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NATIONAL GEOGRAPHIC

NIGER'S
WODAABE:
"PEOPLE OF
THE TABOO" 483

THE WORLD OF
Martin
Luther 418

CIRCLING
EARTH FROM
POLE TO POLE 464

BOUNTY'S
CHILDREN OF
PITCAIRN AND
NORFOLK 510

THE JAPANESE
CRANE, BIRD OF
HAPPINESS 547

NATIONAL GEOGRAPHIC

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October 1983

IT WOULD BE a great shock, indeed, to look up and see yourself walking down the street. But something similar happens to us now and again in various parts of the world when we find imitations and sometimes just downright duplicates of NATIONAL GEOGRAPHIC being offered for sale.

The imitators—like one in Mexico and another in Brazil—usually sport yellow borders, use the word “geographic” somewhere in the title, and offer content they believe to be similar to ours. The most blatant duplication appeared in Taiwan in 1982 (*below*); it simply reproduced our pages from a number of previous issues and translated the text into Chinese. It called itself *World National Geographic Magazine*.

What can be done about this? Our lawyers, skilled in international copyright and trademark laws, have won a judgment against the Mexican imitator, *Revista de Geografia Universal*, that prohibits its importation into the United States. The imitator in Brazil switched the cover color to red. Our fans in Taiwan have now removed the yellow border entirely and have promised to



develop original material for their magazine instead of stealing ours.

If imitation is the sincerest form of flattery, I suppose we should be pleased. But the saddest part of all this is that the imitations are appalling. The murky photography, awkward typography, bad printing, and deplorable cartography appearing in our time-tested format and under the Geographic names of the plagiarists make us wince.

Wilbur E. Garrett
EDITOR

The World of Martin Luther 418

A defiant German monk, born five centuries ago next month, changed the course of history. Luther challenged the Roman Catholic Church, igniting the Reformation and, very nearly, himself. Merle Severy and photographer James L. Amos trace his life.

Circling Earth From Pole to Pole 464

For three years author Sir Ranulph Fiennes and his Transglobe Expedition forged through the heat and cold of four continents and three oceans to complete the first-ever bipolar circumnavigation.

Niger's Wodaabe: "People of the Taboo" 483

A rigid code of behavior guides nomads who squeeze a bare subsistence from the fringes of the Sahara. Carol Beckwith records their ritual celebrations and the elaborate male beauty contests that lighten their lives during the rainy season.

Pitcairn and Norfolk— The Saga of Bounty's Children 510

From South Pacific islands 3,700 miles apart, the descendants of mutineers face uncertain times as the population of remote Pitcairn dwindles and Norfolk confronts an influx of outsiders. Text by Ed Howard; photographs by David Hiser and Melinda Berge.

The Japanese Crane, Bird of Happiness 542

Numbering about a thousand in all, these graceful creatures hold a special place in Japanese culture. Text and photographs by Tsuneo Hayashida.

COVER: Flaunting the whiteness of teeth and eyes, a Wodaabe man of Niger wins top honors for charm in a courtship dance. Photograph by Carol Beckwith.

The World of Luther



PAINTING BY MICHAEL A. HAMPSTEAD (RIGHT); LUERS-CHARNACH (L.A.),
BUNDESSAMMLUNGEN ZU WEIMAR (FOOSE)

By MERLE SEVERY
ASSISTANT EDITOR

Photographs by
JAMES L. AMOS
NATIONAL GEOGRAPHIC PHOTOGRAPHER

ACCLAIMED the Great Reformer, Martin Luther challenged the mightiest power on earth in his day, the Roman Catholic Church. With a call in 1517 for debate on 95 theses—posted, tradition has it, on the Castle Church door in Wittenberg (right)—the scholar and monk ignited an explosion that continues to this day. In the process he placed the Bible in the hands of the common people, in the language of their everyday speech. He offered European man a new notion of himself, preaching access to God without intercession of clergy. And by wrenching much of western Europe away from obedience to the Roman Church, he ended the social order of centuries—and sparked a century of bitter warfare. The tree of Protestant Christianity planted by Luther counts scores of branches with 350 million members, in this the 500th anniversary year of his birth.

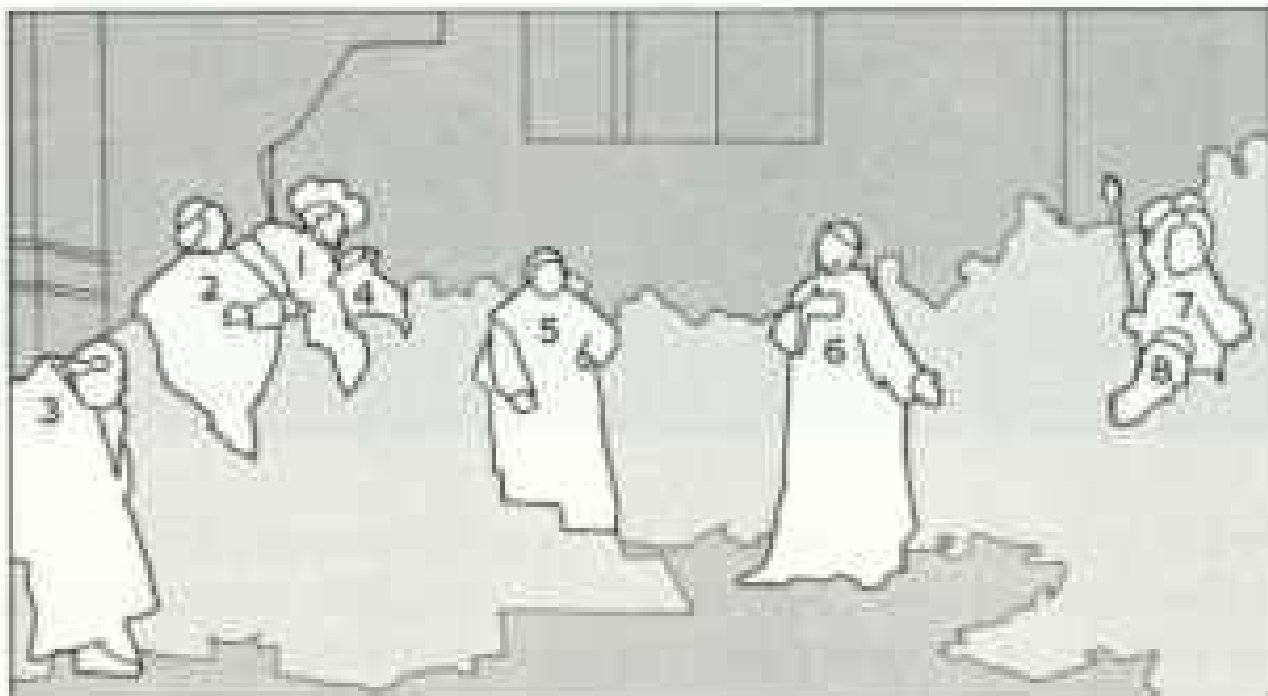




"I cannot and will not recant." Luther's defense of his writings at the Diet of Worms in April 1521 sealed the enmity of the Holy Roman Emperor, Charles V, and earned Luther—already excommunicated by Pope Leo X—an imperial ban, making him an outlaw. Normally his words would have meant burning at the stake. But Luther traveled to Worms for examination before Charles and the diet—Germany's ruling nobles, prelates, and magistrates—under a safe-conduct masterminded by the Elector of Saxony, Frederick the Wise. Although the elector never met Luther, declaring the priest "much too bold," he continued to protect him through the Reformation's crucial early years after Luther's triumphant appearance before the diet. In this turn-of-the-century painting, events and people of two days are combined in one dramatic scene.



ANTON JOB WERNER, RECHT FÜR KUNST UND GESCHICHTE, BERLIN



- 1 Emperor Charles V on the throne
- 2 Alexander, Rome's representative on religious affairs
- 3 Caracciolo, Rome's representative on political affairs
- 4 Frederick the Wise, Elector of Saxony
- 5 Johann von der Ecken of Trier, Chief Inquisitor
- 6 Martin Luther
- 7 Kaspar Sturm, Imperial Herald
- 8 Dr. Jerome Schurff, Luther's lawyer, of the Wittenberg University law faculty



Sundered faiths rejoin amid the lantern lights of children at an ecumenical celebration in Erfurt, East Germany, where Luther studied, entered a monastery, and was ordained a priest in the cathedral, at left. Annually on November 10, his



birthday, Protestants and Catholics gather here to honor both him and the Catholic St. Martin, whose name the infant was given on the saint's feast day, November 11. This year is officially proclaimed as Luther Year by the German Democratic Republic.

THE TORCH of Reformation was picked up and borne by men who modified Luther's teachings in ways he would never have condoned. Though he opposed naming any church Lutheran, such congregations spread, predominantly in northern Germany and Scandinavia, and still follow the creed distilled by Luther's friend and disciple Philipp Melancthon.

In Zurich, Huldrych Zwingli simplified liturgy, stripped churches of ornaments, and proclaimed the doctrine of predestination. Moralistic John Calvin in Geneva drew from Luther and Zwingli and preached of a stern and demanding God. Disciples spread his tenets across Europe. One, John Knox, brought Calvin's Reformed Church to Scotland, where it evolved into the Presbyterian Church.

Henry VIII of England, denied a marriage annulment by Rome, appointed Thomas Cranmer the Archbishop of Canterbury and then had himself made head of the church in England in 1534.

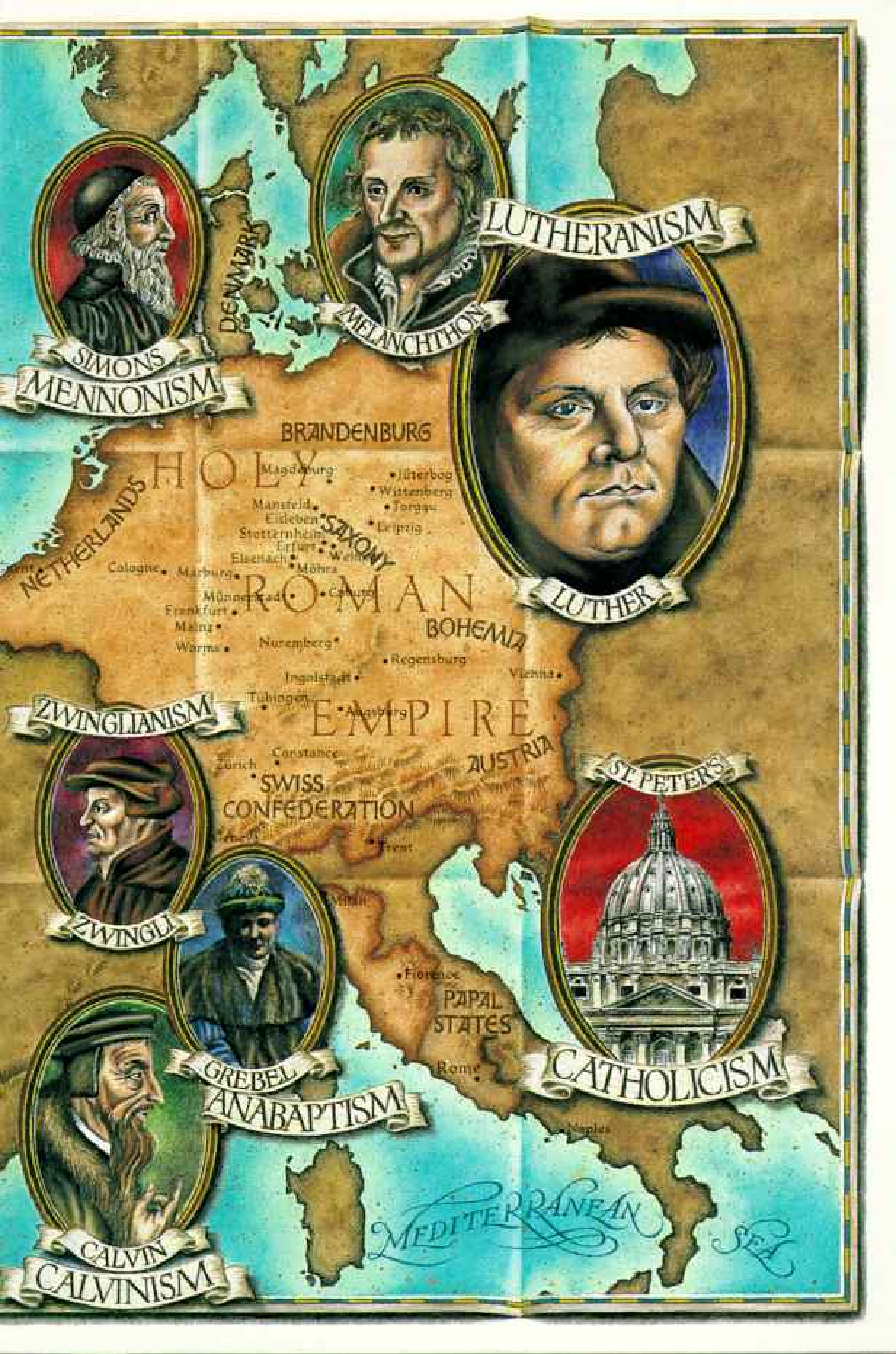
Reformers showed scant tolerance for minority offshoots. From their start in Zurich in 1525, Anabaptists rejected formal organization. They and their leader Conrad Grebel, advocating a personal religion, were persecuted for belief in adult baptism and complete separation of church and state. Anabaptists in the Netherlands adopted the name Mennonites from leader Menno Simons.

Today's Baptist Church stems from John Smyth, who embraced these ideas and broke with the English Congregational Church in the early 1600s.

The Catholic Church responded with its own reformation, which purged abuses of power and renewed spiritual vigor. The ensuing battle for souls was intertwined with a struggle for political power. A century of fighting culminated in the Thirty Years' War, devastating Germany. The 1648 treaty eroded the boundaries of the Holy Roman Empire and forced Catholic and Protestant to concede that both would continue to exist.

PAINTING BY ALLEN CARROLL





SIMONS
MENNONISM



MELANCHTHON

LUTHERANISM



LUTHER

NETHERLANDS

DENMARK

BRANDENBURG

HOLY

Magdeburg

Jüterbog

Wittenberg

Torgau

Mansteld

Eisleben

Stettinheim

Erfurt

Eisenach

SAXONY

Leipzig

Wittenberg

Möhr

Cologne

Marburg

Münster

Frankfurt

Mainz

Worms

Nuremberg

BOHEMIA

Regensburg

Ingenstadt

Vienna

Tubingen

Augsburg

EMPIRE

AUSTRIA

Zürich

Constance

SWISS CONFEDERATION

ZWINGLIANISM



ZWINGLI



GREBEL
ANABAPTISM



CALVIN
CALVINISM



ST. PETERS
CATHOLICISM

PAPAL STATES

Rome

Florence

Naples

MEDITERRANEAN

S.F.



CHURCH BELL rings eleven. I pull my jacket closer against the chill of a November evening—November 10—as I walk along the now quiet, darkened streets of Eisleben in East Germany. I

pause before the house where Martin Luther was born, shortly before midnight, five centuries ago.

A light shines in a ground-floor room—perhaps left on by a workman restoring the house. It brings to mind lamps casting their fitful glow in that very room on a night of expectation, pain, and creative joy after which the world would never be the same again.

Because of high infant mortality (heaven must be full of little children, Luther later commented), babies were baptized as soon as possible—in his case about eleven the next morning in the church around the corner. The day was the feast of St. Martin of Tours, a charitable Roman soldier turned monkly bishop who took an ax to pagan shrines. So, following tradition in honoring the day's saint, Hans and Margaret Luther christened their son Martin.

Had Martin died in infancy would the Reformation have occurred? Would Europe have been racked by that convulsive transition between the medieval and modern eras whose effects we feel even today?

Many reformers had come before. Francis of Assisi, rebuking luxurious prelate and patrician alike, embraced poverty and was proclaimed a saint. Jan Hus of Bohemia attacked the clergy's moral conduct. He was burned at the stake. So was Savonarola, after being hanged. He preached against Florence's vanities and Rome's corruption while Martin was still a boy.

Luther's fate was different. Though excommunicated by the Church of Rome and declared an outlaw by the Holy Roman Empire, he lived to see his Reformation established. Though he risked martyrdom, he died peacefully in the fullness of his years only a few steps away from the house in

Eisleben where he was born 62 years earlier.

In village and city, in field and forest, monastery and castle, and through snowy Alpine passes from little Wittenberg on the Elbe to mighty Rome on the Tiber, I traced Luther's footsteps and his influence—in a Germany split by a wall, in a world severed by faith. Along the way I saw cracks in political and religious walls, and healthy signs of the healing of wounds.

I was amazed to see the tremendous effort that a Communist state was devoting to the 500th anniversary of a man of God, rebuilding his sites, rewriting its histories to stress his "positive social message." My heart warmed to join Roman Catholics and Protestants worshiping together, honoring both St. Martin of Tours and Martin Luther. I kept asking why Luther's Reformation took while others did not. His personality? The temper of the times? Historical accidents?

All three.

In the public mind Luther is the bold monk who rocked Rome by nailing 95 theses on a church door in Wittenberg. And who defied the Holy Roman Emperor when ordered to recant at Worms—challenging the highest constituted powers of heaven and earth.

Ironically, he did not set out to divide the church, or to destroy the supposed unity of medieval civilization. To the last he considered himself a faithful restorer of the pristine purity of the universal church, more catholic than the Pope. A renovator, not an innovator. Nor did he see himself, as some do, as emancipator of the individual, contributor to the rise of the nation-state, or inaugurator of the modern world. His concern was with souls, not things of this world. He opened doors down corridors to human rights and freedoms he never condoned or envisioned. Once a wall is pierced, who knows what will pass through.

Magellan's ships were groping their way around the world during the years when Luther started his Reformation. But he likely

Descendants of Luther's family still live in Möhra, East Germany, where his statue dominates the village square. Luther's parents grew up here but left before his birth. His father rose from peasant farmer to mining entrepreneur and bought an advanced education for Luther, who disappointed the family by becoming a priest.



heard nothing about it, nor would he have cared. Though his concerns were cosmic and his message would transcend boundaries of denomination, nationality, and time, his world was small.

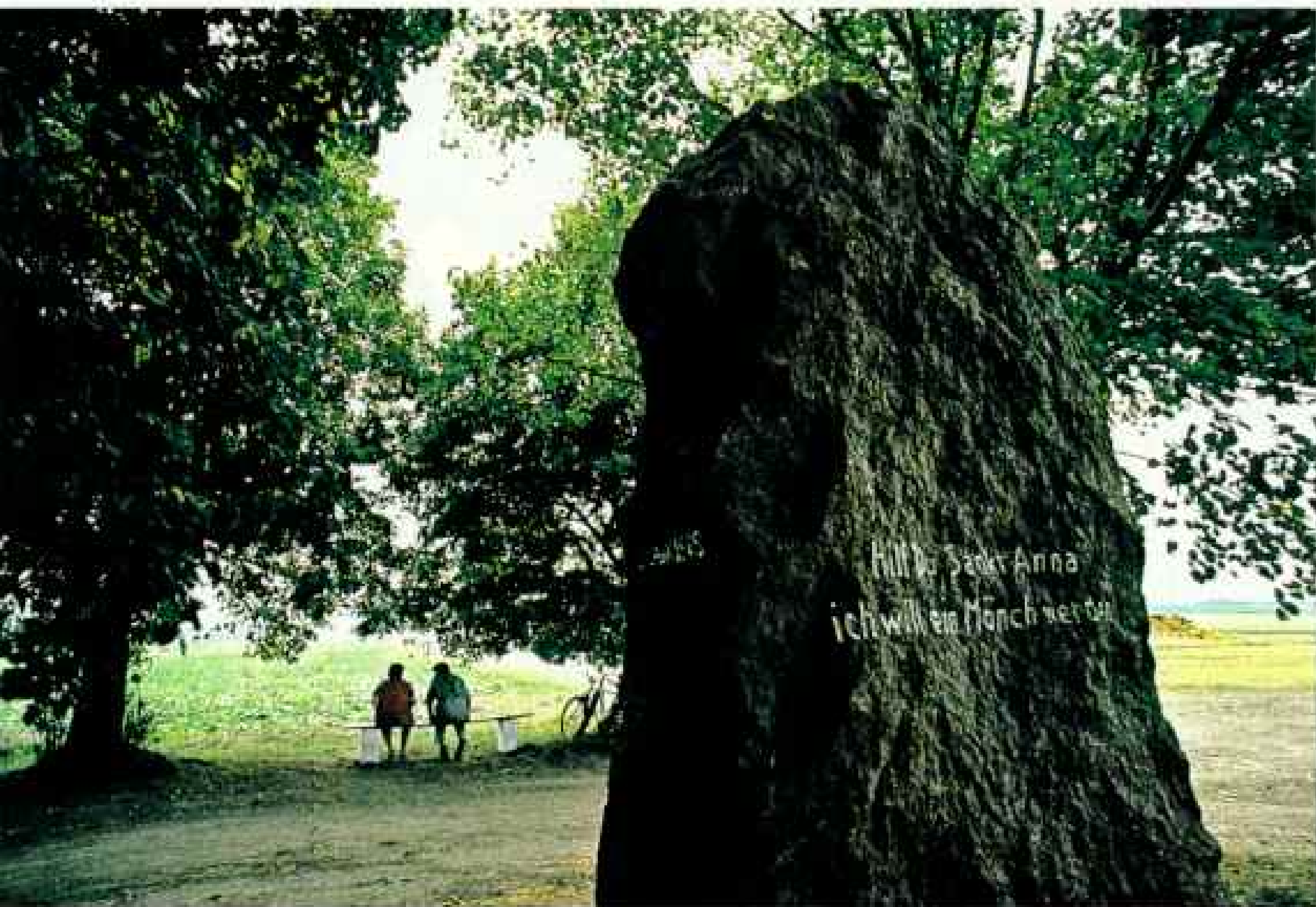
Luther's Germany was not two Germanys as today but hundreds, a crazy quilt of territories nominally under the Holy Roman Emperor. The seven most powerful magnates in the realm—four secular princes and three archbishops—elected the emperor. Periodically he called these seven electors and other princes, prelates, and city magistrates to a diet, usually at an imperial city such as Regensburg, Nuremberg, Augsburg, Frankfurt, or Worms. In this assembly he heard petitions and grievances, and asked for money to war against the Turks.

