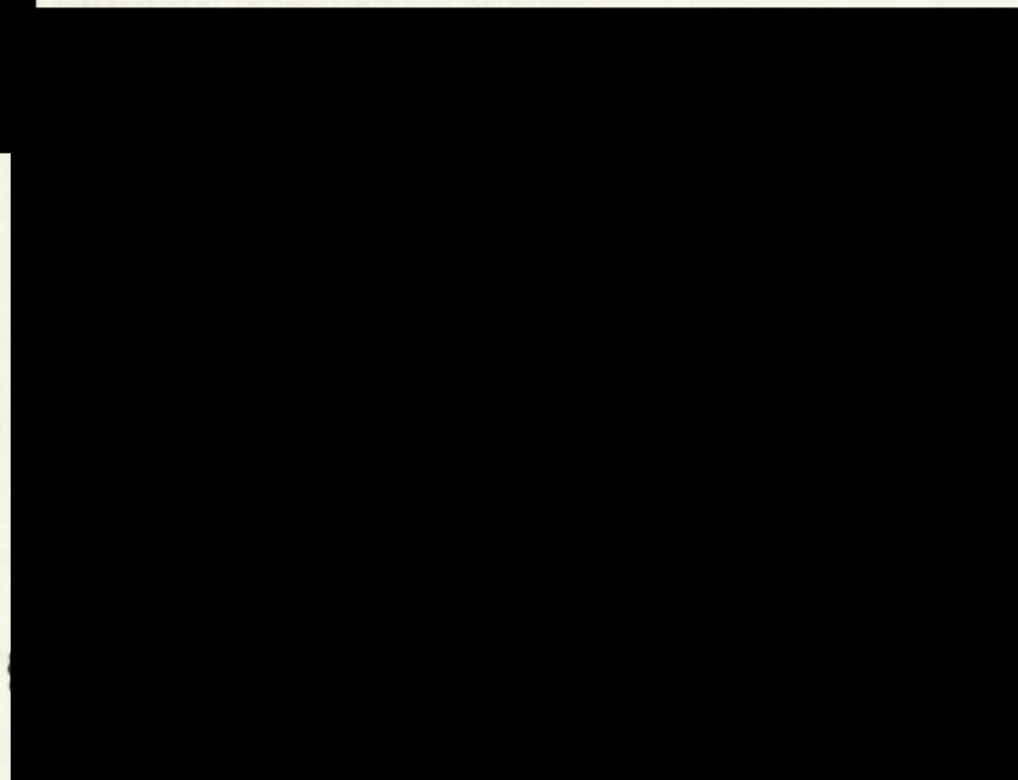
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ARCHITECTURAL SUBSIDIARIES: STANDARD BEARERS AND CHAC MOOLS

- FIG. 70—Chichen Itza, Structure 2D8 (Temple of the Warriors), south standard bearer. [Morris, 1931, fig. 37.]
 FIG. 71—Tula, standard bearer. [Acosta, 1944, fig. 23.]
 FIG. 72—Tenochtitlan, Palacio Municipal, standard bearer. [Seler, 1901, 31:128, fig. 82.]
 FIG. 73—Tula, Mound C, north of stairway, chac mool. [Acosta photo.]
 FIG. 74—Tlaxcala, chac mool. [Seler, 1902-23, 2:817, fig. 17.]
 FIG. 75—Tenochtitlan, Palacio Municipal, chac mool. [Caso y Vivo, 1946, 2:819.]
 FIG. 76—Tacubaya, chac mool. [Seler, 1902-23, 5:269, fig. 95.a.]



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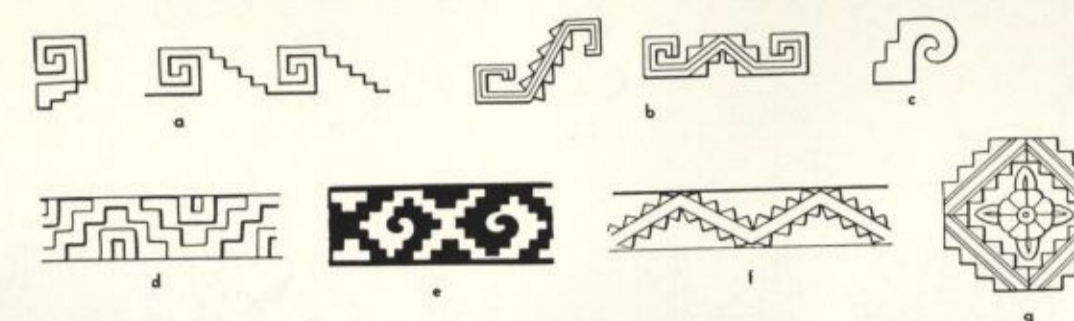


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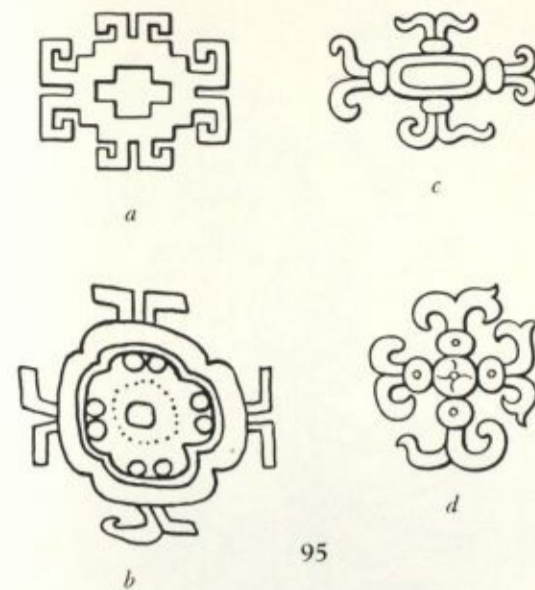
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GEOMETRIC DESIGN

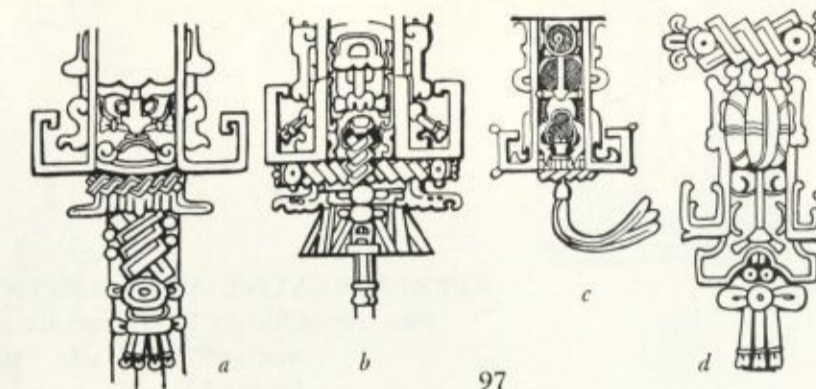
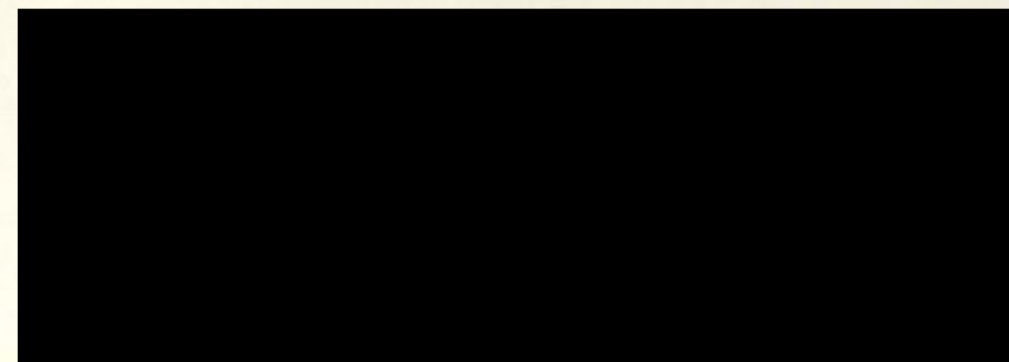
- FIG. 87—Geometric designs. *a*: Tajin [Marquina, 1951, pl. 127]; Mitla [Marquina, 1951, pl. 110, no. 2]. *b*: Piedras Negras, Stela 14 [Proskouriakoff, 1950, fig. 35, *l*]; Uxmal [Seler, 1917, fig. 78, *b*]. *c*: Tula [Ruz, 1945a, fig. 48]. *d*: Tula [Acosta, 1945, fig. 13]. *e*: Tamuin [Du Solier, 1946, facing p. 156]. *f*: Chichen Itza [Seler, 1902-23, 5:239, fig. 52.] *g*: Uxmal [Seler, 1917, fig. 32, *b*].
- FIG. 88—Tilantongo. [Caso, 1949a, fig. 2, *e*.]
- FIG. 89—Chichen Itza, Structure 3E1 (Northeast Colonnade), detail from cornice on dais. [Carnegie Institution of Washington.]
- FIG. 90—Tula, stone.
- FIG. 91—Chichen Itza, Structure 2D8 (Temple of the Warriors), graffito. [Morris, 1931, fig. 261, *b*.]
- FIG. 92—Chichen Itza, Cenote of Sacrifice, gold mask. [Lothrop, 1952, fig. 46, *a*.]
- FIG. 93—Gold as shown in Mexican codices. [After Aguilar in Lothrop, 1952, fig. 47.]
- FIG. 94—Codex Bologna 7.

GEOMETRIC DESIGN

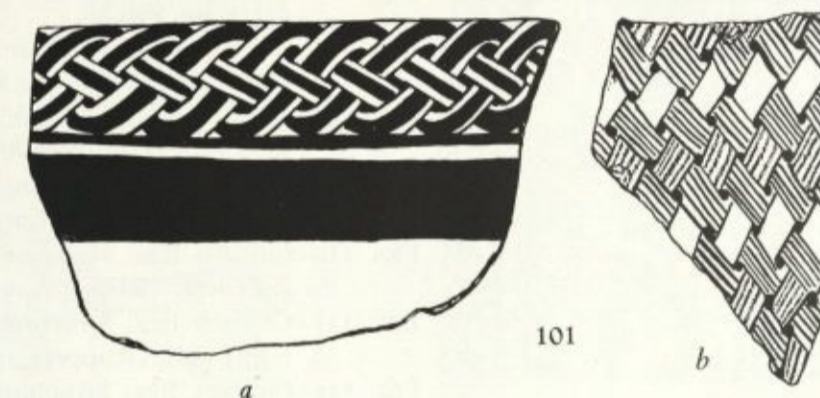
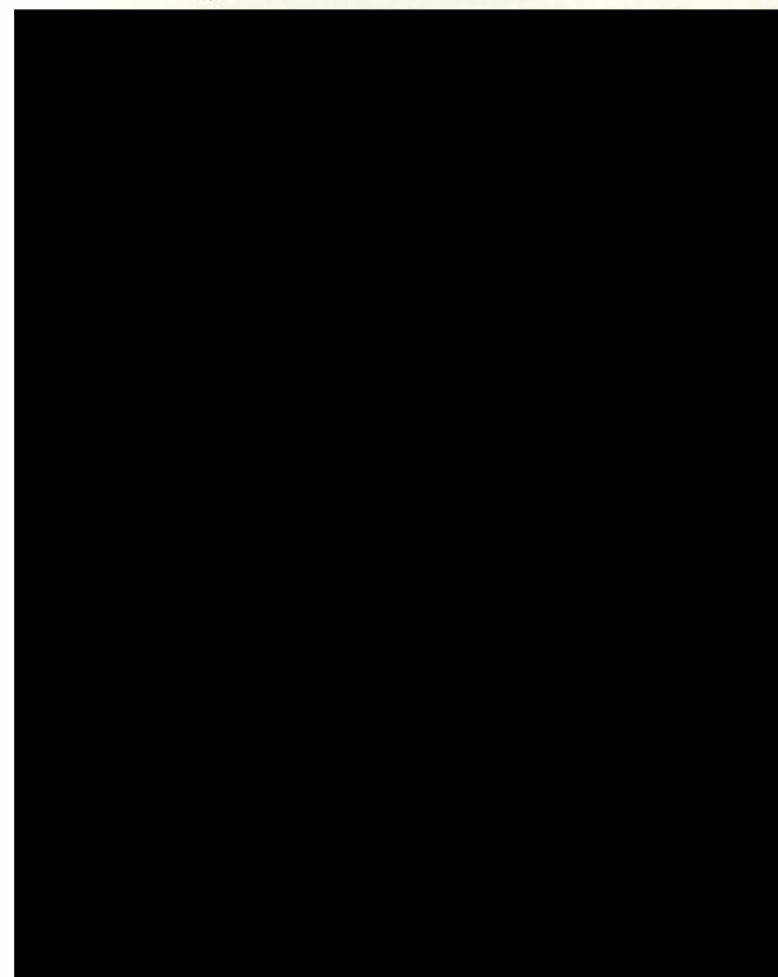
- FIG. 95—Cross, flames. *a*: Piedras Negras, Stela 7 [Proskouriakoff, 1950, fig. 35,*t*]. *b*: Palenque, fresco [Seler, 1915, fig. 132,*b*]. *c*: Uxmal, Adivino [Seler, 1917, fig. 78,*b*]. *d*: Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars) [Maudslay, 1889–1902, vol. 3, pl. 38].
- FIG. 96—Plaited tape. *a*: Tikal, Stela 1. *b*: Copan, Stela 2. *c*: Seibal, Stela 8. *d*: Quirigua, Stela 1. *e*: Naranjo, Stela 12. [Proskouriakoff, 1950, fig. 35,*w,x,y,z,o*, respectively.]
- FIG. 97—Classic “aprons.” *a*: Copan, Stela N, south face. *b*: Quirigua, Stela F. *c*: Tikal, Stela 11. *d*: Palenque, Temple of the Inscriptions. [Spinden, 1913, fig. 15.]
- FIG. 98—Chichen Itza, Structure 5C7 (Temple of the Owls), west pilaster, east side. [Carnegie Institution of Washington.]
- FIG. 99—Chichen Itza, back of wooden figure from Cenote of Sacrifice. [Peabody Museum, Harvard University.]
- FIG. 100—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 60E. [Morris, 1931, pl. 122.]
- FIG. 101—Ulua Valley, painted pottery. [Spinden, 1913, fig. 204.]
- FIG. 102—Tula, sculptured stone. [Caso, 1941, fig. 9.]
- FIG. 103—Xochicalco, geometric design. [Seler, 1902–23, 2:139, fig. 4,*b*.]
- FIG. 104—Chalco, sculptured stone. [Seler, 1902–23, 2:161, fig. 70, *a*.]



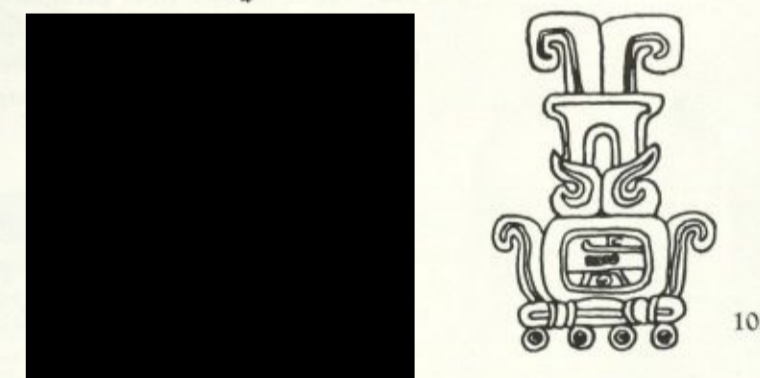
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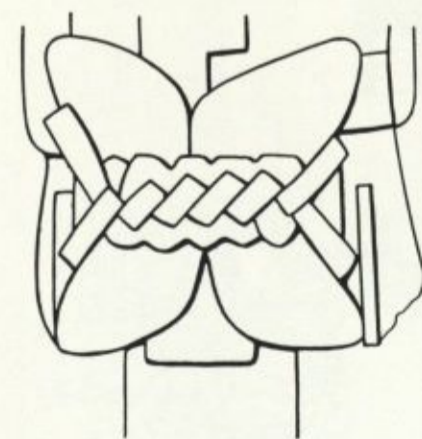
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REPRESENTATIVE ART: SERPENTS

- FIG. 105—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), west wall, south side. [After Breton in Seler, 1902-23, 5:338, fig. 214.]
- FIG. 106—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), west wall, left of door. [After Breton in Seler, 1902-23, 5:341, fig. 216.]
- FIG. 107—Chichen Itza, Structure 2D5 (Castillo), west doorway, jamb. [Maudslay, 1889-1902, vol. 3, pl. 59, b.]
- FIG. 108—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row D. [Maudslay, 1889-1902, vol. 3, pl. 50.]
- FIG. 109—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), main feathered serpent. [Spinden, 1913, fig. 22.]
- FIG. 110—Chichen Itza, Structure 3C16 (Temple of the Wall Panels), cist cover. [Ruppert, 1931, pl. 10, c.]
- FIG. 111—Chichen Itza, Structure 3C16 (Temple of the Wall Panels), north wall. [Ruppert, 1931, pl. 11, a.]
- FIG. 112—Chichen Itza, Structure 3E1 (Northeast Colonnade), figure from dais. [Carnegie Institution of Washington.]
- FIG. 113—Chichen Itza, Structure 3E1 (Northeast Colonnade), figure from dais, with offering. [Carnegie Institution of Washington.]



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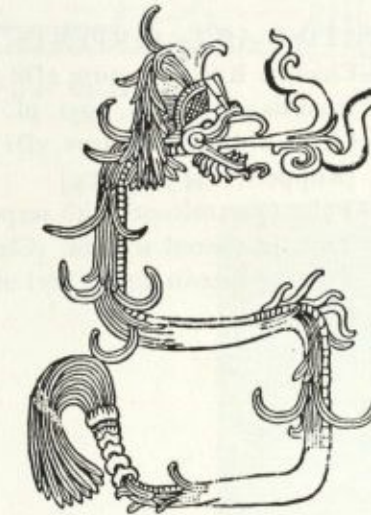
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REPRESENTATIVE ART: SERPENTS

FIG. 114—Chichen Itza, Structure 2D8 (Northwest Colonnade), figures from dais. [Morris, 1931, pl. 124.]

FIG. 115—Chichen Itza, Structure 3D11 (Mercado), figure from dais. [Ruppert, 1943, fig. 23.]

FIG. 116—Tula, Quetzalcoatl with serpent. [Peñafiel, 1890, pl. 54.]

FIG. 117—Tula, feathered serpent. [Cleveland Museum, 1946, no. 30.]

FIG. 118—Tula, atlantean figure, heel of sandal. [Seler, 1902-23, 2:159, fig. 67.]



REPRESENTATIVE ART: SERPENTS

- FIG. 119—Chichen Itza, Structure 2D8 (Temple of the Warriors), serpent motif on base of stair ramp. [Morris, 1931, fig. 32,*a*.]
 FIG. 120—Chichen Itza, Structure 3C15 (Caracol), serpent balustrades of upper platform stairway. [Ruppert, 1935, fig. 159.]
 FIG. 121—Tula, serpent column. [Caso, 1941, fig. 1.]
 FIG. 122—Chichen Itza, Structure 2C1, south column. [Scler, 1902-23, 5:304, fig. 177.]
 FIG. 123—Chichen Itza, Structure 2D8 (Northwest Colonnade), cornice of dais, north side. [Morris, 1931, pl. 126.]
 FIG. 124—Chichen Itza, design on jade bead. [Peabody Museum, Harvard University.]
 FIG. 125—Chichen Itza, design on jade bead. [Peabody Museum, Harvard University.]
 FIG. 126—Chichen Itza, Structure 3D11 (Mercado), cornice of dais. [Ruppert, 1943, fig. 25.]
 FIG. 127—Tula, Colonnade, bench frieze, detail. [Moedano, 1947, color plate between pp. 114 and 115.]



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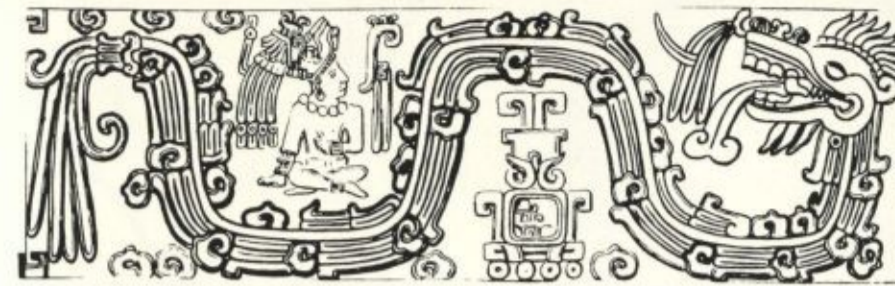
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REPRESENTATIVE ART: SERPENTS

- FIG. 128—Xochicalco, design on base of mound. [Seler, 1902-23, 2:137, fig. 4.]
- FIG. 129—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), guilloche detail. [Carnegie Institution of Washington.]
- FIG. 130—Chichen Itza, Cenote of Sacrifice, jade amulet. [Peabody Museum, Harvard University.]
- FIG. 131—Chichen Itza, Cenote of Sacrifice, jade. [Peabody Museum, Harvard University.]
- FIG. 132—Tula, Edificio 3, carved stone.
- FIG. 132A—Tula, El Corral, Skull Altar, carved stone. [See Dutton, 1955, pl. 18,c.]
- FIG. 132B—Tula, Palacio Quemado, carved stone.
- FIG. 133—Chichen Itza, Structure 2C1, south column. [Seler, 1902-23, 5:304, fig. 177.]
- FIG. 134—Santa Lucia Cotzumalhuapa, Monument 7. [J. E. S. Thompson, 1948, fig. 4,a.]
- FIG. 135—Zapotec vase. [Seler, 1902-23, 2:356, fig. 89,c.]
- FIG. 136—Aztec wooden *atlatl*, end. [Saville, 1925, pl. 17.]
- FIG. 137—Chichen Itza, Structure 2D10 (North Colonnade), Drum 11. [Carnegie Institution of Washington.]
- FIG. 138—Chichen Itza, Structure 4C1 (Monjas), Toltec Annex, South Portico, east jamb. [Carnegie Institution of Washington.]



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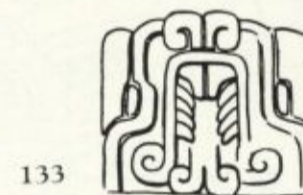
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132A



132B



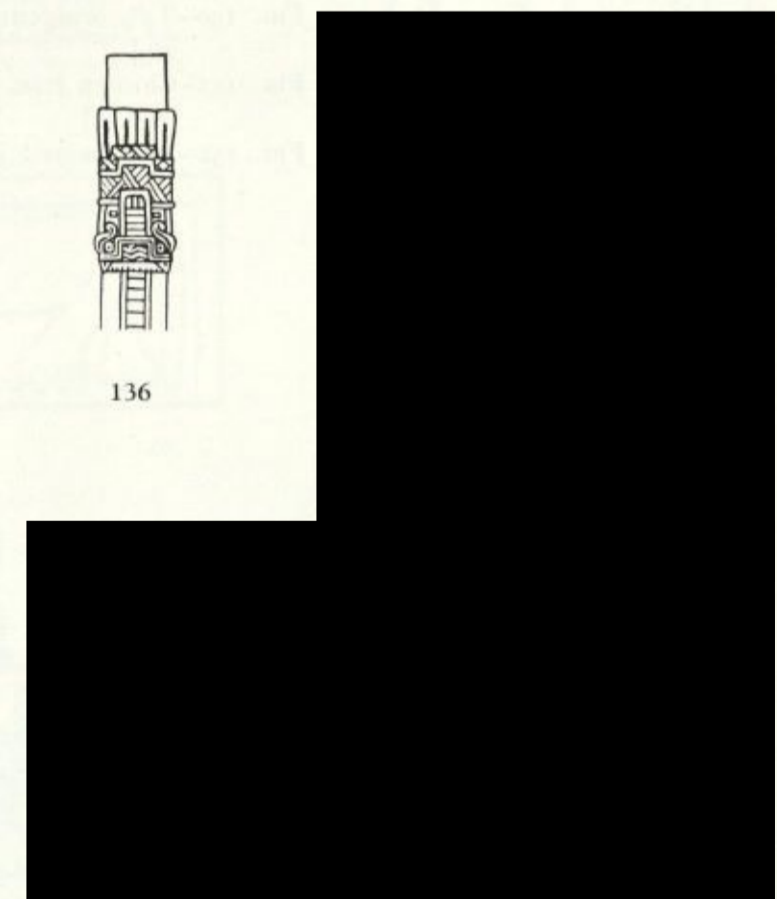
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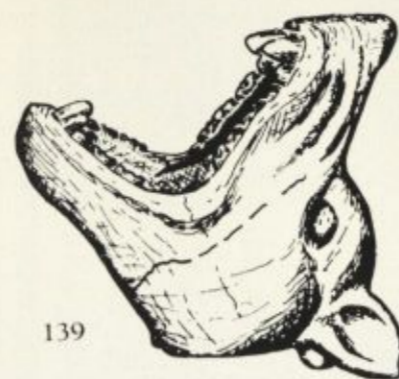


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REPRESENTATIVE ART: JAGUARS

- FIG. 139—Copan, Tomb 1, jaguar-head vase. [Spinden, 1913, fig. 190.]
 FIG. 140—Palenque, Palace, wall panel. [After Maudslay in Proskouriakoff, 1946, pl. 3.]
 FIG. 141—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), north wall, detail. [Seler, 1902-23, 5:321, fig. 195.]
 FIG. 142—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), north bench, detail. [Morris, 1931, fig. 266.]
 FIG. 143—Aubin Tonalamatl 9.
 FIG. 144—Codex Bodleianus 2858.
 FIG. 145—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), detail of upper façade. [Marquina, 1951, fig. 860; see fig. 85 above.]
 FIG. 146—Chichen Itza, Structure 2D7 (Temple of the Big Tables). [Carnegie Institution of Washington.]
 FIG. 147—Esquintla, El Salto, stone. [Carnegie Institution of Washington.]
 FIG. 148—Tula, Temple B, east side. [Marquina, 1951, photo. 48.]
 FIG. 149—Teayo, sculptured stone. [Seler, 1902-23, 3:444, fig. 46.]
 FIG. 150—Tula, sculptured stone finished with stucco. [Ruz, 1945a, fig. 26.]
 FIG. 151—Chichen Itza, seated jaguar. [Carnegie Institution of Washington.]
 FIG. 152—Tula, seated jaguar. [Carnegie Institution of Washington.]



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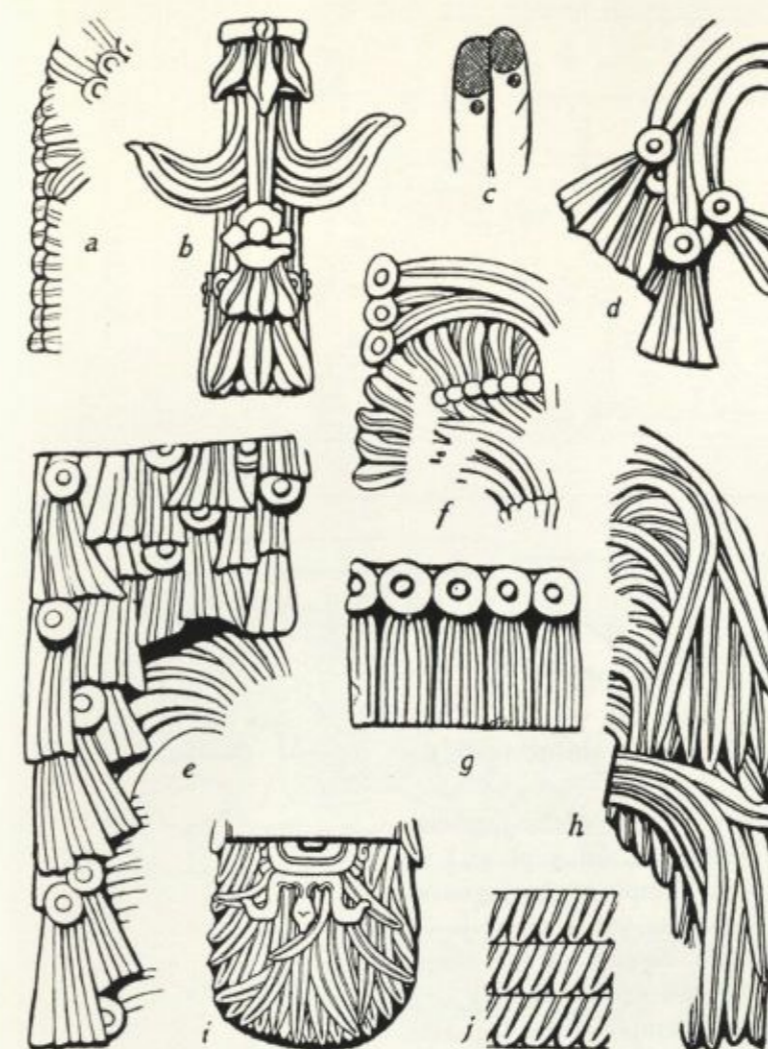
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REPRESENTATIVE ART: BIRDS

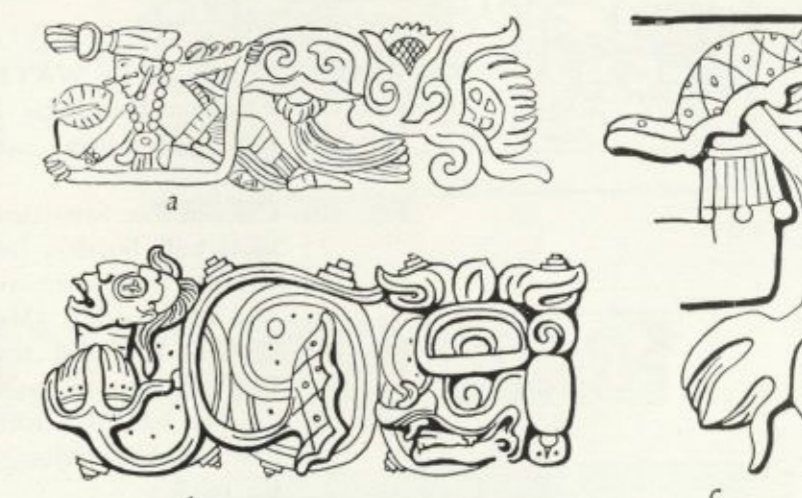
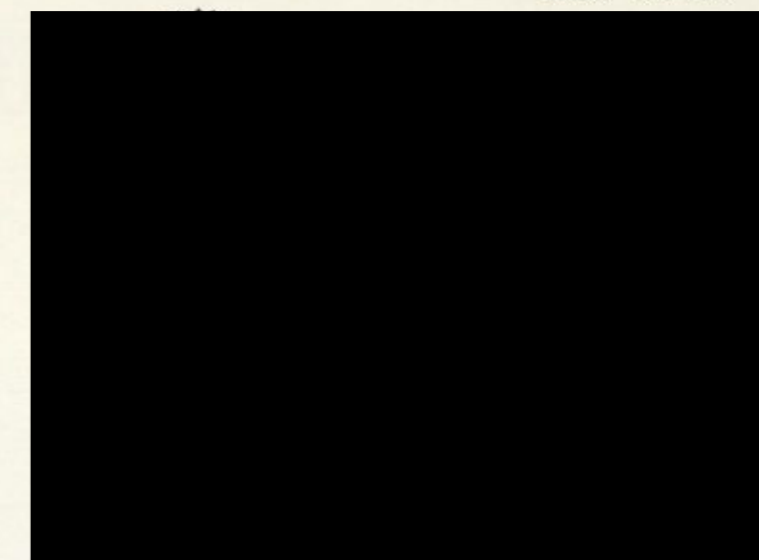
- FIG. 153—Sculptured feathers. *a*: Copan, Stela A. *b,d*: Copan, Stela D. *c,i*: Piedras Negras, Stela 7. *e,f*: Copan, Stela H. *g*: Copan, molding representing feathers (original stone in Peabody Museum, Harvard University). *h*: Seibal, Stela 10. *j*: Uxmal, House of the Turtles. [Spinden, 1913, fig. 106.]
- FIG. 154—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), necklaced vulture. [Maudslay, 1889-1902, vol. 3, pl. 46.]
- FIG. 155—Xcalumkin, south court of Glyphic Group, lintel. [Proskouriakoff, 1950, fig. 95.c.]
- FIG. 156—Yaloch vase, detail. [J. E. S. Thompson, 1939, fig. 3.]