Among Western European nations familiar to us today, only France, England, and Portugal had achieved some unity. Spain comprised Castile, Aragon, and other jealous kingdoms. Italy was diagonally sliced in two by the Papal States. Their prince—the Pope—seesawed as a power balance between French king and Habsburg emperor,

whose rival claims to Milan and Naples caught Rome in a pincers.

Across this mottled stage strode colorful giants: Henry VIII of England, Francis I of France, Holy Roman Emperor Charles V—and Suleiman the Magnificent, leading his Ottoman Turks, "the scourge of God," to the gates of Vienna.

All these rulers were young when Luther stepped from the shadows. And for the rest of the Reformer's life they kept the pot boiling with their conflicting passions and ambitions—an incredible caldron of cross-purposes that saw troops of the Holy Roman Emperor sack Rome and hold the Pope prisoner; the Most Christian King of France allied with Protestant and Turk against the emperor—even basing the galleys of 30,000 Muslim corsairs in Toulon on the French Riviera, where they ran a lively market in Christian slaves. The Pope dubbed Henry VIII Defender of the Faith for writing a book against Luther. Later breaking with Rome over his desire to wed Anne Boleyn, Henry had Parliament declare him Supreme Head of the Church in England and brought



to that land, and subsequently to America, the Reformation he staunchly opposed.

A hurricane of forces flipped the pages of 16th-century history. And in the eye of the hurricane, an obscure friar in a remote university town planted the seeds of reform that took root and slowly grew sturdy as an oak until strong enough to withstand the tumult. Only after Luther's death did wars of religion ravage Europe. When they ended, after a century, denominational lines—Catholic and Protestant—were drawn that essentially remain to this day.

THE WORD did it all," Luther claimed; truth to him was more potent than troops. The Word of Scripture, yes. But Luther's pungent words, too, magnified by the printing press that made the Reformation the first mass-media event. The printing press—"God's last and greatest gift," he called it—launched Luther onto the international stage.

Today, dulled by the glut of print and picture, we can hardly imagine the bombshell effect of the pamphlets, broadsides, open

letters, satires, dialogues, sermons, and discourses that streamed from the newfangled presses printing from movable type. For the nine out of ten people who could not read, hearing them read aloud or scanning the accompanying woodcuts did the trick.

As early as 1523 Luther's tracts had romped through some 1,300 printings, perhaps a million copies. From 1516 to 1546 he averaged a treatise every two weeks—writing enough to fill 102 huge volumes of the famous Weimar edition, making him the most prolific religious figure in history, as well as the most written about since Christ.

We might never have heard of Luther had he taught 40 miles to the south, at Leipzig in the fervidly Catholic Duke George's domain. Luther's Reformation would have died with him at the stake. At Wittenberg three successive electors of Saxony gave him the state protection that enabled him to survive.

At Luther's ancestral village of Möhra, a half-timbered cluster in the Thuringian Forest, I mulled another of the ifs that stud the Reformer's path. "I am a peasant's son,"

Summer lightning sent Luther from law school to cloister when a bolt struck nearby during a journey to Erfurt in 1505. Shaken, he uttered the vow seen on a commemorative stone erected near the spot (left): "Help, St. Anne! I will become a monk." He embraced monastic life with ardor but suffered agonies of doubt over his spiritual fitness. At Wittenberg University, founded by Frederick the Wise, Luther taught the Scriptures and reached the pinnacle of academic distinction, with the right to wear the robes and beret of a doctor of theology (right). But doubts endured until, finally, his study of the Epistles of the Apostle Paul led him to a revelation known as the Tower Experience. He envisioned salvation by faith alone, achieved through God's mercy, in place of church belief that entrance into heaven depended upon both faith and good works—a spiritual balance sheet overseen by the clergy. His belief and his reliance on the Bible as the fountainhead of spiritual truth underpinned all his future thinking.



LUCAS CRANACH E. A., KUNSTSAMMLUNGEN DER VESTE LÖBUNG





PHOTOGRAPHED AT HERZOG AUGUST BIBLIOTHEK, WOLFENBÜTTEL;
INDULGENCE FROM STÄDTISCHES MUSEUM, BRAUNSCHWEIG (BOOK);
PAINTING BY MICHAEL A. HAMPSHIRE (LEFT)

Carnival air surrounds the business of soul saving in a marketplace sale of indulgences (left)—documents authorized by the Pope to insure purchasers against punishment in purgatory or to release souls already there. Sales were a chief form of church revenue: An indulgence (above) rests atop the strongbox of Friar Johann Tetzel, who became a Luther adversary. The purchase price, 20 silver coins. Sales by Tetzel near Wittenberg enraged Luther, who considered the assurances false and feared for the salvation of his parishioners. He preached against indulgences and questioned them in his theses.

Luther recalled. "I really ought to have become an elder, a village mayor or . . . farmhand." As eldest son of an eldest son, he would have inherited the farm—if primogeniture had been the custom.

But since the system was ultimogeniture, where the youngest son inherits, Luther's father headed north to Eisleben, became a copper miner, and a few months after Martin's birth moved to nearby Mansfeld. There, by dint of the hard work, thrift, prudence, and self-improvement that became hallmarks of the Protestant work ethic, Hans emerged from the bowels of the earth to become a self-made mining and smelting entrepreneur and town councillor. He bought a stone house that still stands on one of East Germany's many Luther Streets.

On my way to Mansfeld I gave a ride to

18-year-old Cornelia Semmler, who splits her time between vocational school and data processing in a factory.

Are her parents members of a church?

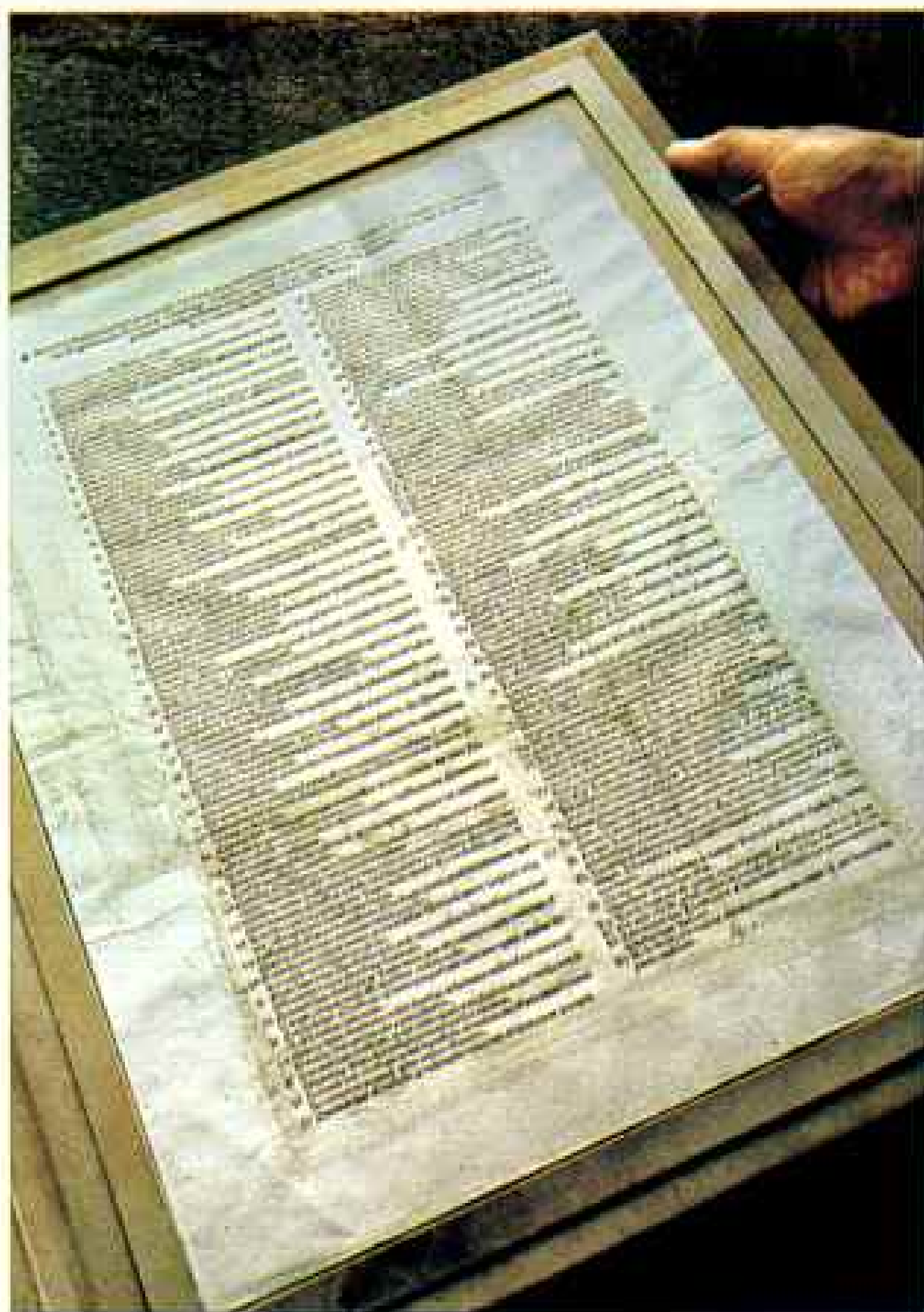
No, they're not interested. But her grandmother told her about God. Her boyfriend has taken her to church services, and she has learned about Luther's translating the Bible. She hoped to be baptized at Easter.

What do her classmates think?

Four or five in her class of 20 openly belong to a church. More would like to, she says, but parental pressure and uncertainty about how it would affect their careers inhibit them. Students fear church participation might lessen their chance of university.

Why is Cornelia willing to take the chance? "Because I believe in God." She wanted something more to hold on to.

Pilgrim fervor drove Luther on a frenzied round of holy sites when he visited Rome in 1510, his only trip outside Germany. Near the Basilica of St. John Lateran, in a ritual performed by the faithful (below right), he ascended on his



PHOTOGRAPHED BY MICHAEL BIRCH, BRITISH ARMY



IN CORNELIA'S SOCIETY, where boys and girls receive state-supported education but the state's needs determine career choices, it is easy to overlook how special Martin's training was in an age when few got any schooling at all.

At seven Martin began Latin school in Mansfeld, where he learned the international language of scholarship, government, and the church. At 13 he first tasted city life, 40 miles north on the Elbe River in bustling commercial Magdeburg, and in his teachers, the lay Brethren of the Common Life, saw examples of simple unformalistic piety.

Then, in "my beloved city of Eisenach," he exulted in music as a choirboy and showed such scholastic aptitude that his father, "by his sweat and labor," sent him to one of Germany's oldest and most famous

universities—Erfurt, opened in 1392. In "many-towered Erfurt," a large, handsome city in his day and ours, "Martinus Ludher ex Mansfeld" matriculated in 1501, taking his bachelor's degree in the minimum 18 months. At 21, mind stimulated by the classics, rhetorical skills honed on scholastic debate, Martin received his master's degree amid torchlit academic splendor.

Clearly the father's investment had paid off. Now Martin would study law, prepare himself for a distinguished career, perhaps as jurist, city magistrate, prince's counselor. A favorable marriage would secure the family's future.

But a personal crisis impelled Martin to break off law studies in the first semester. Rebellion against parental ambitions? A son feeling forced into an uncongenial career?

knees the Sacred Stairs believed to have been trod by Jesus in Jerusalem. This obeisance released a soul from purgatory. On October 31, 1517, Luther published his 95 theses; this misnumbered edition appeared only weeks later (below left).



We see Martin, head lowered in thought, trudging back from a brief visit home. No breeze ripples the golden fields of grain. Grapes swell on the vines. Lowing cattle lie down in the lush grass. Clouds loom in the July sky, dark and foreboding.

A blinding flash of lightning. A crash of thunder. A bolt strikes near, hurling him to the ground. "Walled about with the terror and agony of sudden death," he cries out, "Help, St. Anne!" And in propitiation promises to become a monk.



A power on earth and scion of the Medici family, Pope Leo X (above) first dismissed uproar over the theses as a "monkish squabble." Finally moved to act, he issued a papal bull, or decree, giving Luther 60 days to recant or be excommunicated. On its expiration Luther burned the bull at Wittenberg. Five centuries later a facsimile (right) is ignited there.

That Martin should invoke St. Anne was natural. She was his father's special patron, along with other miners of the region.

On the Luther stone that marks the thunderbolt spot in the fields near Stotternheim, I studied the engraved phrase, "*Ich will ein Mönch werden*—I will become a monk." It can also express the subconscious wish: "I want to become a monk." Taking a legitimate escape in late medieval society, Martin would become not only a monk, but a monk with a vengeance.

Yet, unconsciously, parental values exerted themselves. Erfurt, called a Little Rome because it brimmed with clerics, boasted monasteries of every major order. Of them, Martin chose that house highest in academic and ascetic standards. On July 17, 1505, the door of the great Augustinian cloister in Erfurt closed behind him.

I VISITED Luther's Erfurt monastery. Upstairs I saw the tiny dormered cell from which he'd descend to gather with other friars in the calefactory, the only warm room in raw weather. I strolled the cloisters he strolled in silent contemplation, and in the Gothic Church of St. Augustine swept aside the litter of reconstruction to create a scene from his day.

A last ray of sunlight strikes the crucifix beyond the altar. Brother Martin slowly moves down the empty nave, eyes transfixed on the crucified Christ. He flings himself prostrate before the altar. Sobs wrack his emaciated body.

He has fasted days on end, extended vigils far beyond the rule, abased himself, performed noxious chores, confessed every sin he could imagine, then returned to confess again. Yet austerities bring him no peace, only terror of a judgmental God he cannot appease. "If ever a monk got to heaven by his monkery," he would later say, "I was that monk."

He turns his tonsured head. I see Brother Martin's hollow cheeks, the pained look in his deep-set eyes. He tells of suffering punishments so much like purgatory that had they lasted even for one-tenth of an hour he would have been reduced to ashes. At such a time God seems terribly angry.

Another robed figure has entered the church and overhears Martin's anguish.



Bulla rōtra rōtro

KARTER LVTHERU ET
SPROVACIVN







PHOTOGRAPHED BY STADTBARCHIV WEIMAR

Christian prince and artful dodger: Although Frederick the Wise (**above right**) shielded Luther in his most vulnerable years, the ruler remained to his death a professed Catholic, outwardly loyal to Pope and emperor. As an elector—one of seven German princes charged with deciding succession to the throne of the Holy Roman Empire—Frederick was preeminent among rulers of the hundreds of German cities and principalities within the empire. Both Emperor Charles V and Pope Leo X courted his favor in the power politics of the day. Because of this and Charles's political preoccupations, the ban that the emperor laid on Luther



CHRISTO · SACRVM ·
 ILLE · DEI · VERBO · MAGNA · PIETATE · FAVEBAT ·
 PERPETVA · DIGNVS · POSTERITATE · COLLI ·
 ·D·FRIDR·DVCI·SAXON·S·R·IMP·
 ·ARCHIM·ELECTORI·
 ·ALBERTVS·DVX·NVR·FACIEBAT·
 ·B·M·F·V·V·
 ·M·D·XXIII·

ALBRECHT DÜRER, KUNSTSAMMLUNGEN DER KÖNIGLICHEN BIBLIOTHEK DER UNIVERSITÄT WÜRZBURG

was never enforced.

As successive German territories accepted Luther's evangelical teachings, Frederick's successor, John the Steadfast, joined other nobles to seal an alliance (**above left**) for mutual defense and support of the growing religious movement. In 1529 the term Protestant was coined when evangelical rulers protested a diet decision pushed through by a Catholic majority to prohibit practice of reformed faith in Catholic territories. In Torgau on the Elbe, where the Saxon electors maintained a seat at Hartenfels Castle (**facing page**), Luther in 1544 consecrated the first church built for Protestant worship in Germany.

"You are a fool!" he bursts out. "God is not angry with you. You are angry with God."

WHILE still an obedient friar of 27, three years after being ordained a priest, Luther made his single journey to Rome. On an errand for his order, he set out over the Alps in November of 1510. Finally, after some 40 days, some 800 foot-weary miles, Father Martin caught sight of the Eternal City. "Hail, Holy Rome!" he cried, prostrating himself on the ancient Via Cassia.

Martin's Rome was not the Rome we know, with the music of fountains and the baroque grandeur that bespeaks defiance of his Reformation. Pope Julius II had laid the cornerstone of the new St. Peter's less than five years before Martin arrived. Michelangelo still lay stretched on his back on a scaffolding creating a cosmos on the Sistine Chapel ceiling. Martin's was a decayed medieval Rome. Cows grazed in the half-buried Forum; shops, taverns, huts huddled inside the Colosseum in squalid contrast to the palaces of cardinals; thieves infested the ancient baths and fetid alleys.

But Martin looked upon the Eternal City with the eyes of a pious pilgrim; he ran like "a mad saint through all the churches and crypts," and said Mass at every major altar he found open. "*Passa, passa—hurry up!*" Roman priests urged, eager to get on with the gabble of paid Masses—once seven in an hour, Martin noted. He was even sorry his father and mother still lived. Gladly would he have rescued them from purgatory with his good works.

We next look on Father Martin, now in his early 30s, risen in his Augustinian order. Elected district vicar, he has in his charge monasteries scattered throughout Saxony. We envision sandals trudging on Saxon paths. Monastery doors creak open. Ledger pages turn. Priors report on the conduct of the brothers. Martin also collects rents for a fishpond near Magdeburg, mediates monastic disputes, preaches in monastery and town, supervises the study of novices and friars—all this in addition to holding the university chair of professor of theology at Wittenberg.

He scarcely has time for prayers during the seven canonical hours. He makes up by

skipping meals and praying the whole day Saturday. "Besides all this," he writes a friend, "there are my own struggles with the flesh, the world, and the devil. See what a lazy man I am!"

For ten years he has been reading the Bible again and again. "If you picture the Bible to be a mighty tree and every word a little branch, I have shaken every one of these branches because I wanted to know what it was and what it meant," he tells us.

Still tormented with a fierce and troubled conscience, fearing the righteous wrath of God, Father Martin, spent with care and study, meditating day and night, focuses on Paul's Epistle to the Romans 1:17: "For therein is the righteousness of God revealed . . . *The just shall live by faith.*"

"The whole Scripture revealed a different countenance to me," Father Martin explains. God's mercy is freely given. But the flesh must die that the spirit may live. Only when we are lowest will He reach down and raise us through His grace. Not by payments of alms or performing good works, but through faith alone. "This passage in Paul opened for me the gates of paradise. I felt I was born again."

Tradition calls this breakthrough the Tower Experience. The insight flooded him while alone in the tower of the Augustinian cloister at Wittenberg. Disputed studies claim it occurred not in the study but in the *cloaca*; that Father Martin, plagued all his life with constipation, found physical and spiritual release in the lonely chamber that the Latin denotes as latrine.

IN THE MEDIEVAL walled town of Műnnerstadt, some 60 miles south of Luther's Erfurt, I found an Augustinian cloister with continuity from his day. And among its priests, novices, and lay brothers under their tall, bearded prior, Father Wilfried Balling, I sought insights into Martin's monastic experience.

Changes, of course. While Martin froze, we had steam heat. And conversation at meals, a less ascetic regimen, freer reading, more spirited exchange of ideas. But the focus remains the same—inward. A contemplative, studious life of service and prayer.

A bell summoned us for 6 a.m. responsive readings, Gregorian chants, and prayers in

the chapel. Then we silently filed down the stairs to sing hymns and celebrate Mass in the ornately beautiful monastic church, Father Wilfried's rich voice ringing out as sonorously as Martin's must have done. Other services followed at noon and at 6 p.m.—three instead of Martin's seven canonical hours. A communal meal followed each service, with a midday reading from the order's constitution or the Scriptures.

Learning of my quest for Luther, the monks showed me *their* books on Luther. And in the monastery's 80,000-volume library, I browsed early printed books that Luther knew. I was unprepared to find two large collections of pamphlets by Luther himself, including blasts against the Pope as Antichrist that brought blushes to my 20th-century cheeks—also to learn that today's monks read books by Hans Küng, stormy petrel of the Catholic Church, called a modern Martin Luther for his stands against papal infallibility, and in favor of ordaining women, a married clergy, permitting birth control, and allowing divorced persons to take the sacraments again ("The Reformation was necessary," Küng says).

"You should read Luther to know whether he is right or wrong," explained Brother Anselm, at 21 about Martin's age as a novice. "We read everything. The day of the *Index of Forbidden Books* is over."

I scrutinized the novices carefully. Could one of them be building up a head of steam like young Martin Luther? No. Too many escape valves. "We have four stages where we can back away from eternal vows if we choose," Brother Anselm said.

At breakfast on my last day the prior told me: "You can approach theology in different ways—the scientific way or with the heart, the Augustinian way. If you see Luther with the heart, you have no problem. Luther still inspires the Catholics and shows them what they are."

I commented on the relaxed dress—sometimes novices wore slacks and sweaters, certainly not the clerical pattern in Rome.

"Münnerstadt," the prior said with a smile, "is far from Rome."

So was Luther's Germany.

We get no respect, grumbled the Germans; we're just milk cows for the rapacious Roman Curia. Commoners resented the

centralizing Roman law, which trampled local custom. Disgusted at laxity, abuses, and oppression by clergy who fleeced rather than fed their sheep, pinched by the drain of German gold into the bottomless coffers of Rome, Germans suffered social and economic distress and were stalked by plague, famine, and strife.

With life "nasty, brutish, and short," the *Ars Moriendi—Art of Dying*—made even more morbid by macabre woodcuts, was a best-seller. Albrecht Dürer's "Melancholia" and "Four Horsemen of the Apocalypse," the creepy horrors of Hieronymus Bosch, and the ubiquitous dances of death etch the desperate temper of the times. Luther's world reeled toward the Last Judgment.