REPRESENTATIVE ART: WATER PLANTS AND FISH

- FIG. 157—Plant motif with flowers and leaves. *a*: Chichen Itza, Lower Temple of the Jaguars. *b*: Palenque, Palace, House D. *c*: Madrid stela. [Spinden, 1913, fig. 2.]
- FIG. 158—Plant and fish motifs. *a*: Copan, Altar T. *b*: Palenque, Palace, House A. *c*: Chajcar. *d,j*: Chichen Itza, Lower Temple of the Jaguars. *e,f*: Palenque, Temple of the Cross. *g*: Ixkun, Stela 1. *h*: Palenque, Temple of the Cross, frieze. *i*: Copan, Stela N. *k*: Nebaj, pottery vessel. [Spinden, 1913, fig. 3.]



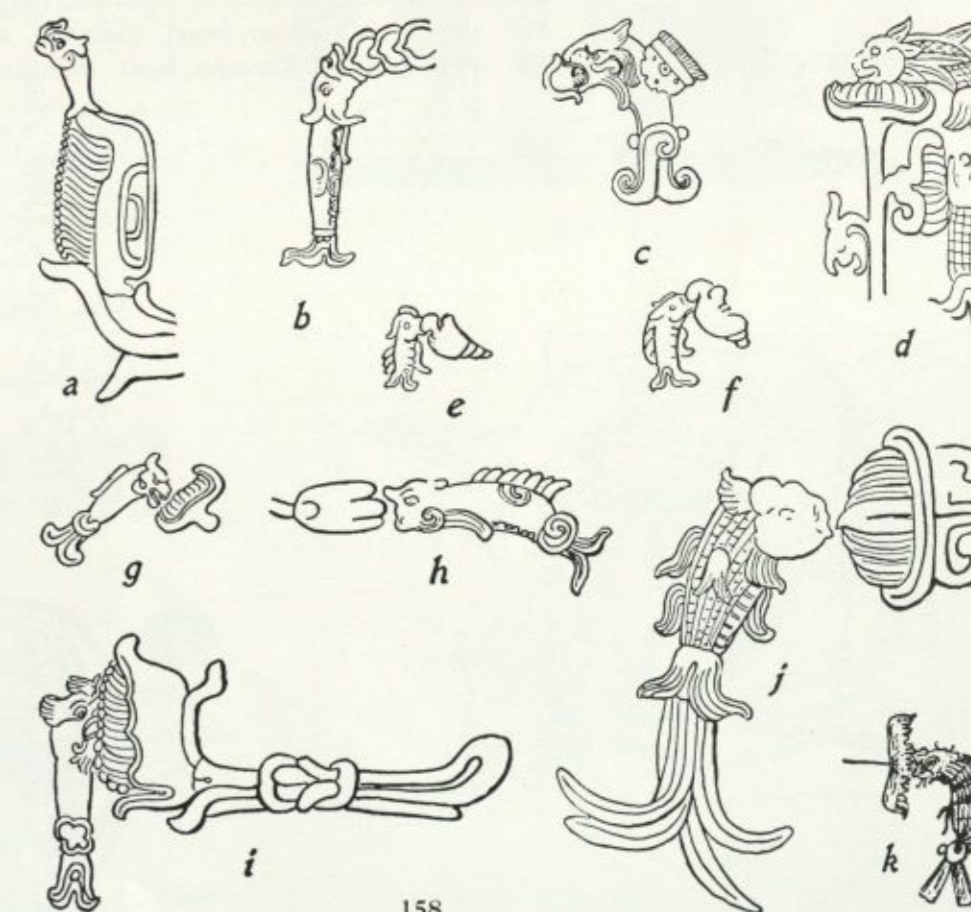
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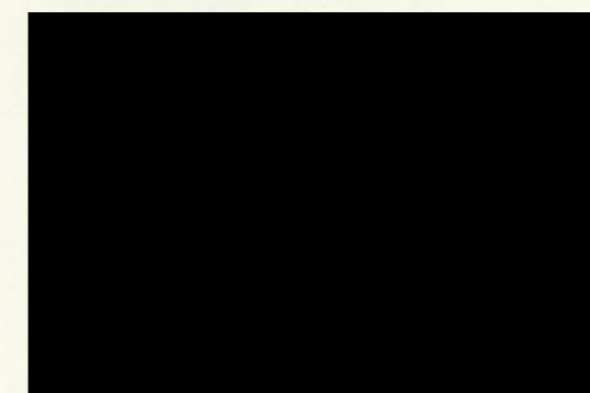
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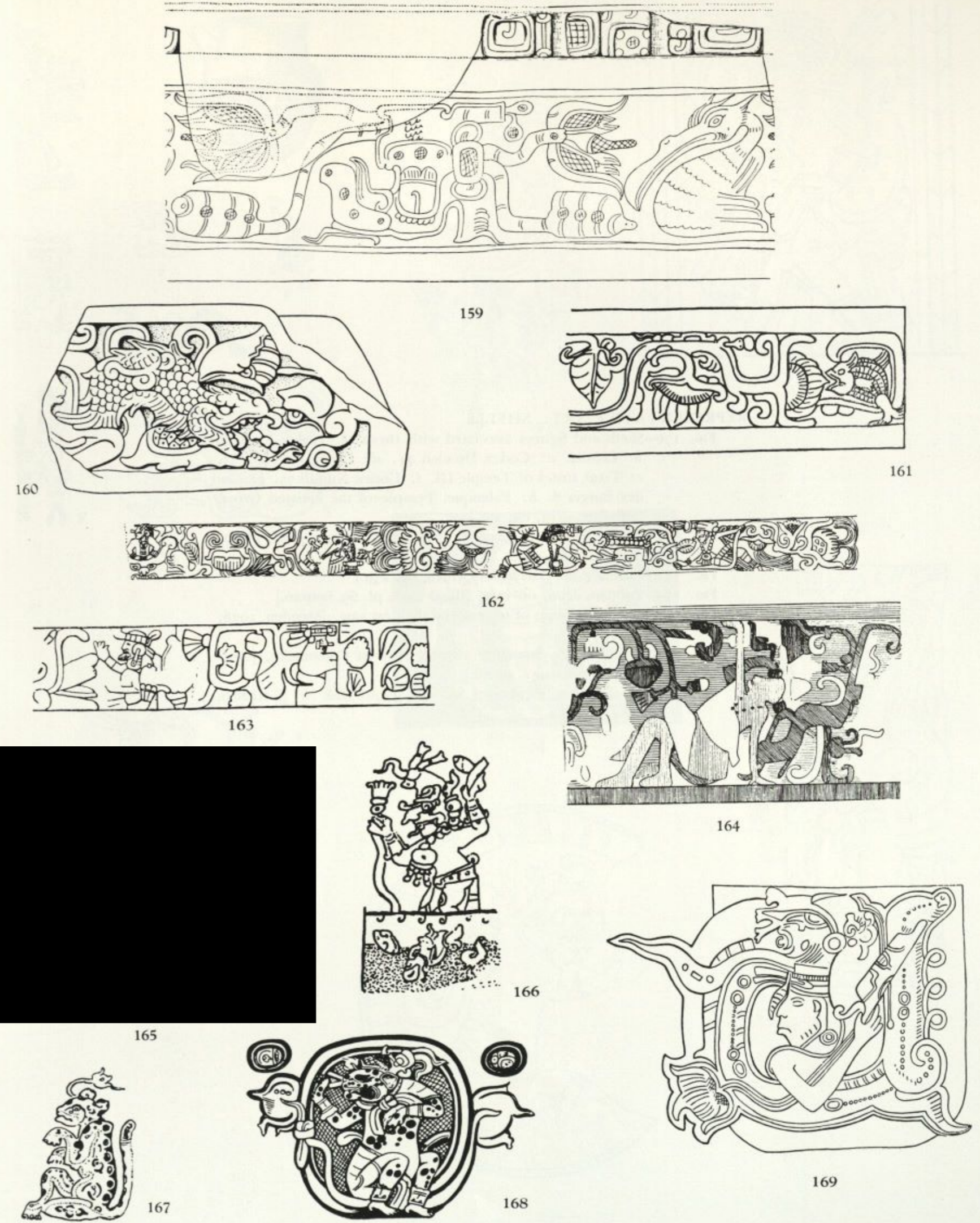


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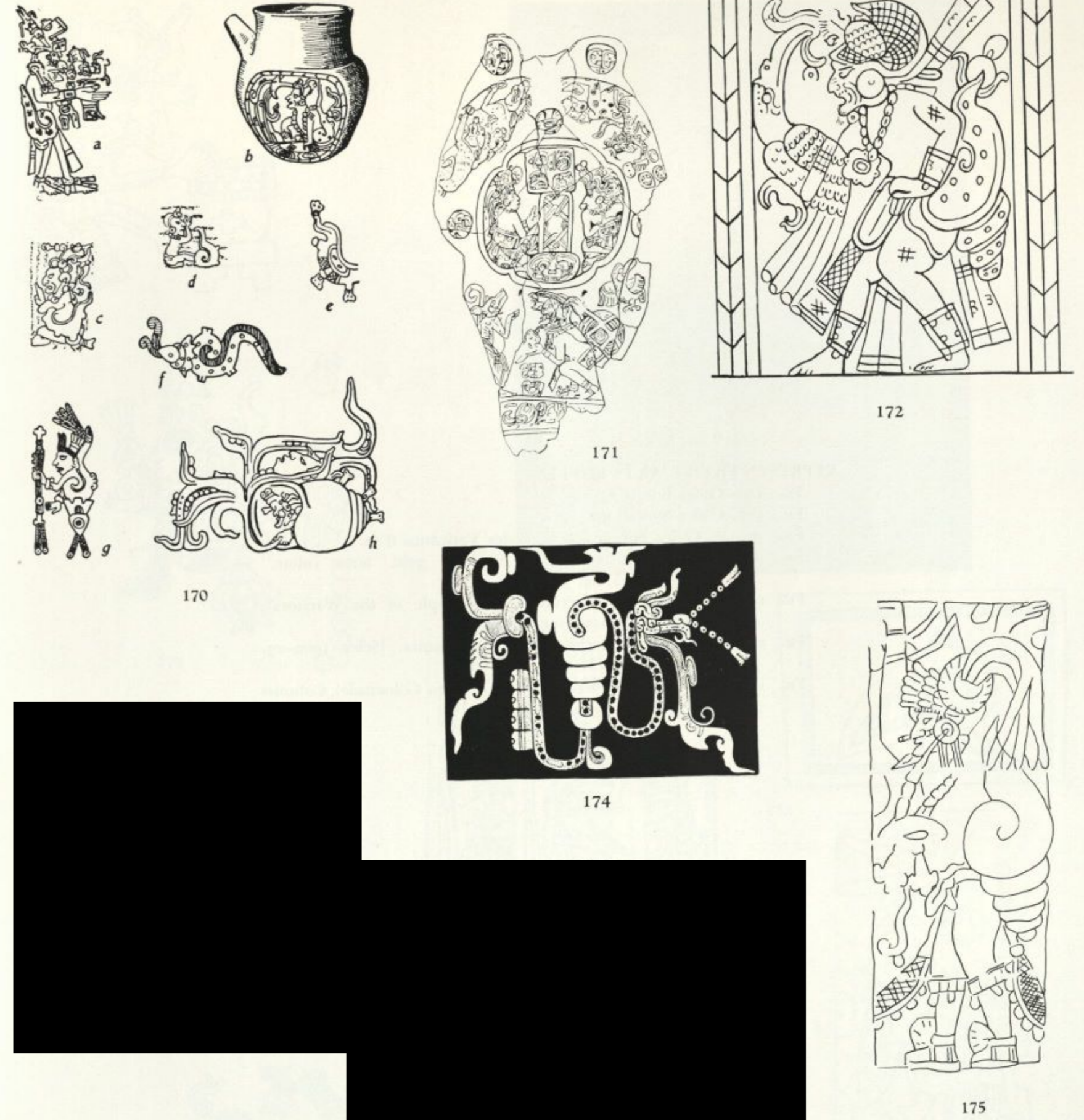
REPRESENTATIVE ART: WATER PLANTS AND FISH

- FIG. 159—Vase from Honduras (?). [Spinden, 1913, fig. 79.]
 FIG. 160—Paraiso, Honduras, stone trough, detail. [Lothrop, 1926, fig. 51, *b.*]
 FIG. 161—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), south wall, border. [Maudslay, 1889-1902, vol. 3, pl. 45.]
 FIG. 162—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), west wall, border. [Maudslay, 1889-1902, vol. 3, pl. 47.]
 FIG. 163—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), north wall, west side. [Breton, 1917, fig. 6.]
 FIG. 164—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), lower border, section. [After Breton in Seler, 1902-23, 5:325, fig. 198.]
 FIG. 165—Chichen Itza, Structure 2D8 (Temple of the Chac Mool). [Morris, 1931, detail from pl. 19.]
 FIG. 166—Codex Dresden 67.
 FIG. 167—Codex Dresden 8. [Spinden, 1913, fig. 100.]
 FIG. 168—Peto, Yucatan, bowl. [Spinden, 1913, fig. 185.]
 FIG. 169—Calcehok, Yucatan, bowl. [Spinden, 1913, fig. 186.]



REPRESENTATIVE ART: SHELLS

- FIG. 170—Shells and figures associated with them. *a*: Codex Paris 6. *b*: Chama. *c*: Codex Dresden 41. *d*: Codex Dresden 37. *e*: Tikal, lintel of Temple III. *f*: Codex Nuttall 75. *g*: Codex Borgia 8. *h*: Palenque, Temple of the Foliated Cross. [Spinden, 1913, fig. 108.]
- FIG. 171—Copan, incised peccary skull, Death blowing a shell. [Spinden, 1913, fig. 210.]
- FIG. 172—Chama vase. [Dieseldorff, 1926, fig. 239.]
- FIG. 173—Yucatan, detail on vase. [Bliss, 1956, pl. 69, bottom.]
- FIG. 174—Salvador, design of serpent and shell on vase. [Spinden, 1928, fig. 24.]
- FIG. 175—Chichen Itza, Structure 2D8 (Northwest Colonnade), Jamb A. [Morris, 1931, pl. 68.]
- FIG. 176—Chichen Itza, Cenote of Sacrifice, Gold Disk N. [Lothrop, 1952, fig. 43*a*.]



REPRESENTATIVE ART: SHELLS

- FIG. 177—Codex Borgia 24.
- FIG. 178—Codex Nuttall 50.
- FIG. 179—*a*: Codex Borgia 64. *b*: Codex Vaticanus B 52.
- FIG. 180—Chichen Itza, Cenote of Sacrifice, gold "horse collar."
[Lothrop, 1952, fig. 56.]
- FIG. 181—Chichen Itza, Structure 2D8 (Temple of the Warriors),
Pilaster B. [Morris, 1931, pl. 40.]
- FIG. 182—Codex Magliabecchi 8, design on manta. [Seler, 1902-23,
2:533, fig. 46.]
- FIG. 183—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column
39N. [Morris, 1931, pl. 105.]



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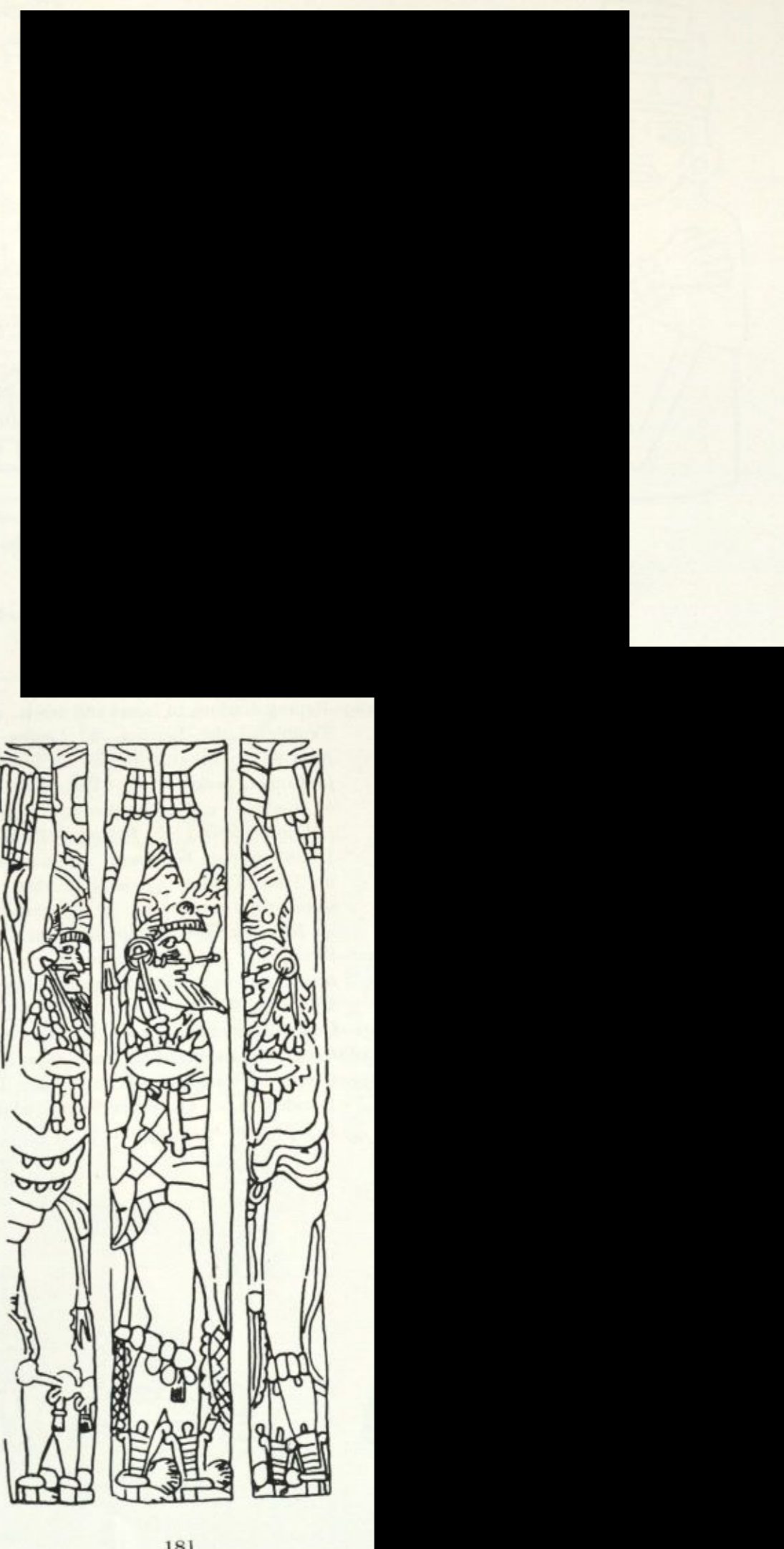


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REPRESENTATIVE ART: TREES AND PLANTS

FIG. 184—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), south stairway, west balustrade. [Marquina, 1951, fig. 30.]

FIG. 185—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B22. [Maudslay, 1889-1902, vol. 3, pl. 49.]

FIG. 186—Chichen Itza, Structure 5B18 (Castillo of Old Chichen), east column, east side, detail. [Carnegie Institution of Washington.]

REPRESENTATIVE ART: CROSSED ARMS

FIG. 187—Tula, stone idol. [Seler, 1902-23, fig. 68.]

REPRESENTATIVE ART: NUDITY

FIG. 188—Chichen Itza, Structure 3D11 (Mercado), east pilaster. [Ruppert, 1943, fig. 20, b.]

REPRESENTATIVE ART: DEATH

FIG. 189—Representations of bones and death. *a*: Chichen Itza, Lower Temple of the Jaguars. *b*: Copan, Altar G1. *c*: Copan, Altar R. *d*: Tikal, Altar 16. *e*: Tikal, lintel of Temple III. *f*: Copan, Stela H. *g*: Palenque, Temple of the Cross. *h*: Codex Tro-Cortesianus 33. *i*: Copan, Stela B, back. *j*: Copan, Stela I. *k*: Palenque, Palace, House D. *l*: Uxmal, House of the Governor, torso. *m*: Codex Dresden 53. *n*: Tikal, Temple 55, detail of frieze. *o*: Uxmal, sculptured stone from environs. *p*: Palenque, Palace, House D. *q*: Mexican Codex. [Spinden, 1913, fig. 115.]

FIG. 190—Bonampak, Room 2, fresco on east end wall, figure with death symbols. [After Ruppert, Thompson, and Proskouria-koff, 1955, fig. 28.]

FIG. 191—Codex Dresden 12, death god (A). [Spinden, 1913, fig. 116.]

FIG. 192—Codex Magliabecchi 60, death sign.

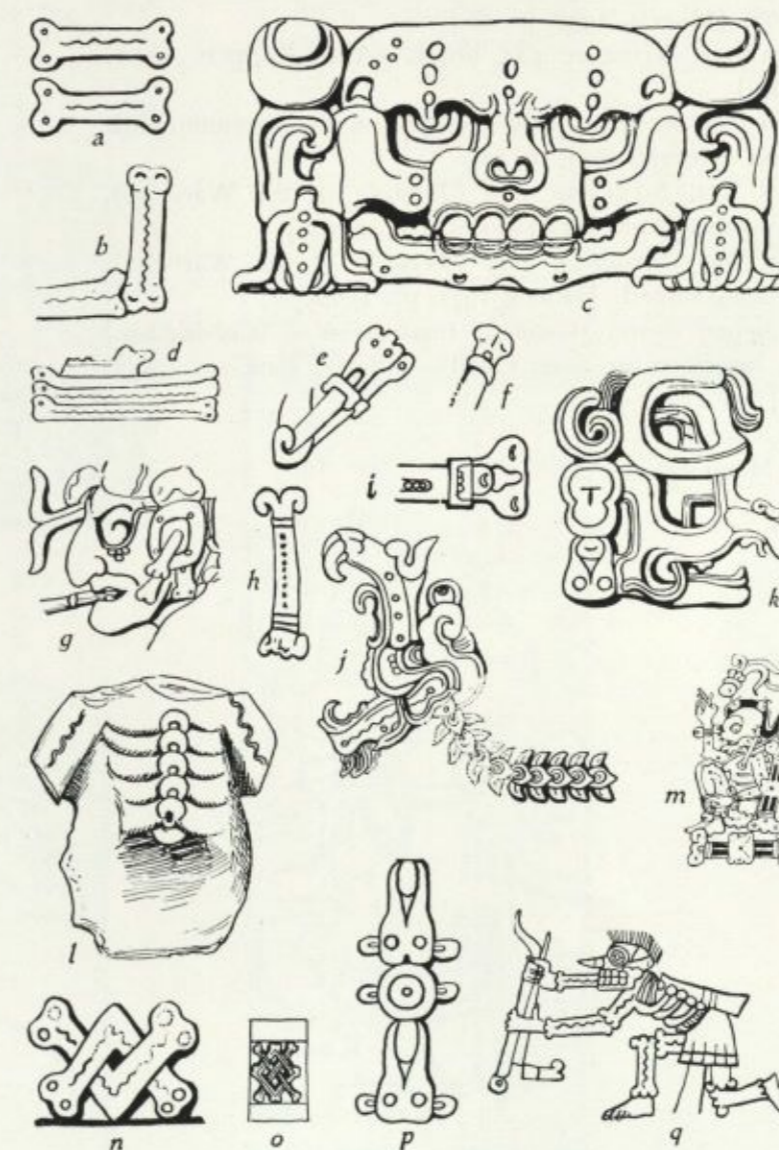
FIG. 193—Glyphs indicating death. *a*: Codex Dresden 63. *b*: Codex Dresden 10. *c*: Quirigua, Stela F, east side. *d*: Copan, Stela I. [Spinden, 1913, fig. 117.]



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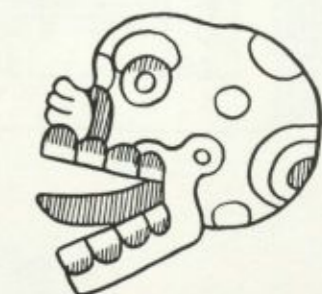
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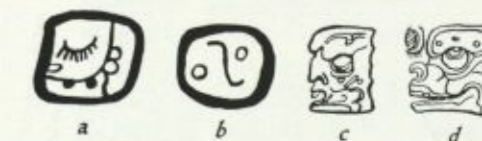
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REPRESENTATIVE ART: DEATH

- FIG. 194—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), south wall, Row A. [Maudslay, 1889-1902, vol. 3, pl. 45, no. 5.]
- FIG. 195—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), north column, south side. [Seler, 1902-23, 5:290, fig. 133.]
- FIG. 196—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), north column, north side. [Carnegie Institution of Washington.]
- FIG. 197—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 20S. [Morris, 1931, pl. 88.]
- FIG. 198—Chichen Itza, Structure 4B3, lintel. [After Ruppert, 1952, fig. 139*a*.]
- FIG. 199—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 2N. [Morris, 1931, pl. 42.]
- FIG. 200—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco, death's-head. [Morris, 1931, fig. 291*b*.]
- FIG. 201—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco, death's-head. [Morris, 1931, pl. 150*a*.]
- FIG. 202—Tula, incised stone. [Carnegie Institution of Washington.]
- FIG. 203—Teayo, carved stone from Castillo. [Seler, 1902-23, 3:445, fig. 47.]
- FIG. 204—Codex Nuttall 78.
- FIG. 205—Codex Magliabecchi 72.



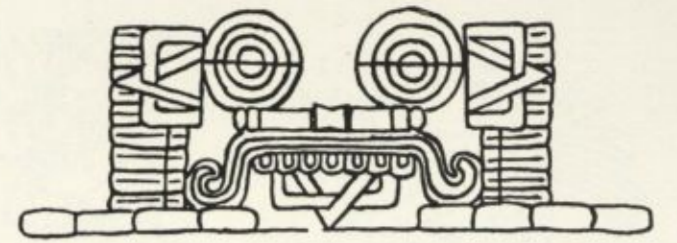
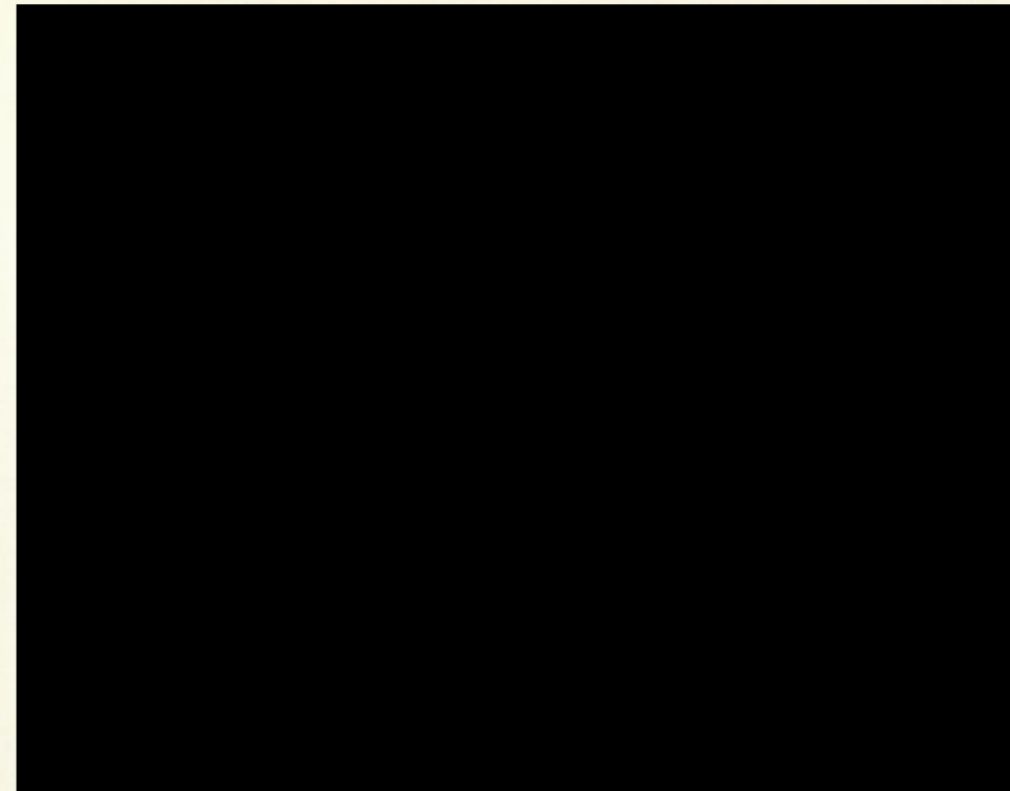
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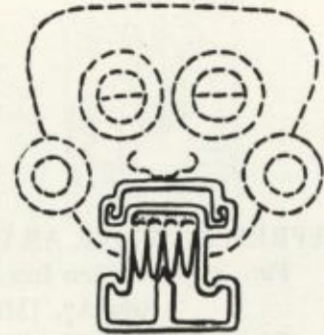
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REPRESENTATIVE ART: MEXICAN GODS—TLALOC

- FIG. 206—Copan, miscellaneous sculpture. [*a*: Proskouriakoff, 1950, fig. 35,*m*'; *b*: Spinden, 1924, fig. 32,*c*.]
 FIG. 207—Sayil, Structure 4B1, east corbel. [Proskouriakoff, 1950, fig. 102,*c*.]
 FIG. 208—Uxmal, Monjas. [Seler, 1902-23, 5:714, fig. 3.]
 FIG. 209—Uxmal, Adivino. [Seler, 1902-23, 5:714, fig. 4.]
 FIG. 210—Teotihuacan, formal sign of Tlaloc. [Marquina, 1951, pl. 14.]
 FIG. 211—Teotihuacan, reconstructed head. [After Beyer in Gamio, 1922, vol. 1, fig. 147.]
 FIG. 212—Teotihuacan, clay head of Tlaloc. [Seler, 1902-23, 5:458, fig. 48,*a*.]
 FIG. 213—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), detail of head of priest. [Maudslay, 1889-1902, vol. 3, pl. 51,*b*.]
 FIG. 214—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), head of atlantean figure. [Seler, 1902-23, vol. 5, following p. 388, pl. 20, no. 14.]
 FIG. 215—Chichen Itza, Structure 2D7 (Temple of the Big Tables), head of atlantean figure. [Seler, 1902-23, vol. 5, following p. 388, pl. 21, no. 11.]
 FIG. 216—Chichen Itza, Cenote of Sacrifice, Tlaloc gold mask. [Lothrop, 1952, fig. 54.]



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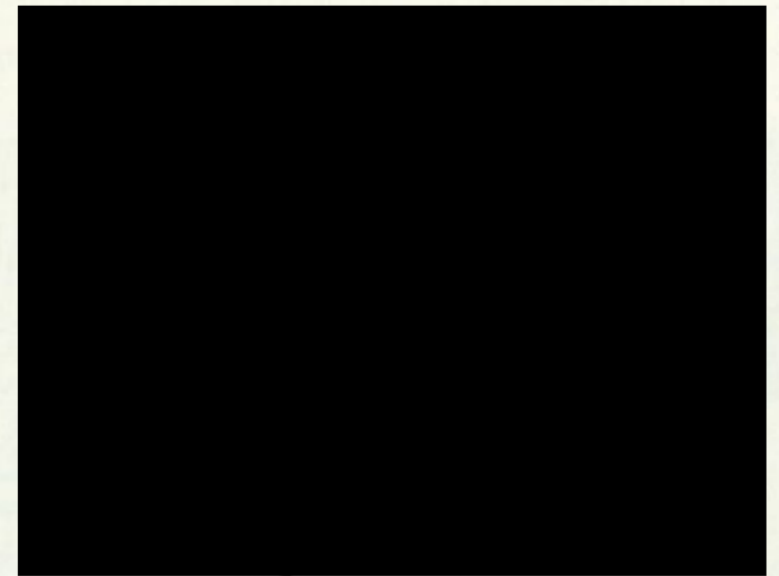
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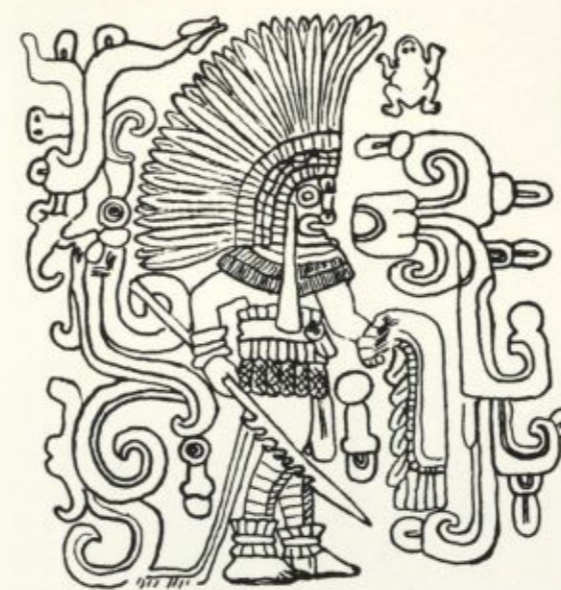
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REPRESENTATIVE ART: MEXICAN GODS—TLALOC

- FIG. 217—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A7. [Maudslay, 1889-1902, vol. 3, pl. 46, no. 7.]
- FIG. 218—Chichen Itza, Structure 2D8, Tlaloc representations. *a*: Northwest Colonnade, Column 28S. *b*: Temple of the Warriors, Column 1S. *c*: Temple of the Warriors, Column 17E. *d*: Temple of the Warriors, Column 4S. [Morris, 1931, pls. 96, 41, 59, 44, respectively.]
- FIG. 219—Chichen Itza, Structure 2D8 (Northwest Colonnade), figure from altar panel. [Morris, 1931, pl. 166.]
- FIG. 220—Codex Magliabecchi 92.
- FIG. 221—Chichen Itza, Structure 7B4 (Temple of the Four Lintels), incensario. [Ruppert, 1952, fig. 150*d*.]
- FIG. 222—El Baul, Sculpture 15. [J. E. S. Thompson, 1948, fig. 8*b*.]
- FIG. 223—Tula, Tlaloc statue found in a ball court. [Acosta, 1944, fig. 1.]
- FIG. 224—Tajin, fragment of sculptured panel. [E. Spinden, 1933, fig. 1*a*.]
- FIG. 225—State of Morelos(?), jade Tlaloc vase. [Caso, 1938*a*, facing p. 33.]
- FIG. 226—Tlaloc vases. *a*: Mexico [Seler, 1902-23, 2:855, fig. 56]. *b*: Chalchicomula [*ibid.*, vol. 5, following p. 585, pl. 72].



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REPRESENTATIVE ART: MEXICAN GODS—TLALOC

- FIG. 227—Mexico, serpentine plaque. [Kelemen, 1943, pl. 238*a*.]
 FIG. 228—Guerrero, Rio Balsa, tablet. [Spinden, 1911, pl. 5.]
 FIG. 229—Mixtec, figurine face. [Peabody Museum, Harvard University.]
 FIG. 230—Tehuantepec, urn. [Peñafiel, 1890, pl. 128.]
 FIG. 231—Codex Magliabecchi 91.
 FIG. 232—Tlaloc heads from codices. *a*: Codex Borgia 1*a*. *b*: Codex Vaticanus B 43. *c*: Codex Laud 31. *d*: Codex Nuttall 31.
 FIG. 233—Tlaloc and the Fifth Quarter of the Heavens. Codex Borgia 27.



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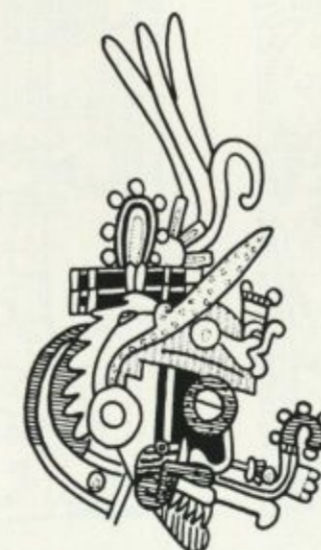
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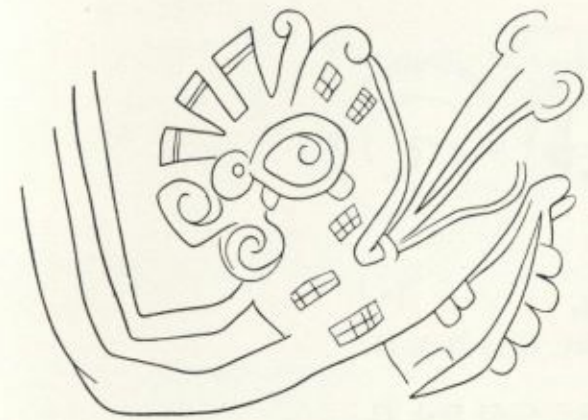
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REPRESENTATIVE ART: MEXICAN GODS

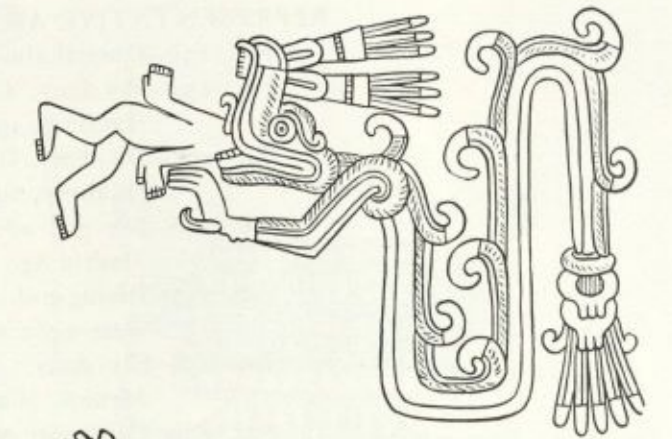
- FIG. 234—Quetzalcoatl. [Sabagun, 1905, bk. 3, ch. 11, fig. 13.]
- FIG. 235—Ecatl. Codex Borbonicus 22.
- FIG. 236—Quetzalcoatl as the sun god. [Seler, 1902-23, 3:454, fig. 3.]
- FIG. 237—Tlauizcalpantecutli. Chichen Itza, Structure 3E1 (Northeast Colonnade), dais, detail from sculptured band. [Carnegie Institution of Washington.]
- FIG. 238—Tlauizcalpantecutli. Tula. [Acosta, 1944, fig. 20.]
- FIG. 239—Tezcatlipoca. Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 3S. [Morris, 1931, pl. 31.]
- FIG. 240—Tezcatlipoca. Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 15W. [Morris, 1931, pl. 57.]
- FIG. 241—Tezcatlipoca. Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 49N. [Morris, 1931, pl. 114.]
- FIG. 242—Tezcatlipoca. Tenochtitlan, Tizoc stone, detail. [Seler, 1902-23, 2:803, fig. 10.]
- FIG. 243—Tlalchitonatiuh. Chichen Itza, Structure 2D3 (Mausoleum I). [Seler, 1902-23, vol. 5, following p. 388, pl. 39.]
- FIG. 244—Tlalchitonatiuh. Tula, Colonnade. [Acosta, 1945, fig. 24.]

REPRESENTATIVE ART: MEXICAN GODS

- FIG. 245—Xiucoatl. Chichen Itza, Structure 2D8 (Temple of the Chac Mool), restoration of serpent on walls. [Morris, 1931, fig. 259.]
- FIG. 246—Xiucoatl. Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), west wall, graffito. [Breton.]
- FIG. 247—Xiucoatl, *a, b*: Esquintla. *c*: Codex Nuttall. [J. E. S. Thompson, 1941a, fig. 9.]
- FIG. 248—Xiucoatl. Tula, back-shield of atlantean. [Acosta, 1943, second plate following p. 144.]
- FIG. 249—Xiucoatl. Tenochtitlan, calendar stone, detail. [Spinden, 1913, fig. 253.]
- FIG. 250—Earth monster. Codex Borgia 67.
- FIG. 251—Warrior in guise of feathered serpent. Codex Nuttall 29.
- FIG. 252—Xiucoatl. Codex Nuttall 3.



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REPRESENTATIVE ART: SKY GODS

- FIG. 253—Quetzal above dish of blood. Codex Borgia 3.
FIG. 254—Sky deity. Chichen Itza, Cenote of Sacrifice, Gold Disk H. [Lothrop, 1952, fig. 15.g.]
FIG. 255—Sky deity. Chichen Itza, Cenote of Sacrifice, Gold Disk C. [Lothrop, 1952, fig. 15.f.]
FIG. 256—Bee god and bee. *a*: Tulum, Ah Muzencab. *b*: Codex Madrid 83. [Roys, 1933, fig. 1.]
FIG. 257—Diving god. Tuxpan, Veracruz, stone of Tepetzintla. [Seler, 1902-23, 2:180, fig. 27.]
FIG. 258—Sky deity. Monte Alban, Lapida 1. National Museum, Mexico. [Caso, 1928, fig. 81.]
FIG. 259—Composite monster and its glyph. Codex Dresden 45. [Spinden, 1913, fig. 133.]
FIG. 260—God M. Codex Madrid 109c.



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REPRESENTATIVE ART: SKY BEARERS OR BACABS

- FIG. 261—Chichen Itza, Structure 2D5 (Castillo), top of inner pillar. [Seler, 1902-23, 5:295, fig. 147.]
 FIG. 262—Chichen Itza, Structure 2D5 (Castillo), capital of serpent column. [Seler, 1902-23, 5:291, fig. 134.]
 FIG. 263—Chichen Itza, Structure 2D5 (Castillo), Column H3, lower figure. [Seler, 1902-23, 5:292, fig. 138.]
 FIG. 264—Chichen Itza, Structure 2D7 (Temple of the Big Tables). [Seler, 1902-23, 5:299, fig. 162.]
 FIG. 265—Chichen Itza, Structure 2D7 (Temple of the Big Tables). [Seler, 1902-23, 5:301, fig. 170.]
 FIG. 266—Chichen Itza, Structure 4C1 (Iglesia), niches. [Seler, 1902-23, 5:242, figs. 56, 54.]

REPRESENTATIVE ART: ASTRONOMICAL FEATURES—SUN DISKS

- FIG. 267—Palenque, Palace, House A. [Maudslay, 1889-1902, vol. 4, pl. 6.]
 FIG. 268—Codex Paris 21.
 FIG. 269—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), west wall. [After Breton in Spinden, 1913, fig. 129.]



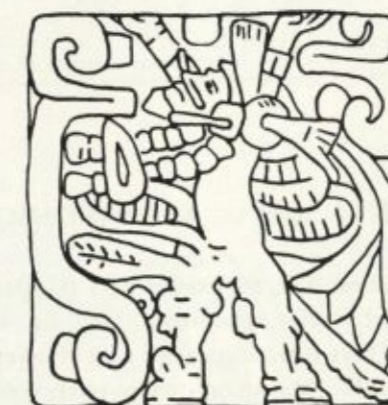
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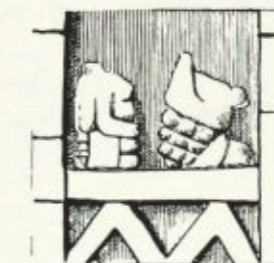
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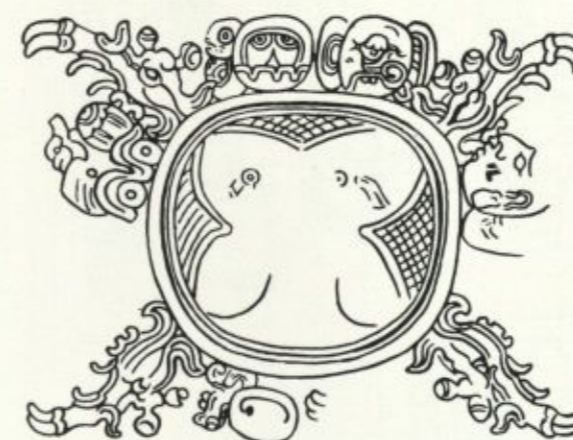
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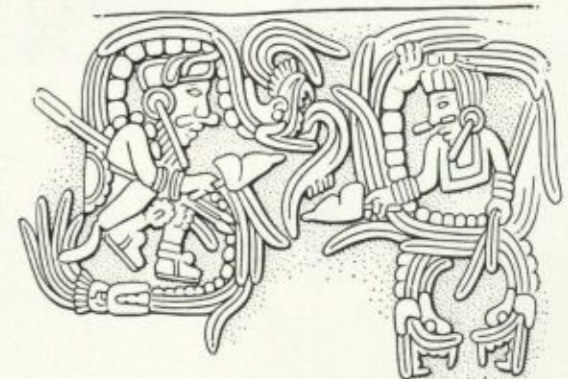
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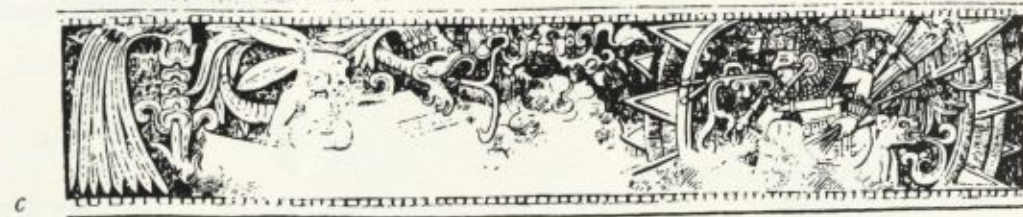
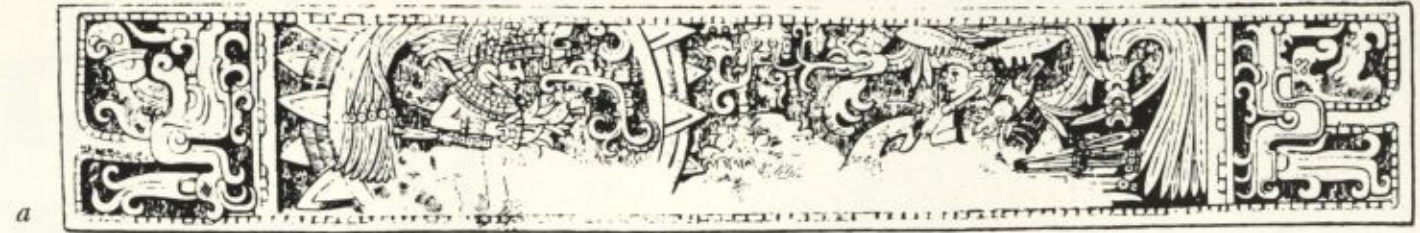


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REPRESENTATIVE ART: ASTRONOMICAL FEATURES—SUN DISKS

- FIG. 270—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), lintel. [Seler, 1902-23, 5:283, fig. 121.]
- FIG. 271—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row E. [Maudslay, 1889-1902, vol. 3, pl. 50.]
- FIG. 272—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), detail. [Breton, 1917, pl. 3.]
- FIG. 273—Tula (?), vase. [Führmann, 1923, vol. 3, pl. 85.]
- FIG. 274—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 5. [Morris, 1931, pl. 45.]



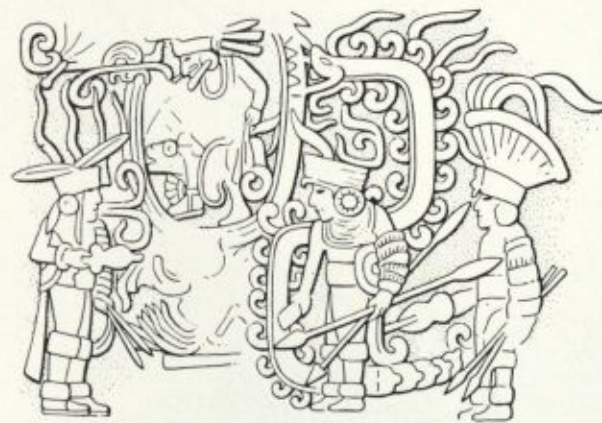
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REPRESENTATIVE ART: ASTRONOMICAL FEATURES—SUN DISKS

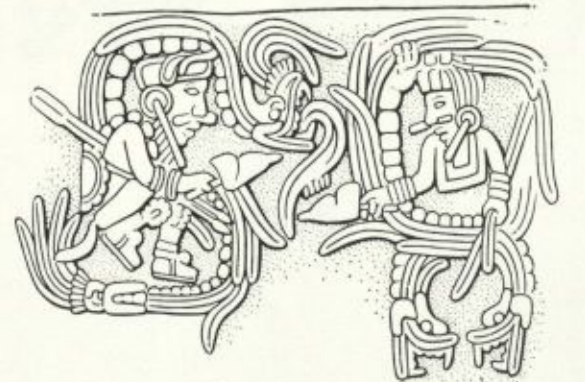
- FIG. 270—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), lintel. [Seler, 1902-23, 5:283, fig. 121.]
- FIG. 271—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row E. [Maudslay, 1889-1902, vol. 3, pl. 50.]
- FIG. 272—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), detail. [Breton, 1917, pl. 3.]
- FIG. 273—Tula (?), vase. [Führmann, 1923, vol. 3, pl. 85.]
- FIG. 274—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 5. [Morris, 1931, pl. 45.]



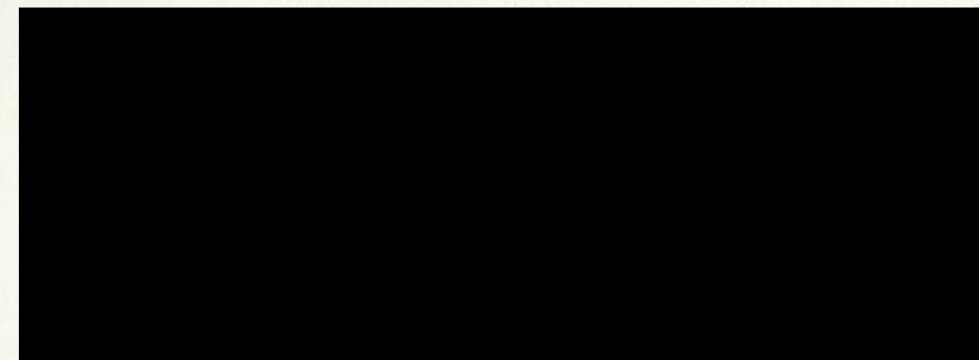
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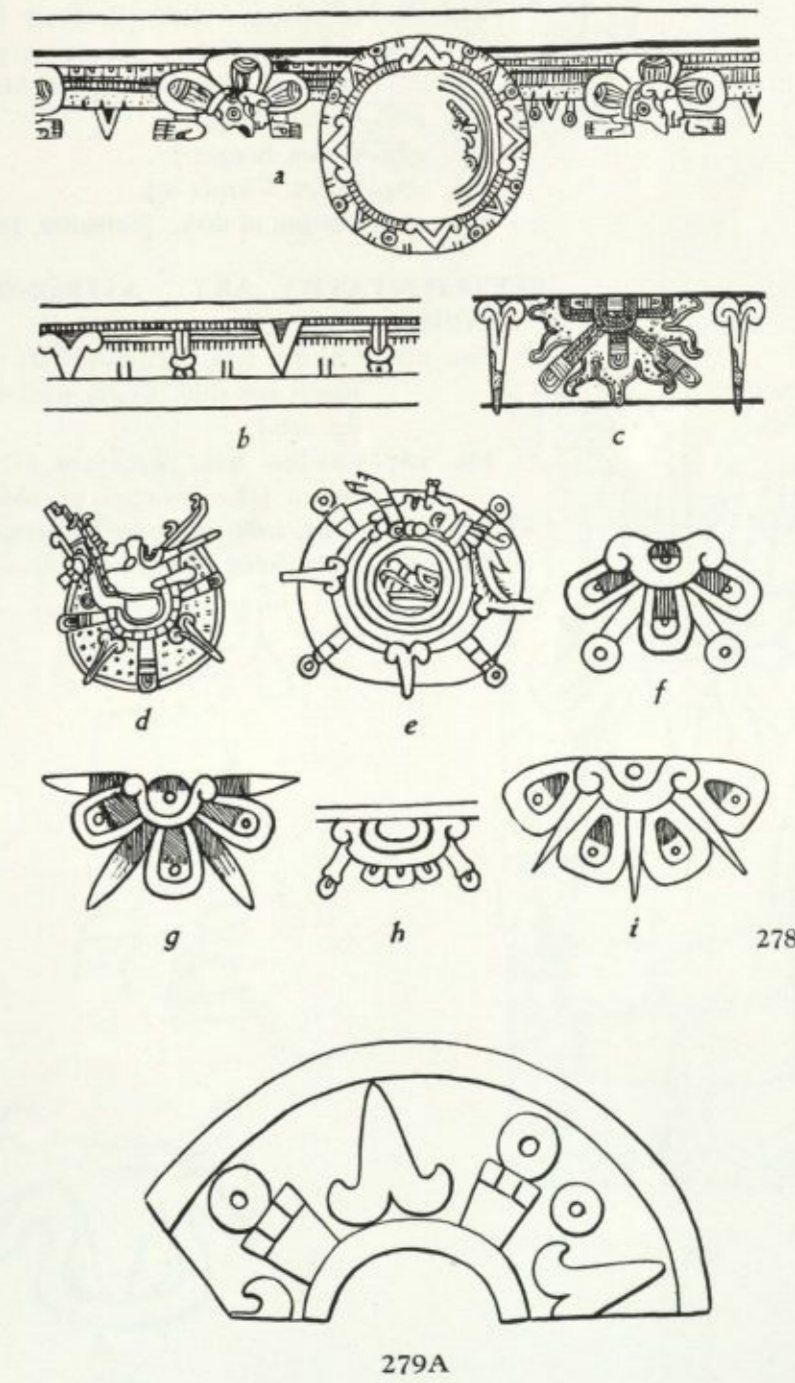


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REPRESENTATIVE ART: ASTRONOMICAL FEATURES—SUN DISKS

- FIG. 275—Chichen Itza, Structure 3C16 (Temple of the Wall Panels), south wall. [Ruppert, 1931, pl. 11,*b*.]
 FIG. 276—Chichen Itza, Cenote of Sacrifice, gilded copper disk. [Lothrop, 1952, fig. 59,*a*.]
 FIG. 277—Chichen Itza, Cenote of Sacrifice, tin (*a*) and gilded copper (*b*) disks. [Lothrop, 1952, fig. 62.]
 FIG. 278—Sun and star symbols, *a,i*: Mitla. *b*: Totonac area. *c,d*: Santa Rita. *e*: Codex Porfirio Diaz. *f*: Codex Fejervary-Mayer. *g*: Codex Vienna. *h*: Chichen Itza, Upper Temple of the Jaguars, Pilaster K5 (north jamb). [Spinden, 1913, fig. 239.]
 FIG. 279—El Castillo, Guatemala. [J. E. S. Thompson, 1948, fig. 7,*c*.]
 FIG. 279A—Tula, sun disk. [Peñafiel, 1899–1900, pl. 55.]

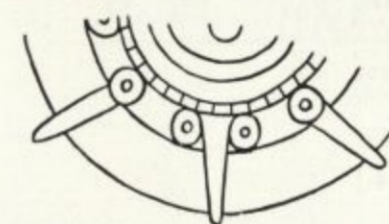
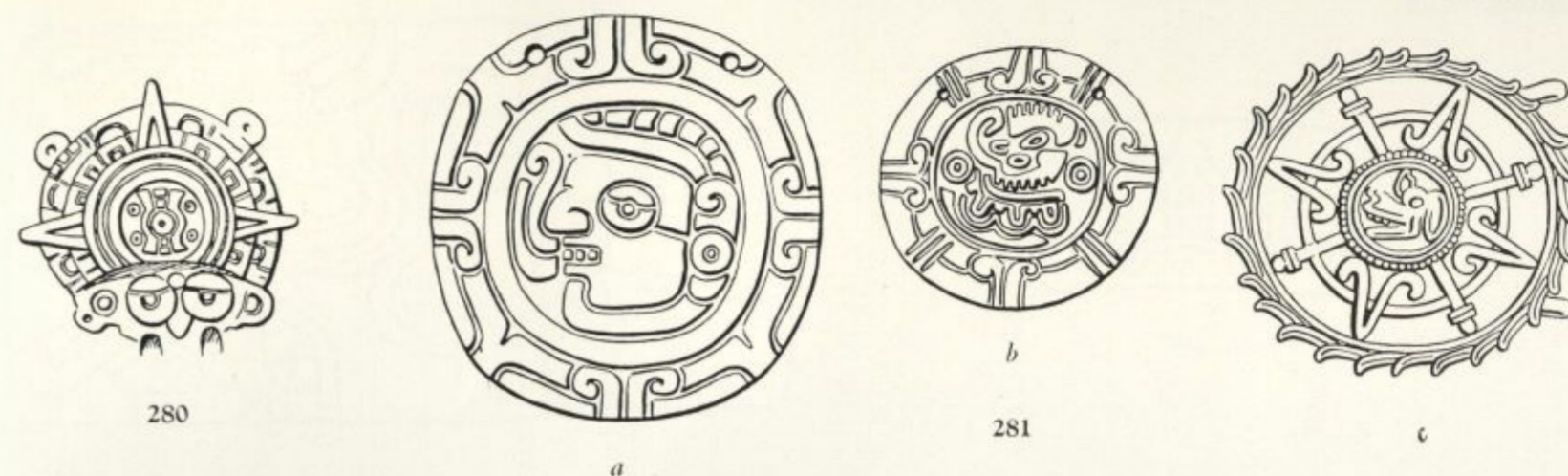


REPRESENTATIVE ART: ASTRONOMICAL FEATURES—SUN DISKS

- FIG. 280—Pulque bowl, Vienna Museum. [Seler, 1902-23, 2: 921, fig. 22.]
 FIG. 281—*a*: Oaxaca disk [Peabody Museum, Harvard University].
b: Xoxo [Seler, 1902-23, 2: 339, fig. 62, *c*]. *c*: Monte Alban, jewel [National Museum, Mexico].
 FIG. 282—Codex Borgia 7.
 FIG. 283—Codex Borgia 7.
 FIG. 284—Codex Vienna 23.
 FIG. 285—Portion of disk. [Saussure, 1891, pl. 5.]

REPRESENTATIVE ART: ASTRONOMICAL FEATURES—STAR GLYPHS

- FIG. 286—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), fresco, east side, Toltec with star sign. [Seler, 1902-23, 5: 346, fig. 220.]
 FIG. 287—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco. [Morris, 1931, pl. 160, *a*.]
 FIG. 288—Tula, from stone at ball court. [Acosta, 1944, fig. 2, *b*.]
 FIG. 289—Tula, from Pilaster 8. [Acosta, 1941, fig. 4.]



REPRESENTATIVE ART: ASTRONOMICAL FEATURES—STAR GLYPHS

- FIG. 290—Tula, Edificio 3, Sala 1, roof frieze.
- FIG. 291—Tenochtitlan, Templo Mayor, *quauhxicalli*. [Seler, 1902-23, 2:811, fig. 13,a.]
- FIG. 292—Tenochtitlan, stone relief. [Seler, 1902-23, 4:725, fig. 914,a.]
- FIG. 293—Tenochtitlan, calendar stone. [MacCurdy, 1912, pl. 66.]
- FIG. 294—Sky band. [Saussure, 1891, pl. 4, no. 6.]

REPRESENTATIVE ART: ASTRONOMICAL FEATURES—PLANETS

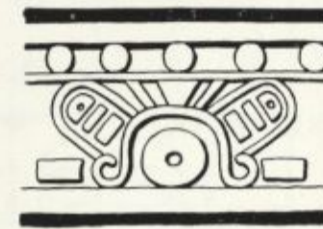
- FIG. 295—Chichen Itza, Structure 3D10 (Red House Ball Court), astronomical band. [Ruppert, 1942, fig. 44,b.]
- FIG. 296—Venus signs. *a*: Palenque, Palace, House E. *b*: Copan, Altar R. *c*: Codex Dresden 56. [Spinden, 1913, fig. 131.]
- FIG. 297—Chichen Itza, Structure 2D4 (Mausoleum III), panel. [Seler, 1902-23, 5:367, fig. 243.]
- FIG. 298—Chichen Itza, Cenote of Sacrifice, border patterns from disks. *a*: Disk E. *b*: Disk D. *c*: Disk A. [Lothrop, 1952, fig. 14.]
- FIG. 299—Seibal, Stela 3, Saturn glyph. [Maler, 1908, pl. 3, no. 2.]
- FIG. 300—Saturn glyphs. *a*: Codex Dresden [after Förstemann in Bowditch, 1910, p. 225]. *b*: Tula [Acosta, 1941, fig. 6].



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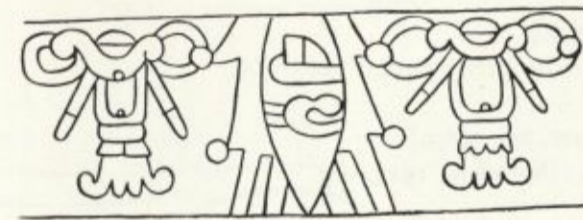
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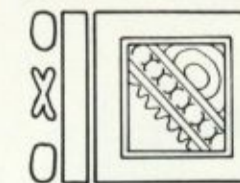


c

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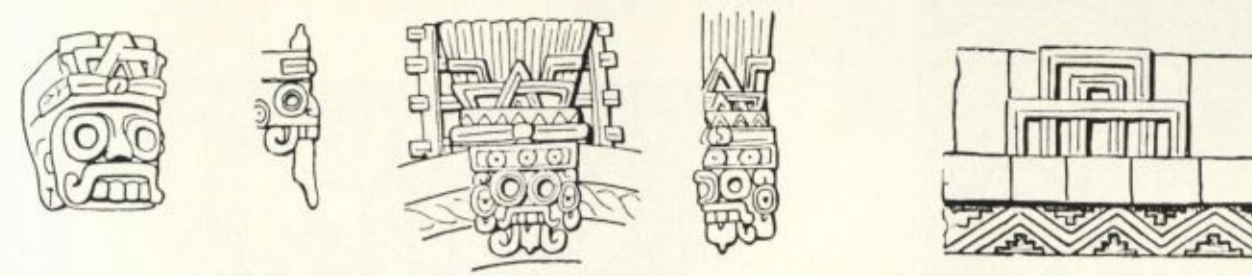
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REPRESENTATIVE ART: ASTRONOMICAL FEATURES—YEAR SYMBOLS

- FIG. 301—Copan. [Spinden, 1924, fig. 32, *a-d*.]
 FIG. 302—Chichen Itza, Structure 4C1 (Monjas), east façade, roof ornament. [Seler, 1902-23, 5:224, fig. 34.]
 FIG. 303—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 17S. [Morris, 1931, pl. 59.]
 FIG. 304—Tula, stone figure.
 FIG. 305—Tula, stone figure. [Acosta, 1945, fig. 5, *b*.]
 FIG. 306—Tula, detail from Stone of Xico. [Arte prehispanico de Mexico, 1946, fig. 75.]
 FIG. 307—Jalapazco, Puebla. [Seler, 1902-23, 5:502, fig. 148, *a*.]
 FIG. 308—Xochicalco, figure on base of temple. [Spinden, 1913, fig. 266.]
 FIG. 309—Tenango, monolith. [Garcia Payon, 1936-39, fig. 2.]
 FIG. 310—Teayo, stone. [Seler, 1902-23, 3:434, fig. 32.]
 FIG. 311—Mitla, fresco. [Seler, 1902-23, vol. 3, following p. 469, pl. 15, fig. 2.]
 FIG. 312—Aztec and Mixtec year signs. [Spinden, 1928, fig. 83.]
 FIG. 313—Chichen Itza, Structure 2D4 (Mausoleum III), year-binding sign. [Maudslay, 1889-1902, vol. 3, pl. 52, *e*.]