THE CHARMING medieval town of Jüterbog lies 25 miles northeast of Wittenberg, a day by foot in Luther's time, less than an hour by car in ours. Meandering through the serene village-dotted countryside, I pondered the anxieties and fears of Luther's parishioners. The flames of purgatory, where the dead expiated their sins before passing to paradise, blazed fiercely in the medieval mind.

In the sacrament of penance, the contrite sinner, seeking forgiveness through confession, received absolution. The priest then imposed works of satisfaction: special prayers, fasts, vigils, almsgiving, or a pilgrimage, even a hair shirt and flagellation.

Indulgences offered a popular palliative. Christ, mankind's Redeemer, and His saints had built up an infinite reservoir of merits, church doctrine declared. The Pope at his discretion could draw upon this treasury and award these credits to a sinner in return for a good work such as giving alms. A papal bull extended this so that the living could also procure indulgences for the dead.

Indulgences served many a useful purpose. Luther's university at Wittenberg, even his own salary, was partly funded from offerings of the pious who flocked to pray before Elector Frederick the Wise's famous relic collection displayed periodically in Wittenberg's Castle Church.

I had leafed through a 1509 catalog of it with Dr. Ernst Müller, a state archivist in Weimar. Woodcuts from the workshop of Lucas Cranach showed a wondrous variety



"Land of the birds" was a name Luther gave to lonely Wartburg Castle (above), where he was hidden after an "abduction" stage-managed by Frederick for Luther's protection after the Diet of Worms. Disguised as a bearded squire (bottom right), with only feathered companions (top right), Luther immersed



LUCAS CRANACH D. Ä., KUNSTSAMMLUNGEN ZU WEIMAR (1896)

himself in writing, translating the New Testament from Greek into a masterpiece of vernacular German. His stay lasted almost a year, broken only by a brief trip to Wittenberg. During this time his colleagues at the university there spread his thoughts and launched the Reformation, but radicals went too far for Luther.

of reliquaries encasing with the jeweler's art such marvels as "five particles of the milk of the Virgin Mary. . . . one piece of the diaper in which He was wrapped. . . . one piece of the bread of which Christ ate with his disciples during the Last Supper. . . . one piece of the burning bush which Moses saw. . . ."

"*Lieber Gott!*" exclaimed the archivist as he tabulated the time off from purgatory a pilgrim could earn who prayed before every relic: "2,112,151 years and 205 days!"

Because Frederick forbade competing indulgence sales in his territory, Luther's flock went over the border into Brandenburg for the St. Peter's indulgence, one of the biggest campaigns, authorized by Pope Leo X for the rebuilding of St. Peter's Basilica. Hired for it was papal pitchman Johann Tetzel.

As I drove into walled and triple-gated Jüterbog and parked in the market square before the centuries-old brick-gabled town hall, I conjured the carnival atmosphere in October of 1517.

Tetzel parades into town to the pealing of bells, plants the papal banner in the square, displays the bull of the pontiff on scarlet and gold velvet, stacks the printed letters of indulgence, and begins to wring the hearts of hearers. Groans rise as he evokes the piteous wailing of dead parents in purgatory pleading for the release that their children's alms could bring. "As the coin in the coffer rings, so the soul from purgatory springs."

WITTENBERG, October 31, the day Protestants mark as Reformation Day. Worshipers overflow the Castle Church. In the pulpit above Luther's grave, the East German pastor takes his theme from a Luther text, "Freedom of the Christian." Telling of a man freed from prison having difficulty accepting rehabilitation and becoming a repeater, he asks: Is it the essence of our time to move from one prison to another? Have we Christians, to have privileges in the state, not returned to the bondage of a state religion?

"Not permissible before the thaw of 1978," whispers a friend.

Reformation Day. Yet 465 years earlier, crowds streaming into town on the eve of All Saints' Day, when the elector's thousands of relics would go on display, barely noticed, if at all, a black-robed friar posting, so

tradition has it, a printed notice on the door of All Saints' Church, the Castle Church. If they paused, and could read its Latin, they saw it was an invitation, "out of love and zeal for the elucidation of truth," to a debate on a number of propositions at Wittenberg, "the Reverend Father Martin Luther, Master of Arts and Sacred Theology, presiding."

Luther was in no festive mood. When his parishioners returned from Jüterbog joyfully brandishing letters of indulgence, he was outraged: Instead of preaching penitence, Tetzel peddled pardons. "I'll knock a hole in his drum," Luther vowed, little realizing he'd also shatter the unity of his church.

But why choose the north portal of the Castle Church? Why not the Town Church where Luther preached?

"That's where the university bulletin board was," Professor Ernest Schwiebert explained to me. "The Castle Church was the university chapel. Assemblies, graduations, promotions, and disputations took place here. A professor inviting his fellow scholars to debate would naturally post the notice here."

Disputation sharpened dialectical skills and memory, clarified issues—and occasionally bloodied noses in fistfights. Coming up with a hundred arguments on a theme was a standard student exercise. Wittenberg paid bonuses to faculty who took part—even fined those who did not.

"So it was in the normal pattern of university life that Luther, on October 31, 1517, posted his invitation to debate the doctrine of indulgences," concluded Schwiebert.

Heard round the world in the hammerblows of hindsight, the 95 theses drew little notice at the time. But if the fuse was long, Luther had struck a momentous spark. Translated without his knowledge, printed copies of the theses spread through Christendom in four weeks, a contemporary notes, "as if the angels themselves were messengers." And in the vernacular, Luther played a tune Germans liked to dance to.

Starting low-keyed, as was his wont, he rose in a crescendo of indignation to the trumpet blasts: If the Pope knew the sharp practices of the indulgence purveyors, "he would prefer to have St. Peter's collapse in ruins rather than build it with the skin and flesh and bones of his sheep." If for the sake

of money the Pope can free suffering souls from purgatory, why not for the sake of love empty out purgatory altogether?

That Luther set Germany by the ears astonished him. He did not pretend to pronounce dogma but to discuss, nor to inflame but to enlighten. In the unexpected clamor that rose from a debate that never took place, he feared "the song threatened to become too high for my voice."

When Luther sent the theses to Albrecht, Archbishop of Mainz, unwittingly he stepped into a hornet's nest. Humbly reminding the archbishop that the true treasure of the church is the Gospel and urging him to curb the misleading teaching of his agent Tetzel, Luther knew nothing of the scandal behind this campaign.

Albrecht was deeply in debt to the Fuggers of Augsburg, the papal bankers who had advanced him the fortune needed to speed his highly irregular rise to power. Canonically underage, and holding not one but three sees, he had to pay steep papal fees and fines. Pope Leo X helped out by proclaiming an indulgence—half the proceeds to go toward St. Peter's Basilica, half to the Fuggers to retire the archbishop's debt. Albrecht sent the 95 theses to Rome, urging that the Curia initiate the time-honored process to quash "the rash monk of Wittenberg."

LUTHER was an Augustinian friar; Tetzel, a Dominican. Wittenberg's Augustinians stood for the *via moderna* and reform. Tetzel's Dominicans defended the *via antiqua*, guarded the traditional faith, hounded heretics. Dominican hands had fed fagots onto Jan Hus's pyre at Constance. In Luther they perceived a foe far more dangerous. Hus attacked abuses in church practice. Luther attacked church doctrine, striking at the very roots of the sacramental system.

In Germany and Rome, the Dominicans swung into battle. At a hearing in Augsburg, Luther faced the general of the Dominican Order himself, Cardinal Cajetan, the papal legate in Germany. Then the most formidable of Luther's Dominican foes, Johann Eck, theology professor from Ingolstadt in Bavaria, turned fiercely on Luther and pursued him like the Greek Furies the rest of his life. In a grueling debate spanning 11 days in

July 1519 before hostile Duke George's court and university in Leipzig, the inexorable, huge-voiced Eck got Luther to deny the divine origin of papal supremacy and to assert that the heretical Hus was correct and the council that condemned him in error.

Branding Luther "a heathen," Eck went to Rome, helped prepare the bull *Exsurge Domine*, condemning Luther's "errors," and returned to publish it in German cities.

Like a prizefighter at the bell, Luther leaped to each challenge. He felt "more acted upon than acting." "I cannot control my own life," he confessed. "I am driven into the middle of the storm." Asserting, "It was the love of truth that drove me to enter this labyrinth and stir up six hundred Minotaurs," he little realized the explosive power of the anger bottled up since childhood—first directed against his own severe, unapproving father, then against a judgmental Father in heaven. Now he vented it on his Holy Father in the hierarchical church, who he felt had failed to feed the faithful the indispensable Word of God.

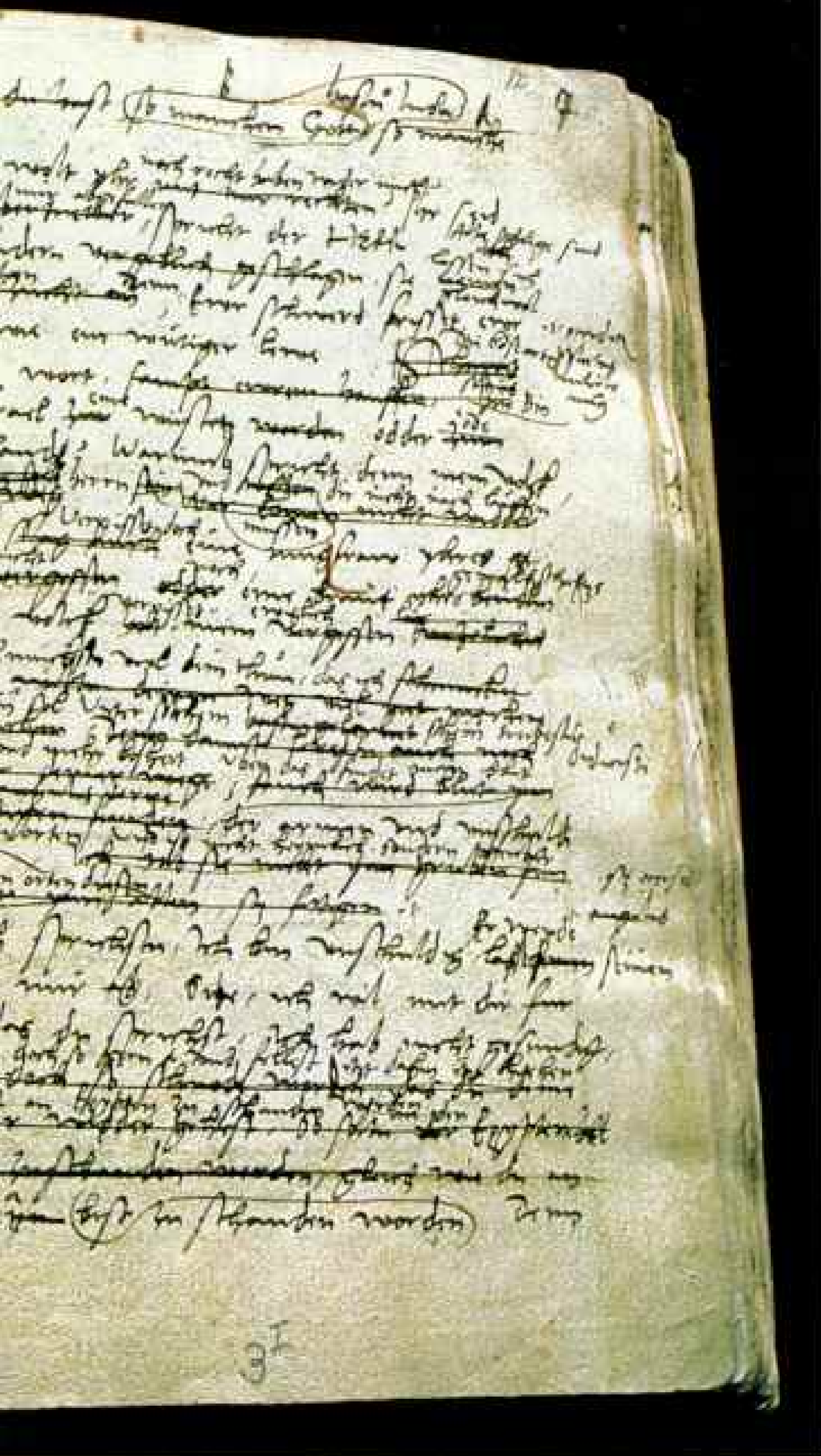
In the crucible of confrontation, Luther forged his creed: *sola scriptura, sola gratia, sola fide*. Only through Holy Scripture, only from God's grace, only through faith in Christ does the Christian receive salvation. The clarity of his teaching packaged a hundred years of Europe's religious yearnings into simple, hard-hitting concepts that could be pounded home from countless pulpits and printing presses, spreading the Reformation far and wide.

The torrent of words pouring from Luther's lips and pen climaxed in three Reformation manifestos in 1520:

In the "Freedom of the Christian," he envisions a personal relationship with God instead of reliance on works, elaborate ritual, and dogma he found tyrannical.

"On the Babylonian Captivity of the Church" rejects the sacramental system as having no basis in Scripture except for baptism and the Eucharist.

In his "Address to the Christian Nobility of the German Nation," Luther urges abolishing or curtailing pilgrimages, privately endowed Masses, the veneration of saints, mendicancy, indulgences, interdicts, festival days. Heretics are to be refuted with arguments, not with fire. Priests should marry



"That all may understand" was Luther's aim in translating the Bible. He completed the Old Testament (left) in 1529. The printing press helped diffuse his works throughout Europe. Pastor Otto Kammer of Worms (below) here studies some of the 60,000 pages penned by Luther, who wished that "all my books would disappear and the Holy Scriptures alone be read."



PHOTOGRAPHED AT FÖRSLUNGSBIBLIOTEKEN GOTNA (480791)

Giovanni de' Medici, son of Lorenzo the Magnificent of Florence, was tonsured at seven, abbot at eight, cardinal at 13. Crowned with the jeweled triple tiara as Leo X at 37, four days after becoming a priest, he was a blithe spirit: "Let us enjoy the papacy, since God has given it to us."

Enjoy it he did, partying, pushing his family's fortunes, patronizing poets, artists, scholars who flocked to his largess in Rome's golden age. He also kept a Machiavellian

eye on the political scene. In an effort to keep a too powerful Habsburg, Charles, from ascending the imperial throne, he sought support from Frederick the Wise. Naturally the Pope would not smite Luther while he needed the goodwill of Luther's protector.

Nor could the pleasure-loving pontiff comprehend the moral fervor or menace in the "monkish squabble" in remote Saxony. Far simpler to remove the critic than correct the abuse. And what captious cleric couldn't



Heart and hearth blessed Luther after he denounced clerical celibacy and married former nun Katherine von Bora (top right). Wedding celebrants danced in Wittenberg's Town Hall, used for civil ceremonies by present-day newlyweds.



LUCAS CRANACH D.R., KUNSTSAMMLUNGEN ZU WEIMAR



(above). Luther and his bride settled in his former monastery (bottom right) and lived there for 20 years. Luther elevated wifely status from housekeeper to helpmate, finding marriage a "delight, love, and joy without ceasing."

be bought off with a fat benefice? Perhaps a cardinal's hat for Frederick's star professor. Or brought into line with a little force? Leo exhorted Frederick to induce Luther "to return to sanity and receive our clemency. If he persists in this madness, seize him."

"The problem is, in Rome they basically did not understand Luther."

Hans Küng, the craggily handsome Catholic reformer, spoke in his spacious study looking over Tübingen to the Swabian Alps in southwestern Germany. "If Rome had given on three points, probably the breach would not have occurred."

"Which three?"

"First, vernacular language. To sing, to hear the Scriptures. This was a big thing, real piety. And indicates how long it takes to achieve change. In the Catholic Church we needed 450 years to grasp that it is legitimate to talk in my own tongue to God.

"Secondly, the chalice for the laity. Luther was never invited to a council, but I was—to Vatican II, which adopted the principle that the Communion cup was no longer restricted to the clergy.

"The third, still not realized, is the marriage of priests. Here the church is in deep trouble. We have lost thousands of our clergy. Hundreds of parishes have no priest. Of a thousand Catholic theology students at the university, perhaps one out of seven intends to go into the priesthood. Many will no longer make the sacrifice of celibacy."

NOT everything on the Reformation is in a shoebox labeled "Luther, M.," chuckled Monsignor Charles Burns in the Archivio Segreto Vaticano—Secret Archives of the Vatican.

But he ferreted out large leather-bound volumes of documents from the 25 miles of shelves and placed key pieces of the story in my hands: reports of the Papal Nuncio Aleander on his efforts to get Luther condemned by the emperor; an original of the Edict of Worms, drafted by Aleander and signed and sealed by Charles V, imposing the imperial ban and branding Luther the devil incarnate whose "teaching makes for rebellion, division, war, murder, robbery, arson, and the collapse of Christendom"; a report to Leo from Henry VIII on steps he is taking against Lutheran heretics in his realm.

Finally *Exsurge Domine*—"Arise, Lord! Judge your cause. . . . A wild boar is destroying your vineyard. . . ." In this bull Leo X gave Luther 60 days to recant or suffer excommunication.

"Of course, this is only our copy," commented Monsignor Burns. "You know what Luther did with his!"

Indeed, I had stood outside Wittenberg's old Elster Gate where Luther and his students lit a bonfire when the 60th day had passed. Burning volumes of the canon law as symbols of man's shackles on the spirit of Gospel Christianity, Luther also tossed the bull on the flames. Thus defying the Pope, Luther set the seal on what he had already written: "Farewell, unhappy, hopeless, blasphemous Rome! The wrath of God has come upon you as you deserved."

ROME HAD SPOKEN. Luther had answered. Now it was time for the emperor to act. Pressured by the senior elector, Frederick the Wise, to give Luther a hearing before condemnation, Charles summoned the Reformer under safe-conduct to Worms.

Aleander was alarmed at the temper of Germany. Nine-tenths of the people are shouting "Luther!" and the other tenth "Death to the Roman Court!" he reports. "In such a manner does the Saxon dragon raise his head; in such a manner do the Lutheran serpents multiply and hiss far and wide."

The bishop's residence, where the imperial hearing was held, is now a garden near the cathedral. The house where Luther stayed has given way to a shopping mall. Warfare destroyed the gateway through which Luther rode, his wagon, surrounded by supporters, making a triumphal procession. But Fritz Reuter, director of the city archives, helped me flesh out scenes.

April 17, 1521, late afternoon, a room filled with princes, prelates, nobles, gentry, burghers, doctors of law. The 21-year-old emperor leans forward in the throne to scrutinize the intense 37-year-old friar before him: "This man will never make me a heretic!" Aleander reports Charles saying.

Raised on the chivalric lore of Burgundy amid the tapestries and tourneys of Ghent, Charles saw himself as a knight-errant leading a united Christendom in glorious

crusade against enemies of the faith. "God's standard-bearer," he called himself. How ironic that this lowborn prophet of a revolutionary age would thwart his chivalric dream of a lifetime—to sit on Constantine's throne in a reconquered Constantinople.

At Worms, Luther was asked two questions. Were these his books? And was he ready to revoke the heresies they contained? To the first he replied: They were his. The second required time to consider.

At 6 p.m. the following day Luther was led into a larger, torchlit room packed to suffocation with the empire's notables. To disown some of his books would be to condemn simple Christian morality, Luther said. In others, though he apologized for the vehemence of his attacks, he could not deny that Rome and its canon law had enslaved Christians, body and soul, lest he open his countrymen to further oppression.

Dark eyes flashing, voice clear and strong, he ended with ringing defiance: "Unless proved wrong by Scripture and plain reason . . . my conscience is captive to the Word of God. I cannot and will not recant. . . . God help me. Amen." Here he stood. Being Luther, he could do no other.

The next morning Charles rendered his decision: "I am descended from a long line of Christian emperors. . . . a single friar who goes counter to all Christianity for a thousand years must be wrong. . . . I will have no more to do with him."

Other business took over, and the edict outlawing Luther in the empire was not issued until May 26, long after Luther had departed homeward under safe-conduct.

WHY DIDN'T Charles burn this excommunicated heretic and stamp out Luther's Reformation in its weak early stages? I put this question to a scholar working on Charles V's letters in Constance, where Jan Hus was burned despite an imperial safe-conduct.

"He didn't want to stain his knightly honor, and he had a lot of pots bubbling on the stove," Professor Horst Rabe told me. "The Protestant matter usually had to take a back burner to crises in Italy or Spain, or to the Turkish threat."

At Worms, Luther's life had hung in the balance of Charles's chivalry. Now he was

an outlaw, and his life hung on a ruse. On his return from Worms, he vanished. Rumors spread he had been slain. "O God, if Luther is dead," lamented the artist Dürer, "who will explain to us the Gospel?"

High in the Thuringian Forest I sought out the spot where Luther's wagon was set upon by horsemen. In a mock abduction Luther (foresightedly grabbing Greek and Hebrew Scriptures) was spirited off to the Wartburg, a castle commanding a ridge over Eisenach and a superb sweep of fell and forest. Here, tonsure grown out into unruly dark hair, disguised as a bearded squire—Junker Georg—Luther lived ten months alone with God and the devil under the protective custody of Frederick the Wise.

"Did Luther actually throw an inkwell at the devil?" I was discussing the castle's best known legend with its director, Werner Noth. Luther's Bible lay open on a table in Luther's room, which looks out over sylvan serenity toward the formidable border with West Germany. Relic hunters carried off the original, splinter by splinter, like fragments of the True Cross. A 16th-century table from ancestral Möhra replaces it.

"Luther drove himself hard," Noth told me. "He wrote 14 works here. He was working at a feverish pace on his New Testament, which he translated from Erasmus's Greek in an incredibly short 11 weeks. He was frustrated, lonely, often sick, anxious as an outlaw. In his 50 letters, he mentions being troubled by evil spirits. Yes, the inkwell episode is entirely possible. Why not? People throw vases at walls today."

Disquieting news from Wittenberg intruded on Luther's solitude. Reformers were pushing ahead at a reckless pace. "Good Lord!" Luther wrote. "Will our people at Wittenberg give wives even to the monks? They will not push a wife on me!"

Frederick sent word that "so many sects arose among them that everybody was at sea and none knew who was the cook and who the ladle." But that Luther should not risk his life by returning.

Trusting in "a far higher protection" than the sword, Luther boldly mounted the pulpit in Wittenberg's Town Church and held forth for a week until he had turned the raging torrent of religious revolt. How rash to smash images, strip away comforting

trappings in a heedless rush. He preached what he wrote from Wartburg Castle in "A Faithful Exhortation for all Christians to Shun Riot and Rebellion": Public order and inner faith should go hand in hand.

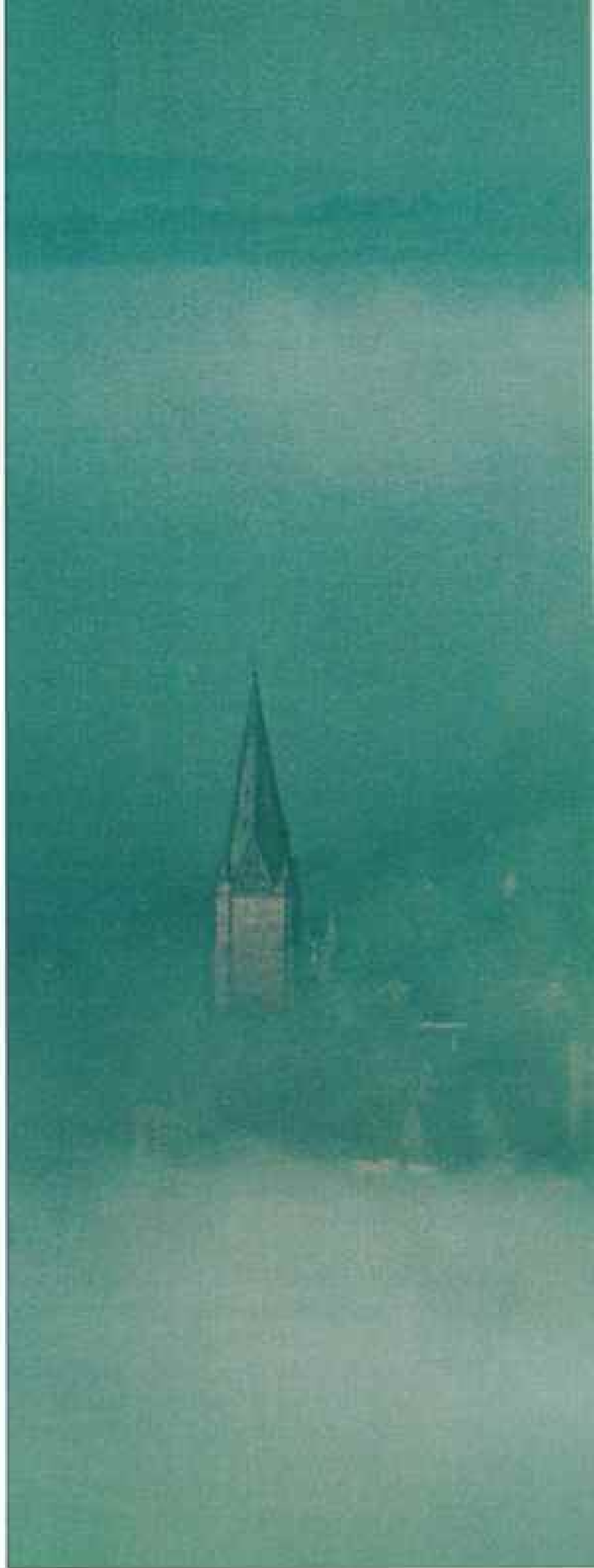
"The Bible is our vineyard, and there we should all labor and toil," Luther declared. No Pope, no dogma, rather a priesthood of all believers. The trouble was, scrutiny of Scriptures produced as many contradictory interpretations as Luther's writings themselves. He now found himself a checkrein on the Reformation he had unleashed.

Not that attacks let up outside the reformers' camp. A German cleric, Dr. Johannes Cochlaeus, wished to see this "infamous, blaspheming, heretical scamp," Luther, exterminated. This is the Cochlaeus whose venomous biography of Luther would poison the wells of Catholic opinion for 400 years. But opposition only spurs Luther to herculean action. "My wrath is God's wrath," he claims. "God has used my enemies to compel me to raise my voice even more insistently. I must speak, shout, shriek, and write till they have had enough."

Sometimes his wrath is chilling. Luther condemns a woman accused of trying to kill her husband by witchcraft. Witches should be burned: "An example should be made of them to terrify others." Nor should any mercy be shown to Anabaptists, who deny the validity of infant baptism. This dark streak surfaces later when he turns viciously on the Jews, whom earlier he had championed. He urges authorities to burn their synagogues, schools, homes, confiscate their books and money, ship them off to Palestine.

In 1525 Luther urges moderation on peasants, who had taken his sympathy for their just grievances as a call to violence. Then, furious at them for almost ruining his Reformation, he exhorts the princes: "Smite, slay, and stab the murderous and thieving hordes." God will punish princes in His own time. Meanwhile subjects must suffer, obey, and pray. Luther, the archconservative, condemns riot and rebellion as always wrong, and backs secular authority so long as it preserves divine law and order.

"Luther found it easier to make a revolution than to consolidate one," Professor Helmar Junghans told me in Leipzig. He serves on both the state's and the Evangelical



Medieval Marburg, its modern buildings veiled in fog, appears as it did in 1529 when Luther and the Swiss reformer Zwingli debated the meaning of the



Lord's Supper in the castle of Philip of Hesse. The body and blood of Christ are present in the bread and wine, argued Luther. They symbolize His sacrifice, countered Zwingli. Thus the meeting failed to mend the rift that divided the strength of the Reformation and weakened efforts of Protestant rulers to gain autonomy.

Churches' Martin Luther committees. And he is professor of theology at Karl Marx University, the famous 1409 Leipzig University renamed.

"Earlier research concentrated on the young Luther. The older Luther interests us more," continued Professor Junghans, whose two volumes on Luther's last 20 years are among the 100 publications the German Democratic Republic is issuing on Luther subjects and sites this year.

More and more Luther's Reformation became involved with the political maneuvering of the German princes. During the 1530

Diet of Augsburg, he fretted and fumed and fired off missiles of rebuke and counsel from Coburg, his protector's southernmost castle 130 miles away, as near as the outlawed Luther could come.

His mild and moderate lieutenant, Philipp Melanchthon, drafted the Augsburg Confession, a move toward reconciling Luther's and Rome's views. After Charles rejected that, with Luther's archfoe Eck helping write the refutation, Luther gave up hope in the emperor. The Protestant princes leagued in defense, and Luther finally conceded it fitting "to be ready to meet force."



When it came, the year he died, it plunged Europe into a century of religious wars.

Though Luther continued to speak of the invisible church, the visible church rose before his eyes to seek guidance in organization, liturgy, and Gospel interpretation, thrusting upon him the unwilling role of “Protestant Pope.”

When church visitations in Saxony revealed appalling conditions—avowedly celibate clergy living in “wild wedlock” and open fornication, frequenting taverns, unable to recite the Ten Commandments or the Lord’s Prayer—Luther undertook to train

replacements and prepared simple sermons that could be read from the pulpit. When his followers, banned by the Roman Church, formed into congregations of German territorial churches, he compiled a book of devotions, a songbook, two catechisms—questions and answers providing a clear summary of principles of the faith.

Unlike John Calvin, whose Reformed Church of Geneva inspired congregations far and wide, today vastly outnumbering Lutherans in America, Luther was not a systematic theologian or church builder. When students treated Luther’s word as law, he



PHOTOGRAPHED AT MUSEUM FÜR KUNST UND GEMÄLDE, HAMBURG (AGOVSI)

A new soul enters the Evangelical Church through baptism at the font in Wittenberg’s Town Church (left), where Luther baptized his son Johann, the first of six children. A gold medallion given to the infant bears his birth year and name in Latin (above). Of seven sacraments central to Roman Catholicism, Luther kept baptism and Communion. Preaching the “priesthood of all believers”—that is, the individual’s direct relationship with God—he stressed the congregation’s participation in the worship service. In the Town Church, Luther conducted German-language services, including Communion wherein the congregation as well as the pastor partook of wine and received bread in their own hands.

objected: "They are trying to make me into a fixed star. I am an irregular planet."

During most of these years, when Luther's name reverberated across Europe, he remained a stay-at-home professor in the Augustinian monastery in Wittenberg. When the friars left, he stayed on, the cloister assigned to him as a university residence by the elector.

In 1524, three years after the Pope had excommunicated him, Friar Martin, "with pain and difficulty," laid aside his monkly cowl. A year later, convinced there was no scriptural basis for clerical celibacy and that their vows were wrong and void, Doctor Luther and the former nun Katherine von Bora married, shocking Catholic Europe while, as the 42-year-old bridegroom put it, "the angels laughed, and the devils wept."

Here in the cloister, where their six children were born, they made their home for 20 years of domestic happiness. Here they

housed poor relatives, boarded needy students. And with open hearts they welcomed scholars, exiled clerics, and dignitaries from near and far visiting this upstart frontier university now made so famous by the Reformer that Shakespeare would enroll Prince Hamlet of Denmark here and Christopher Marlowe would make his Doctor Faustus a doctor of theology at Wittenberg.

VISITED this handsome brick-gabled Luther House. One flight up, a large oak-paneled room, with table and benches and a great porcelain stove rising in tiers of allegorical scenes to the beamed ceiling, is Luther's living room.

One can imagine a scene from his day:

The door swings open, and filling the carved doorway stands Doctor Luther himself, moonfaced, heavy-jowled, a big man with tousled dark hair, in academic robes. Wearing from a day that began at dawn, he



had supped at five. Now follows conversation around the table, then reading before bedtime at nine.

Warmed by genial company and drafts of beer, Doctor Luther taps a cask of conversation: current events, astrology, dreams, nature, lust and love. One-liners from Cicero, Horace, or Ovid, coarse Thuringian jests, *Aesop's Fables*, all laced with homey recollections of student days. He recalls his journey to Rome, how he "knocked a hole" in Tetzel's drum, "put the squeeze on" Eck at Leipzig, made a great stand at Worms. "Had I desired to foment trouble, I could have started such a little game that the emperor would not have been safe."

He hears a nightingale sing beautifully. But the croaking of frogs in the Elbe drowns it out. "That's the way it is in the world. This nightingale is Christ, who proclaims the Gospel. He's drowned out by the clamor of the heretics [as Luther called his Roman opponents], who shout with great might. But let these windbags come! I'll grease their stilts so they'll fall."

Even peace-loving Erasmus, the celebrated humanist who "laid the egg that Luther hatched," reaps scorn—though Luther is glad he exposed "monks and priests, snoring in their deep-rooted ignorance."

In Luther, teacher and preacher are one. Rare is the anecdote without its moral. Exulting at the beauty of the nighttime sky, he comments: "He who has built such a vault without pillars must be a master workman." Fond of his dog Tölpel (Blockhead), he notes the dog eyeing a piece of meat he expects from his master's hand; gaze riveted, unflickering. "Ah," says Luther, "if only I could pray the way that dog watches that morsel, all his thoughts concentrated on it!"

He talks of love: "The first love is ardent, an intoxicated love which dazzles us and leads us on." But remember, "there's more to it than a union of the flesh. There must be harmony in patterns of life and ways of thinking. The bonds of matrimony alone won't do it."

Then, perhaps reflecting on a trifling row with his Katie (whom he wouldn't give up for all France and Venice too), he speculates how Adam and Eve must have scolded: "You ate the apple," Eve would chide. "But you gave it to me!" retorts Adam.

He snorts at Copernicus's astonishing theory that the earth goes around the sun. "The fool wants to turn the whole of astronomy upside down. I believe the Holy Scriptures, where Joshua commanded the sun, not the earth, to stand still."

He grumbles at the newfangled money economy, inflation, and men's greed. Five or 6 percent interest Luther will concede. But 20 percent, 30, 40, 60 percent! "The devil is in that game." Damnation to usurers, unless they repent and return what they stole.

He deplores the arms race and its deadly devices, firearms and cannon. "I think these things were invented by Satan himself."

To calm his choler, the doctor picks up his lute and plucks from its strings a soothing melody. He begins to sing; others at the table join in. He exclaims, "Music is the greatest gift, indeed it is divine. It puts to flight all sad thoughts." He adds that music should

A MIGHTY FORTRESS IS OUR GOD

Martin Luther (1523/24) by Johannes H. Heine

Martin Luther

A mighty fortress is our God, A bulwark here we see, That none shall move us here, Though all should rise against us.

Our help is in the name of the Lord our God, the Lord on high.

Were it not for our Lord, we should all be as chaff, blown away by the wind.

We will not be afraid, though the wrath of the Lord be kindled against us.

LIBRARY OF CONGRESS (ADDL)

"The devil doesn't stay where there's music." Luther's words reflect a musical bent strong since childhood. In music he found solace, inspiration, and entertainment. A strong singer, he also played flute and lute. Today master lutenist Roland Zimmer (*facing page*), who performs professionally in East Germany, has recorded Reformation compositions. Luther established congregational singing as a regular part of worship, wrote hymns, and helped compile a Protestant hymnal. One of his works, known as the "battle hymn of the Reformation," is familiar to millions in many languages and arrangements (*above*).



be supported by the state, responsible for preserving the arts as well as laws.

We see him a child among his children. As little Martin is being taken to bed, he says: "Go to sleep, dear little boy. I have no gold to leave you, but a rich God." Then with mock seriousness: "If you become a lawyer, I will hang you on the gallows," and adds: "Because some lawyers are greedy and rob their clients blind, it is almost impossible for lawyers to be saved. It's difficult enough for theologians."

Then one day in 1542, we feel Luther's heartrending grief when, after a brief illness, his 13-year-old daughter Magdalene dies in his arms. "Darling Lena, it is well with you. You will rise and shine like a star, yes, like the sun," he chokes out. "I have sent a saint to heaven."

Luther will survive his daughter by little more than three years. He speaks for God in an age when every divine claims to, yet is often racked with self-doubts. "You alone know everything? What if you should lead all these people into error and into eternal damnation? *What if you are wrong?*"

Though ill and often plunged into depression, Luther worked with demonic energy to the end. Some weeks after celebrating his 62nd birthday, he traveled through winter's misery to mediate between quarreling counts of Mansfeld. By the time he reached Eisleben, he was seriously ill. Yet in his last few days Luther not only settled the dispute but also preached four sermons, ordained two pastors, founded a school, wrote bantering letters to his concerned Katie, and jotted notes perhaps for another treatise.

Despite doses of ground "unicorn" horn in wine and other wondrous medications, he died peacefully at three o'clock in the morning of February 18, 1546.

TWO MONTHS EARLIER the Council of Trent opened in northern Italy. By the time the third and last phase concluded in 1563, the Church of Rome had committed to rid itself of gross abuses, clarified and reaffirmed Catholic dogma, made provision for a new catechism, and stamped Reformation teachings as heresy. The Catholic Reformation, in full swing, armed with the rack and fire of the Inquisition and the mind-shackling *Index of*



The Reformer sleeps in a tomb at the foot of the pulpit in Wittenberg's Castle Church (facing page). In keeping with his conviction that the Word of God should be accessible to all, he made the sermon central to the worship service and himself preached thousands in his lifetime.

Luther's ministry ended on February 18, 1546. Asked on his deathbed, "Are you willing to die in the name of the Christ and the doctrine that you have preached?" he answered, "Yes." Katherine died six years later in Torgau, where her tombstone effigy (above) stands in the Town Church.

Praising the Reformation and decrying the Catholic Church, this 1569 painting by Lucas Cranach the Younger takes its theme from Christ's parable of the laborers in the vineyard: "The kingdom of God shall be taken from you, and given to a nation bringing forth the fruits thereof." Matthew 21:43.

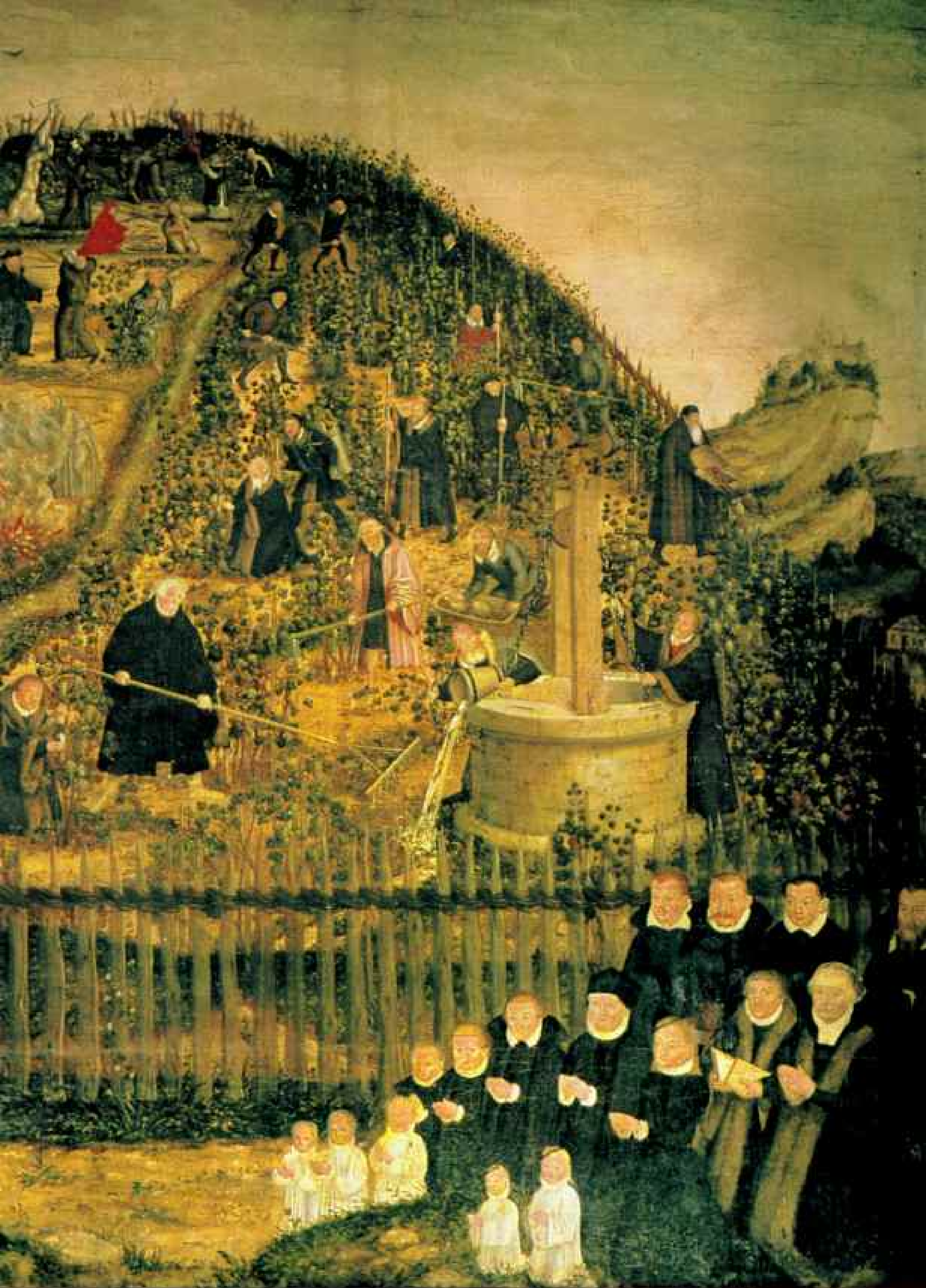
At center, Luther wields a rake, cultivating healthy grapevines with other reformers. To the left, the Catholic hierarchy destroys vines and chokes a well with stones. Apparently led by the Pope, ecclesiastics file through the gate as laborers, seeking wages from Christ and receiving none.