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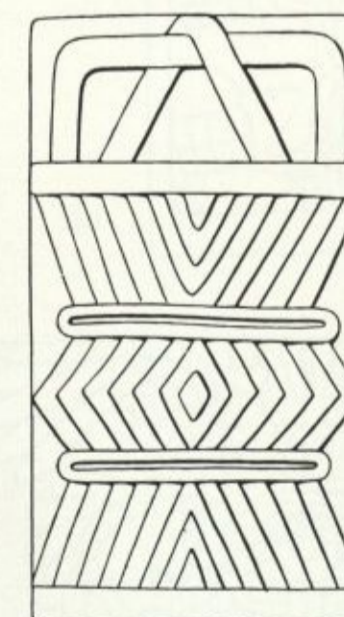
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REPRESENTATIVE ART: MONSTERS—MASKS

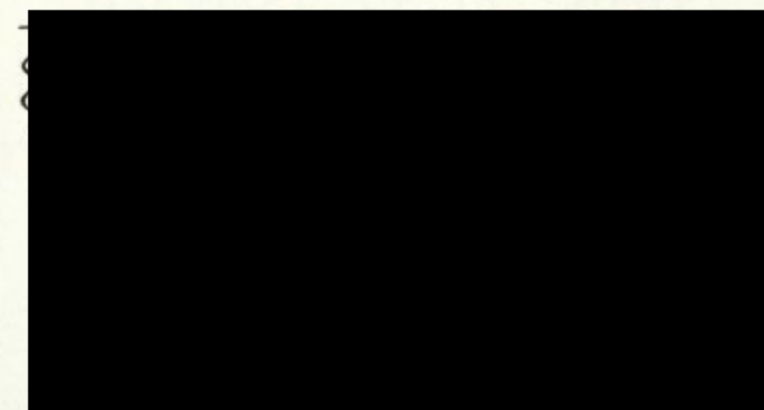
- FIG. 314—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), end of north wall. [Maudslay, 1889-1902, vol. 3, pl. 51.c.]
- FIG. 315—Chichen Itza, Structure 2D4 (Mausoleum III), panel. [Seler, 1902-23, 5:367, fig. 242.]
- FIG. 316—Chichen Itza, Structure 2D8 (Temple of the Warriors), figure on north façade. [After Morris, 1931, fig. 17.]
- FIG. 317—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 6, bottom figures. [Morris, 1931, pl. 46.]
- FIG. 318—Chichen Itza, Structure 2D1 (South Temple of the Great Ball Court), Column 5N, base. [Carnegie Institution of Washington.]
- FIG. 319—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 2W. [E. B. Ricketson, 1927, p. 14.]
- FIG. 320—Chichen Itza, Structure 2C3. [Seler, 1902-23, vol. 5, following p. 388, pl. 33, Bb.]
- FIG. 321—Tula, stone.
- FIG. 322—Tula, Main Temple, frieze. [Acosta, 1945, 7:33, fig. 19.]



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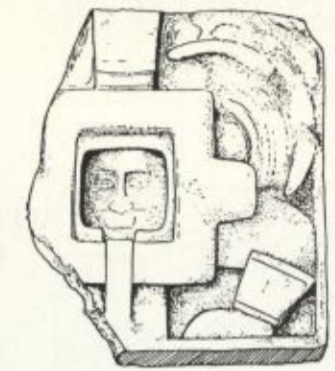
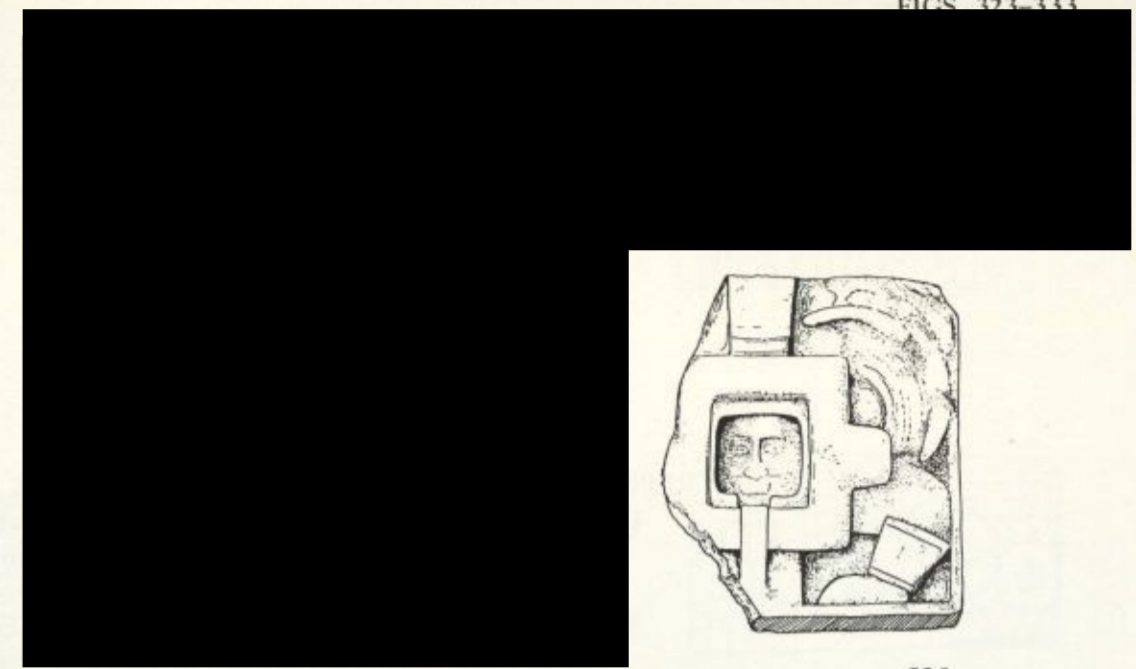


REPRESENTATIVE ART: MONSTERS—MASKS

- FIG. 323—Tula, stone.
 FIG. 324—Tula, stone. [Pijoan, 1946, fig. 872.]
 FIG. 325—Tajin, Lesser Ball Court, northwest panel. [E. Spinden, 1933, pl. 16, *a*.]
 FIG. 326—Texcoco, tile. [Spinden, 1913, fig. 242.]
 FIG. 327—Piedras Negras, Stela 26 (*a*) and Stela 7 (*b*). [Spinden, 1913, fig. 251, *a, c*.]
 FIG. 328—Maya jade. [J. A. Mason, 1927, facing p. 55.]
 FIG. 329—Chiapas, Maya jade plaque, "Ocosingo style" (?).
 FIG. 330—Chalco, head from onyx tablet. [Spinden, 1913, fig. 251, *f*.]
 FIG. 331—Texcoco, sculptured stone. [Spinden, 1913, fig. 251, *h*.]
 FIG. 332—Miacatlan, Morelos. [Seler, 1902-23, 2:157, fig. 64.]
 FIG. 333—Oaxaca, head from figure urn. [Caso and Bernal, 1952, fig. 56.]



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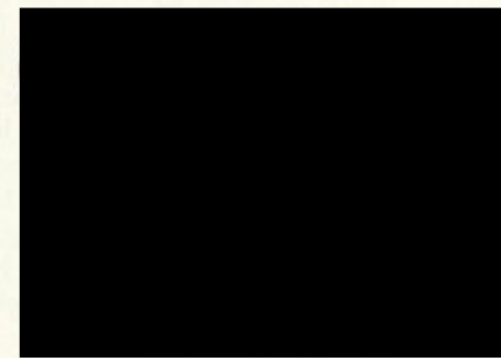


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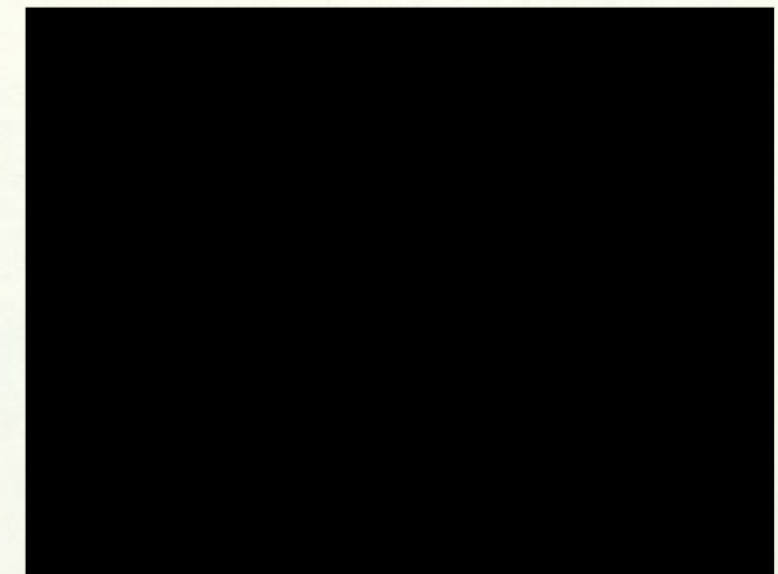
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REPRESENTATIVE ART: MONSTERS—MASKS

- FIG. 334—Chichen Itza, Structure 5C7 (Temple of the Owls), lateral decoration, reconstructed from miscellaneous stones. [Carnegie Institution of Washington.]
- FIG. 335—Chichen Itza, Structure 2D1 (South Temple of the Great Ball Court), Drum 4, top of mask, restored from photographs. [Carnegie Institution of Washington.]
- FIG. 336—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), pilaster. [Maudslay, 1889-1902, vol. 3, pl. 38, h2.]
- FIG. 337—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court). [Seler, 1902-23, 5:306, fig. 181.]
- FIG. 338—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), lower border. [Spinden, 1913, fig. 154, a.]
- FIG. 339—Chichen Itza, Structure 3D11 (Mercado), west pilaster. [Ruppert, 1943, fig. 20, e.]
- FIG. 340—Chichen Itza, Structure 3D13 (Xtoloc Temple), carving at base of south column, north face. [After Ruppert, 1952, fig. 136, a.]
- FIG. 341—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), pilaster. [Morris, 1931, fig. 138.]
- FIG. 342—Chichen Itza, Structure 2C3, mask. [Spinden, 1913, fig. 154, b.]
- FIG. 343—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 2W. [E. B. Ricketson, 1927, p. 14.]
- FIG. 344—Chichen Itza, Cenote of Sacrifice, border patterns from disks. a, c: Disk F. b: Disk C. [Lothrop, 1952, fig. 12.]
- FIG. 345—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), bottom of column. [Maudslay, 1889-1902, vol. 4, pl. 93, o.]
- FIG. 346—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), top of column. [Seler, 1902-23, 5:317, fig. 192.]
- FIG. 347—Tula, Main Temple. [Acosta, 1944, fig. 8.]



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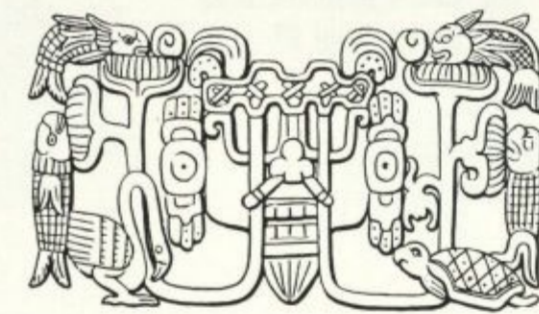
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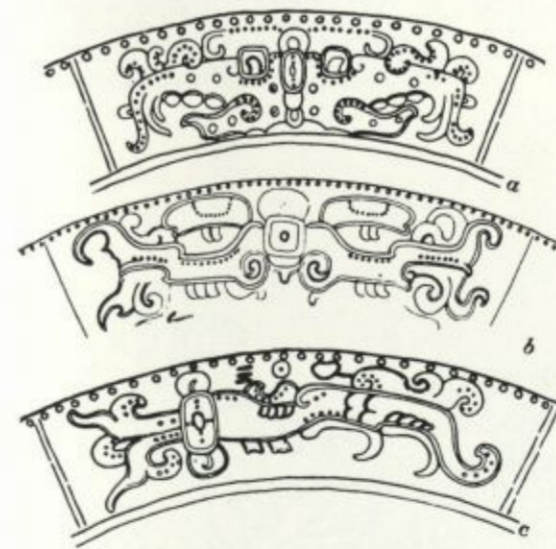
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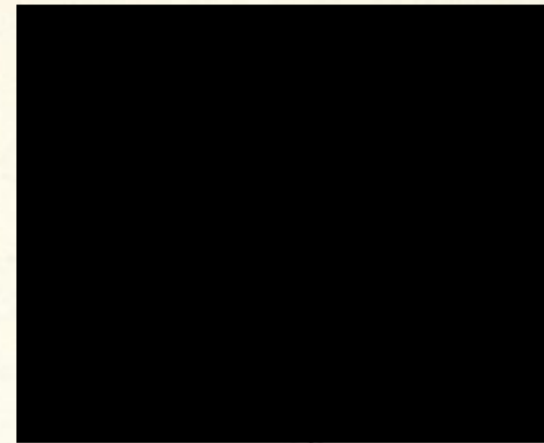
346

REPRESENTATIVE ART: MONSTERS—EARTH MONSTER

- FIG. 348—Tlaltecutili. Codex Borbonicus 33.
 FIG. 349—Aztec, circular stone detail. [Escultura Mexicana Antigua, pl. 48.]
 FIG. 350—*Quauhxicalli*. [Seler, 1902-23, 2:718, fig. 3.]
 FIG. 351—Teocalli de la Guerra Sagrada. [Caso, 1927, fig. 64.]
 FIG. 352—Tizoc stone, portion. [Seler, 1902-23, 2:803, fig. 10.]
 FIG. 353—Engraved femur, National Museum, Mexico. [Beyer, 1919-22, fig. 3.]
 FIG. 354—Tlalchitonatiuh with Xolotl. Aubin Tonalamatl 16.
 FIG. 355—Telleriano Remensis 20.
 FIG. 356—Codex Borbonicus 16.
 FIG. 357—Bilimec vase, Vienna Museum. [Seler, 1902-23, vol. 2, facing p. 912, no. 1.]
 FIG. 358—Aubin Tonalamatl 6.
 FIG. 359—Codex Borbonicus 24.
 FIG. 360—Codex Laud 38.



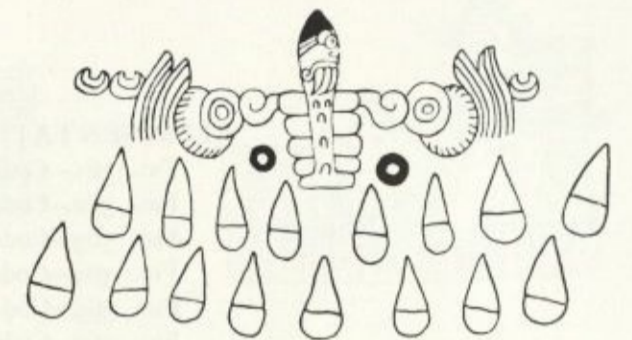
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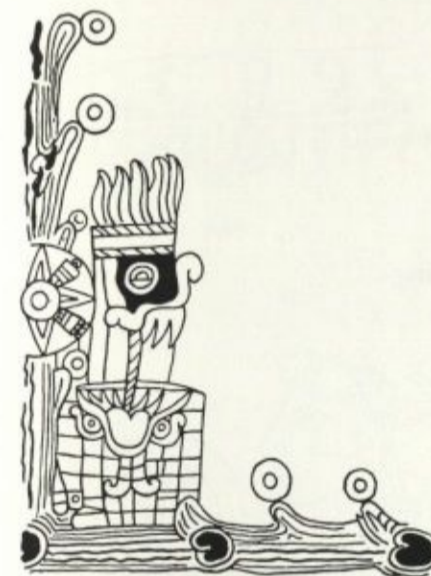
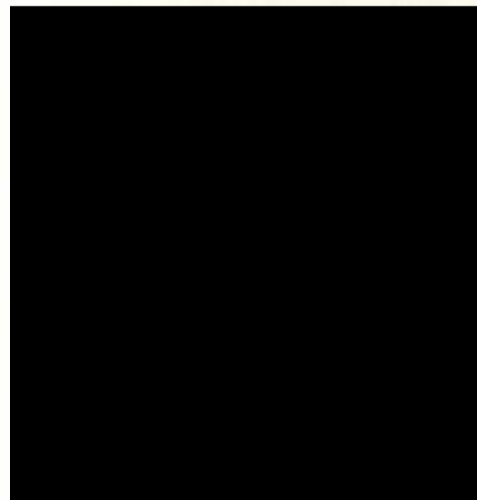
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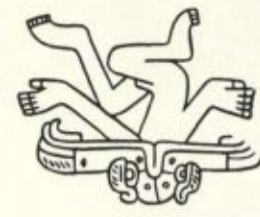
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REPRESENTATIVE ART: MONSTERS—EARTH MONSTER

- FIG. 361—Codex Borgia 3.
 FIG. 362—Codex Borgia 60.
 FIG. 363—Codex Borgia 13.
 FIG. 364—Codex Fejervary-Mayer 40.
 FIG. 365—Codex Vaticanus B 11.
 FIG. 366—Codex Vaticanus B 12.
 FIG. 367—Codex Nuttall 1.
 FIG. 368—Codex Borgia 19.
 FIG. 369—Codex Borgia 56.
 FIG. 370—Codex Borgia 71.
 FIG. 371—Codex Bologna 25.
 FIG. 372—Codex Nuttall 12.
 FIG. 373—Teayo, Veracruz, Castillo, "La Chinola" stone. [Seler, 1902-23, vol. 3, following p. 410, pl. 7.]
 FIG. 374—Monte Alban, jewel. [National Museum, Mexico.]
 FIG. 375—Codex Fejervary-Mayer 1.
 FIG. 376—Chuitinamit, Guatemala. [Carnegie Institution of Washington.]



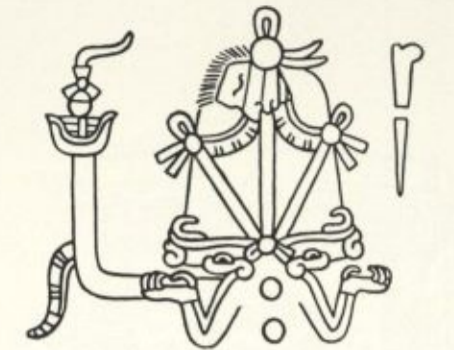
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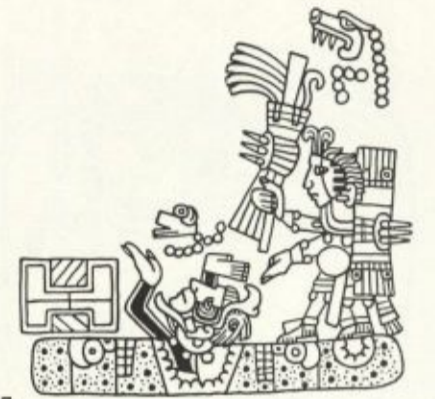
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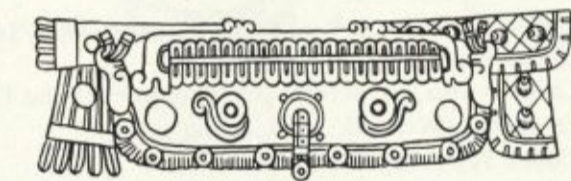
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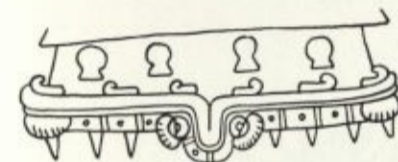
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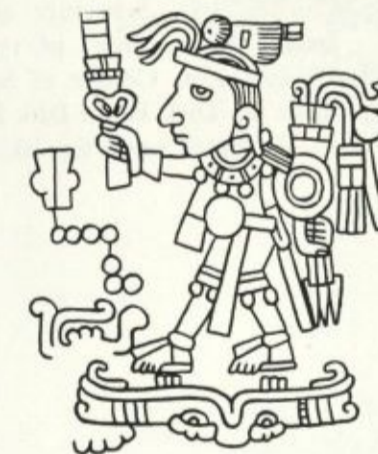
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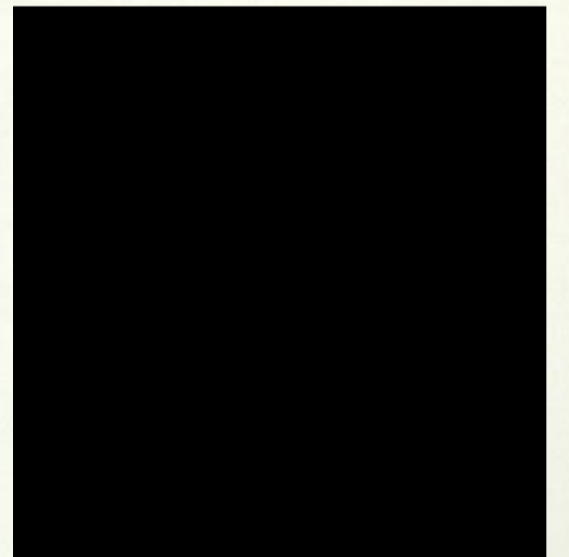
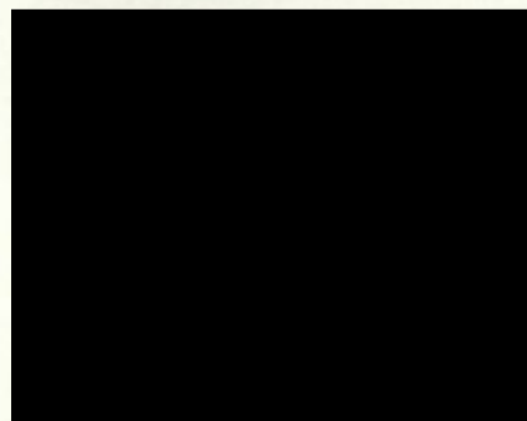
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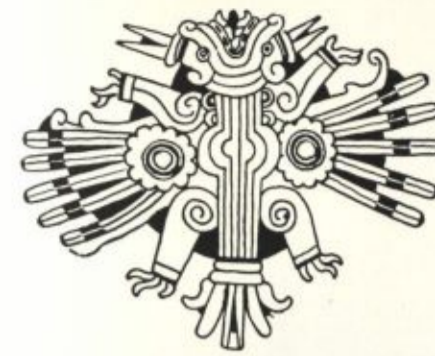


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REPRESENTATIVE ART: MONSTERS—EARTH MONSTER

- FIG. 377—Costa Rica, design from jar. [Lothrop, 1926, pl. 83.]
 FIG. 378—Codex Paris 23.
 FIG. 379—Codex Dresden 69a.
 FIG. 380—Codex Madrid 18a.
 FIG. 381—Codex Dresden 69a.
 FIG. 382—Codex Dresden 33b. [Spinden, 1913, fig. 73*a*.]
 FIG. 383—Codex Paris 16.
 FIG. 384—Chichen Itza, Structure 5C7 (Temple of the Owls), painted capstone. [Willard, 1926, facing p. 248.]
 FIG. 385—Codex Fejervary-Mayer 42.
 FIG. 386—Chichen Itza, Structure 2D10 (North Colonnade), Drum 6. [Carnegie Institution of Washington.]
 FIG. 387—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco. [Morris, 1931, pl. 170*b*.]
 FIG. 388—Chichen Itza, Cenote of Sacrifice, earth monsters on gold disks. *a*: Disk H. *b*: Disk I. *c*: Disk D. *d*: Disk J. *e*: Disk F. [Lothrop, 1952, fig. 16.]



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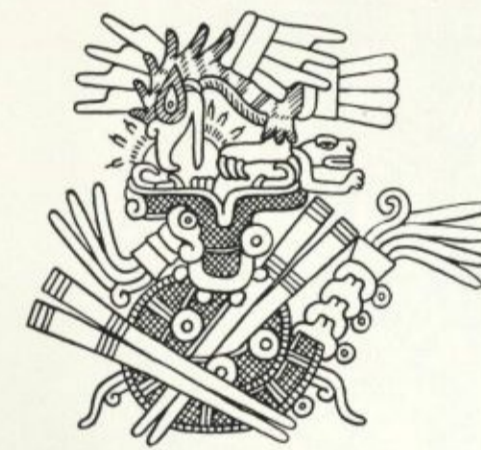
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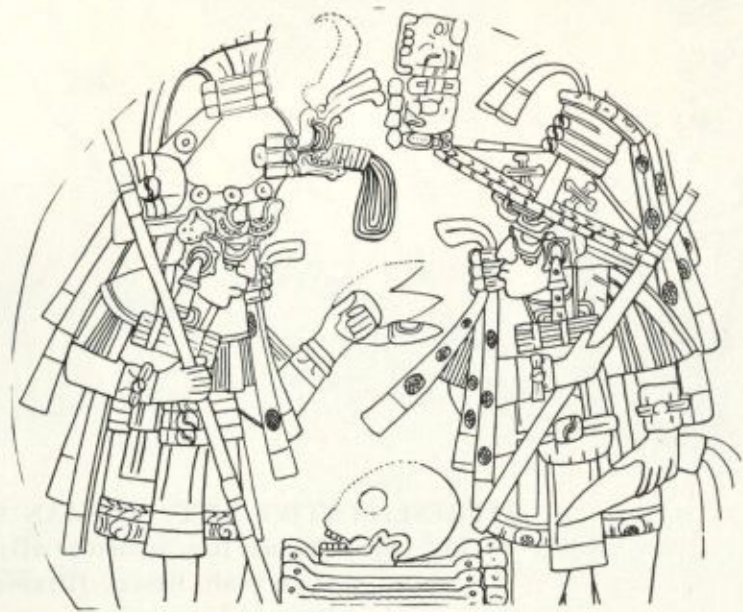
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REPRESENTATIVE ART: HUMAN SACRIFICE

FIG. 389—Piedras Negras. a: Stela 11, detail [Maler, 1901, pl. 20, no. 1].

b: Stela 14, detail [*ibid.*, pl. 20, no. 2].

FIG. 390—Tikal, Altar 5. [Maler, 1911, pl. 28.]

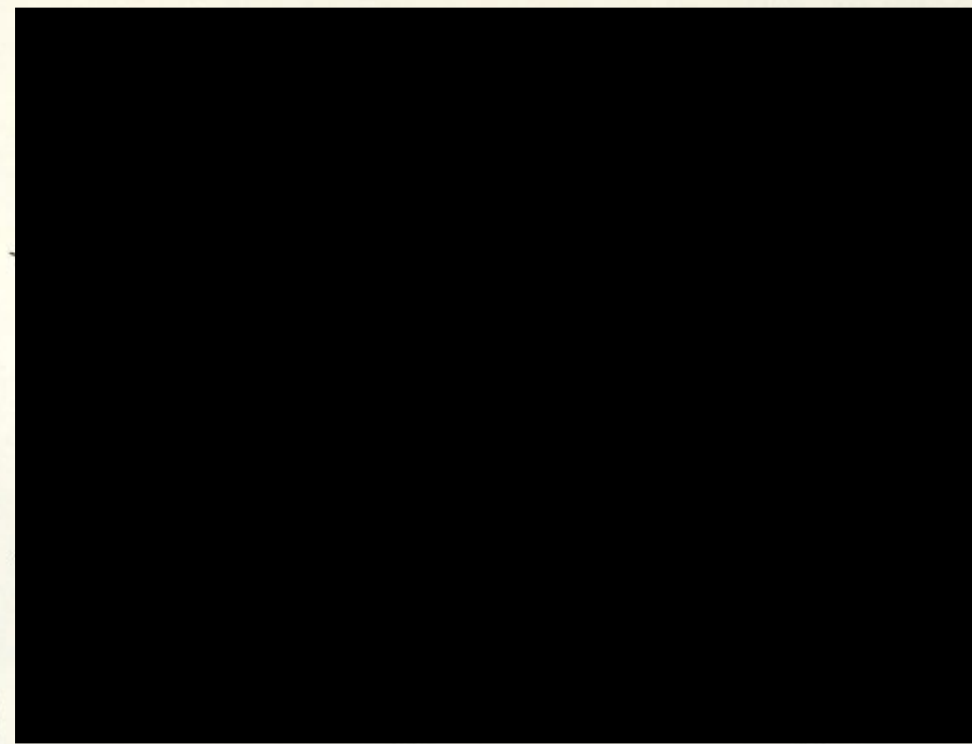
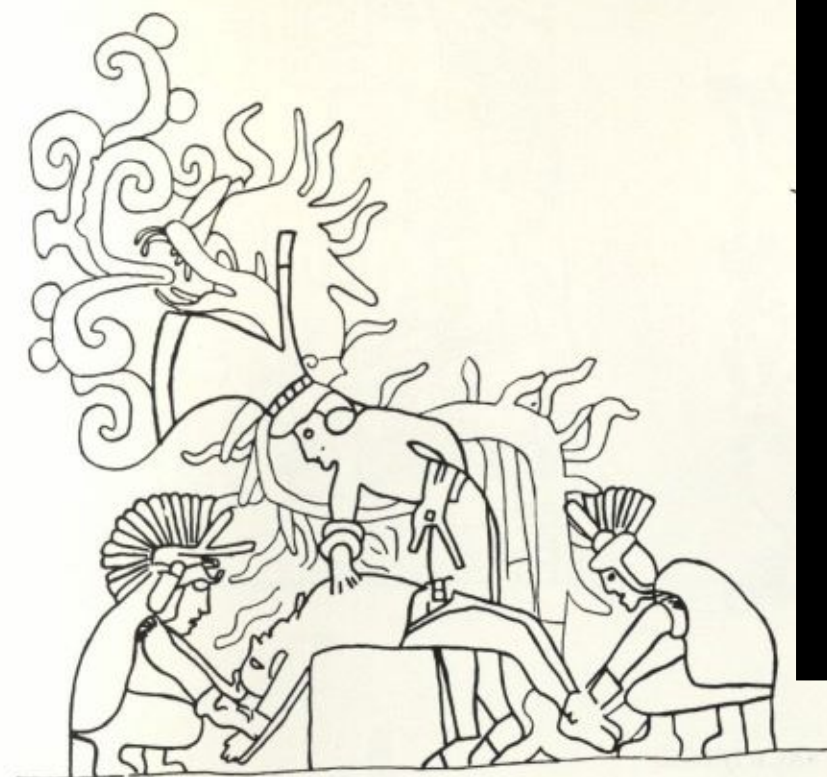
FIG. 391—Yaxchilan, Lintel 12. [Spinden, 1913, fig. 10.]



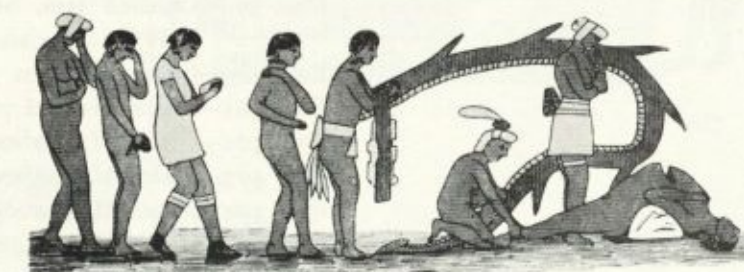
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REPRESENTATIVE ART: HUMAN SACRIFICE

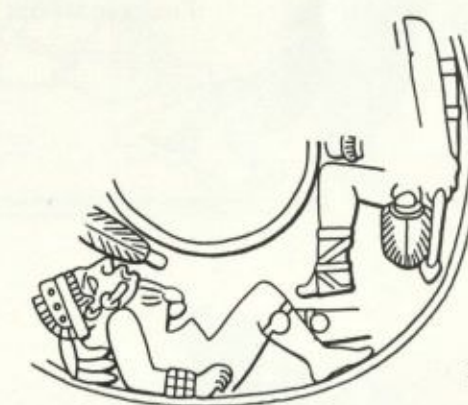
- FIG. 392—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), south vault, fresco. [Drawing by Breton, Peabody Museum, Harvard University.]
- FIG. 393—Chichen Itza, Cenote of Sacrifice, Disk H. [Lothrop, 1952, fig. 1.]
- FIG. 394—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), east wall. [Le Plongeon, 1896, pl. 50.]
- FIG. 395—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco. [Morris, 1931, pl. 145.]
- FIG. 396—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), fresco. [Seler, 1902-23, 5:333, fig. 209.]
- FIG. 397—Chichen Itza, Cenote of Sacrifice, jade cirlet. [Peabody Museum, Harvard University.]
- FIG. 398—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), south vault, fresco. [Drawing by Breton, Peabody Museum, Harvard University.]



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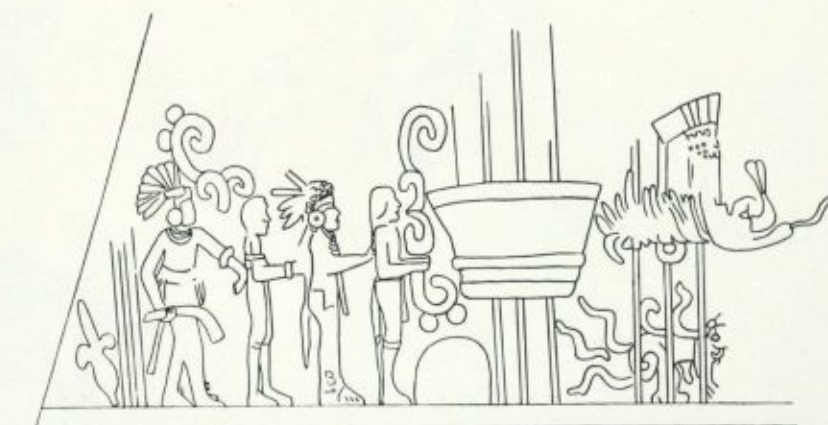
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REPRESENTATIVE ART: HUMAN SACRIFICE

FIG. 399—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), east wall. [Breton, 1917, fig. 7.]

FIG. 400—Codex Dresden 3.

FIG. 401—Codex Madrid 76.

FIG. 402—Codex Magliabecchi 70.

FIG. 403—Codex Magliabecchi 68.

FIG. 404—Codex Magliabecchi 66.

FIG. 405—Codex Borgia 42.

FIG. 406—Codex Bodleianus 25.

FIG. 407—Codex Porfirio Diaz N.

FIG. 408—Codex Nuttall 69.

FIG. 409—Tikal, graffito. [Maler, 1911, fig. 10, no. 6.]



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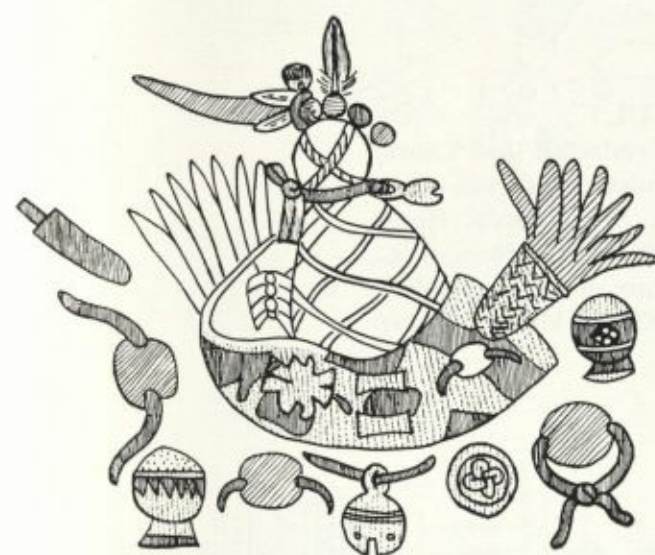
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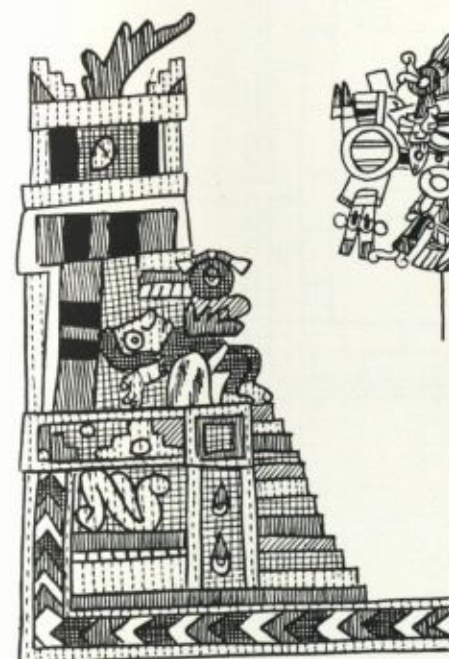
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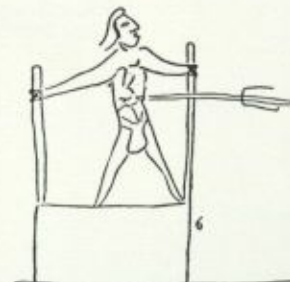
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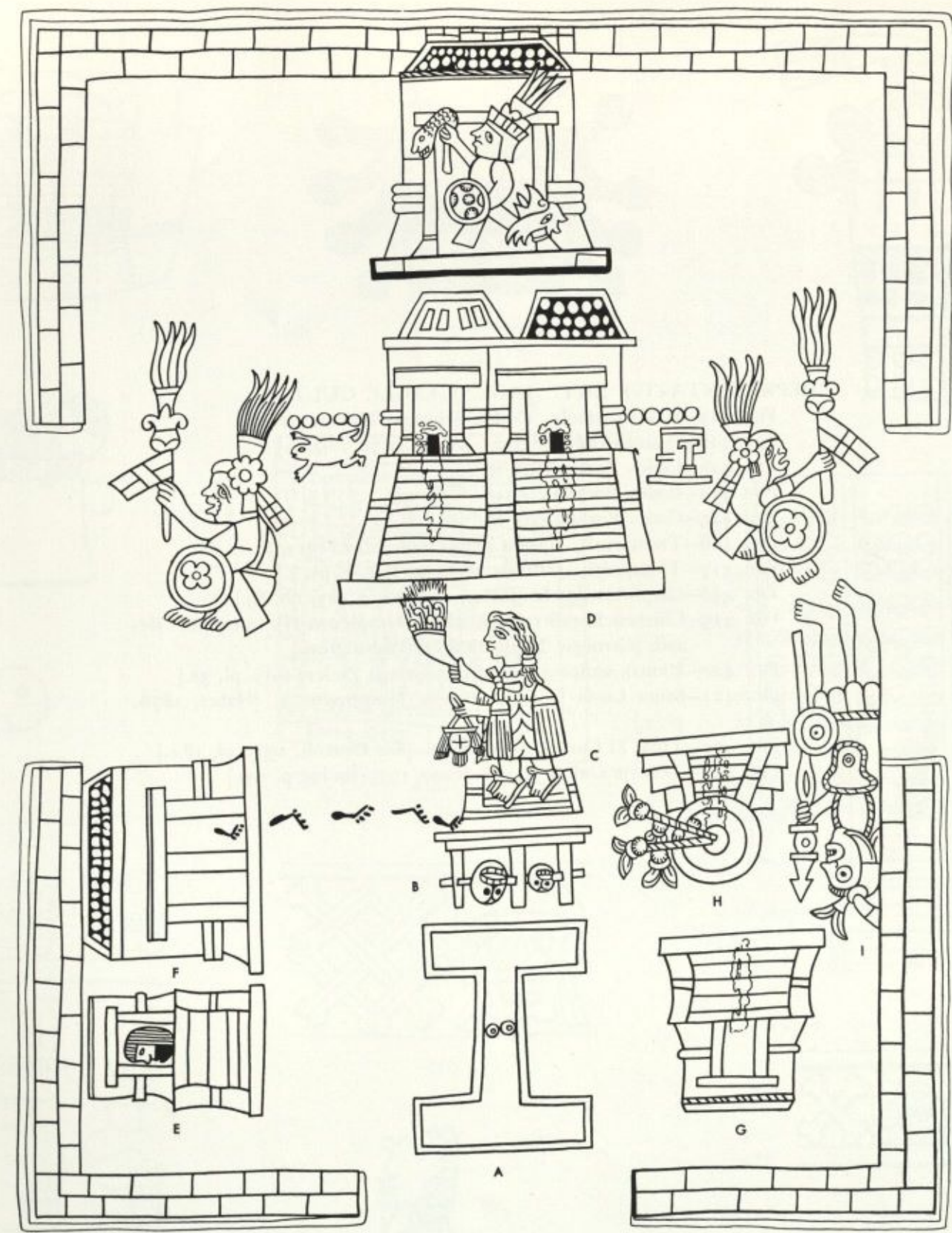


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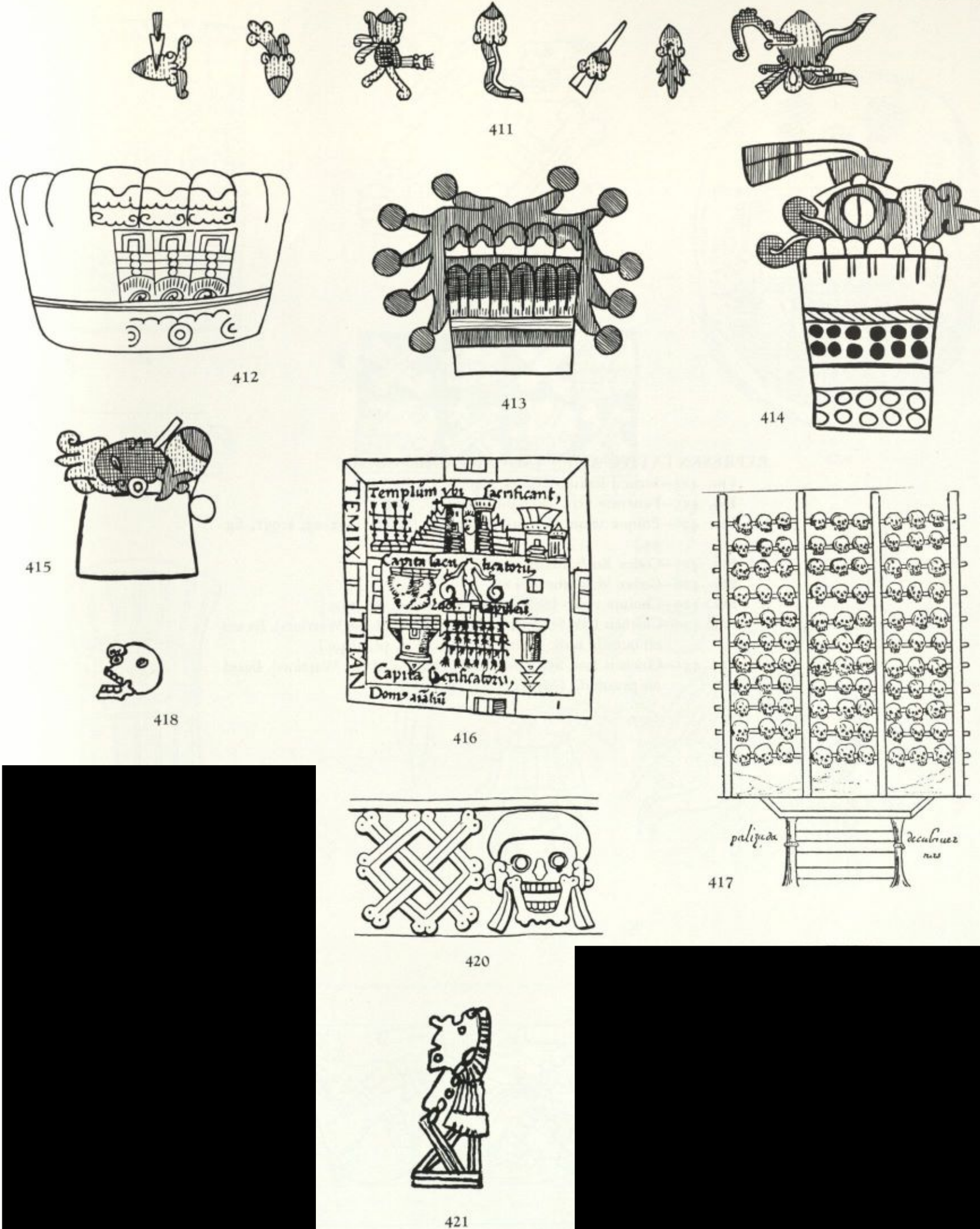
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REPRESENTATIVE ART: JAGUAR-EAGLE CULT
 FIG. 410—Tenochtitlan, temple enclosure. *A*, Teotlachtli (Ball Court).
B, Tzompantli (Skull Rack). *C*, Quauhxicalli (Vessel of the
 Eagle Warriors). *D*, Teocalli Grande. *E*, Cuauhcalli (House
 of the Eagle Warriors). *F*, Calmecatl (Priests' House). *G*,
 Temple of Xipe. *H*, Temalacatl (Stone of the Gladiatorial
 Sacrifice). *I*, Xipe. [Sahagun, 1905, Codex Matritense, Pri-
 meros Memoriales, cap. 1, pl. 11.]



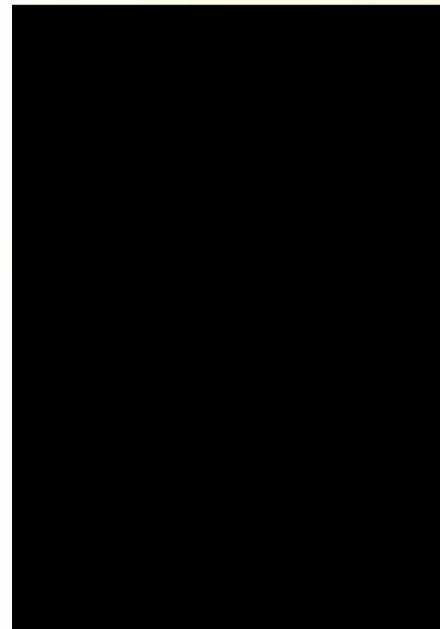
REPRESENTATIVE ART: JAGUAR-EAGLE CULT

- FIG. 411—Heart symbols. Codex Fejervary-Mayer, *passim*.
- FIG. 412—Quauhxicalli. [Seler, 1902-23, 2:707, fig. 9.]
- FIG. 413—Codex Borbonicus 18.
- FIG. 414—Codex Borbonicus 15.
- FIG. 415—Codex Borbonicus 13.
- FIG. 416—Tzompantli, Upsala map. [Maudslay, 1912, p. 12.]
- FIG. 417—Tzompantli. [Duran, 1867-80, trat. 2, pl. 3.]
- FIG. 418—Glyph for death. [Seler, 1902-23, 1:423, no. 89.]
- FIG. 419—Chichen Itza, Structure 2D2 (Mausoleum II), tzompantli detail. [Carnegie Institution of Washington.]
- FIG. 420—Uxmal, sculpture, cemetery group. [Seler, 1917, pl. 32.]
- FIG. 421—Santa Lucia Cotzumalhuapa, Monument 3. [Habel, 1878, pl. 2.]
- FIG. 422—Tula, El Corral, Skull Altar. [See Dutton, 1955, pl. 18,c.]
- FIG. 423—Tenayuca, altar fresco. [Caso, 1935, facing p. 300.]

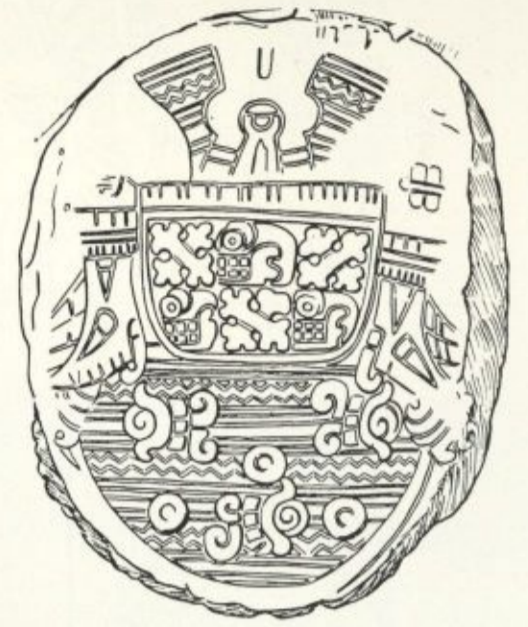


REPRESENTATIVE ART: JAGUAR-EAGLE CULT

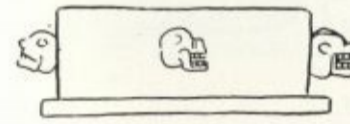
- FIG. 424—Incised femur. [Caso, 1940, p. 75, fig. 11.]
- FIG. 425—Funerary urn. [Peñafiel, 1890, pl. 59.]
- FIG. 426—Pulque vessel, Vienna Museum. [Seler, 1902-23, 2:951, fig. 53.]
- FIG. 427—Codex Borbonicus 36.
- FIG. 428—Codex Magliabecchi 88.
- FIG. 429—Cholula vase. [Seler, 1902-23, 2:299, fig. 14.a.]
- FIG. 430—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco on outside wall. [After Morris, 1931, pl. 164.a.]
- FIG. 431—Chichen Itza, Structure 2D8 (Temple of the Warriors), band on pyramid. [Morris, 1931, fig. 25.]



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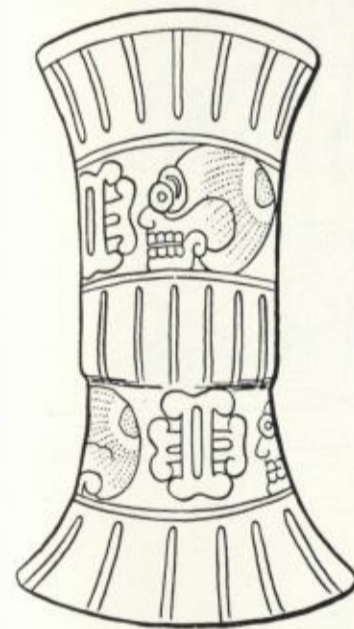
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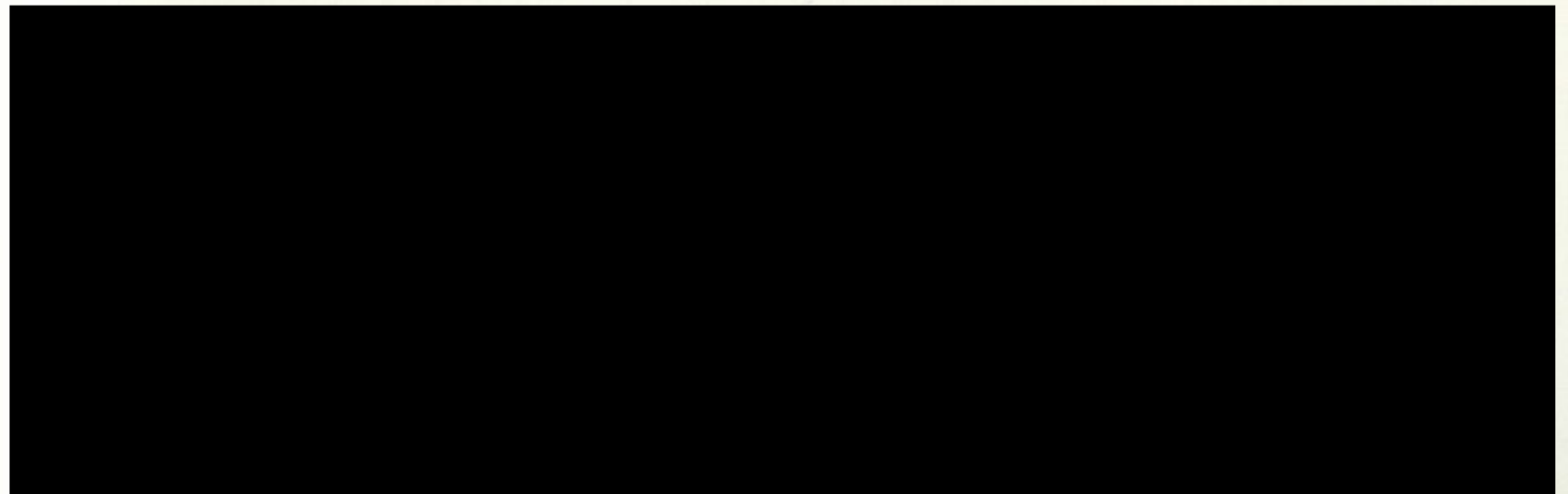
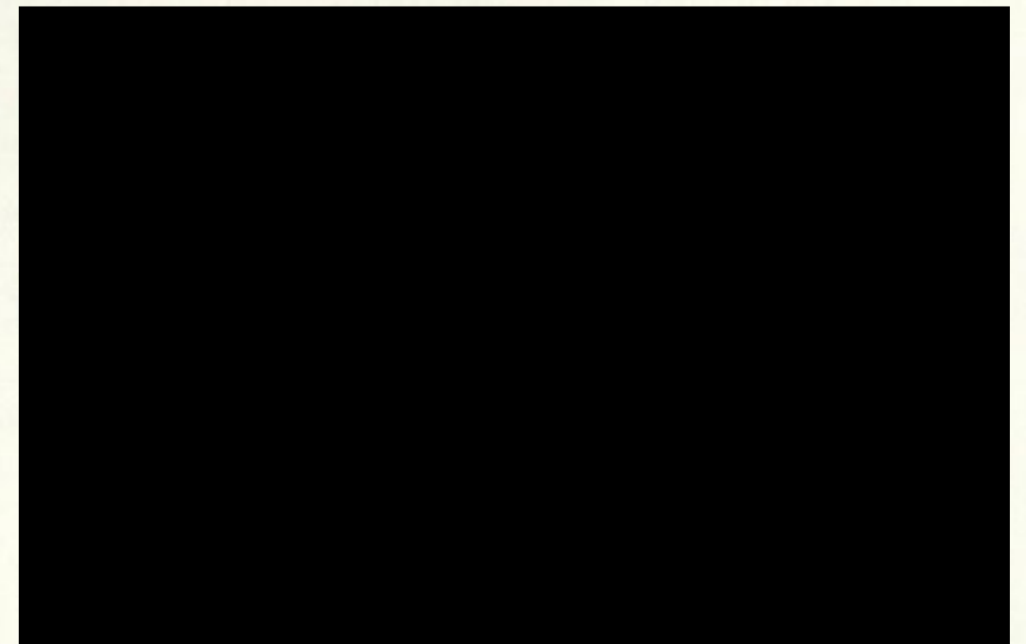
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REPRESENTATIVE ART: JAGUARE-EAGLE CULT

- FIG. 432—Chichen Itza, Structure 2D3 (Mausoleum I). [Proskouriakoff, 1946, pl. 24.]
- FIG. 433—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), north wall. [Breton, 1917, fig. 5.]
- FIG. 434—Chichen Itza, Structure 3D11 (Mercado). [Ruppert, 1943, fig. 12, *b*.]
- FIG. 435—Chichen Itza, Structure 2D3 (Mausoleum I). [Seler, 1902-23, vol. 5, following p. 388, pl. 37.]
- FIG. 436—Chichen Itza, Structure 5C14 (Temple of the Phalli), dais, south exterior, eagle-man. [Carnegie Institution of Washington.]
- FIG. 437—Chichen Itza, Cenote of Sacrifice, Disk L. [Lothrop, 1952, fig. 41.]



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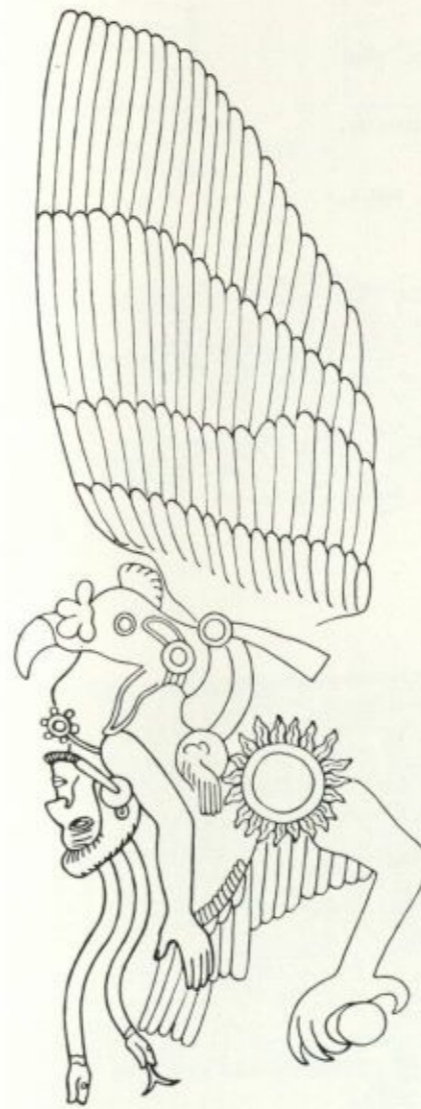
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REPRESENTATIVE ART: JAGUAR-EAGLE CULT

- FIG. 438—Chichen Itza, Cenote of Sacrifice, gilded copper disk. [Lothrop, 1952, fig. 59, *b*.]
 FIG. 439—Tulum, fresco. [Lothrop, 1924, pl. 5, *b*.]
 FIG. 440—Santa Lucia Cotzumalhuapa, Monument 17. [Habel, 1878, pl. 6.]
 FIG. 441—Santa Lucia Cotzumalhuapa, Monument 21. [J. E. S. Thompson, 1948, fig. 6, *d*.]
 FIG. 442—Tula, stone eagle. [See Dutton, 1955, pl. 12, *d*.]
 FIG. 443—Tula, stone with "coat-of-arms." [See Dutton, 1955, pl. 1, *a*.]
 FIG. 444—Tula, stone eagle. [Acosta, 1943, seventh plate following p. 144.]
 FIG. 445—Tula, stone eagle. [Carnegie Institution of Washington.]



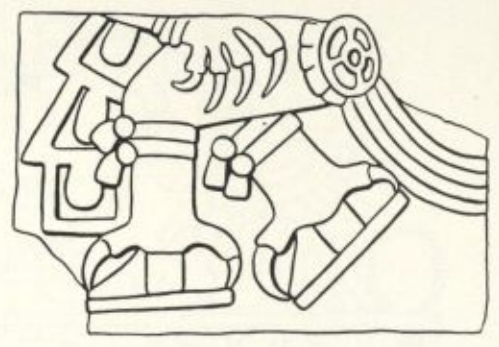
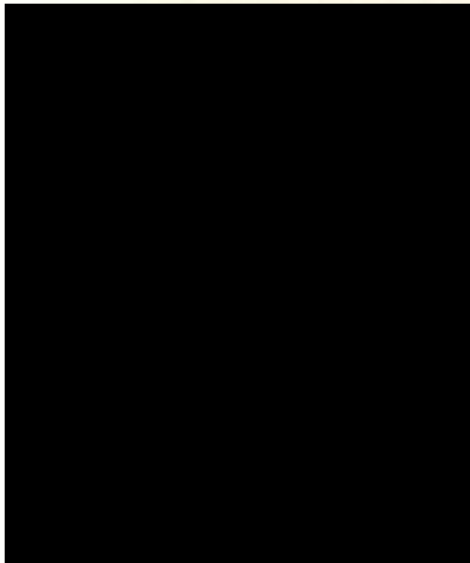
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REPRESENTATIVE ART: JAGUAR-EAGLE CULT

- FIG. 446—Tula, lower half of column. [Carnegie Institution of Washington.]
- FIG. 447—Codex Borbonicus 13.
- FIG. 448—Tula, clay tablet. [Peñafiel, 1890, pl. 168.]
- FIG. 449—Malinalco, entrance to Room I. [Marquina, 1951, photo. 78.]
- FIG. 450—Malinalco, Toluca drum. [Saville, 1925, pl. 45.]
- FIG. 451—Detail of design on drum, National Museum, Mexico. [Saville, 1925, pl. 32.]
- FIG. 452—Xochicalco, detail on stones strewn around monument. [Peñafiel, 1890, pl. 196.]
- FIG. 453—Tajin, Great Ball Court, southwest panel. [Marquina, 1951, photo. 193.]
- FIG. 454—Mitla, fresco. [Seler, 1895, pl. 39.]
- FIG. 454A—Codex Borbonicus 11.



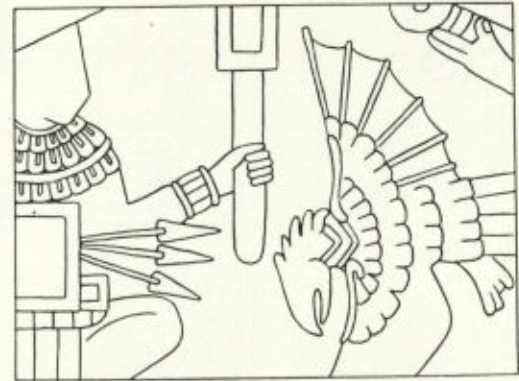
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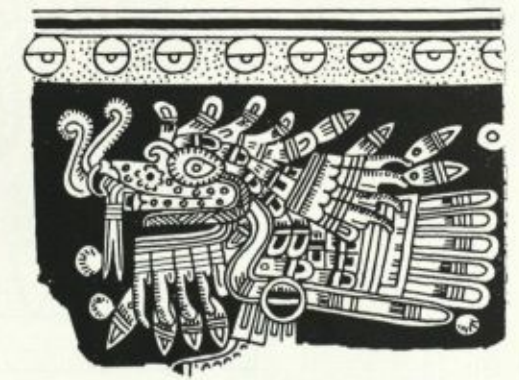
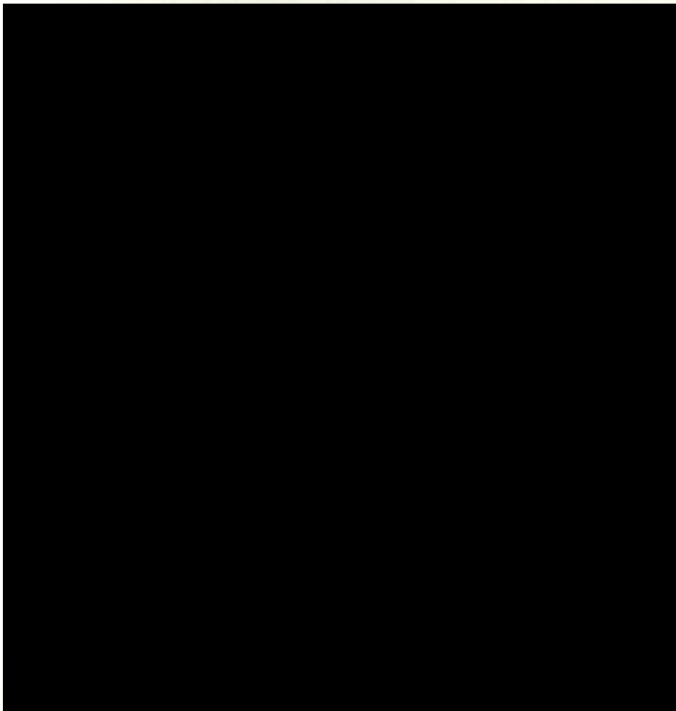
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REPRESENTATIVE ART: JAGUAR-EAGLE CULT

- FIG. 455—Codex Selden A 12. [J. E. S. Thompson, 1941, fig. 8,d.]
- FIG. 456—Codex Selden A 12.
- FIG. 457—Codex Porfirio Diaz I.
- FIG. 458—Codex Porfirio Diaz I.
- FIG. 459—Codex Porfirio Diaz N.
- FIG. 460—Chichen Itza, Structure 2D2 (Mausoleum II). [Seler, 1902-23, 5:365, fig. 237.]
- FIG. 461—Chichen Itza, Structure 2D2 (Mausoleum II), south balustrade. [Carnegie Institution of Washington.]
- FIG. 462—Santa Lucia Cotzumalhuapa, Monument 13. [J. E. S. Thompson, 1948, fig. 3,e.]