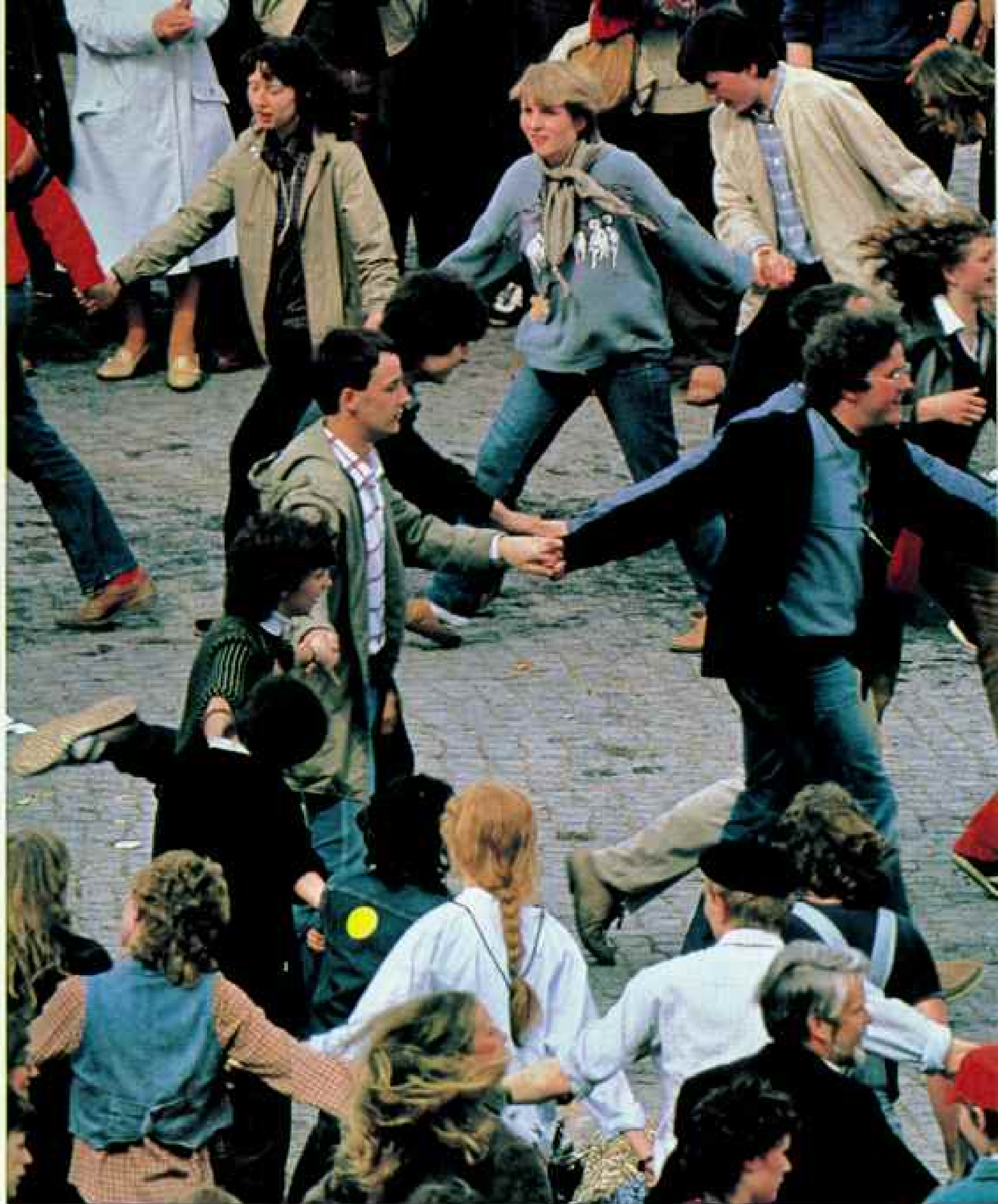
Cranach painted this as an epitaph for Paul Eber, a Wittenberg University professor and a pastor, who is pictured to the left of Luther. His family appears as pious Protestants at lower right. Eber is the German word for boar, and Cranach's allegory may also play on the words of Pope Leo X, who branded Luther a boar in the vineyards of the Lord.

Such memorial paintings filled Lutheran churches during the 16th century. While Protestant liturgical art declined in favor of austere church interiors, the Catholic Church became a leading patron of the 17th-century baroque artists. Their elaborate style promoted the image of a revitalized church, successful in stemming the spread of Protestantism in Italy, France, Spain, and Poland.

ADN BERICHT JONTRALEID, DDF







Forbidden Books, put Jesuit shock troops in the front lines of the struggle for men's bodies and souls.

Rome demanded unquestioning obedience. "I will believe that the white object I see is black if that should be the decision of the hierarchical church," asserted Jesuit founder Ignatius Loyola. "Even if my own father were a heretic, I would gather wood to burn him," affirmed the pitiless inquisitor

Pope Paul IV. While Calvinists stripped their chapels to bare essentials, monumental baroque churches, filled with theatrically pious art, proclaimed the power and prestige of the resurgent Church of Rome.

As men hardened their hearts against those across the battle lines of faith, Protestants entrenched behind an ossified orthodoxy. Meanwhile, admirers and detractors rarefied Luther into a two-dimensional



caricature—saint on one side of the doctrinal fence, Satan on the other. Tolerance and mutual understanding had to wait 400 years, until our century had spent itself in two World Wars.

The vigorous Church of Rome of today incorporates more of Luther's reforms than most laymen realize. And it actively engages in ecumenical dialogue with Protestant as well as Eastern Orthodox churches.

Spontaneous dancing whirls young participants in a Church Day celebration in Erfurt, one of seven church rallies sanctioned by East Germany for Luther Year. Though seldom in church, young adults are increasingly drawn to Christianity. Like Luther, they seek new forms of worship. And, like Luther, they may defy the state in doing so.

"Unity will come, perhaps not in our lifetime, but we hope in the next generation," predicted executives of the Lutheran World Federation ("Augsburgian Catholics," they described themselves to me) in Geneva's Ecumenical Center. "But unity in a new form—*without winners or losers.*"

IS IT CONCEIVABLE that Martin Luther's excommunication will ever be lifted? I pursued the matter in the Vatican itself. Politely but firmly officials parried my question. Clearly, the time still is not ripe.

At dusk I emerged on St. Peter's Square. Bernini's colonnades enclosed me in a welcoming embrace as I crossed the vast piazza into the greatest church in Christendom.

I lingered before Michelangelo's tender Pietà, so human in scale and in pathos amid this awesome setting. The singing of vespers soared into Michelangelo's majestic dome. What a price it cost to build this basilica—and what a priceless glory it is!

Privileged to meet the Pope, I asked what significance he saw in this Luther Year.

His Holiness John Paul II fixed me with his intense blue eyes. I felt the warmth of his firm hands, the magnetism of his personality. "I see it as a year of redemption." His face lighted. "Yes, a year of redemption for *all* Christians."

I thought back to that November night at Luther's birthplace in Eisleben. Earlier I had joined children and parents of St. Gertrude's Catholic Church and St. Andrew's Evangelical Church to place a wreath before his statue in the square. Sharing St. Martin's sweet buns, lighting one another's lanterns and torches, singing Luther hymns, together the congregations celebrated St. Martin of Tours' feast and Luther's birthday.

Gazing at young faces radiant from St. Martin's lantern light, looking up at Martin Luther's bronze face enlivened by flickering torches, I recalled Christ's words he quoted from Matthew: "For where two or three are gathered in my name, there am I in the midst of them."

The priest and pastor raised their linked hands. To the lamplit families one said: "You are the light of the world." The other said: "You are the salt of the earth."

Then both: "May God bless you." □

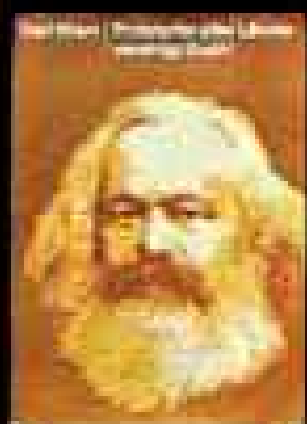


Church and state are tenuously allied in East Germany to commemorate Luther's anniversary. The government has helped restore churches and landmarks and is promoting tourism. The visitors center at Eisenach (right) displays a proclamation from Communist party head Erich Honecker, praising the "historical accomplishments" of Luther.

Churches stress the theological Luther in services such as Erfurt's ecumenical Church Day (above)—a demonstration that Christians here have won greater freedom in recent years. "Not a breakthrough," says one minister. "But it is a recognition by the state that the church isn't going away."



EISENACH information



Zu den progressiven Traditionen, die wir pflegen und weiterführen, gehören die Wirken und das Vermächtnis all derer, die uns voraus sind, zur Entwicklung der Weltkultur beigetragen haben, ganz gleich, in welcher sozialen und klassenspezifischen Bindung sie sich befanden.

Erich Honecker

In diesem Sinne würdige die DDR die historischen Leistungen von

MARTIN LUTHER 1483-1546



Circling Earth From



Poised for the Pole, members of the British Transglobe Expedition prepare for a traverse of Antarctica by snowmobile, part of a history-making circuit of the earth across both

Pole to Pole

By SIR RANULPH FIENNES



RANULPH FIENNES

Poles that began in September 1979 and ended three years later.

THE IDEA was preposterous, but my wife, Ginnie, insisted: "Why not go around the world the *hard* way—through both Poles?"

There were any number of reasons why not, and I began to list them, but Ginnie is stubborn. "It's the last great journey left," she interrupted, "and it *can* be done. Where there's a will, there's a way."

Well, we did eventually do it, though it took all of ten years—seven in preparation and three for the actual circumnavigation. The dimensions of such a journey are enormous: 38,500 miles across four continents, three oceans, and ten seas; a traverse of both Poles; survival under conditions of extreme heat and cold; conquest of the world's most inhospitable and unforgiving realms.

Ginnie's and my conversation took place in the summer of 1972, at a time when we were barely able to pay the mortgage on our home in Sussex, England. After eight years' service in the British Army, I had led several expeditions to such areas as the Nile River and the glaciers of Norway and had earned a small income from books about those experiences. What faced us now, however, seemed not so much an expedition as a lifelong career, and a potentially impossible one at that. As our subsequent patron, His Royal Highness Prince Charles, was to say of the undertaking: "It is splendidly mad."

But then so were all the great pioneers of British polar exploration—splendidly mad in their challenge of the unknown. Though Sir John Franklin and Robert F. Scott paid for the challenge with their lives, both contributed much to man's knowledge of the polar regions. Another countryman, Vivian Fuchs, achieved the first traverse of Antarctica in 1957-58, and British explorer Wally Herbert first crossed the frozen Arctic Ocean a decade later.

To Ginnie and me the whole idea was irresistible, and it turned out we were not alone in that view. Over the next few years a total of 1,800 organizations, firms, and

individuals in 19 countries donated equipment or services. One of the most generous contributions was the loan of a 1,265-ton former polar-research vessel, *Kista Dan*, by her owners, Marsh & McLennan of New York and C. T. Bowring and Co. Ltd. of London. In acknowledgment we renamed the ship *Benjamin Bowring* after the founder of the London firm. One of his descendants, Antony Bowring, was to become a key member of our expedition.

As word of the project spread worldwide, we were besieged by volunteers from some dozen countries, one from as far away as Fiji. After extensive interviews and field tests, I selected 27 applicants from among 126, bringing to 29 the total membership in what we called the Transglobe Expedition.

By what seems in retrospect a sequence of miracles of all shapes and sizes, we were finally ready in late summer of 1979. On September 2, *Benjy B*, as we affectionately called her, left her berth at Greenwich and slipped down the Thames, outward bound on a unique voyage around the world.

OUR PLAN was to follow the Greenwich meridian south across Europe and Africa to Antarctica. We would traverse the southern continent via the South Pole, then span the Pacific by way of New Zealand, Australia, and North America. From there we would thread the Northwest Passage and the Arctic Ocean, traverse the North Pole and return to England via Spitsbergen. Simple—or so it seemed on the map.

Benjy B was to serve as a mobile base, unloading a picked team to cross land or ice masses along the route and recovering the team each time on the far side. The overland team consisted of Charles Burton, a former specialist in commercial security, Oliver Shepard, a brewery manager, and me, all three of us British and in our 30s. Simon Grimes, a mechanical wizard, would team with Ginnie as our radio communicators, leapfrogging from point to point along the route and keeping us in constant touch with the outside world.

Following her departure from Greenwich, *Benjy B* crossed the English Channel. From France we quickly crossed Europe and Africa by Land-Rover, traversing the Sahara in blazing 120°F heat and stopping

Around the world—the hard way



North
Pacific
Ocean

VENTURING the unattempted, the Transglobe Expedition sought to circumnavigate the earth generally along the Greenwich and 180° meridians, imaginary lines of longitude encircling the globe. Capturing the spirit of early explorers in scope and imagination, participants from 13 countries conducted scientific research from one end of the earth to the other.

AUSTRALIA

Auckland
NEW
ZEALAND

Christchurch

Sydney

Indian
Ocean



Experiments in polar navigation assumed critical urgency as the ice team, Fiennes and Burton, drifted on a disintegrating ice floe for 99 days before rendezvousing with the Benjamin Bowring for a triumphant return to Greenwich, August 29, 1982.

START
 Three-year, 38,500-mile odyssey began September 2, 1979, as expedition ship Benjamin Bowring sailed from Greenwich, origin of expeditions from Drake to Darwin.

Zoological research on the overland journey across the Sahara to the rain forests of the Ivory Coast yielded lizard, bat, and snail specimens for the British Museum.

Encamped through antarctic winter and during continental crossing, team members took ice-core samples and wind and magnetic measurements. Barometric readings determined elevations of ice above sea level.

Arrived April 11, 1982
 NORTH POLE

Alert
 Arrived Sept. 26, 1981
 Departed Feb. 13, 1982

Arrived June 30, 1981

Pollen counts and measures of snow accumulation were conducted en route to the North Pole.

Supported by nearly 500 corporate sponsors, the expedition held trade fairs in Paris, Abidjan, Cape Town, New Zealand, Australia, the U.S.A., and Canada.

Antarctic crossing, the lengthiest ever completed, ended at Scott Base January 11, 1981

Dashed red line: Overland or ice trek
 Solid red line: Ocean or river journey

AZIMUTHAL EQUIDISTANT PROJECTION
 DRAWN BY BANSLEY MURRAY
 COMPILED BY GRAHAM J. TRISCO
 NATIONAL GEOGRAPHIC CARTOGRAPHIC DIVISION





MIKE HOOVER (ABOVE), RASHLEIGH FIERBERG (BELOW AND CENTER), AND SYMON GRIMES (FAR LEFT)

Wild companions in the far north: arctic hares, wolves, and polar bears.

The team's original plan had been to cross the frozen Arctic Ocean by snowmobile, but heavily compacted coastal ice forced the men to abandon the vehicles on the third day and haul their food and equipment the next hundred miles by sledge (above). When the ice smoothed, a ski-equipped support plane landed replacement snowmobiles for the remaining 320 miles to the North Pole.



briefly in the Ivory Coast. There we collected snails for British and French medical researchers studying schistosomiasis—one of many scientific tasks we were to carry out over the next three years.

Benjy B met us at Abidjan, and we headed south for Antarctica through the roaring forties, which lived up to their name. We spent New Year's Eve tumbled about like the contents of a cocktail shaker and arrived at the South African National Antarctic Expedition base (SANAE) on January 5, 1980.

Here, as in the years to come, weather was the ruling factor. In order to avoid Antarctica's coastal barrier of sea ice, we had arrived during the late summer month of January, when breakup had cleared the way. By then, however, the darkness and fearful cold of Antarctica's winter were only weeks away, forcing us to wait eight months for southern spring before continuing.

By means of the expedition's ski-equipped Twin Otter, we airlifted more than a hundred tons of gear and supplies from *Benjy B* to our wintering-over camp at Ryvingen in the Borg Massif, 270 miles inland. There four of us settled down to endure the winter together.

It is difficult to say which produced the greater strain—the incredibly close quarters

or the sense of total isolation. Outside the walls of our prefabricated cardboard huts the cold was appalling. Temperatures on the nearby Antarctic Plateau fall as low as minus 120°F in winter. Under such conditions steel bars that are stressed at all may fracture, tin containers simply disintegrate into loose granules, and mercury in an ordinary thermometer turns to solid metal.

Somehow we managed to cope with our problems and remain friends in the bargain. On October 28, 1980, Charlie, Ollie, and I left Ryvingen by snowmobile for a 2,200-mile traverse of Antarctica, the first ever made in open vehicles (page 476). By then the temperature stood at a relatively balmy minus 60°F, though the danger of frostbite while under way was constant. Our route was uncharted, so we took regular barometric readings for topographical mapping.

ON DECEMBER 15, after six weeks of navigating across 1,200 miles of nearly featureless plateau, we reached the United States South Pole Station. The 16-member staff welcomed us warmly and treated us to two incredible luxuries—hot showers and fresh ice cream. Simon Grimes and Ginnie joined us by Twin Otter to set up a temporary radio station at the Pole. On



From searing jungle heat to overriding polar cold, weather severely tested the expedition's endurance. In the Ivory Coast, Charles Burton (left) checks out the radio. He kept in constant contact with Ginnie Fiennes, the expedition leader's wife, who operated a mobile communications center aboard the ocean-going support ship Benjamin Bowring and at each base camp.

News of a historic achievement (right) is radioed from the North Pole by Sir Ranulph on Easter Sunday 1982. The event marked the first time men traversed both Poles in a single expedition.

December 23 we pushed off again for the final 980-mile leg to New Zealand's Scott Base on the far side of the continent.

Summer now became our mortal enemy, softening and rotting the ice bridges across crevasses that could swallow us whole. Cautiously we made our way several hundred miles down the treacherous Scott Glacier and across the Ross Ice Shelf without a major mishap. Finally on the morning of January 10, 1981, we sighted the massive volcanic dome of Mount Erebus overlooking Scott Base and McMurdo Sound.

The Pacific Ocean was largely an interlude between challenges, and there was no point in hurrying across it. Once again the seasons dictated our schedule, requiring us to reach Alaska by early June so as to thread our way into the Northwest Passage in summer. From there we would trek north and winter over at the edge of the Arctic Ocean in order to start for the North Pole by snowmobile in early spring. With luck the Arctic Ocean would remain frozen solid until we could reach the other side and rendezvous with *Benjy B* for the voyage home.

Nothing worked quite the way we had planned it. A family crisis called Ollie back to England, and Charlie and I had to face the Arctic without him. After averting several

near disasters, we made our way by rubber raft and outboard 1,200 miles up the Yukon River, then journeyed overland to the Mackenzie. From its mouth, in a Boston Whaler equipped with twin 60-horsepower engines, we navigated the Northwest Passage, going 4,000 miles in less than a month, the only such voyage ever made in a single season.

After a grueling, 200-mile overland snowshoe trek to Alert on Ellesmere Island's north coast, Charlie and I met Ginnie on September 26, and we set up winter camp in four abandoned huts at the edge of the Arctic Ocean. Four months later Charlie and I set off for the North Pole in snowmobiles.

Within three days one of the machines broke down in the great welter of pack ice. We continued on foot, each man dragging 160 pounds of supplies and dehydrated food on a single sledge behind him. After a hundred memorable miles of hauling, the ice improved, and our faithful Twin Otter delivered two more snowmobiles for the remaining 400 zigzag miles to the Pole. We arrived there on Easter Sunday, the only people ever to reach both Poles by surface routes. We radioed Ginnie at Alert to fly out and join *Benjy B* at Spitsbergen, where the ship waited to come north to meet us.

The rest was pure frustration. Some 180 miles south of the Pole, Charlie and I came to a halt on a huge ice floe, large enough at first for the Twin Otter to land and resupply us. But as spring and warmer temperatures arrived, the floe grew gradually smaller until no one could reach us—neither the Otter, because of the melted surface of the floe, nor *Benjy B*, because of the surrounding pack ice. For 99 interminable days Charlie and I drifted aimlessly, wondering what would come first, the ship or a spring storm—which would make rescue academic.

Finally *Benjy B* inched her way through the ice to within 12 miles of us and radioed her position. Charlie and I abandoned our floe in two small canoes, and a long day's paddling and hauling among drifting ice brought us aboard for a memorable reunion. On August 29, 1982—almost exactly ten years since the expedition was conceived—we arrived in Greenwich once again for a warm official welcome.

I live in constant apprehension of Ginnie's next idea. * * *



DAVID MASON (BELOW) AND RANULPH FENWICK

Antarctica's Awesome Challenge

COLDEST AND EMPTIEST of all the continents, larger than China and India combined, Antarctica presented the single greatest obstacle to circumnavigation of the earth. As a private expedition, the Transglobe team lacked official support by Antarctica's permanent bases but was welcomed informally at the three stations it visited.

Near the South African base, SANAE, on Fimbul Ice Shelf, the *Benjamin Bowring* (*below*) unloads supplies (*right*) for airlifting to winter camp 270 miles inland. Winds as high as 50 miles an hour threatened the operations—"a sudden and awesome demonstration of the forces to which we would be subject," recalls photographer Bryn Campbell.

472





BOTH BY BRYN CAMPBELL



BLINDING SNOW SQUALL (*below*) envelops two expedition members as they rescue a steel sledge from a sudden crack in the ice of the Fimbul Shelf during unloading. Failure would have meant loss of the snowmobile and a second sledge harnessed to the first one by orange nylon lines.

For winter camp at Ryvingen, crew members assemble prefabricated cardboard dwelling units (*right*) conceived by Ginnie Fiennes. Covered with a layer of snow and heated by kerosene stoves, the dwellings withstood 100-mile-an-hour winds and temperatures in the minus 50s Fahrenheit.

By March 15, 1980, the long polar night had settled over the camp, recalling for the author the lines from Coleridge's "Ancient Mariner":

*The sun's rim dips, the stars rush out:
At one stride comes the dark. . . .*

In the camp's radio shack (*below right*) Ginnie Fiennes checks her gear. With no previous experience in radio, she trained in London before the expedition merely to operate the equipment. But when the main set broke down at Ryvingen, she was able to repair it with instructions radioed from London via the backup set.





TRANSILVARE EXPEDITION (ABOVE), BRYN CAMPBELL (FLOWER LEFT), AND RANULPH FIENNES







ALL BY RAYMOND FENNER

DAWN OF SUMMER bathes the camp at Ryvingen in round-the-clock daylight by late October (*above*), when the three-man overland team set out by snowmobile and sledge on the 1,200-mile journey to the South Pole. Wind-scoured ice formations (*left*) destroyed a heavy Eskimo-style wooden sledge and damaged two of the lighter metal ones. Temperatures, in the minus 60s at the outset, warmed to the minus 20s. Arriving at the U. S. Amundsen-Scott South Pole Station on December 15, 1980, the team posed for a portrait in an ordinary garden-style mirror ball (*right*), left by the station's first scientific director, the late Dr. Paul Siple.





Billowing plume of volcanic steam above Mount Erebus signals the end of the



BRYN CAMPBELL

2,200-mile traverse by men and machines, dwarfed by mountains and crevasses.