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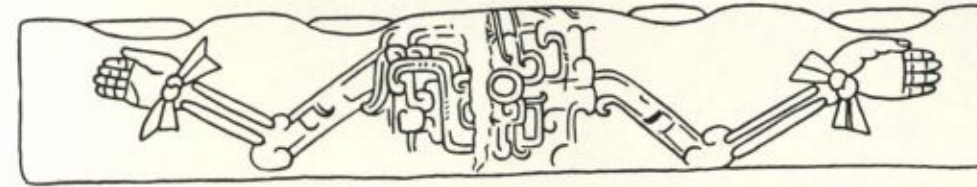


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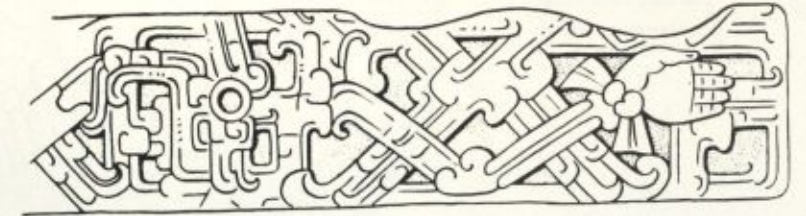


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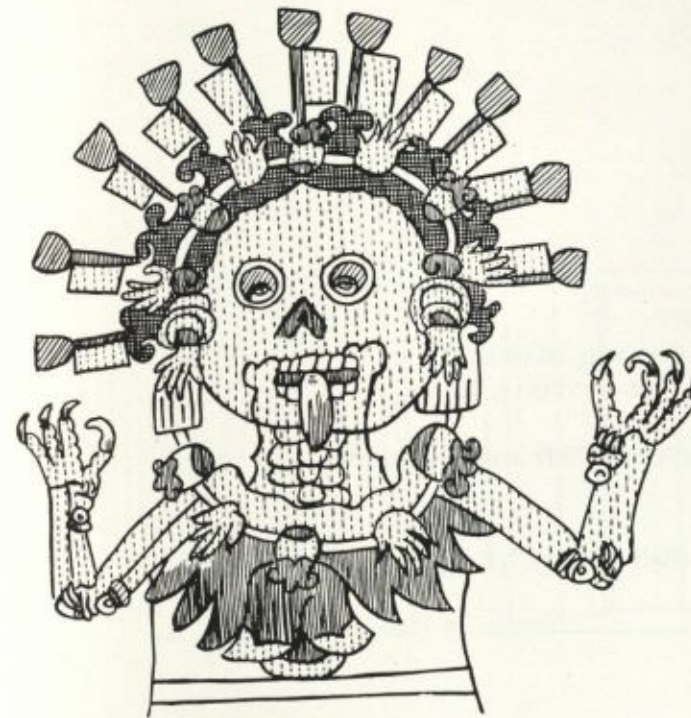




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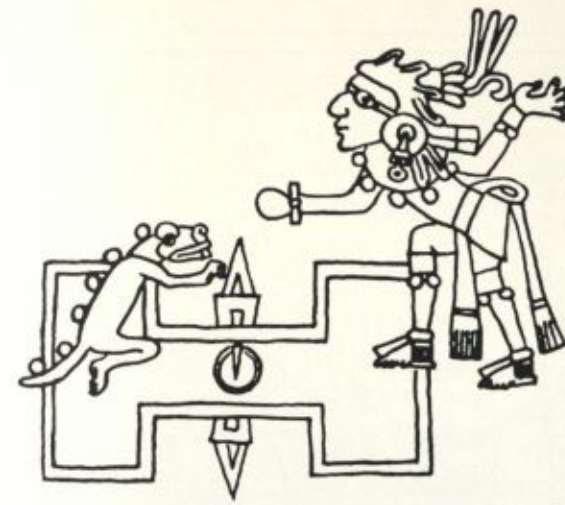


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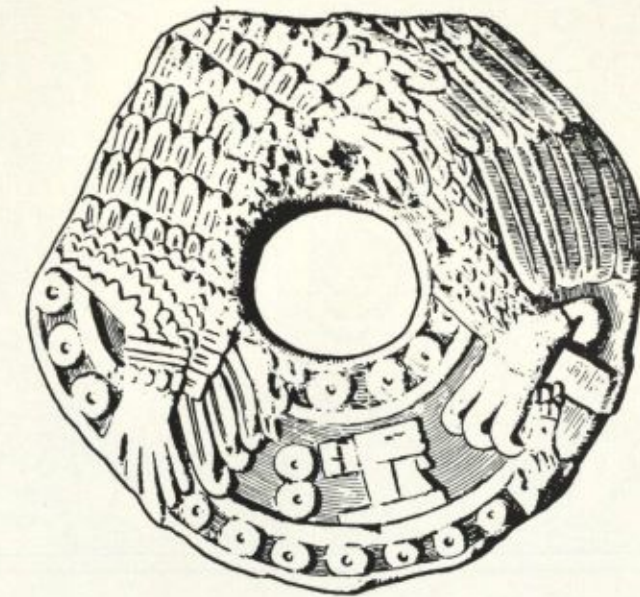
REPRESENTATIVE ART: JAGUAR-EAGLE CULT
FIG. 463—Totonac yoke. [Strebel, 1890, vol. 3, fig. 21.]
FIG. 464—Totonac yoke. [Strebel, 1890, vol. 3, fig. 26.]
FIG. 465—Codex Magliabecchi 76.
FIG. 466—Codex Laud 41.
FIG. 467—Codex Borbonicus 10.

REPRESENTATIVE ART: BALL COURT

- FIG. 468—Ball court and player. Codex Fejervary-Mayer 29.
FIG. 469—Tepoztlan, stone ring. [Seler, 1902-23, 2:213, fig. 21.]
FIG. 470—Codex Nuttall 18.
FIG. 471—Yaxchilan, Structure 14 (northwest ball court). [Morley, 1937-38, vol. 2, fig. 88.]
FIG. 472—Codex Nuttall 74.
FIG. 473—Chichen Itza, Structure 3E2 (Ball Court). [Ruppert, 1952, fig. 49.]



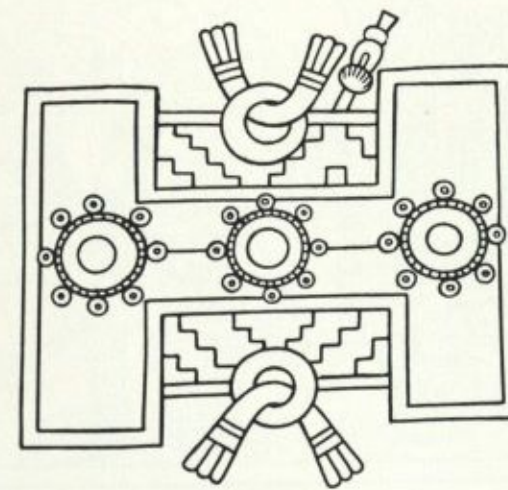
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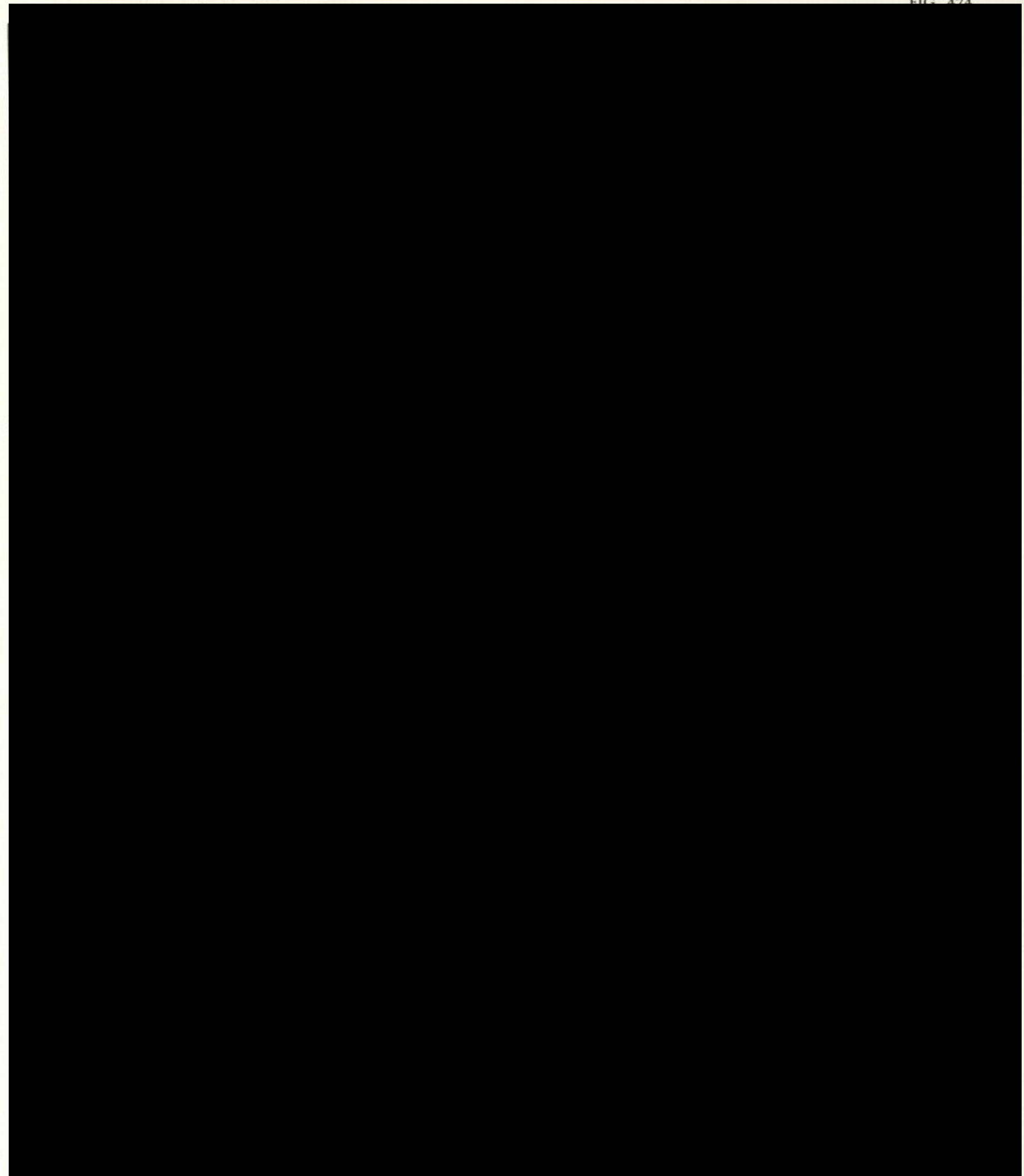
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REPRESENTATIVE ART: BALL COURT

FIG. 474—Chichen Itza, Structure 2D1 (Great Ball Court), west side, center panel. [Marquina, 1951, pl. 266.]



REPRESENTATIVE ART: BALL COURT

- FIG. 475—Aparicio, Veracruz, design on palma. [Garcia Payon, 1948-49, fig. 1.]
 FIG. 476—Codex Telleriano Remensis 15.
 FIG. 477—Codex Fejervary-Mayer 41.
 FIG. 478—Copan, middle marker from ball court between Structures 9 and 10. [Morley, 1937-38, vol. 3, tailpiece.]
 FIG. 479—Piedras Negras, Structure K-6, ball-player. [Morley, 1937-38, vol. 3, fig. 97.]
 FIG. 480—Santa Lucia Cotzumalhuapa, Monument 6, detail. [Habel, 1878, pl. 3.]
 FIG. 481—Alvaralo, Veracruz, stone yoke. [Ekholm and Covarrubias photo.]
 FIG. 482—Santa Lucia Cotzumalhuapa, Monument 4. [Habel, 1878, pl. 2.]
 FIG. 483—Chichen Itza, Structure 2D1 (Great Ball Court), detail. [Marquina, 1951, pl. 266; see fig. 474 above.]



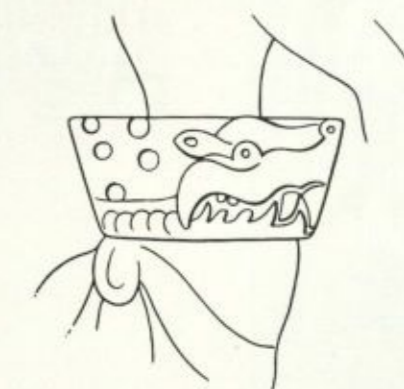
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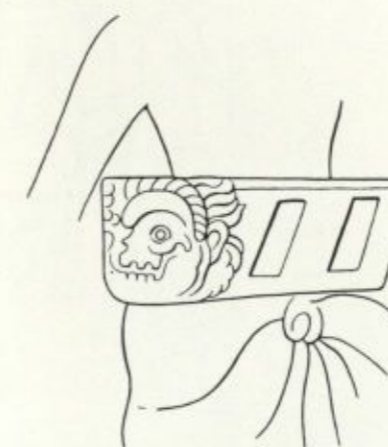
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REPRESENTATIVE ART: BALL COURT

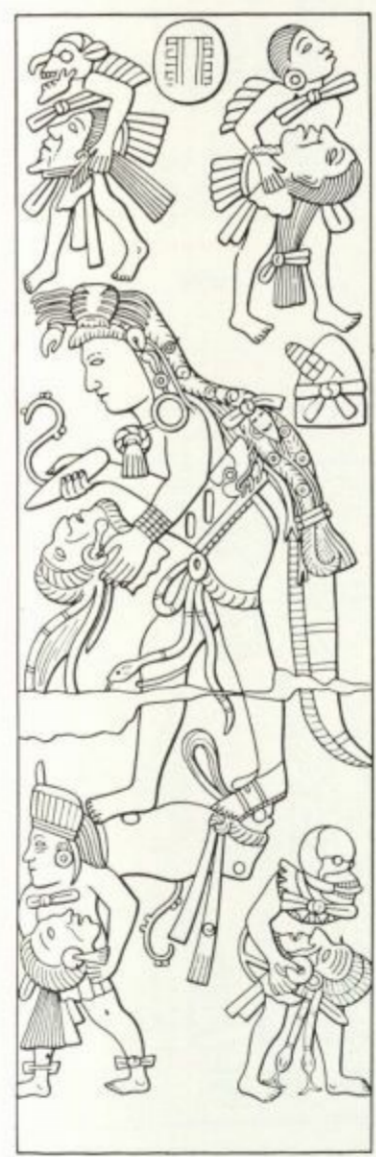
- FIG. 484—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B. [Maudslay, 1889-1902, vol. 3, pl. 49.]
- FIG. 485—Etzna, Stela 6. [Ruz, 1945b, p. 153.]
- FIG. 486—Chinkultic, Chiapas, ball-court marker. [Morley, 1937-38, vol. 1, tailpiece.]
- FIG. 487—Santa Lucia Cotzumalhuapa, Monument 1. [Habel, 1878, pl. 1.]
- FIG. 488—Santa Lucia Cotzumalhuapa, Monument 4. [Habel, 1878, pl. 2.]
- FIG. 489—Escuintla, design from jar. [Rhode Island School of Design, 1941, fig. 67.]
- FIG. 490—Tula, ball-player. [Acosta, 1941, fig. 1.]



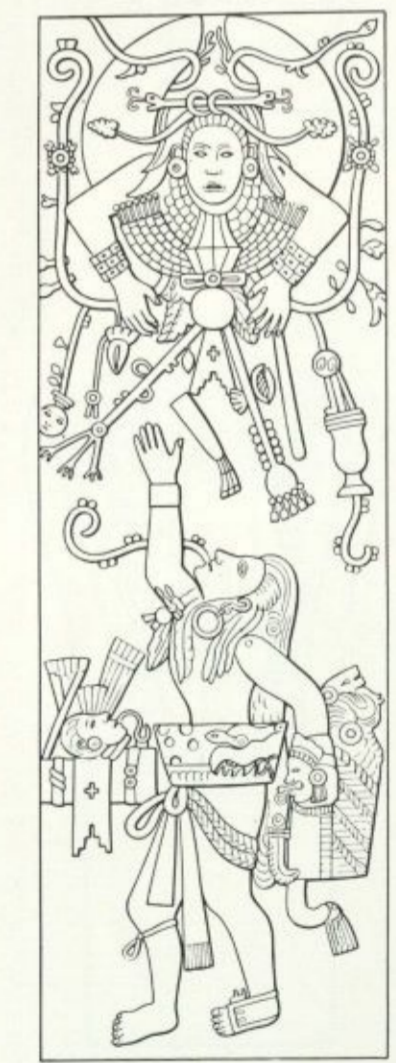
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REPRESENTATIVE ART: BALL COURT

- FIG. 491—Tula, feet of ball-player. [Carnegie Institution of Washington.]
- FIG. 492—Tajin, Great Ball Court, northwest panel. [E. Spinden, 1933, fig. 7.]
- FIG. 493—Tajin, Great Ball Court, northeast panel. [E. Spinden, 1933, fig. 6.]
- FIG. 494—Tepatlaxco, Veracruz, stela. [Batres, 1905, pl. 2.]
- FIG. 495—Tajin, Structure 5, Monument T2. [Proskouriakoff, 1954, fig. 9.a.]
- FIG. 496—Tajin, palma. [Carnegie Institution of Washington.]
- FIG. 497—Totonac, Palma 11, detail. [Proskouriakoff, 1954, fig. 6.]
- FIG. 498—Coatepec, Veracruz, Palma 24, detail.
- FIG. 499—Veracruz, Palma 12. [Proskouriakoff, 1954, fig. 6, from Cavallo, 1954, p. 57.]
- FIG. 500—Coatepec, Veracruz, Palma 5. [Proskouriakoff, 1954, fig. 6.]



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REPRESENTATIVE ART: ARTIFACTS

FIG. 501—Chichen Itza, spindle weights. [The lettering is that of the original in Kidder, 1943a, pp. 98-99.]

FIG. 502—Chichen Itza, clay pipe. [After Morris, 1931, pl. 21.]

FIG. 503—Tula, clay pipe. [Acosta, 1945, fig. 57, no. 4.]

FIG. 504—Chichen Itza, Cenote of Sacrifice, stone points. [Lothrop, 1952, fig. 27.]

ETHNOLOGY: TOLTEC AND MAYA

FIG. 505—Tula vase, Vienna Museum. [Lehmann, 1933, fig. 84.]

FIG. 506—Chichen Itza, Structure 2D1, name signs. Upper Temple of the Jaguars: *a-c,k,l* [Maudslay, 1889-1902, vol. 3, pl. 38]. Lower Temple of the Jaguars: *d* [*ibid.*, pl. 45], *e,f,i,j* [*ibid.*, pl. 47], *g* [*ibid.*, pl. 49], *h* [*ibid.*, pl. 46].

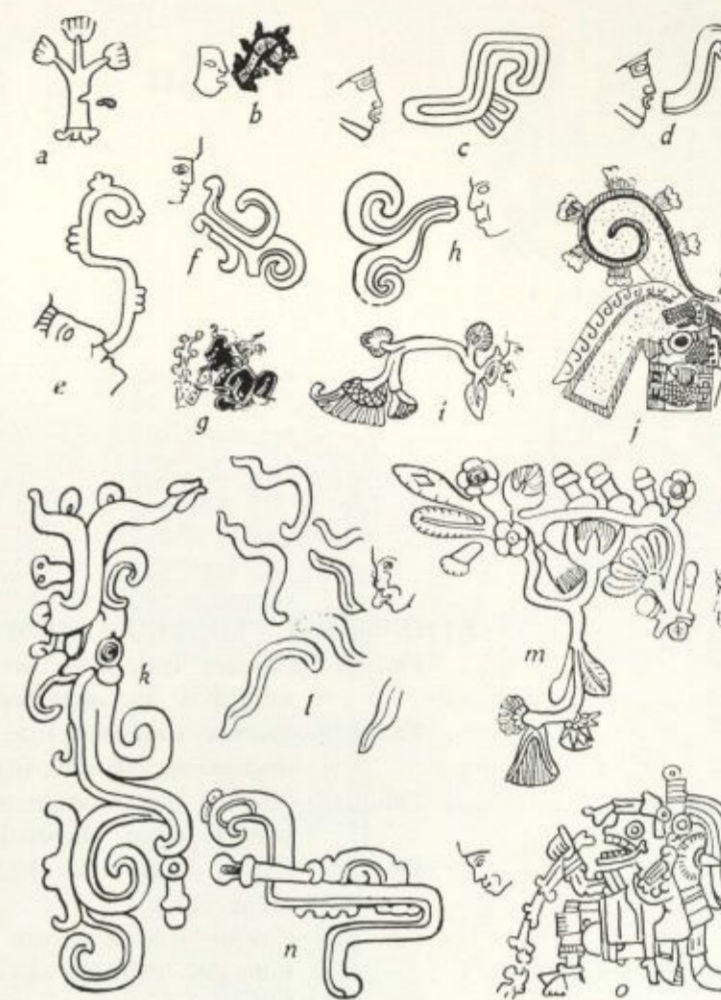
FIG. 507—Tula, Main Temple, Pilaster 1, name sign. [Acosta, 1941, fig. 5.]

FIG. 508—Tula, Main Temple, Pilaster 11, name sign. [Acosta, 1941, fig. C.]

FIG. 509—Speech-scrolls. *a,b*: Nahuatl place names. *c,d*: Xochicalco. *e*: Santa Lucia Cotzumalhuapa. *f,h,i,k-n*: Chichen Itza, Lower Temple of the Jaguars. *g*: Codex Dresden 34. *j*: San Juan Teotihuacan. *o*: Codex Chavero. [Spinden, 1913, fig. 240.]

FIG. 510—Acanceh, from façade. [Seler, 1911, pl. 15.]

FIG. 511—Oaxaca, grave stone. [Seler, 1902-23, 2:360, fig. 101.]



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ETHNOLOGY: TOLTEC AND MAYA

- FIG. 512—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 61W, ear ornament. [Morris, 1931, pl. 123.]
- FIG. 513—Chichen Itza, Structure 2D8 (Temple of the Warriors), ear ornaments. [Morris, 1931, fig. 194.]
- FIG. 514—Chichen Itza, Cenote of Sacrifice, jade nose button. [Peabody Museum, Harvard University.]
- FIG. 515—Copan, figure from Altar Q. [Maudslay, 1889-1902, vol. 1, pl. 92, fig. 5.]
- FIG. 516—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 5W. [Morris, 1931, pl. 45.]
- FIG. 517—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco. [Morris 1931, pl. 155, a.]
- FIG. 518—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 57N. [Morris, 1931, pl. 120.]
- FIG. 519—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 39W. [Morris, 1931, pl. 105.]
- FIG. 520—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 16S. [Morris, 1931, pl. 84.]
- FIG. 521—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 16N. [Morris, 1931, pl. 84.]



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FIGS. 512-521

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ETHNOLOGY: TOLTEC AND MAYA

FIG. 522-8 Deer. Codex Nuttall 52.

FIG. 523-8 Deer. Codex Nuttall 78.

FIG. 524-Glyph of the soul of a warrior. [Seler, 1902-23, 2:799, fig. 9.]

FIG. 525-Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 14S. [Morris, 1931, pl. 56.]

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FIG. 526-Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), Pilaster k4. [Maudslay, 1899-1902, vol. 3, pl. 38.]

FIG. 527-Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C. [Maudslay, 1889-1902, vol. 3, pl. 49.]

FIG. 528-Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C. [Maudslay, 1889-1902, vol. 3, pl. 49.]



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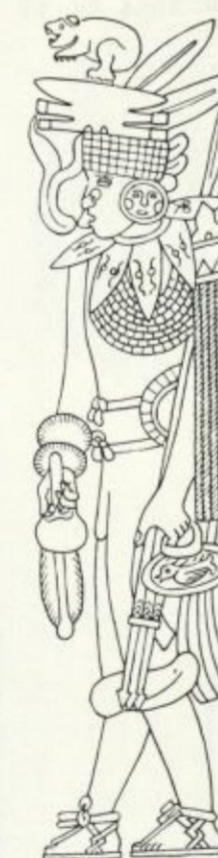
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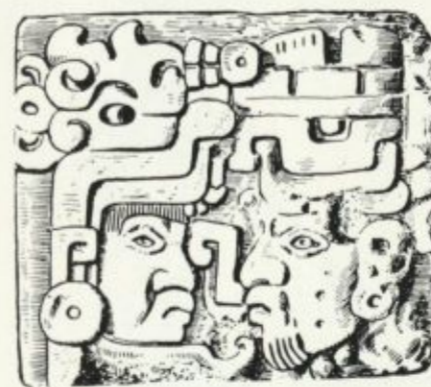
ETHNOLOGY: TOLTEC

FIG. 529—Chichen Itza, Cenote of Sacrifice, Tula-Toltec headdresses from disks. *a*: Disk A. *b*: Disk C. *c*: Disk D. *d,m*: Disk E. *e,h,i*: Disk I. *f,o*: Disk F. *g*: Disk B. *j,k,l,n,p*: Disk H. [Lothrop, 1952, fig. 19.]

FIG. 530—Oaxaca, Zapotec stone. [Seler 1902-23, vol. 2, p. 360, fig. 99.]

FIG. 531—Tula, section of Pilaster 11. [Acosta, 1941, fig. 3.]

FIG. 533—Veracruz, Plaque 3. [Proskouriakoff, 1954, fig. 3.]



ETHNOLOGY: TOLTEC AND MAYA

- FIG. 534—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row D. [Maudslay, 1889-1902, vol. 3, pl. 50.]
 FIG. 535—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 53S. [Morris, 1931, pl. 117.]
 FIG. 536—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 45N. [Morris, 1931, pl. 111.]
 FIG. 537—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row E. [Maudslay, 1889-1902, vol. 3, pl. 50.]
 FIG. 538—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C. [Maudslay, 1889-1902, vol. 3, pl. 49.]
 FIG. 539—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C. [Maudslay, 1889-1902, vol. 3, pl. 49.]
 FIG. 540—Halakal, painted capstone. [Beyer, 1937, pl. 13.a.]
 FIG. 541—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B. [Maudslay, 1889-1902, vol. 3, pl. 49.]
 FIG. 542—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B. [Maudslay, 1889-1902, vol. 3, pl. 49.]



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FIGS. 534-542



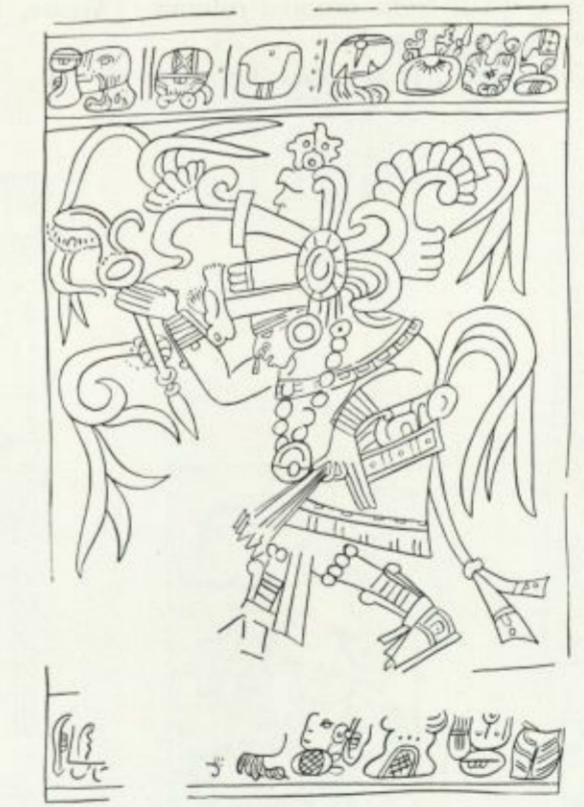
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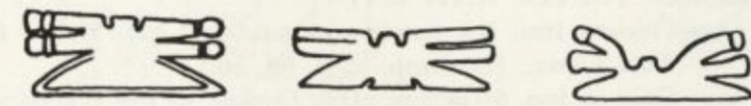
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ETHNOLOGY: TOLTEC AND MAYA

- FIG. 543—Tula, details from cacique frieze. [Moedano, 1947, fig. 3.]
FIG. 544—Tula, upper part of atlantean figure. [Acosta, 1941, fig. 2.]
FIG. 545—Tula, warrior figure.
FIG. 546—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), conventionalized bird-forms. [Spinden, 1913, fig. 238.]
FIG. 547—Chichen Itza, Cenote of Sacrifice, jade cirlet. [Peabody Museum, Harvard University.]
FIG. 548—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 16S. [Morris 1931, pl. 58.]
FIG. 549—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 53N. [Morris, 1931, pl. 117.]
FIG. 550—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 18N. [Morris, 1931, pl. 86.]
FIG. 551—Tula, detail from restored column. [Acosta, 1945, fig. 11; see fig. 561 below.]
FIG. 552—Tula, Stela 1. [Caso, 1941, fig. 7.]



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ETHNOLOGY: TOLTEC AND MAYA

- FIG. 553—Chichen Itza, leg bands and sandals. *g,l*: Maya. *Others*: Tula-Toltec. [Lothrop, 1952, fig. 26.]
- FIG. 554—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 7S. [Morris, 1931, pl. 47.]
- FIG. 555—Tula, warrior figure. [Acosta photo.]
- FIG. 556—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C. [Maudslay, 1889-1902, vol. 3, pl. 49.]
- FIG. 557—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), west wall, fresco. [Drawing by Breton, Peabody Museum, Harvard University.]
- FIG. 558—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 32W. [Morris, 1931, pl. 99.]
- FIG. 559—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 43N. [Morris, 1931, pl. 109.]
- FIG. 560—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B. [Maudslay, 1889-1902, vol. 3, pl. 49.]



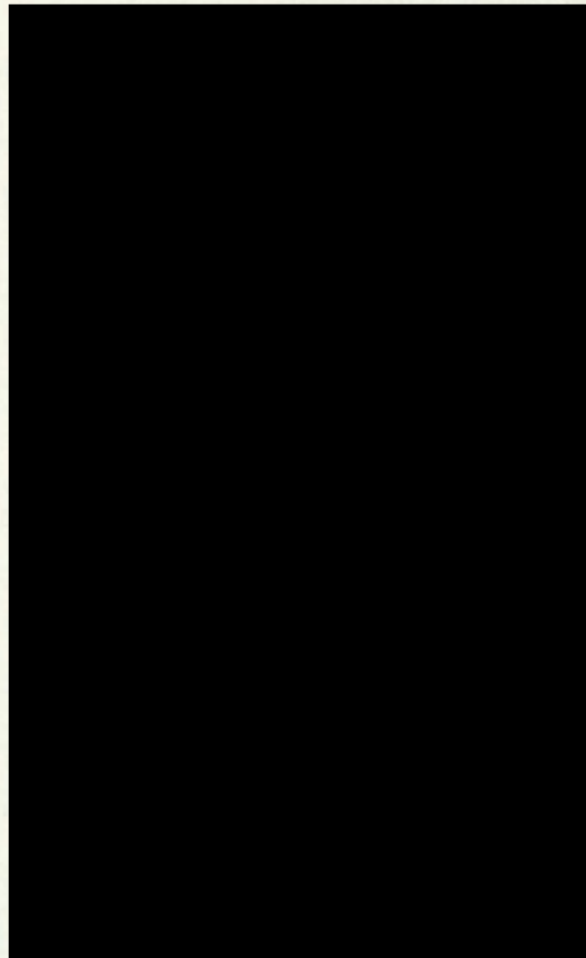
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ETHNOLOGY: TOLTEC AND MAYA

FIG. 561—Tula, restored column. [Acosta, 1945, fig. 11; see fig. 551 above.]

FIG. 562—Tula, atlantean column. [Acosta, 1944, fig. 14.]

FIG. 562A—Tula, Palacio Quemado, Sala 2. [Acosta, 1950.]

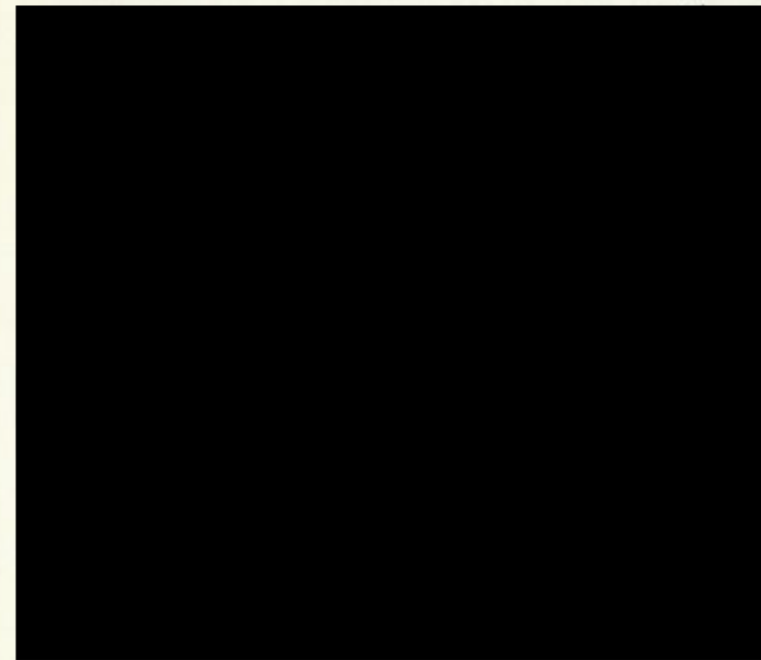
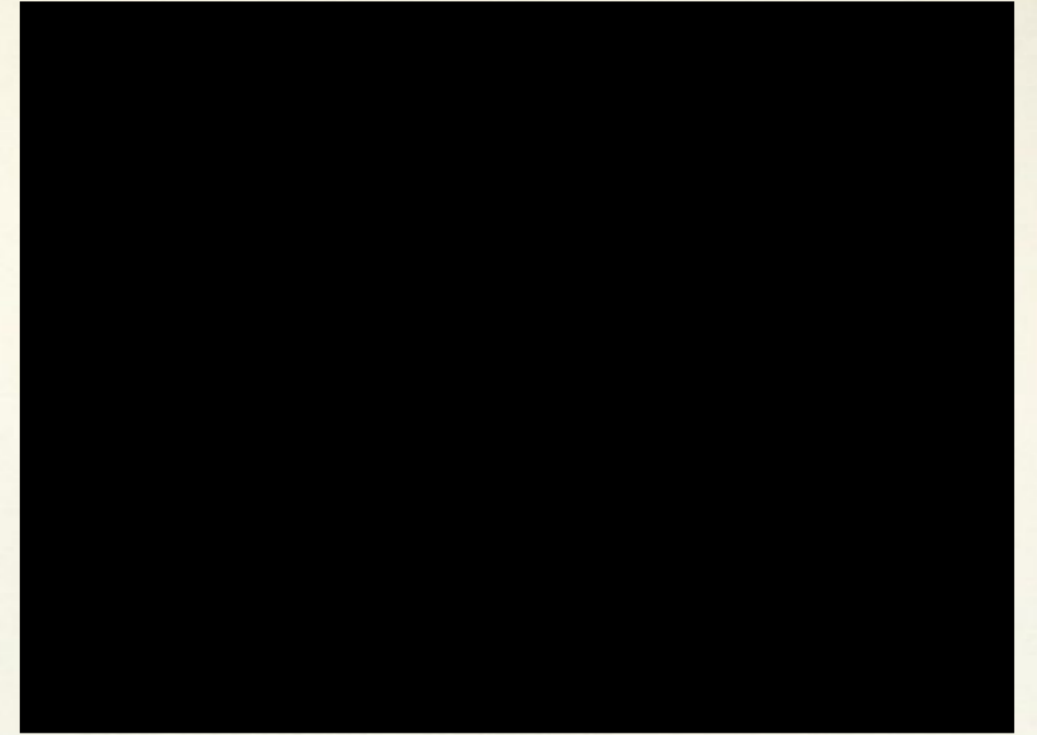
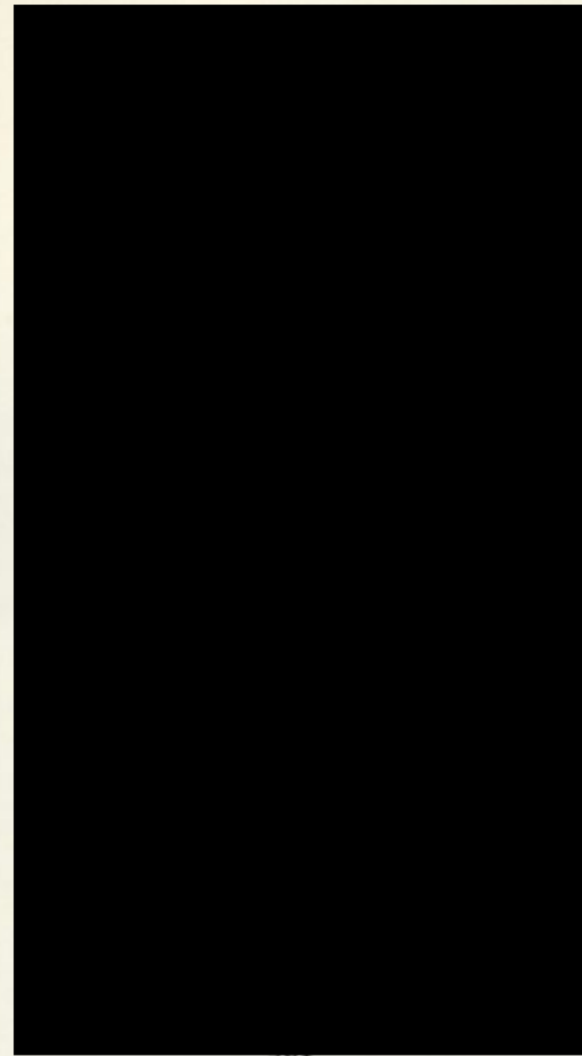
FIG. 563—Tula, lower half of column. [Carnegie Institution of Washington.]

FIG. 563A—Tula, Stela 2.

FIG. 564—Chichen Itza, Cenote of Sacrifice, jade bead. [Peabody Museum, Harvard University.]

FIG. 565—Codex Dresden 47.

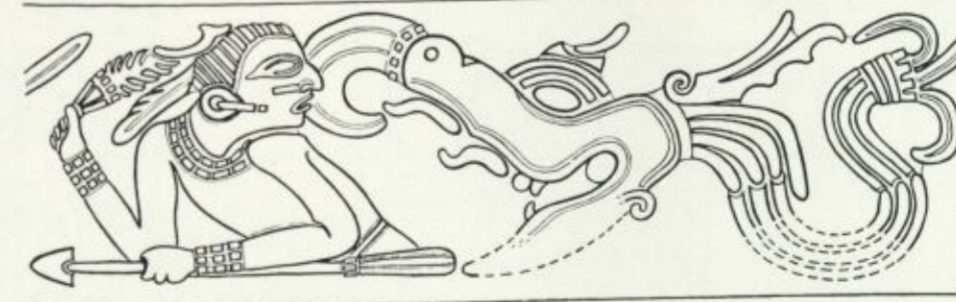
FIG. 566—Oaxaca, incised figure on stone idol. [Peabody Museum, Harvard University.]



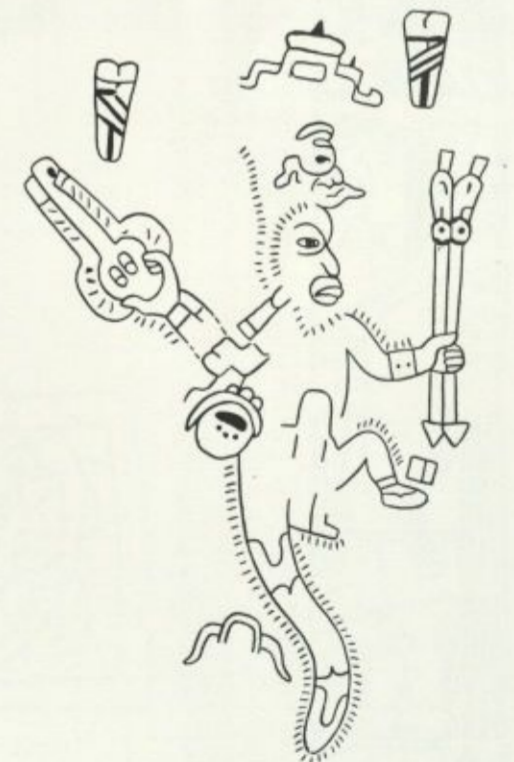
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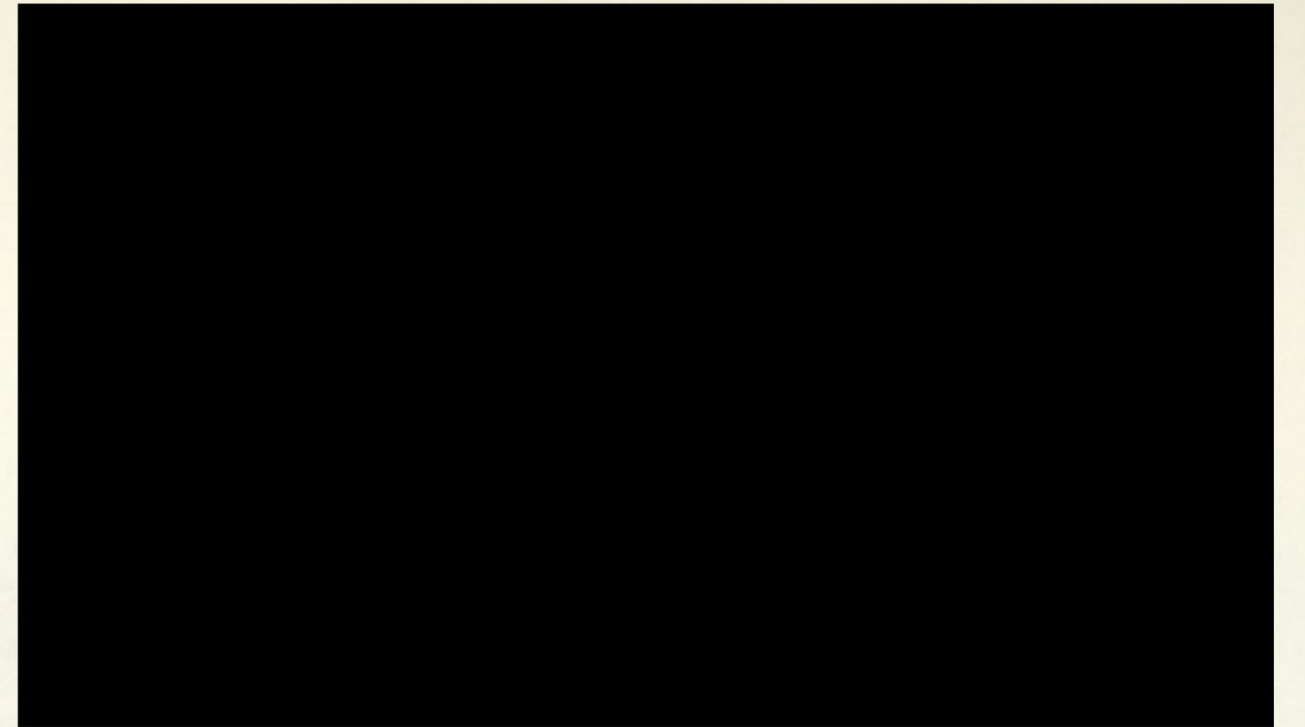
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ETHNOLOGY: TOLTEC AND MAYA

- FIG. 567—Teotihuacan, Tepantitla. [Carnegie Institution of Washington.]
- FIG. 568—Mitla, fresco. [Seler, 1902-23, 2: 350, fig. 77, *b*.]
- FIG. 569—Huastec and Mixtec *atlats*. [Beyer, 1933, figs. 75-80, 85, 86.]
- FIG. 570—Tula, pilaster. [Carnegie Institution of Washington.]
- FIG. 571—Tula, Palacio Quemado. [Acosta photo.]
- FIG. 572—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 47W. [Morris, 1931, pl. 112.]
- FIG. 573—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 11E. [Morris, 1931, pl. 51.]
- FIG. 574—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), part of altar top. [Drawing by Breton, Peabody Museum, Harvard University.]
- FIG. 575—Chichen Itza, Structure 4C1 (Monjas), Toltec Annex, south portico, capital of column. [Carnegie Institution of Washington.]
- FIG. 576—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 1S. [Morris, 1931, pl. 29.]



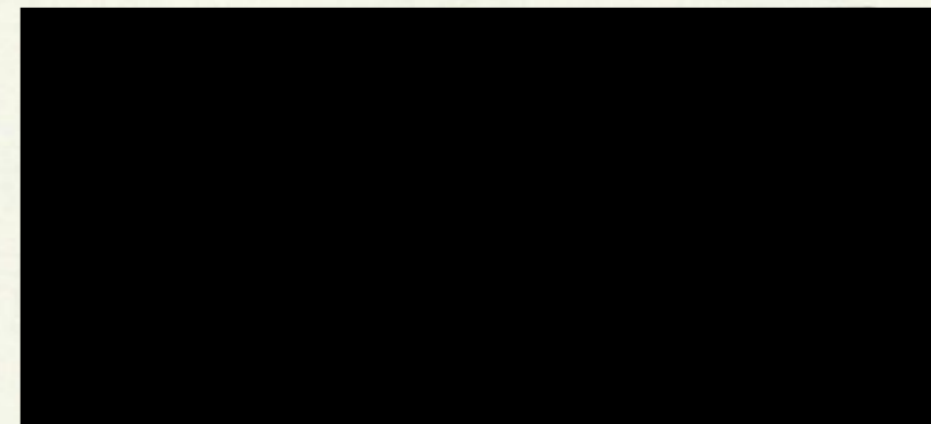
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ETHNOLOGY: TOLTEC AND MAYA

- FIG. 577—Chichen Itza, Structure 2D1 (South Temple of the Great Ball Court), Column 4S. [Carnegie Institution of Washington.]
- FIG. 578—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row C. [Maudslay, 1889-1902, vol. 3, pl. 47.]
- FIG. 579—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 16E. [Morris, 1931, pl. 58.]
- FIG. 580—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 4S. [Morris, 1931, pl. 44.]
- FIG. 581—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 1S. [Morris, 1931, pl. 41.]
- FIG. 582—Tula, tape garters. [Carnegie Institution of Washington.]
- FIG. 583—Tula, tape garters. [Carnegie Institution of Washington.]
- FIG. 584—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 6S. [Morris, 1931, pl. 46.]
- FIG. 585—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 17N. [Morris, 1931, pl. 59.]
- FIG. 586—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 24S. [Morris, 1931, pl. 92.]
- FIG. 587—Chichen Itza, Structure 3C1 (High Priest's Grave), bird atlantean. [Seler, 1902-23, 5:277, fig. 108.]
- FIG. 588—Chichen Itza, Structure 2D8 (Northwest Colonnade), bird-mask head from northwest corner. [After Morris, 1931, fig. 44.]
- FIG. 589—Chichen Itza, Cenote of Sacrifice, jade. [Peabody Museum, Harvard University.]



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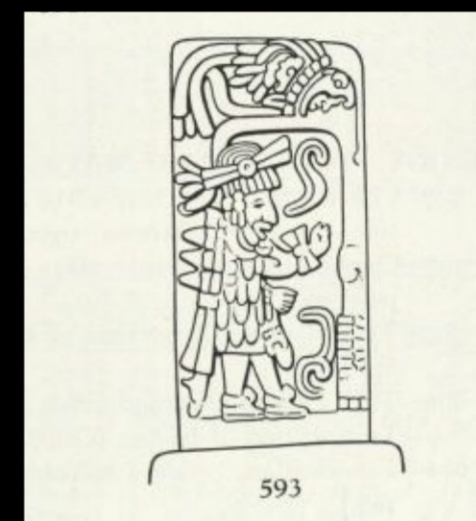
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ETHNOLOGY: TOLTEC AND MAYA

- FIG. 590—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 27N. [Morris, 1931, pl. 95.]
- FIG. 591—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 57W. [Morris, 1931, pl. 120.]
- FIG. 592—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 5N. [Morris, 1931, pl. 73.]
- FIG. 593—Tula, sculpture. [Peabody Museum, Harvard University.]
- FIG. 594—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 9N. [Morris, 1931, pl. 49.]
- FIG. 595—Chichen Itza, Structure 2D8 (Northwest Colonnade), two figures from west side of dais. [Morris, 1931, pl. 124.]
- FIG. 596—Chichen Itza, Structure 2D8 (Northwest Colonnade), altar panel. [Morris, 1931, pl. 166.]



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FIG. 597—Chichen Itza, Structure 2D10 (North Colonnade), dais, south side, east part. [Morris, 1931, fig. 257.]

FIG. 598—Chichen Itza, Structure 3D11 (Mercado), gallery, dais. [Ruppert, 1943, fig. 23.]

FIG. 599—Tula, Temple B, section of sculptured dais. [Acosta, 1945, fig. 24.]

FIG. 600—Tula, Palacio Quemado, Sala 2, sculptured frieze.

FIG. 601—Tula, section of frieze. [Caso, 1941, fig. 2.]

FIG. 602—Tenochtitlan, "centro mercantil" stone. [Peñafiel, 1910, pl. 106.]

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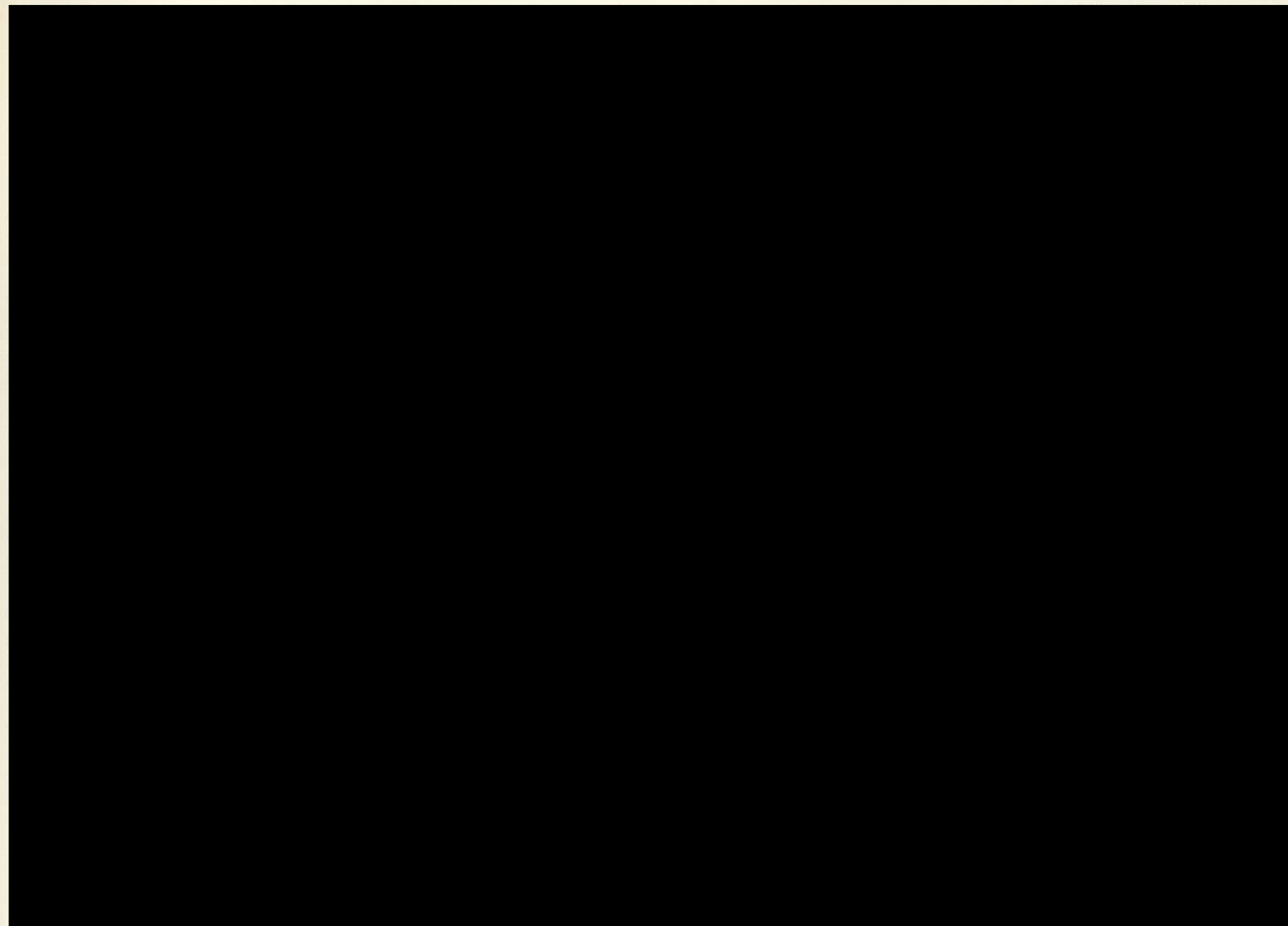
ETHNOLOGY: TOLTEC AND MAYA

FIG. 603—Kabah, Structure 2C6 (Codz Poop), jambs. [Proskouriakoff, 1950, fig. 103, *a, b*.]

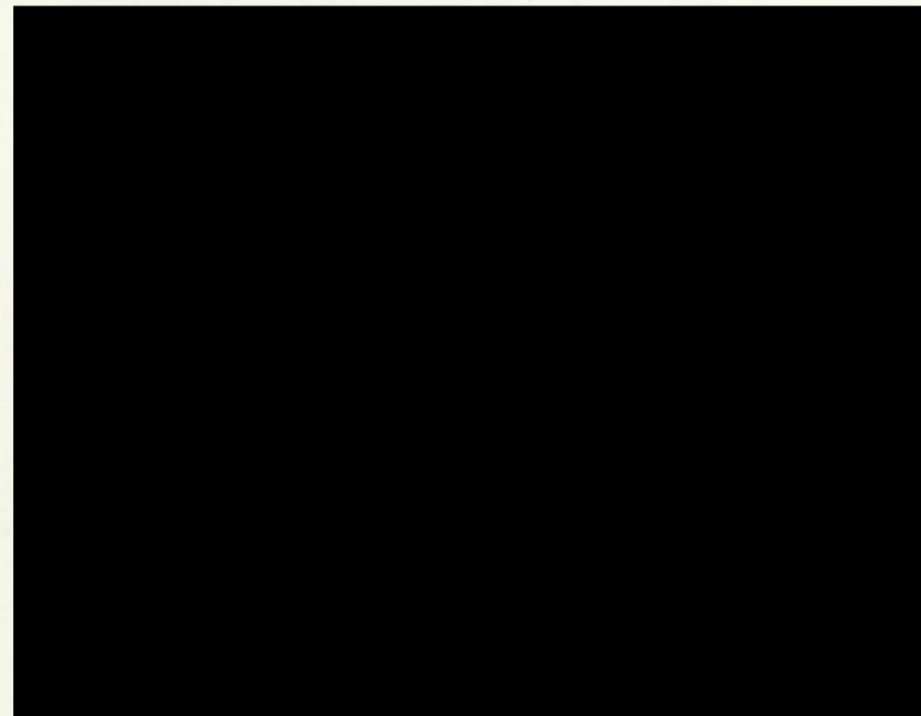
FIG. 604—Uxmal, Stela 14. [Willard, 1933, facing p. 358.]

FIG. 605—Humboldt stone, center. [Peñafiel, 1910, pl. 117.]

FIG. 606—Isla de Sacrificios, Veracruz, polychrome vase. [Du Solier, 1943, p. 78, *o*.]



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ETHNOLOGY: TOLTEC AND MAYA

FIG. 607-8 Deer. Codex Nuttall 49.

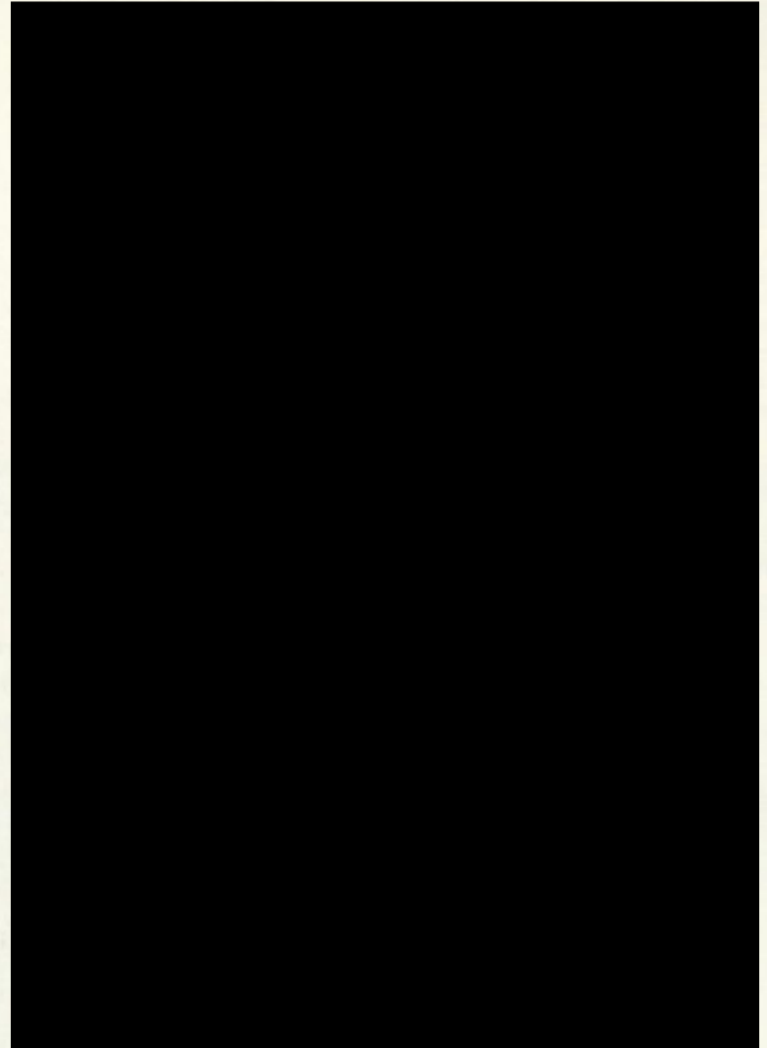
FIG. 608-Tula, stone bas-relief. [Arensburg Collection, Philadelphia Museum of Art.]

FIG. 609-Tula, Mound B, east side.

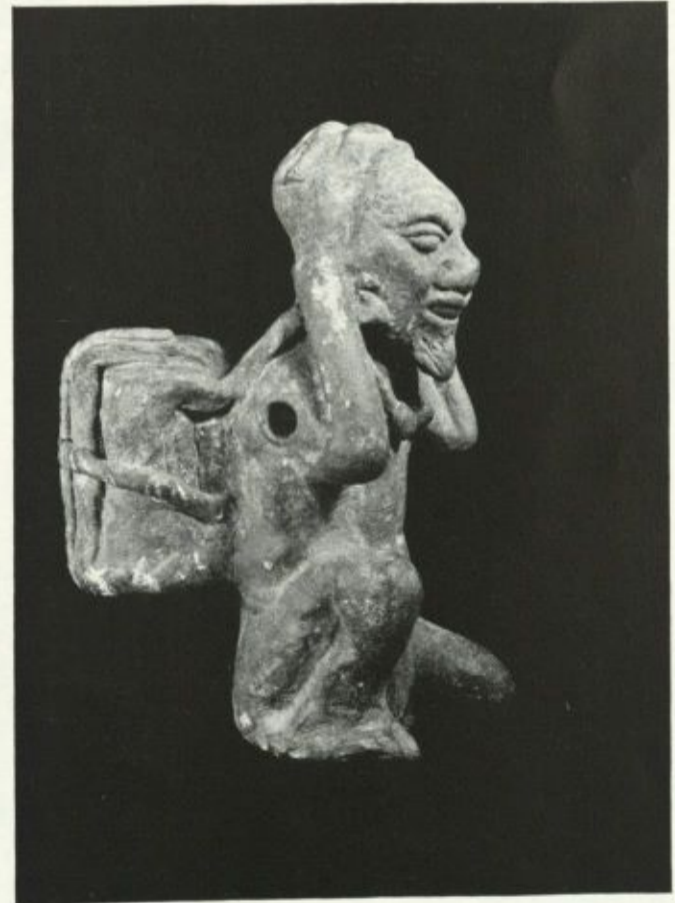
FIG. 610-Usumacinta, figurine. [Peabody Museum, Harvard University.]



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ETHNOLOGY: MAYA

- FIG. 611—Chichen Itza, Cenote of Sacrifice, Maya headdresses from disks. *a*: Disk D. *b,d*: Disk B. *c,f,g,i*: Disk G. *e*: Disk A. *h*: Disk L. [Lothrop, 1952, fig. 20.]
- FIG. 612—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 47.]
- FIG. 613—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 47.]
- FIG. 614—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), end of south wall. [Maudslay, 1889-1902, vol. 3, pl. 51.c.]
- FIG. 615—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), south column, west side. [Carnegie Institution of Washington.]
- FIG. 616—Chichen Itza, Structure 2D10 (North Colonnade), capstone. [Morris, 1931, pl. 163.]
- FIG. 617—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), fresco. [Morris, 1931, fig. 268.]
- FIG. 618—Chichen Itza, Structure 2D8 (Temple of the Warriors), fresco. [Morris, 1931, pl. 157.b.]
- FIG. 619—Chichen Itza, Cenote of Sacrifice, Disk M, detail. [Lothrop, 1952, fig. 23.e.]



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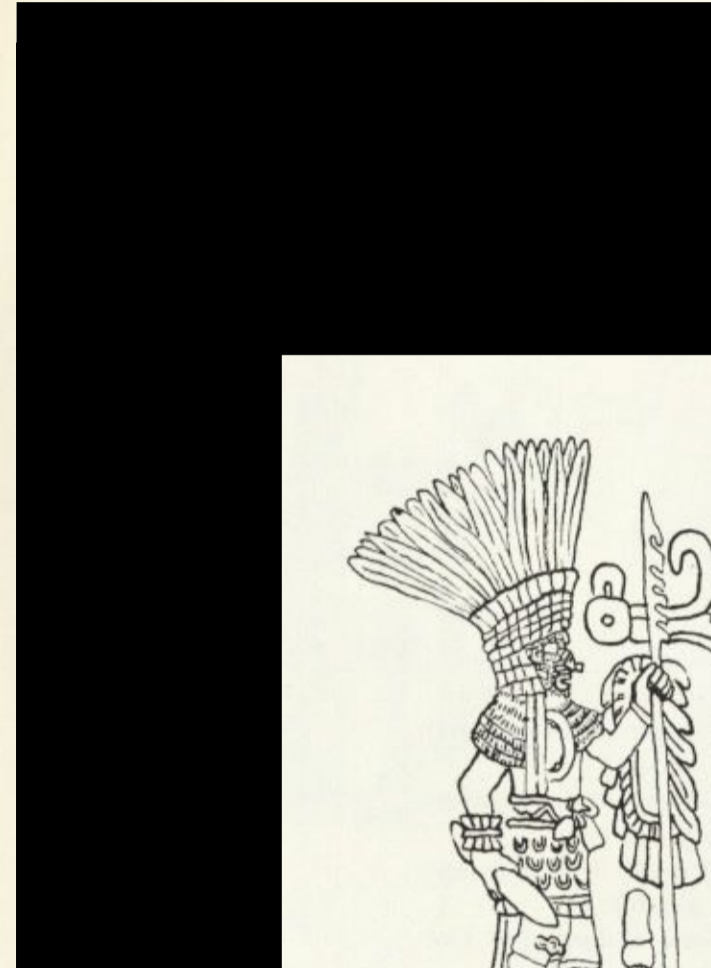
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- FIG. 620—Chichen Itza, Structure 3C15 (Caracol), pilaster, left side. [Carnegie Institution of Washington.]
- FIG. 621—Chichen Itza, Structure 2D10 (North Colonnade), Drum 11. [Carnegie Institution of Washington.]
- FIG. 622—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 46.]
- FIG. 623—Chichen Itza, Cenote of Sacrifice, design on jade bead. [Peabody Museum, Harvard University.]
- FIG. 624—Chichen Itza, Cenote of Sacrifice, jade necklace assembled. [Lothrop, 1952, fig. 21.]
- FIG. 625—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 48.]
- FIG. 626—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B. [Maudslay, 1889-1902, vol. 3, pl. 49.]



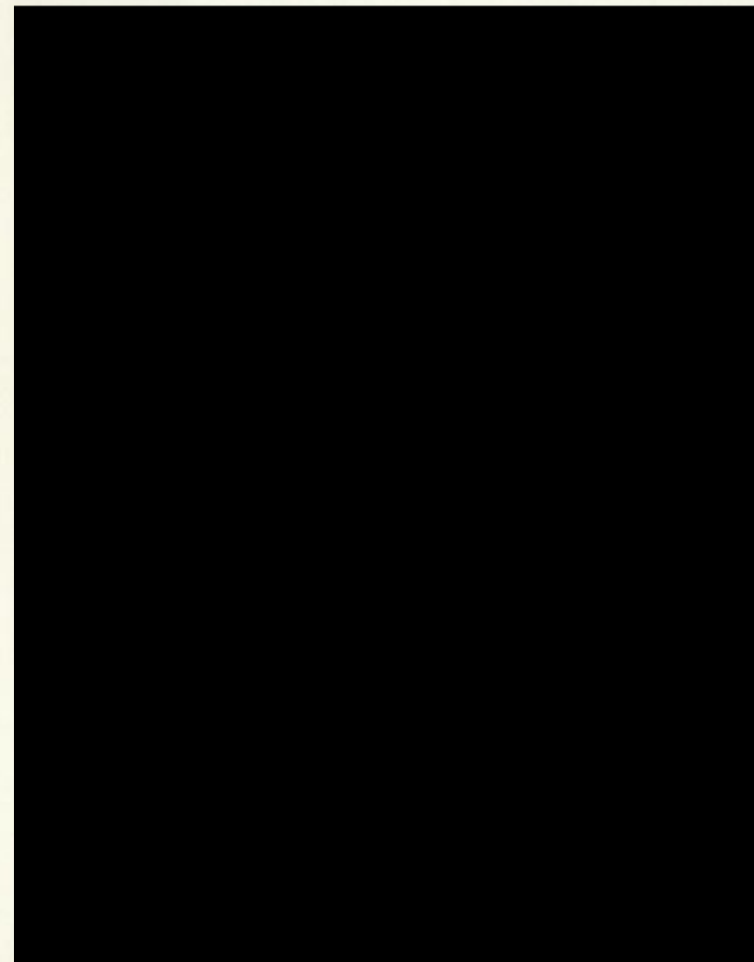
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ETHNOLOGY: MAYA

- FIG. 627—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row B. [Maudslay, 1889-1902, vol. 3, pl. 49.]
- FIG. 628—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 48.]
- FIG. 629—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 46.]
- FIG. 630—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 37E. [Morris, 1931, pl. 103.]
- FIG. 631—Chichen Itza, Structure 2C3, south column, north side. [Seler, 1902-23, vol. 5, following p. 388, pl. 33, third from left.]
- FIG. 632—Chichen Itza, Structure 3E1 (Northeast Colonnade, Column 1E. [E. B. Ricketson, 1927, p. 13.]