ROGER CLARK (TOP), SINNIE FIENNES (BELOW), AND BRYN CAMPBELL

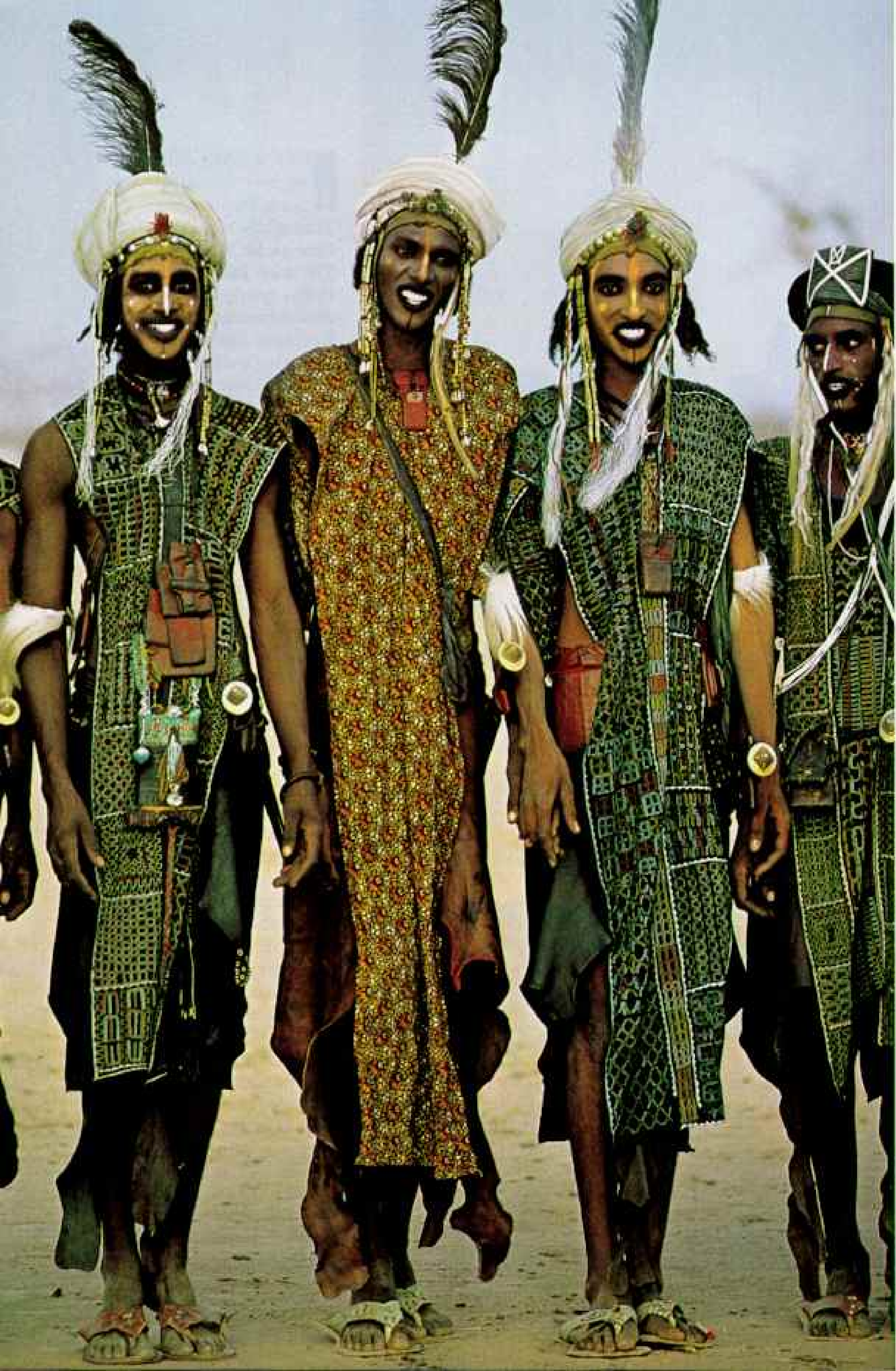


HUSKY ESCORT driven by New Zealand hosts leads the victorious Transglobe team into Scott Base on McMurdo Sound. The date: January 11, 1981—nearly three months after departure from the Ryvingen camp.

During training for their ordeal, Oliver Shepard, the author, and Charles Burton (*below right*, from left) acquired temporary scars from frost nip, a mild form of frostbite.

Final victory was celebrated a year and a half later, on August 29, 1982, when the expedition returned from the Arctic Ocean traverse to its starting point at Greenwich (*far left*). Flanked by expedition patron Prince Charles and teammate Burton, author Fiennes leads the victory parade. Family considerations prevented Oliver Shepard from taking part in the Arctic traverse.

"Perhaps our greatest accomplishment lay in human rather than geographic terms," says Sir Ranulph. "Our team lived cheek by jowl for three years under extraordinary pressure and occasional danger. We emerged as friends with a deeper understanding of human tolerance and capability—both in greater measure than we could have believed." His book on the journey, *To the Ends of the Earth*, will be distributed this month by Arbor House Publishing Co., New York. □



Niger's Wodaabe: "People of the Taboo"

TALL, LITHE, AND FINE FEATURED in the way of the Wodaabe nomads of Niger, Mokao was properly indirect in declaring his fondness for me. Taking aside my friend and traveling companion, Marion van Offelen, he confessed he would like to have me as his second wife.

"But I do not know how to approach her father, though I will gladly ride to him on camelback. How many cattle should I offer for Fatiima?"

Months before, when he had taken me into his family, he had given me this Wodaabe name. And though I had tried to explain the great distance that separated me from my Boston parents, he could not imagine a place more distant than a good camel could travel.

According to the custom of *teegal*—any marriage that is not prearranged by parents—Mokao could, if I agreed, simply abduct me, slaughter a sheep, and, with that short celebration, we would be wed. He suspected this procedure might not be appropriate in my case.

Fortunately, patience is an important and time-honored Wodaabe trait, and he was prepared to wait as long as necessary for my answer.

I was not totally unprepared for this roundabout proposal. For the past year I had lived with the Wodaabe, photographing and drawing them for a book Marion and I were preparing.*

Marion, a Belgian writer and anthropologist, had preceded me, establishing herself much earlier among these little-known people. They are now widely scattered, for the most part, across the sub-Sahara Sahelian steppe in the West African republic of Niger.

Roughly bounded by desert in the north and savanna in the south, the territory they cover in their ceaseless search for grass and water to sustain their herds is not easily measured. I estimate it to be about 250,000 square kilometers (96,500 square miles).

No one knows where the Wodaabe originated. Many

**Nomads of Niger*, with photographs by Carol Beckwith and text by Marion van Offelen, will be published this month by Harry N. Abrams, Inc., New York, and Editions du Chêne, Paris, and in 1984 by William Collins Sons & Co., Ltd, London.

Article and
photographs by
CAROL BECKWITH



To charm women, Wodaabe men in makeup and hand-embroidered tunics (*facing page*) exaggerate their features during an all-male dance. In the nomads' unending migration across the arid Sahel, Wodaabe rituals reflect admiration of masculine beauty.



Clusters of hand-dug wells provide meager oases during the October-to-



May dry season, when cattle are moved constantly in search of pasture.

scholars believe it to be the upper Nile basin in what is now Ethiopia, although a few suggest Egypt, where ancient art depicts individuals of strikingly similar appearance. The Wodaabe are part of the Fulani ethnic group, whose six million members are now mostly semi-sedentary. Only the Wodaabe, who today number about 45,000 in Niger, remain as nomadic as their ancestors.

For an intimate view of Wodaabe life, Marion and I had decided to concentrate on one family unit—Mokao and some 30 of his close relatives. He expressed great pleasure over our choice: "For us there is no greater happiness and honor than those we can count as friends and guests."

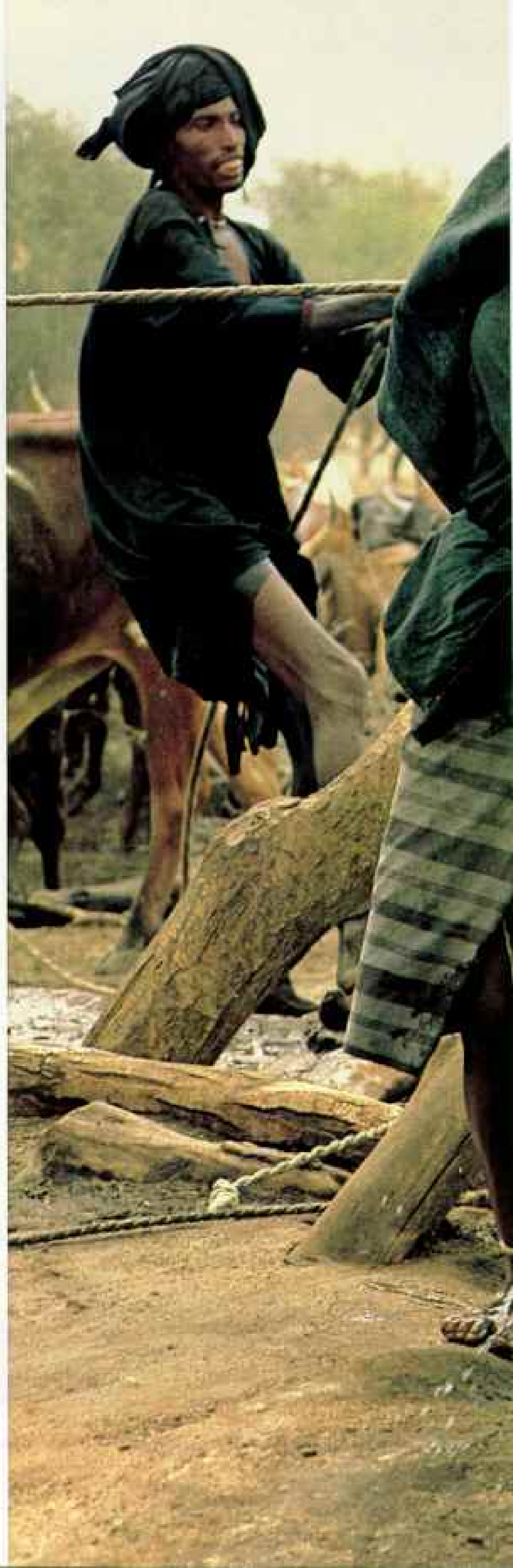
SINCE OUR FIRST MEETING we had traveled many miles together. With Marion's help I had already learned the rudiments of the Wodaabe culture and Fulfulde, the language they share with other Fulani peoples. Mokao patiently taught me how to manage better with both.

Through him I came to understand and eventually to identify with these proud nomadic people who long ago discovered how to live in harmony with their harsh environment and wrest from it the bare subsistence it provides.

Rarely exposed to outsiders, the Wodaabe continue to preserve the traditions and taboos of ages past. Prohibitions imposed upon their behavior are both rigid and plentiful. For example: When Wodaabe greet each other, they may not look each other directly in the eyes. During daylight a man cannot hold his wife's hand in public, call her by name, or speak to her in a personal way. Parents may never talk directly to their first- and second-born children or refer to them by name.

Free of the preoccupations of technological societies, the Wodaabe retain a high respect for human relationships, physical

Sharing a grueling task, women haul water drawn by oxen from a 40-meter (130-foot) well. A necklace of talismans on the woman at right marks her as a nursing mother, who may not be touched by any man, even her husband.





beauty, and the natural world on which their fate depends. These hereditary values have survived because the Wodaabe temperament is both elusive and nonaggressive.

"We are like birds in the bush," one elder said. "We never settle down, and we leave no trace of our passage. If strangers come too close, we fly to another tree."

To avoid pressures from British colonial rulers and local Muslim chiefs, the Wodaabe fled Nigeria at the end of the 19th century. Only the old ones remember hearing from their fathers of the migration, and why they chose the hostile Sahel as their present home. "Here we are free to follow our tradition. We have room to move with our animals when and where we please."

ONE OF THE MOST important values expressed in Wodaabe behavior is hospitality. When Marion and I first arrived, Mokao's wife, Mowa, brought an armful of long poles to "the area for greeting guests." There she assembled a Wodaabe-style portable bed on spool-shaped legs so that we would not have to sleep on the ground. We later found out that this was her wedding bed, a present from her mother when Mowa first joined her husband's encampment.

Mokao began my education immediately. "In our tradition we have a code of behavior which emphasizes *semteende*, reserve and modesty; *munyal*, patience and fortitude; and *hakkilo*, care and forethought. This code, along with our many taboos, was given to us by our ancestors. In fact, Wodaabe means 'people of the taboo.'"

When I asked him how he would rate me on *boodal*—physical beauty—he showed no reserve whatsoever in providing a complete vertical analysis.

"Fatiima, you are fine from your forehead to below your nose. You are less interesting between your nose and your chin. From your neck to your waist you are beautiful, but between your waist and your thighs you are not very good. Your knees and ankles

are excellent, and your feet are the most beautiful of all. You have pale skin, which we admire, your hair is black like ours, and your dark eyes are not the blue ones that our children believe cannot see."

Sensing his remarks had made me a bit self-conscious about my shortcomings, Mokao hastily gave me high marks in *logu*—charm, personality, and magnetism. "For us that is far more important than physical beauty. Those blessed with *logu* will never be alone."

Mowa was as candid as Mokao when she told me the Wodaabe did not like my hairstyle. "It is too short and too bushy; in a word, unbecoming. Grow it long so I can braid it and make you more attractive."

Two months later I was ready to place my head in her lap and submit to the three-hour tressing she recommended. Separating my hair into sections, she ran a line of butter down each part. Then, pulling the strands so tightly I scrunched up my face and squealed, she wove them into the approved coiffure of two side braids, a topknot, and an elaborately layered arrangement reaching from my crown to nape.

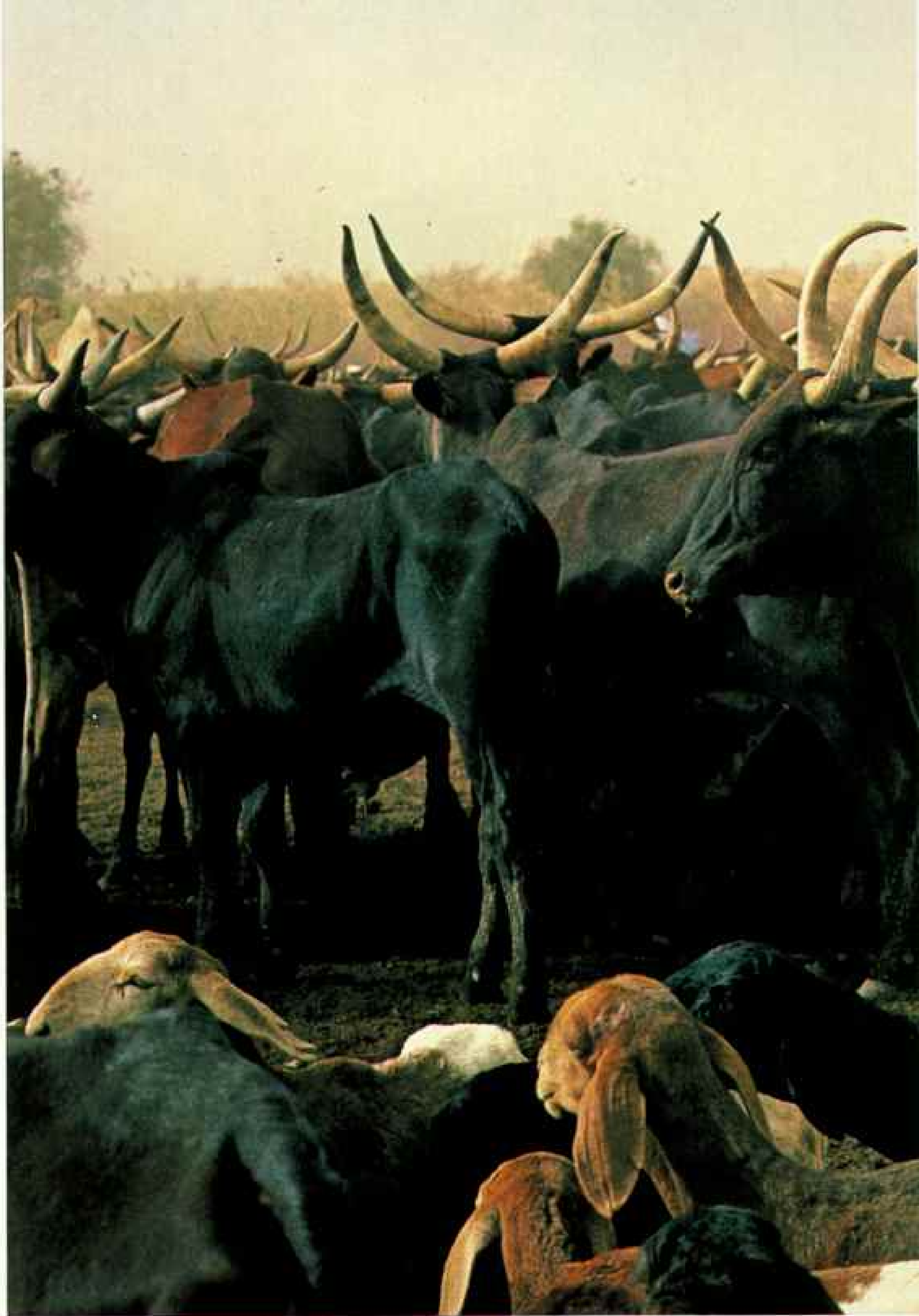
FOR COMFORT AND CONFORMITY I had by this time adopted native dress: embroidered chemise-like top and knee-length, wraparound skirt. Now Mowa's daughter by a former marriage, Nebi, suggested she pierce my ears with the usual thin, sharp thorn, adding in each ear seven more holes above the one I already had. This would enable me to wear eight pairs of large silver or brass loop earrings as do most Wodaabe women. My courage failed with the second puncture.

I resisted completely the campaign to permanently tattoo my temples and cheeks with geometric designs and the corners of my mouth with fan-shaped patterns as is the custom. Instead, I accepted the use of erasable black kohl when I wished to create the same effect. The men, who excel at makeup because their

(Continued on page 497)

Sidesaddle perch on grandmother's feet keeps a baby girl free of the sand during a bath. Wodaabe taboo prohibits a mother from speaking to her first- or second-born child and—except for nursing—strictly limits physical contact with them. Other relatives, especially grandparents, lavish care and affection on the children.





A gentle hand wields the stick of a herdsman tending sheep and zebu cattle at a well. Should a cow take too much of the water, a mere rap on the horns is



the sharpest reprimand delivered. Zebu milk is the main food of the Wodaabe, who hold their cows in deep affection, calling each one by name.



A honeycomb of man-made salt pans on the edge of the Sahara (right), north of the Wodaabe's range, provides salt to supplement the cattle's diet. Worked by a neighboring people, the shallow pans are filled with saline water that leaves thick deposits after evaporation. Formed into cakes, the salt is carried by caravan to markets frequented by the Wodaabe. The earth is so salty that some herdsmen travel here just to give their animals the opportunity to lick the ground.

Though the job of watering baby camels falls to a young girl (above), her father plans to give them to his sons; rarely do women enjoy the prestige of such expensive mounts. While men concentrate on handling the cows, women face a harsh regimen of milking, pounding millet, cooking and serving, while continually packing family belongings for countless moves.







Darkness at noon foreshadows a violent storm—the welcome arrival of the summer rainy season. “It was unnervingly frightening,” the author recalls, “almost like a total eclipse.” After hovering around 120°F, the temperature fell 40 degrees in only minutes as the winds swept in.

When the rains come, the spirits of the Wodaabe rise. Flourishing pastures and standing ponds bring respite from the drudgery of the dry season, when

cattle must be herded every other day from pasture to well. In preparation for the rainy season’s cycle of celebrations, a young, unmarried woman adjusts her jewelry (right).

Believed to have originated in the Nile region of eastern Africa, the Wodaabe number about 45,000 and are divided into 15 lineages. Parents arrange marriages at birth between cousins, but a man’s subsequent wives must come from outside his lineage.





Burdensome measure of a woman's wealth, scores of ceremonial calabashes—nested ten to a bundle—travel unused for most of the year (left). Come rainy season, women proudly arrange them for view (below) as part of the Worso—a celebration of the arranged marriages and births that have occurred over the previous year. In addition to his first wife, betrothed to him at her birth, a man may take up to three more wives. Each sets up a suudu, or shelter, with the first wife occupying the northernmost position and later wives located progressively southward.



(Continued from page 488) ceremonial appearances demand this skill, delighted in doing these facial decorations for me.

My physical transformation was more easily achieved than adjusting to my Wodaabe hosts' overwhelming generosity.

Though Marion and I had joined Mokao's encampment at the peak of the dry season when milk—almost the only food in the Wodaabe diet—was extremely scarce, Mowa brought us a calabash full. Nor did she stint in giving us millet porridge, a necessary supplement as the milk supply shrinks.

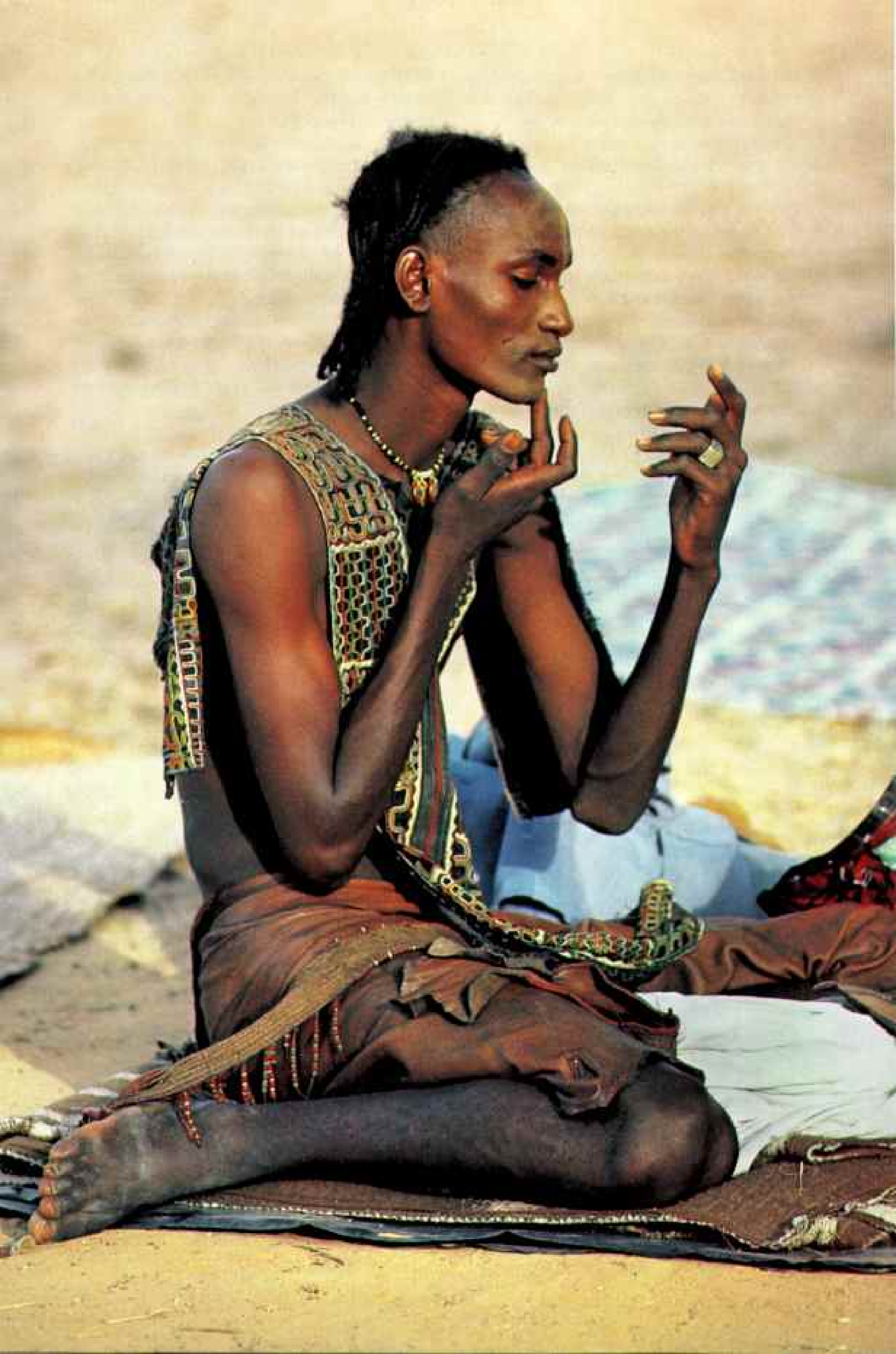
"If you have guests and there is little milk," said Mokao's father, Gao, "you give what you have to them and you eat nothing.

With plenty of cows and milk to share, the heart is happy. Everyone will come and see you and respect you."

Our attachment to the Wodaabe deepened as Marion and I traveled by foot, camel, and donkey with Mokao and his kin—father, brothers, their wives and children. As haphazard as their movements at first seemed to be, I was told that each family group has a well-defined travel pattern from which it seldom strays.

As the October-to-May dry season became more severe, the herds were directed in ever widening circles around a family-owned well in search of dwindling patches of pasture.





However far away grazing is found, the undernourished stock must be led back to the well at frequent intervals to be watered. To accomplish this, herdsmen engage in the backbreaking, day-long chore of toting the full 30-liter buckets, hoisted up by ox power, from well rim to long, shallow drinking troughs nearby. Often the animals' thirst seems unquenchable.

Sharing Mowa's stores for our rations, Marion and I carried little with us beyond bare essentials. Wodaabe wives, ever on the move, must transport everything they own: beds and mats, clothes both ceremonial and everyday, cooking utensils, sacks of millet, newborn animals, young children, and an abundance of large, round calabashes.

For, while a man measures his worldly wealth in cattle and children, his wives measure theirs in calabashes. Of the many they acquire in a lifetime, few are put to practical use. All the others are purely ornamental, to be displayed only on certain ceremonial occasions.

Making camp, a woman unloads her heavily burdened ox and donkey, then builds the *suudu* that she, her husband, and all their possessions will occupy. The roofless space is partially protected by a semi-circular screen of dry thorny branches.

While the men relax from cattle tending and sip their tea, the women milk the cows, haul the water, gather and ignite the firewood, and—to make the meals when milk is low—spend several hours each day pounding millet for porridge with mortar and pestle. They may take a brief respite from this routine—sometimes as long as a week—after they deliver babies in the bush.

Husbands see nothing unfair about this division of labor. And, since women perform most of the work, take care of the family, and bring prestige to their husbands, men are often eager to acquire a second, third, or even fourth wife, the maximum allowed at any one time. (This does not preclude rejecting one and winning another to keep within the quota.)

As I assumed the hairdo, dress, and linguistic skills of a nomad, curious women would ask to see the palms of my hands and, having done so, sadly shake their heads. "You have no calluses from pounding millet. You will never truly be one of us."

I certainly could not emulate their stoicism or endurance. Daily walks of five hours in heat as high as 50°C (120°F) on a scant milk diet, with blisters on my feet and digestive problems from drinking the sandy, brown water, often left me too exhausted to make photographs, draw, or conduct lengthy conversations.

The only solution I could think of was to purchase a Suzuki jeep that would permit



Absorbed in preening, a young man with his hairline shaved to dramatize his forehead applies powder to lighten skin (facing page) for the yaake dance, when women judge men on charm. Turban, jewelry, black kohl on the eyelids and lips, and a line to elongate the nose complete the look (above).





Chanting paeans to feminine beauty, a circle of elaborately costumed men moves slowly counterclockwise (above) in the ruume dance during the Worso. In the center, elders urge them on and laud particularly talented singers. As wives cast appraising looks (left), marriageable women stand outside the circle inviting courtship. Should a man's wink be met by a woman's gaze, romance is born. To encourage mingling with other lineages, a woman may not attend certain courtship dances performed by her own clan.

Marion and me to conserve our energy, transport our own food, and carry extra provisions for our hosts. Happily, this decision caused no rift in our Wodaabe relationships. Rather, it generated a friendly rivalry among the men over who would sit in front to guide us across the sandy, seemingly trackless Sahel. After Marion left for home to work on her manuscript, an extra passenger or two often hopped aboard.

Despite the hardships they face and the restraints imposed by the practice of *sem-teende*, the Wodaabe are basically a light-hearted, playful people. I was sometimes a bit slow, however, to grasp the full meaning of their fun.

So it was when a young man first winked at me. My automatic response was to wink back—not once but several times—much to the amusement of those around us. I had, according to Mowa, committed a slight breach of Wodaabe etiquette. “A man winks to show his interest in a woman. If she does not turn away, he twitches one corner of his mouth—ever so discreetly, of course—to indicate which direction she should take to join him in the bush.”

BY MAY I have spent seven months with Mokao and his extended family; any reserve about my presence has long since disappeared. I have become attuned to the tempo of their travels. My affection for them and my admiration of their fortitude grows with every day.

The long dry spell is ending, but the heavy rains of summer have not begun. In this between-seasons period, the Wodaabe face their most difficult time. Forage is extremely scarce and scattered; water is to be found only in a few very deep wells. Cows become emaciated and almost milkless. Precious cattle must be sold at rock-bottom prices in village markets to purchase millet.

Now, an occasional shower begins to refresh the landscape. We move more often, abandoning the wells and “following the clouds” that will create ponds and rejuvenate the grasslands.

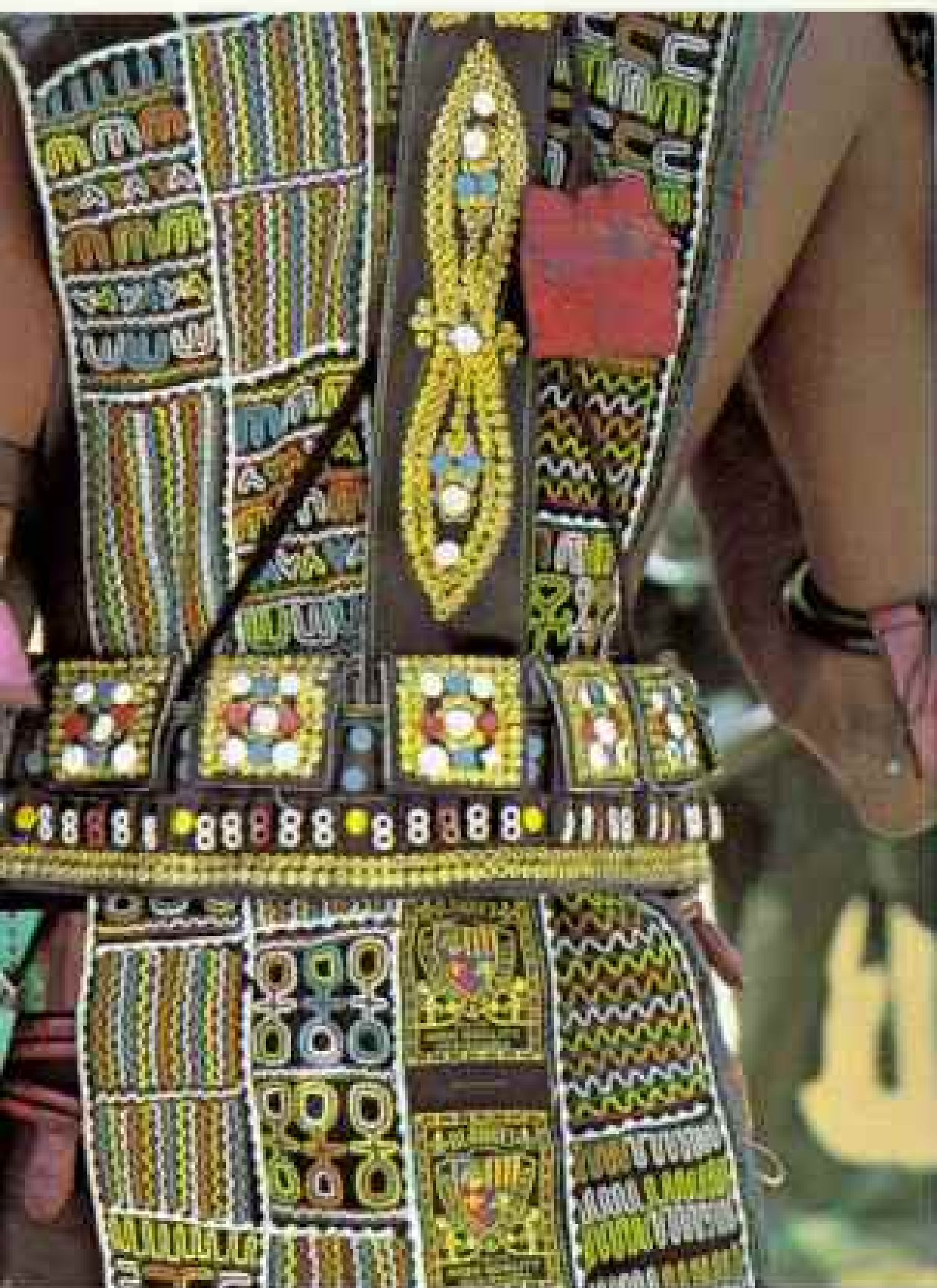
Finally the long-awaited summer rains descend, reviving man, beast, and the parched countryside. Various small groups like ours, moving northward on a narrowing front in search of prime pasturage, draw



Marriages are made by the strength of the eyes, the Wodaabe believe. During the yaake competition, a man rolls his right eye in and out, a talent



especially alluring to women. When the men discovered that the author's eye drops cleared bloodshot eyes, they began queuing up for a dose before each dance.



Modern motifs find increasing use in the eclectic designs of Wodaabe fashion. Blanket labels blend with embroidery on a male dancer's tunic (above). Eyelets festoon his ammunition belt, worn strictly for decoration. Safety pins (below) separate a traditional snake pattern at top from a design inspired by the airplane. As a final decorative touch, a young girl adds new sandals to her headdress (facing page).



closer together. The forced isolation imposed by the dry season is over. Visiting resumes as we make camp within sight of Wodaabe neighbors.

Energies until recently expended on mere survival now focus on the annual celebrations that will highlight the rainy season—the Worso and the Geerewol. My costume, which I have been embroidering for several months under the expert guidance of Nebi, will soon be finished.

“It is good that you will have it ready for the Worso,” said Mokao. “This is a festive time when Wodaabe of the same lineage—mine is the Kasawsawa, which means ‘lineage of the long lance’—gather to celebrate births and marriages. Already the elders have passed the word on where it will be held. Other family groups like ours will ride in this way until our paths converge.”

LINEAGE IS THE KEYSTONE of the Wodaabe social structure. “All of us trace our origins,” said Gao, “from two brothers: Ali and Degereejo. Their descendants divide into 15 primary lineages, which in turn break up into many sublineages like ours. In traditional marriage—*koobgal*—only cousins of the same lineage, pledged to each other in infancy by their parents, may wed.”

The joyous reunion begins. Clad in their most elegant attire, the tribesmen sweep into the Worso site on camelback, showing off the speed and splendor of their mounts. Women follow on donkeys laden with calabashes and other treasures exhibited only at this time.

The next three days are filled with various rituals associated with births and marriages: singing, dancing, and the roasting of rarely slaughtered animals. Tradition dictates how the meat will be divided and who will feast upon it. Storytelling, one of the most popular leisure-hour pastimes (for the Wodaabe have no written language), continues far into the night. Through the expanded togetherness of the Worso, the Wodaabe reaffirm their common ancestry.

This ceremony, though important, cannot compare with the grandeur of the many Geerewol celebrations held at various locations several weeks later. At each site two lineages unite for seven days of dancing





Proud and stately in uniform dress, only the most handsome men dare to compete in



the geerewol dance, being judged solely against the Wodaabe's exacting ideal of beauty.

designed primarily to display male beauty. One of its extra benefits is that it provides young men and women an opportunity to seek attachments—permanent or otherwise—outside their circle of cousins.

Two dances—the *yaake* and the *geerewol*—dominate the festivities. At these, handsome young men vie for the honor of being chosen the most charming and the most beautiful, thus proving their outstanding ability to attract women. Romance flourishes. Many a teegal marriage grows out of alliances formed at the Geerewol.

Many hours of preparation precede each



Leaving little to chance, men seek to repel bad luck and attract the good through talismans worn on their turbans and on their arms during dances (above). Ground bark, seeds, and leaves carried in pouches ward off evil words and enemies and enhance one's desirability to women. Among the peoples of West Africa, the Wodaabe are renowned for their knowledge of maagani, cures both real and magical.

performance. For the *yaake*—the charm competition—pale yellow powder is liberally applied to the dancer's face to lighten skin tone; borders of black kohl are painstakingly applied to highlight the whiteness of teeth and eyes. A painted line running from forehead to chin elongates the nose; a shaved hairline heightens the forehead. These are among the physical features the Wodaabe most admire (pages 502-503).

Now the dancers, shoulder to shoulder as in a chorus line, quiver forward on tiptoe to accentuate their height, and launch into a series of wildly exaggerated facial expressions on which their charm, magnetism, and personality will be judged.

Eyes roll; teeth flash; lips purse, part, and tremble; cheeks, inflated like toy balloons, collapse in short puffs of breath as if extinguishing a candle. Elders dash up and down the line, challenging, mocking, and criticizing in an effort to incite the contestants to ever greater contortions. A dancer knows he's receiving favorable attention when an old woman dashes toward him yelling "Yee hoo" and gently butts him in the torso.

"You'll see," said Mokao, "my cousin Djajiijo will win again, as he has for many years. No one projects more charm in the *yaake* than he does. Already it has attracted three wives."

As predicted, Djajiijo emerges the victor. Not until his eldest son becomes eligible to compete will he be forced, by custom, to retire from dancing.

THE WEEK, as it progresses, becomes an exhausting dance marathon highlighted by afternoon and evening performances of the *geerewol*, where the most beautiful men are selected.

Uniformly dressed in tight wrappers bound at the knees, strings of white beads crisscrossing bare chests, and turbans adorned with ostrich feathers, the men line up before their audience.

Resplendent in red ocher face makeup, they fill the next two hours with haunting chants and frenzied jumping and stamping dance steps. Then those who feel the competition is too great for them voluntarily withdraw. Those remaining replace their ostrich feathers with horsetail plumes, and the event resumes at an even wilder pace.

Three unmarried young ladies chosen for their loveliness are brought out by the elders to serve as judges. Kneeling modestly, they conceal with the left hand their scrutinizing glances. In order to hold their attention, the finalists resort to every facial expression and bodily movement they can muster.

After a period of observation the women rise and, advancing slowly toward the dancers, indicate their favorites with a graceful swinging of the arm. In this way the most beautiful are chosen. The winners reap only intangible rewards: increased pride in themselves, the admiration of other men, and the ardor of women.

The week-long Geerewol ends at sunrise after a full night of spirited dancing. As a final gesture of generosity and goodwill, the host lineage presents the roasted meat of a bull to the departing guests. Then, like the chameleon whose dried, powdered skin is worn as a ceremonial cosmetic, celebrators fade into their surroundings and disappear from view.

"Why," I asked Mowa's brother Jumou, "do the Wodaabe place such emphasis on male beauty?"

"Because it makes women want us. We are born beautiful. But we also have the power of *maagani*—the knowledge of secret potions—to enhance that beauty."

The gift of *maagani* makes the Wodaabe feared by some, sought by others. For the formulas they concoct from roots, seeds, leaves, and bark are capable, many believe, of having both magical and curative powers. Thus, leaves of the *eedi* tree (*Sclerocarya birrea*) are applied as a poultice on scorpion bites. The seeds of the *roogo* plant, or cassava (*Manihot esculenta*), are used to keep away the evil spirits that induce madness. These and many more, widely used by the Wodaabe, find a ready market as far away as Senegal and the Ivory Coast.

Since the devastating drought of the early 1970s that decimated herds on which their self-sufficiency depends, the Wodaabe have been forced to yield increasingly to the currency economy of more settled peoples. Some Wodaabe travel into the towns and cities to sell traditional *maagani* remedies. On occasional visits to local weekly markets—often only a spot on the landscape where vendors meet—they may sell a goat or

sheep to purchase such necessities as millet, salt, waterskins, sugar, tea, spices, blankets, and cloth. But only under the direst of circumstances will they part with one of their zebu cattle. And under no circumstances will they accept the more sedentary life where these items are readily available.

LIKE FELLOW tribesmen, Mokao wears many *maagani* powders in leather pouches around his neck. Some protect him from snakes, scorpions, sorcery, fear, evil words, and injury; others increase his charm and virility. For he still wants a wife who can bear the children that Mowa, ten years his senior, has never been able to give him.

But Mowa, who loves him dearly, has made it clear that should he bring another wife into their *suudu*, she would return to her own people as she had done some years before when an earlier husband married again. And she would take her daughter, Nebi, wed to Mokao's brother Bango with her, thus breaking up two families.

Although Mokao, when pressing his courtship with me, claimed that Mowa would never be jealous of an *anasara* wife—one with white skin—I knew Mowa felt differently, and I respected her feelings.

As important as fatherhood is to all Wodaabe men, Mokao has no desire to lose Mowa, who outshines the average wife in her devotion, loyalty, modesty, and grace.

When the time came for me to leave the Wodaabe, Mokao asked me to share with him the traditional three glasses of tea: The first "strong like life," the second "sweet like love," the third "subtle like friendship."

As we sipped, he talked. "Friends the Wodaabe make remain so forever. We mount our camels and find our friends even if much time and distance lie between us. But when the *anasaras* make friends and go away, they never return; they forget us. This I have observed. Friendship is not the same for the *anasaras* as for the Wodaabe."

But Mokao sensed our friendship would be more lasting. On the day of my departure he scooped some sand from one of my footprints to wear—along with 14 other *maagani*—as a talisman. "In this way I know you will return. For you are leaving your footprints on my heart." □



Facing choppy seas, half the people of tiny Pitcairn Island – most of them

Pitcairn and

THE SAGA OF *BOUNTY'S*

By ED HOWARD

Photographs by DAVID HISER



MELINDA BERGE

descendants of Bounty mutineers – return in a single boat from an outing.

Norfolk

CHILDREN

and MELINDA BERGE

Pitcairn Island

Nearly two centuries after young Fletcher Christian seized H.M.S. *Bounty* from its hard-driving captain, Lt. William Bligh, the colony founded by nine mutineers and 19 Polynesians still survives on this remote Pacific island. A Bible from *Bounty* today rests in the Seventh-day Adventist church, while a carved model of the ship sits in the workshop of Steve Christian, one of many residents who carry on the famous name.



PHOTO BY TRAVIS HIGGS

PPOINT OF ORDER, Mr. President!" The eight other members of one of the smallest parliaments in the Commonwealth swivel their heads toward the man who has objected. His voice is angry, his weathered face defiant. The hand he has raised for attention is callused from years of hard farming and fishing. The little finger is missing, torn off in an accident years ago.

His name is Greg Quintal. He is a descendant of both Matthew Quintal and Fletcher Christian, two of the most famous mutineers in history. A fellow member of parliament has just criticized the seizure of His Majesty's Ship *Bounty* nearly two centuries ago.

"He's accusing us of stealing! We did not steal the *Bounty*!"

He waits for the effect of his words, and then suddenly the crinkles on his face shift into a gleeful grin.

"We just took-et," he says with delight.

And the members, clerks, and gallery spectators in the Norfolk Island Legislative Assembly break up in laughter.

But they are dead serious about the *Bounty*. Five of the nine assembly members are descendants of the British sailors who "just took" the ship from Lt. William Bligh in 1789. They are Pitcairners, a small, distinct stock of people in the South Pacific with a colorful and even illustrious history, whose future is under threat.

In the vastness of the Pacific a sprinkling of islands forms the Polynesian triangle, some 15 million square miles in area. Hawaii is at the apex, Easter Island down at the lower right-hand vertex, New Zealand at







the lower left. The Pitcairners today inhabit two widely separated islands near the eastern and western tips of the triangle.

By far their most populous home is Norfolk Island, far to the west: a three-by-five-mile green dot in the Pacific blue. Thirty-seven hundred miles east, flung out off the end of French Polynesia's Tuamotu Archipelago, lies Pitcairn itself. It is a

craggy, forbidding place, a fairy-tale refuge for 18th-century mutineers and the entrancing Tahitian women they brought with them. If Norfolk Island is remote, Pitcairn is almost lost from the world.