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ETHNOLOGY: MAYA

- FIG. 633—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 47.]
- FIG. 634—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 45.]
- FIG. 635—Yaxchilan, Lintel 45, detail. [Morley, 1937-38, vol. 5, pl. 114.c.]
- FIG. 636—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 45.]
- FIG. 637—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 46.]
- FIG. 638—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 46.]



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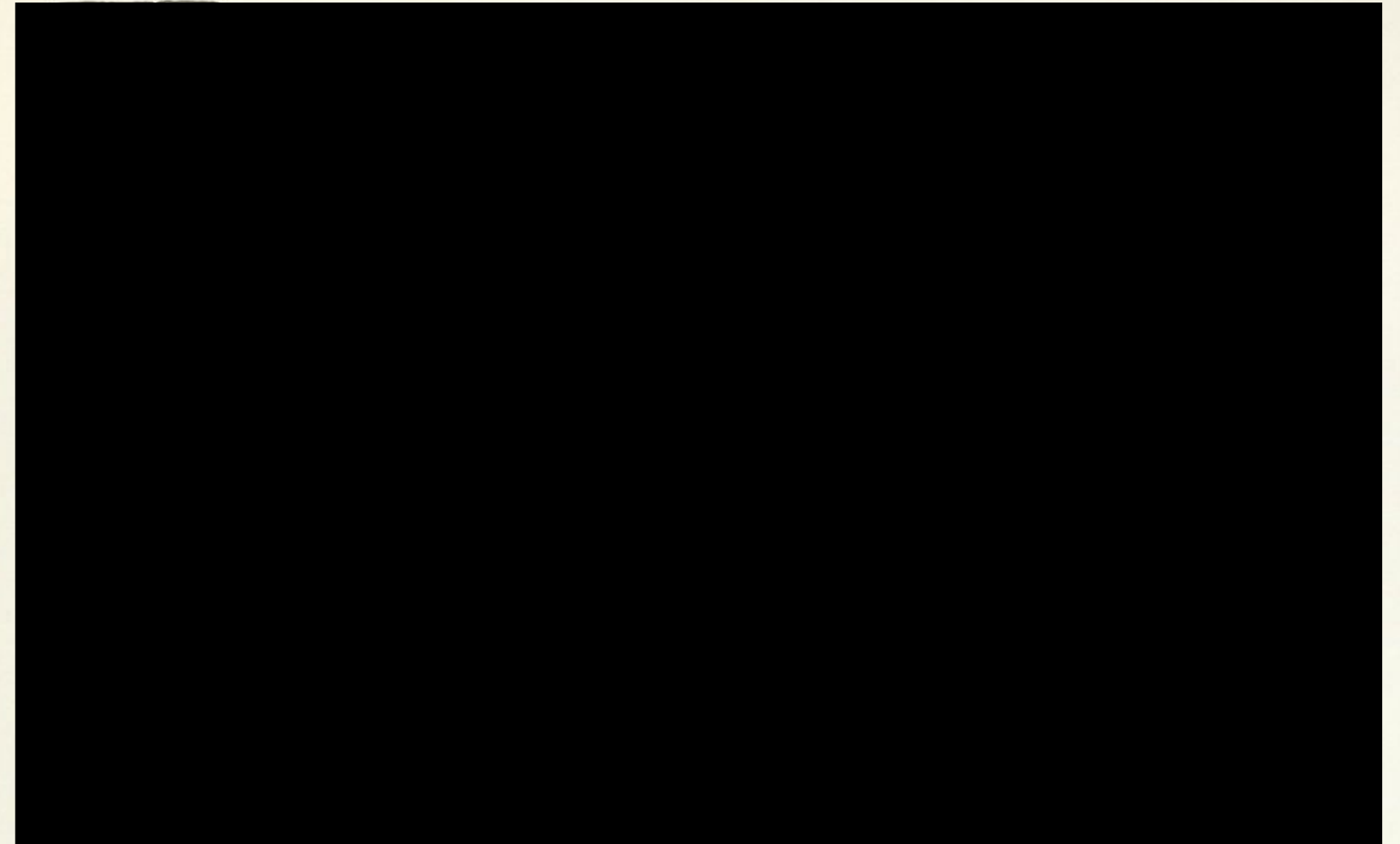
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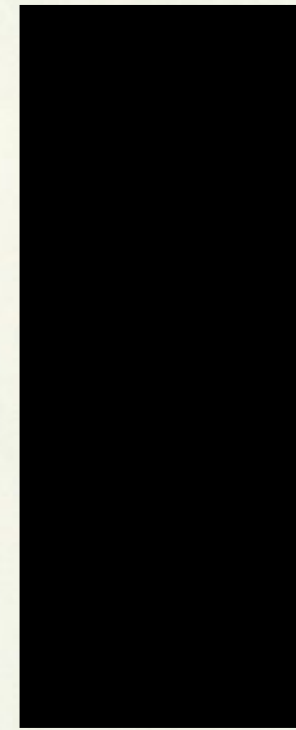
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ETHNOLOGY: MAYA

- FIG. 639—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 17W. [Morris, 1931, pl. 59.]
 FIG. 640—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 47N. [Morris, 1931, pl. 112.]
 FIG. 641—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 11S. [Morris, 1931, pl. 51.]
 FIG. 642—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 4S. [E. B. Ricketson, 1927, p. 11.]
 FIG. 643—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 47.]
 FIG. 644—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 46.]
 FIG. 645—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 4N. [E. B. Ricketson, 1927, p. 11.]



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ETHNOLOGY: MAYA

- FIG. 646—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 45.]
- FIG. 647—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 45.]
- FIG. 648—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 4N. [Morris, 1931, pl. 72.]
- FIG. 649—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 4E. [Morris, 1931, pl. 35.]
- FIG. 650—Chichen Itza, Structure 2D1 (Lower Temple of the Jaguars), Row A. [Maudslay, 1889-1902, vol. 3, pl. 47.]
- FIG. 651—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 2W. [E. B. Ricketson, 1927, pl. 14.]
- FIG. 652—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 10W. [Morris, 1931, pl. 50.]
- FIG. 653—Tikal, graffito. [Maler, 1911, fig. 12, no. 2.]
- FIG. 654—Chichen Itza, Structure 4C1 (Monjas), Toltec Annex, south portico, west jamb. [Carnegie Institution of Washington.]



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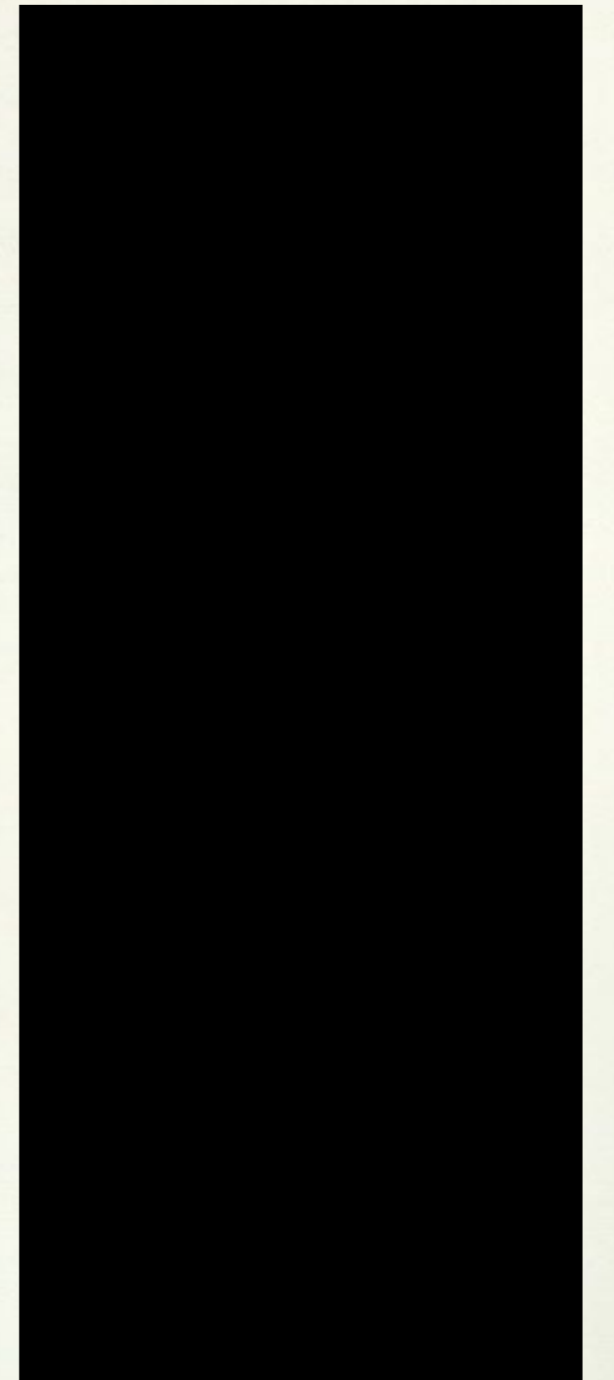
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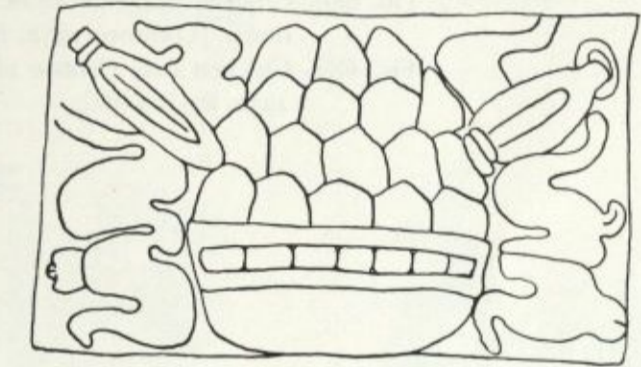
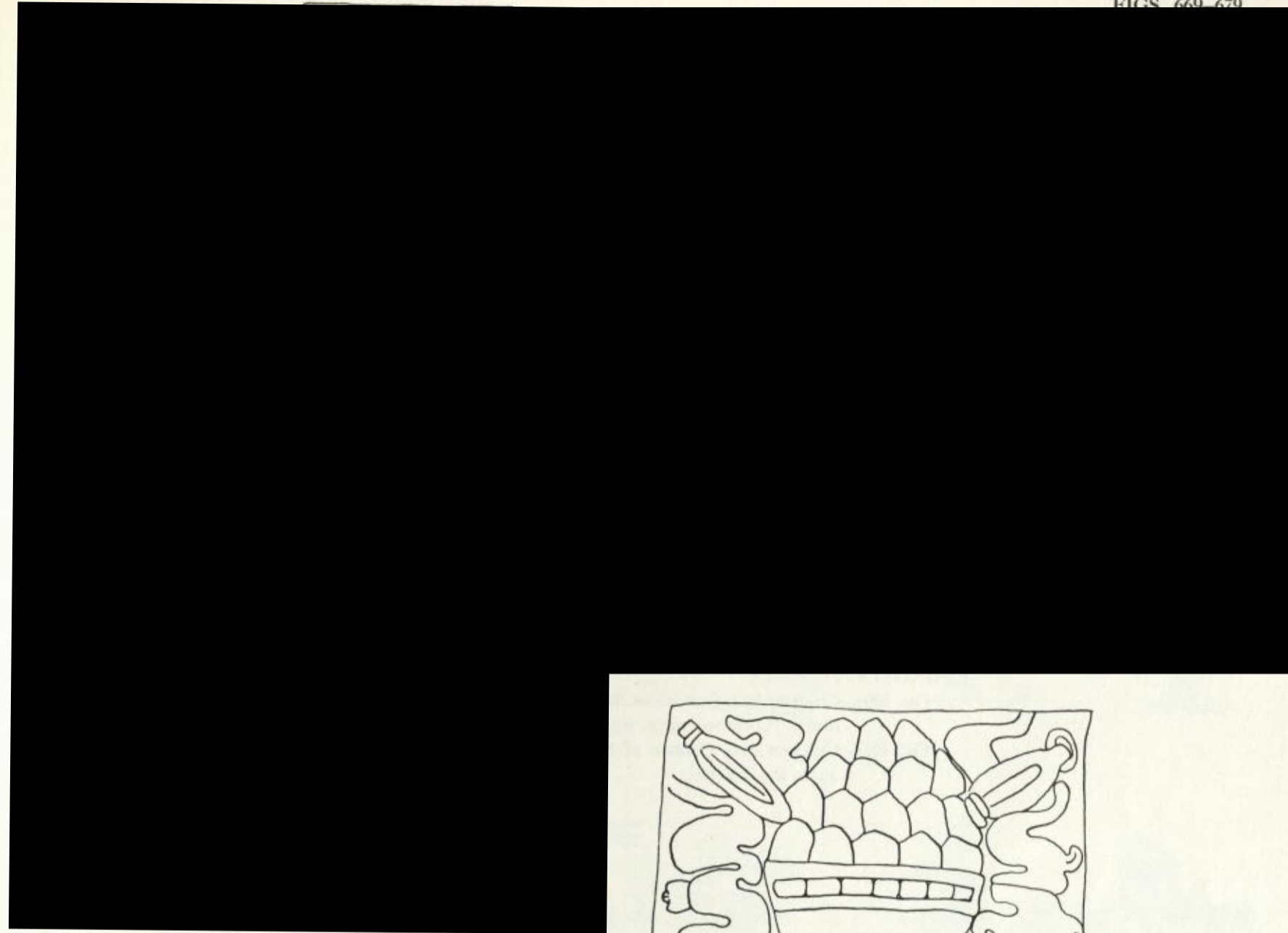


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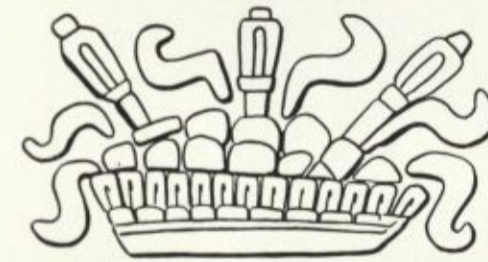
- FIG. 655—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 10S. [Morris, 1931, pl. 50.]
- FIG. 656—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 4S. [Morris, 1931, pl. 35.]
- FIG. 657—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 4S. [Morris, 1931, pl. 72.]
- FIG. 658—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 1S. [E. B. Ricketson, 1927, p. 13.]
- FIG. 659—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 51N. [Morris, 1931, pl. 115.]
- FIG. 660—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), south bench. [Morris, 1931, fig. 305.]
- FIG. 661—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 56S. [Morris, 1931, pl. 119.]
- FIG. 662—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 52S. [Morris, 1931, pl. 116.]
- FIG. 663—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 1W. [E. B. Ricketson, 1927, p. 13.]
- FIG. 664—Chichen Itza, Structure 2D8 (Northwest Colonnade), dais, south side. [Morris, 1931, pl. 128.]
- FIG. 665—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 5W. [Morris, 1931, pl. 36.]
- FIG. 666—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 5S. [Morris, 1931, pl. 36.]
- FIG. 667—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), Column 6W. [Morris, 1931, pl. 37.]
- FIG. 668—Chichen Itza, Structure 3C1 (High Priest's Grave), Column 3N. [Carnegie Institution of Washington.]

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- FIG. 669—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 39S. [Morris, 1931, pl. 105.]
- FIG. 670—Chichen Itza, Structure 3E1 (Northeast Colonnade), Column 4E. [E. B. Ricketson, 1927, p. 11.]
- FIG. 671—Chichen Itza, Structure 2D8 (Temple of the Chac Mool), portion of south bench. [Morris, 1931, pl. 133.]
- FIG. 672—Chichen Itza, Structure 2D8 (Temple of the Warriors), Column 12N. [Morris, 1931, pl. 52.]
- FIG. 673—Chichen Itza, Structure 2D8 (Northwest Colonnade), cornice of dais, south side. [Morris, 1931, pl. 128.]
- FIG. 674—Chichen Itza, Structure 3E1 (Northeast Colonnade), cornice of dais. [Carnegie Institution of Washington.]
- FIG. 675—Tula, Palacio Quemado.
- FIG. 676—Tula, Palacio Quemado.
- FIG. 677—Tula, Palacio Quemado.
- FIG. 678—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), base of column. [Seler, 1902-23, 5:307, fig. 182.]
- FIG. 679—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), north wall. [Seler, 1902-23, 5:321, fig. 196.]



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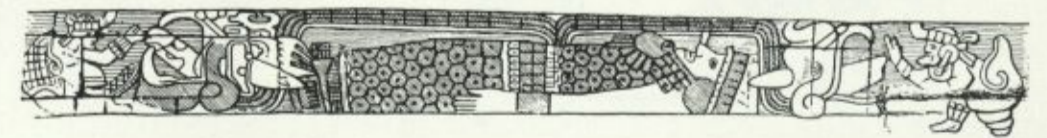
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FIG. 680—Chichen Itza, Cenote of Sacrifice, plan of decoration on gold disks. [Lothrop, 1952, fig. 11.]

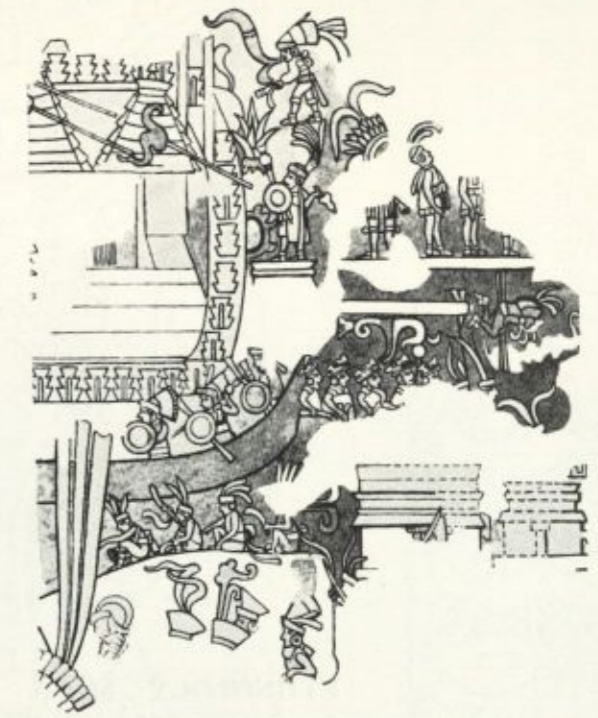
FIG. 681—Chichen Itza, Cenote of Sacrifice, Disks A-G, I. [Lothrop, 1952, figs. 29-36.]

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- FIG. 682—Chichen Itza, Structure 2D1 (Upper Temple of the Jaguars), Toltec and Maya. [Seler, 1902-23, 5.327, fig. 201.]
- FIG. 683—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), north wall, east end. [Breton, 1917, fig. 6.]
- FIG. 684—Chichen Itza, Structure 4C1 (Monjas), south room, fresco. [Breton in Willard, 1926, facing p. 253.]
- FIG. 685—Chichen Itza, Structure 2D1 (North Temple of the Great Ball Court), west side, detail. [Breton, 1917, pl. 4.]
- FIG. 686—Chichen Itza, Structure 3C15 (Caracol), sculptured circular stone. [After Ruppert, 1935, fig. 169.]
- FIG. 687—Kabah, Structure 2A3, jambs. [Spinden, 1920, p. 389.]
- FIG. 688—Tekax, Yucatan, jar. [J. E. S. Thompson, 1927, fig. 12.]



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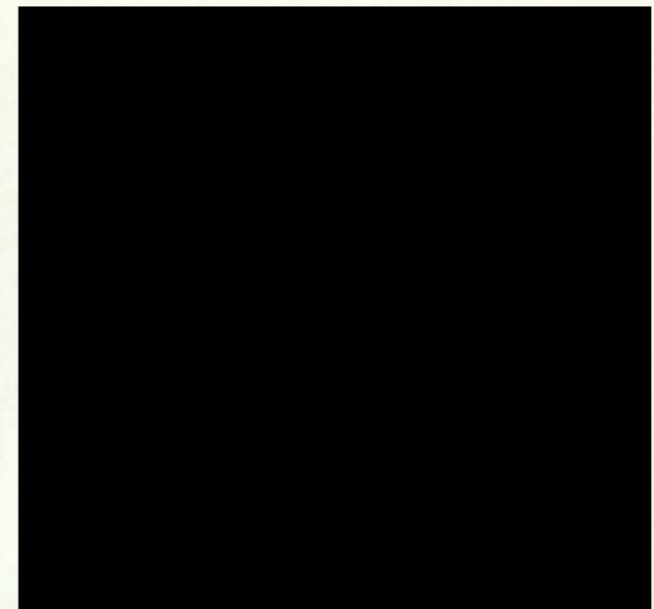
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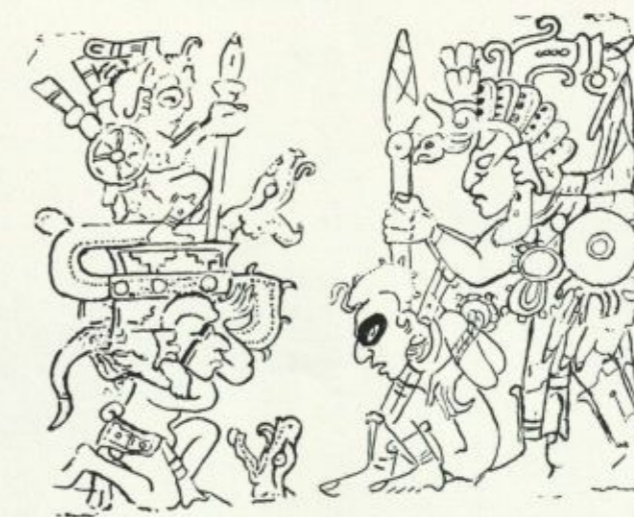


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- FIG. 689—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 37S. [Morris, 1931, pl. 103.]
- FIG. 690—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 33N. [Morris, 1931, pl. 100.]
- FIG. 691—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 32S. [Morris, 1931, pl. 99.]
- FIG. 692—Chichen Itza, Structure 2D8 (Northwest Colonnade), Column 33S. [Morris, 1931, pl. 100.]
- FIG. 693—Chichen Itza, Structure 4C1 (Monjas), Toltec Annex, south portico. [Carnegie Institution of Washington.]
- FIG. 694—Codex Dresden 60.



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FIG. 695—"Near Teotihuacan," jade. [Kelemen, 1943, pl. 238, b.]

FIG. 696—Chichen Itza, Cenote of Sacrifice, jade. [Peabody Museum, Harvard University.]

FIG. 697—Jade. [University of Pennsylvania Museum.]

FIG. 698—Colipa, near Misantla, Veracruz, jade. [Strebel, 1885-89, vol. 2, pl. 7, no. 5.]

FIG. 699—Tenochtitlan, jade. [Batres, 1902, p. 24, no. 7.]

FIG. 700—Tula, shell relief. [Peñafiel, 1890, pl. 169.]

FIG. 701—Xochicalco, detail of frieze on base of temple. [Peñafiel, 1890, pl. 169.]

FIG. 702—Tula, Palacio Quemado, stone amulet.



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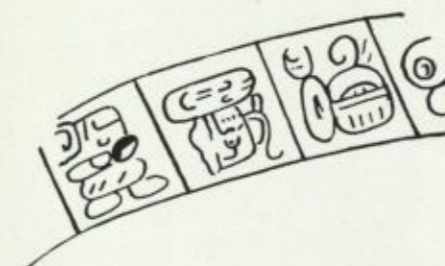
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CENOTE OF SACRIFICE

FIG. 703—Chichen Itza, view from north. [Proskouriakoff, 1946, pl. 21.]

FIG. 704—Chichen Itza, Sacred Way, looking south. [Carnegie Institution of Washington.]

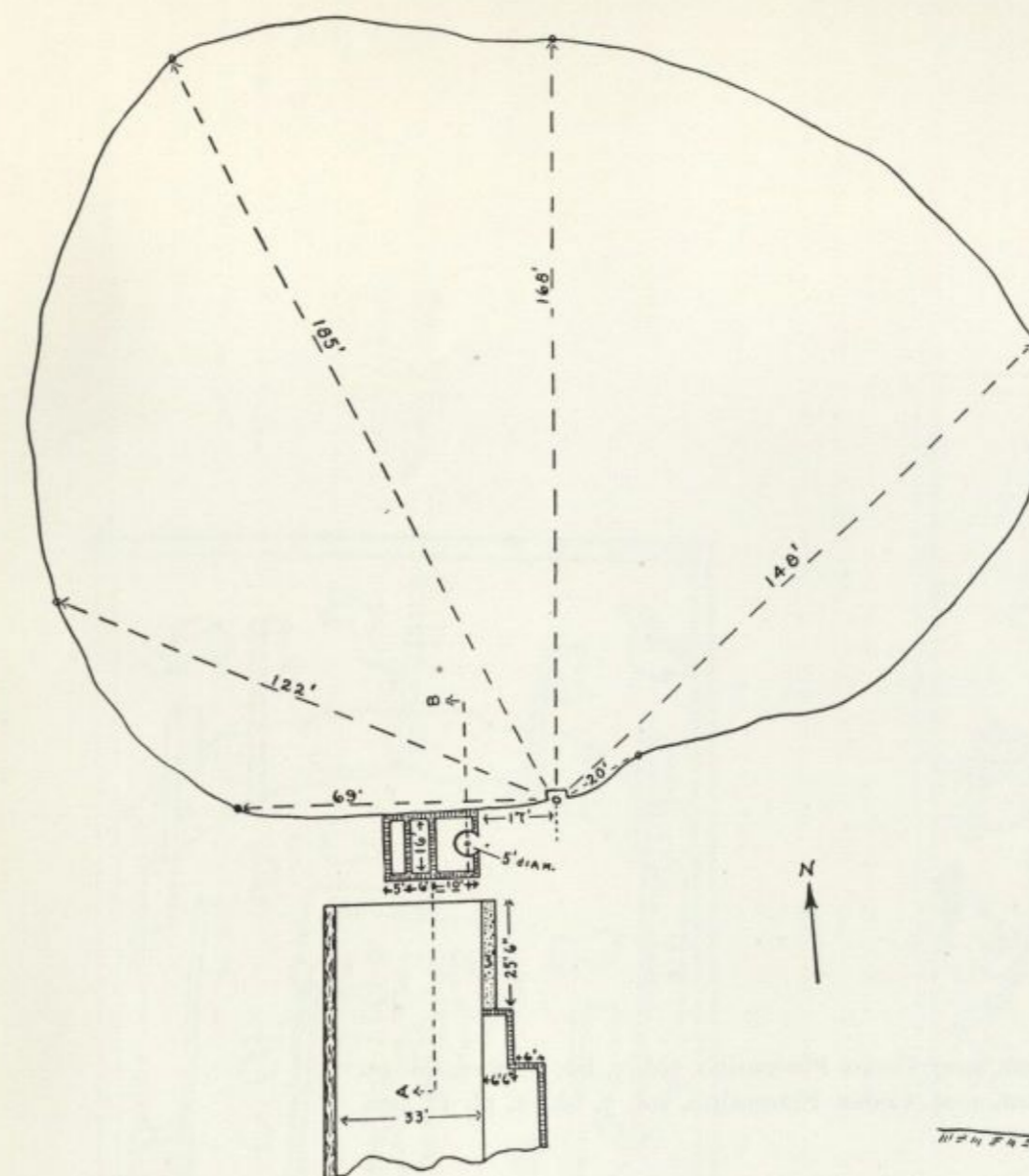
FIG. 705—Chichen Itza, Cenote of Sacrifice, E. H. Thompson's dredge. [Peabody Museum, Harvard University.]



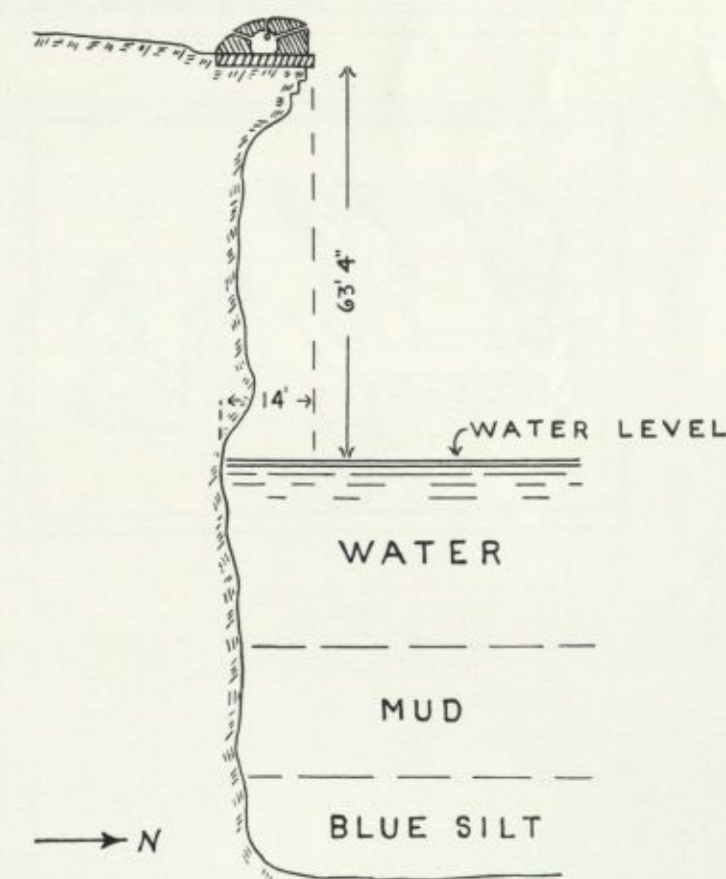
CENOTE OF SACRIFICE

FIG. 706—Chichen Itza, Cenote of Sacrifice, plan.

FIG. 707—Chichen Itza, Cenote of Sacrifice, section of south side.



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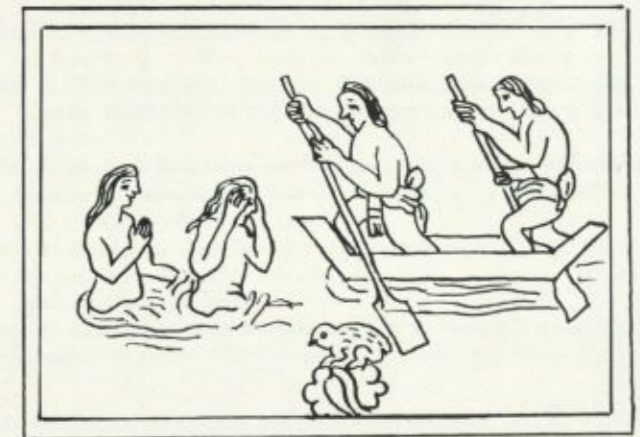
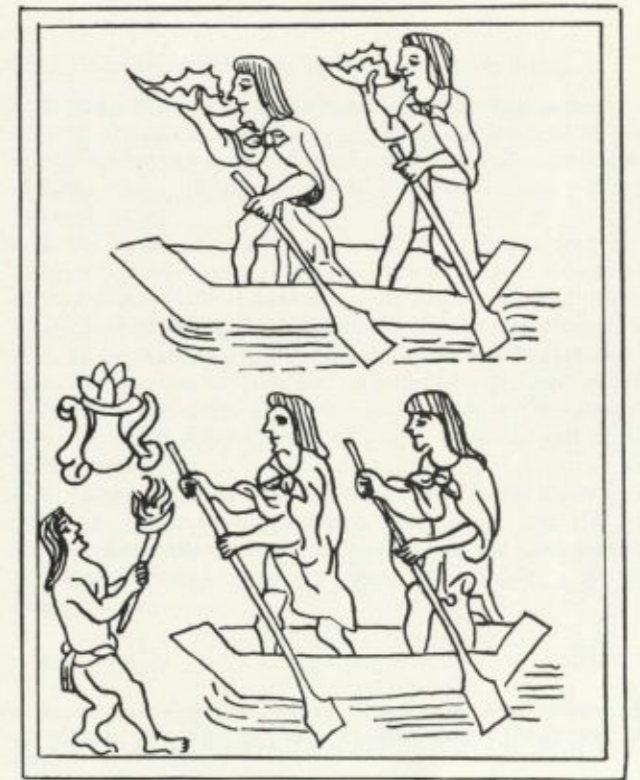
CENOTE CULT

FIG. 708—Sahagun, 1905, Codex Florentino, vol. 5, bk. 1, pl. 7, no. 33.

FIG. 709—Sahagun, 1905, Codex Florentino, vol. 5, bk. 2, pl. 12, nos. 22, 23.



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