Queen Victoria gave the Pitcairners Norfolk Island as a new and slightly more spacious home back in 1856. They had seemed likely to overpopulate tiny Pitcairn, and



To hide from punishment, the mutineers in 1790 burned their ship in Bounty Bay (left), where a small rocky cove still serves as the island's harbor. Their fate was unknown until 1808, when an American vessel discovered their would-be paradise. By then, every man but one, John Adams, had perished by violence or disease, leaving a settlement of women and children. The remains of the *Bounty* were found in 1957 by NATIONAL GEOGRAPHIC writer Luis Marden. One of her anchors sits in the public square (below), to the amusement of two boys.



BOTH BY WELFORD BERGE

Norfolk, with a similar latitude and climate, had just become surplus to the empire's needs. All 193 Pitcairners packed their belongings and sailed five weeks to get there, taking over a recently abandoned penal colony that had become a black mark on Britain's reputation. After several years six families moved back to Pitcairn. This splinter group kept Pitcairn alive.

I JOURNEYED TO PITCAIRN as part of a Film Australia documentary crew, sailing the last leg of *Bounty's* final voyage on *Kebir*, a 56-foot ketch we had chartered out of Tahiti.

Pitcairn loomed up like a tattered gray ruin of a fortress. There is no safe harbor, even for a yacht like *Kebir*, so we handed bags and cases of equipment and provisions

over the side into one of the Pitcairn long-boats, which the islanders had motored to us from Bounty Bay at first light.

"We didn't think you guys'd really get here," said Steve Christian, the boat's smiling young coxswain. "When council got your letter, everybody just laughed—'no way those guys gone get here that quick!'"

You have to apply for permission to visit Pitcairn Island through the British consular office in Auckland, New Zealand. "A licence to land and reside in any of the Islands may be granted by the Governor," the official form says. "It is usual to consult with the Pitcairn Island Council before issuing a licence. On the rare occasions when a licence is issued it is normally for a period not exceeding six months. . . ."

My application, with the required medical certificate and letters of reference, had been lodged only four months before our planned arrival time. It is almost unheard of for anyone to get to Pitcairn on such short

notice. "Get here in four months?" Steve said. "Crazy!"

The longboat poised outside the surf off Bounty Bay, waiting to power in on the back of the right wave. The moment came, the diesel engine roared, and in we charged, wallowing down to a gentle halt alongside a concrete jetty built by Royal Navy engineers in the mid-1970s.

A well-worn bulldozer was part of the engineers' equipment. Until then, six or seven generations of Pitcairners had struggled with the Hill of Difficulty—a steep, rough footpath from the landing place up the cliff face to the shelf of land where their homes are, 300 feet above. I had braced myself for the hard climb with our gear, but found that the legendary ordeal was just that—only a legend now. The bulldozer had long since cut a wide dirt road at a quite reasonable slant across the cliff and up to The Edge at Adamstown.

We didn't even have to walk it. We and



Making contact with the rest of the world, Tom Christian broadcasts on an amateur radio as his mother-in-law, Millie, left, daughters Raelene and Darlene, and wife, Betty, listen in. Tom also runs Pitcairn's telegraph station, which sends cables through Fiji and communicates with ships that pass near the island.

our baggage were loaded into the bucket of a big International Harvester tractor and chauffeured in style up the hill.

Bulldozed roads have replaced many of the paths that the NATIONAL GEOGRAPHIC's Luis Marden followed when he visited Pitcairn in 1957. * Motorbikes, sometimes towing a two-wheeled box trailer full of kids and vegetables, are commonly used for any journey longer than a five-minute walk. There is a dusk-to-11:00 p.m. electricity service, and even a telephone system.

The phone system is an old wartime one, a party line, donated by New Zealand. Each phone is cranked by hand, in a Morse code series of jerks, to call anyone on the island. Turning the crank causes all the phones to ring: dah-dit-dah-dit-dah for Ben and Irma Christian, dit-dit-dit for the school building, dah-dit-dit-dah for Len and Thelma Brown, and so on.

The New Zealand instructions said no

*See the December 1957 NATIONAL GEOGRAPHIC.

more than 12 phones could be hooked into one network, so the Pitcairners strung up two networks. Government and island officeholders were put together on one network and everybody else on the other. This quickly became known as the "bosses and dogs" system.

Then Steve Christian said he thought the New Zealand installation instructions were full of baloney, and he rewired everyone into a single network. It works fine. And I found there was a surprise bonus in having personal Morse "phone numbers": One day at Tom Christian's house the phone rang with a dah-dit-dit-dit. I was puzzled when Brian Young, without a word, walked to the phone and began talking. It had been Brian's "number" ringing, not Tom's.

When a few of the families rejected Norfolk and resettled Pitcairn about 1860, they numbered only 43 people. In a few generations, by the 1930s, they had multiplied to 200. Then their number began dwindling.



BOTH BY DAVID HEEB

Small piece of the empire, Pitcairn remains the last British colony in the South Pacific. Administered through a commissioner in Wellington, New Zealand, more than 3,000 miles away, 1.75-square-mile Pitcairn and three uninhabited islands—Henderson, Ducie, and Oeno—are governed by an island council.





DAVID WISER (ABOVE AND LEFT)

Barefoot farmers John Christian, 87, and his wife, Bernice, 83 (above), carry sweet-potato cuttings for planting in their garden. On the main road in Adamstown, Pitcairn's sole settlement, avocados are distributed at a share-out (left), a method once used by British seamen. As one person points to a pile, another, back turned, names the family to receive it. A map (right) drawn by 11-year-old Dean Warren-Christian depicts such places as Lookout Point and Goat's Land, where no one ventures but the island's feral goats.



MELINDA BERGE

The greatest decline came in the 1960s, as world shipping patterns changed. Transoceanic jets ended the era of regular passenger ships, and cargo ships rapidly became containerized, computer-managed vessels with little time for out-of-the-way islands. The Pitcairners saw the handwriting on the wall. The steady flow of ships passing Pitcairn, which had given them a market for their carvings and crafts, delivered the supplies they needed from the world, and provided transportation when they needed medical care or education, was doomed.

In the first three years of the decade 40 percent of the people packed their possessions, closed their houses, and moved away. By 1963 the Pitcairner population had fallen to 86. As 1983 began, it was down to 45—almost the same number that had returned from Norfolk some 120 years earlier.

If only a few more leave Pitcairn, it may not be possible to man the longboats and make contact with the few passing ships.

Andrew Young, a patriarch of the island, says, "I think Pitcairn is on her last leg. The manpower now is getting down so low—what are they going to do about it? They may come right to the point they can't manage. What they'll do—whether they'll send people here or move the people—I don't know."

If anything can hold a place together, I thought, people like Andrew Young can. He's a fifth-generation descendant of Edward Young, the *Bounty* midshipman who probably persuaded Fletcher Christian to lead the mutiny. He's soft-spoken, wise, amused by mankind, and for a man well into his 80s, strong as a horse. He can't take his place in the longboats any more, but he has a steely pride in fending for himself. When a neighbor hinted that he was getting old and frail, Andrew stalked angrily down to Bounty Bay, taking the pastor along with him as an indisputably honest timekeeper, and powerfully paddled his one-man boat completely around Pitcairn's circumference in just over an hour. Old and frail? Hah!

THE CENTER of Adamstown is a concrete-paved area called The Square. In U-shape around three sides of it are one-story, veranda-shaded buildings. A Seventh-day Adventist church. A dispensary where the pastor's

wife, always a nurse, provides the best medical care the island can give, and where mechanic Steve Christian delicately wields an old-fashioned dentist's drill when teeth need repair. The library. The post office, where you mail letters through a slot knowing they will lie there until the next ship calls at the island, perhaps weeks or months later. The courthouse—more often used as Pitcairn's public hall. The Island Secretary's office, a paper-crammed cubicle that is the seat of local government.

In front of the courthouse stands one of *Bounty's* anchors, brought up from the ocean floor just off the island by Irving Johnson of the yacht *Vankee* in 1957. For a time the islanders kept it doused with fish oil to prevent its rusting away. They say the aromatic effect on The Square could only be described as stunning. Nowadays the protective coating is plain black enamel.

The buildings are painted and orderly. They give the neat impression of a small colonial outpost. But down an eight-foot bank, on the open side of the U of buildings, Adamstown's main road winds past. Walk its dusty track in either direction, and the tidy, colonial impression of The Square ends abruptly: Pitcairn is dying.

When the population declines steadily, houses have no value except to their occupiers. When a family moves away, they close the door and leave the house to deteriorate. There is no new family to buy and move in. Termites have their way with untreated wood. The house gradually collapses.

The Pitcairners are people with a proud heritage. The first generations after the mutineers and their women were taller, stronger, handsomer than their parents. Their constitution, written in 1838, was probably the first in the English-speaking world (perhaps the first in all history) to give women the vote equally with men. The Pitcairners were among the first to write compulsory education into the lawbook.

They took the plain tenets of Christianity from the Bible that Fletcher Christian brought ashore from the *Bounty* and put them into daily practice: Honor thy father and thy mother. Do not let the sun go down on your anger. Speak gently and with dignity. They became admirable people, a blend of good-natured Tahitian easiness

with their natural surroundings and the long English tradition of working hard. People with love and pride in their relationships and in their community.

Could such a people allow a neighboring house to collapse onto its foundations, without clearing it away and getting rid of the debris? Yes. They have no choice. There simply aren't enough of them any more to keep ahead of the deterioration. They are the hardest working people I've ever lived among, but they are few and their number continues to decrease.

The collapsed houses pain the islanders. I sense it as I walk with radio operator Tom Christian and one of his young daughters

down the dusty road through Adamstown. Tom glances at one, starts to say something, says nothing. Slumping houses are a painful fact to be borne with dignity and acceptance, as when you must watch someone very old whom you love die day by day.

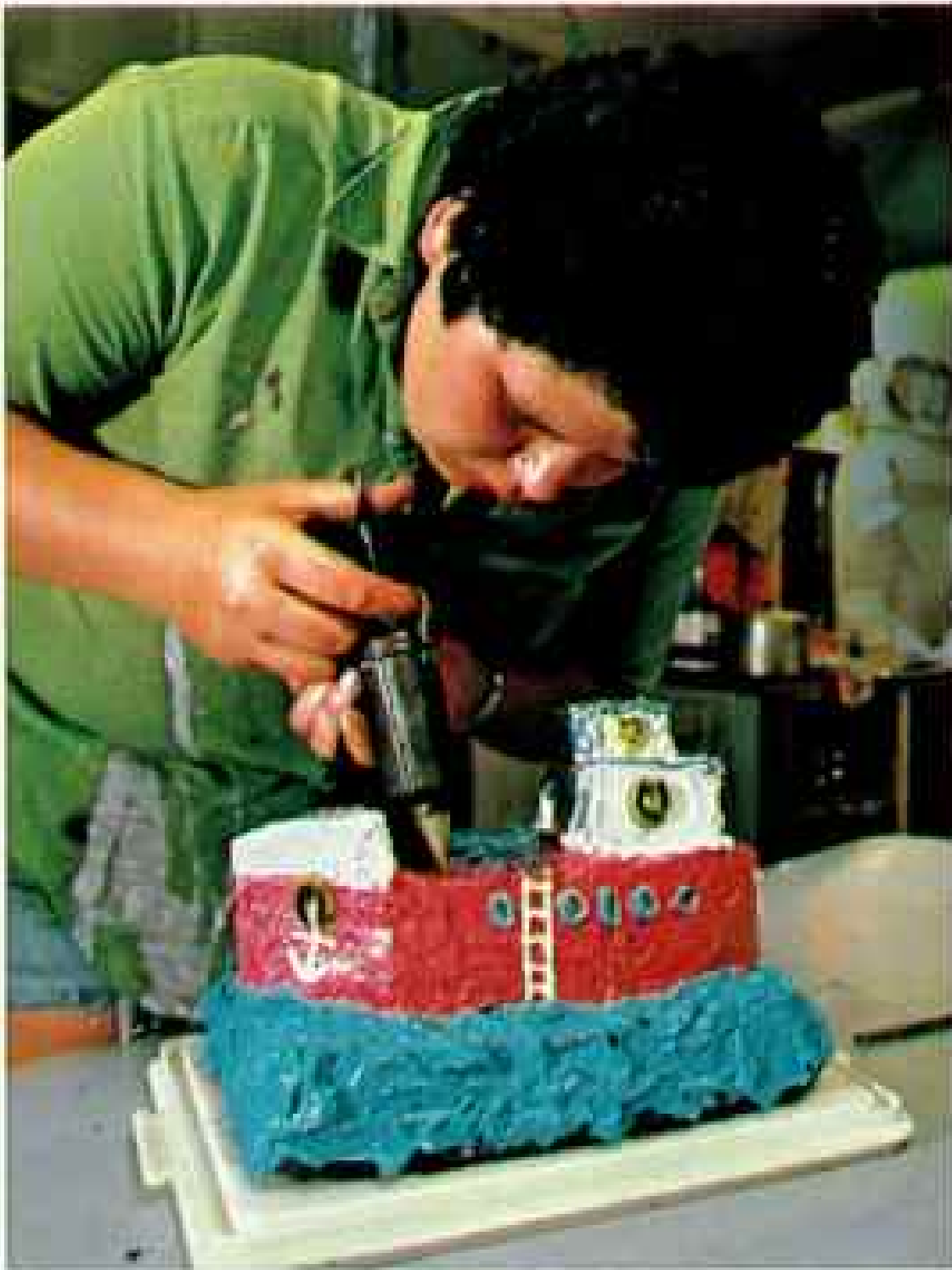
THERE IS A BUZZING SOUND in the sky, somewhere up above the tops of the banyan trees and the rose apple thickets. It turns out to be a pair of kites—man-made kites, not birds. Let me explain about the buzzing.

The people of Pitcairn work almost continuously, from the start of day until nearly time to go to bed, gardening, cooking,



DAVID WISSE

Only way to arrive on this island of rocky cliffs, a longboat is winched into a boathouse at Bounty Bay. These 36-foot-long diesel workhorses must brave crashing surf to carry people and cargo between Pitcairn and visiting ships. Smaller sheds house skiffs and log canoes used for fishing.



DAVID HISEK (ABOVE AND RIGHT)

Best excuse for a party, a birthday brings together nearly everyone on the island. This dinner at Pastor Thurman Petty's house (right) is a triple celebration: for six-year-old Darralyn Warren, 13-year-old Ron Christian, and the pastor himself. Each family brings a generous portion of such Pitcairn dishes as pilhi (breadlike pudding), pota (cooked greens), and humpus bumpus (fried banana burgers). These names hint at the unique flavor of the island's home-grown language, a jaunty concoction of 18th-century English, Tahitian, and nautical lingo. Master cake maker Meralda Warren (left) puts the final touches on a treat for another party, a sweet creation shaped like one of the freighters so important to the island's life.

One recent ship delivered a new video camera to an eager Brian Young (below), who captures Darralyn on her bike. Travel on island paths was revolutionized by all-terrain vehicles like the one beside Brian, along with dune buggies, tractors, and several dozen motorcycles.



WELYNDA BERGF



Hopes soaring like their homemade kites, Shawn, Trent, and Randy Christian sail plastic bags at The Edge, overlooking Bounty Bay. Children stay in the island school till 15, after which some continue studies in New Zealand.

getting firewood, mending something, carving curios, weaving baskets and hats, washing, ironing, sweeping, repairing a motorbike, weeding the little cemetery, planting, preserving, replacing a termite-riddled plank, painting the boats, fishing, baking bread, tidying up the kids, patching a roof—every day but their Saturday Sabbath an endless strand of chores, and more waiting tomorrow. I have awakened at 5:30 in the morning and found Dobrey Christian, in whose home I was privileged to stay, already well into her morning basket weaving.

But once in a while—once a year? twice a year?—some one of the men suddenly takes it into his head to make a kite for one of his children. Then kite fever sweeps through the families, and within a few days six or ten kites are flying in the tropic wind high over the island, left there to fly and buzz as long as they will.

Brian Young has made his from five slender sticks of wood, plastic wrapping saved from some past shipment of supplies, fishing line, and plastic tape. It is six-sided, about five feet from top to bottom, and carries a double plastic tail 20 or 30 feet long. On a taut line at the top of the kite he has pasted a strip of tissue paper cut from a dress pattern. That's what makes the buzzing noise—or a roaring, humming, or singing, depending on how any specific bit of tissue wants to sound.

Why put a voice on a kite? Steve Christian gives a teasing Pitcairn explanation: "If you had a big kite up there, and it couldn't say anything, that'd be some dumb kite, wouldn't it?"

I see a full-size Norwegian flag hundreds of feet above Adamstown, streaming in the endless Pacific sky. It takes me a few seconds to puzzle out that it is flying halfway up Brian's kite string. He has made the kite for his son, Timmy. The flag belongs to his wife, Kari, one of the few outsiders who have become part of the Pitcairn community.



As a girl in Norway, Kari studied to be a ship's radio operator and went to sea. She got to Pitcairn by sheer persistence.

"I read *Mutiny on the Bounty* when I was 12 or 13 years old," she told me. "The story fascinated me. It was so far away from Norway and from the school drag. We always identified William Bligh with our teacher at school. All the girls in my class had a great time playing 'mutiny on the *Bounty*.' We all wanted to be Fletcher Christian."

She determined to see Pitcairn and began



DAVID HYDER

applying for permission. It took three years to get it. "The Island Council granted me a permission right away," she said, "but the governor of Pitcairn wouldn't. He was in Fiji in those days. He thought I was a romantic Eskimo and was doubtful about my reasons for coming here. I just stated that I had fallen in love with Clark Gable when I was 12 years old, because he was Fletcher Christian in the first *Bounty* film. He didn't like that."

Kari was eloquent about the Pitcairners.

"As a group of people they are quite marvelous, something special," she told me. "They have developed a special kind of communication—being together and laughing and joking and helping each other—that has been necessary for them to be able to survive through the centuries. They have still kept it, even in our days, though modern conveniences have come in, and though they are getting more from the outside world, more information and things that destroy the Pitcairn spirit bit by bit."



Taking a break from an endless string of chores, Charlotte and Charles Christian relax in their kitchen. Pitcairn houses are built with dunnage lumber



WELYNDA BERGG

thrown overboard by passing ships, acquiring a roomy but ramshackle appearance. Runoff from metal roofs provides all drinking water.

She had never been a religious person, but the islanders changed her. "God seems to be with them, everywhere," she explained. "I've heard them talk to God, and about God, as if He were next to them in their gardens, or in the boats, or sitting beside them on the sofa."

I had long talks with Oliver Stimpson, the pastor sent by the Seventh-day Adventist Church in America for a two-year stint on the island. Seventh-day Adventism has been Pitcairn's only established religion

since a missionary effort converted the whole community back in 1887. Church services and activities are one of the cornerstones of life for most of the islanders, and the pastor and his wife—providing philosophical and spiritual continuity as well as medical care—are interwoven with the Pitcairners every day of the year. Oliver was gentle, rather than evangelical, in his ministry to the islanders.

WILL the Pitcairners survive as a people? Their original island, Pitcairn, could no longer sustain a community were it to lose even two or three of its able-bodied younger men.

There has been talk of building a short airstrip on a flatland at Aute Valley, at the top of the island. In theory it would allow some departed Pitcairners to return, knowing that they could count on transport back off the island when it was necessary. It could make possible a miniature tourist industry—a dozen or so visitors at a time, living with island families.

But hard financial facts make the idea most unlikely. Governments don't build million-dollar airfields and establish new subsidized airlines on islands with populations of only a few dozen people. A regular shipping service could help revitalize the island, but the problem of numbers is the same. It's a 2,300-nautical-mile round trip from the nearest commercial port, Papeete on the island of Tahiti.

Richard Goodman, a tour operator in Oakland, California, is trying out a Voyage to Pitcairn Island package, taking groups of 15 travelers from Los Angeles to Tahiti by air and then sailing to Pitcairn aboard a 112-foot cargo schooner that could carry a useful load of supplies for the people of the island. The tourists pay \$5,000 for the journey, including two weeks of living on Pitcairn. If the venture is sustainable, it could mean some regular service, and some new income, for the Pitcairners.

If Pitcairn can't be kept going, the people will have to abandon it once again. Their most practical alternative home would probably be New Zealand, where so many of their relatives have moved. Or, perhaps, the island their forebears tried and rejected once before: Norfolk.



BOTH BY DAVID WHEEN

Day or night, when a ship like the Essi Gina stops (above), Pitcairners head out in longboats to pick up or send packages and barter with the crew. Twice a year or so authorities in Auckland send basic supplies such as fuel oil and heavy equipment. For anything else, islanders rely on freighters that stop less and less often. Lookouts in a Norfolk Island pine (right) search for a ship due soon.



Norfolk Island

Second home to descendants of the Bounty mutineers, Norfolk Island shares their legacy. The entire population of Pitcairn was moved here in 1856 when that island became overcrowded. A few families returned, but most stayed on to settle this 13-square-mile Australian territory. Today an airstrip links Norfolk to faster paced Australian society, but life remains slow enough for cattle to turn up in the main shopping area.



BOOTH BY DAVID HUBER

SINCE ARRIVING on Norfolk in 1856, the Pitcairners have grown in number and have admitted a trickle of new settlers to share their fertile, rolling hills and valleys, their benign climate, and their coral-reefed beaches.

Those first Pitcairners on Norfolk landed less than 100 years after their family tree had taken root following the mutiny on the *Bounty*. A hundred-foot, three-masted merchantman, *Bounty* had been sent from England by King George III in 1787 to barter for breadfruit trees in Tahiti and take them

for replanting in the West Indies. They were intended to become a permanent, almost cost-free source of food for slaves in the British colonies there.

The mutiny on the *Bounty* is the most famous of all mutinies at sea, and it was probably the most gentle—although three of the mutineers were eventually hanged from the yardarm of a Royal Navy ship in Portsmouth Harbour.

Bligh wasn't a monster, though he was an authoritarian captain with a quick temper and a woundingly sharp tongue. As *Bounty*



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Stately as a colonial plantation, these buildings along Quality Row in Kingston served as military barracks in Norfolk's dreaded penal colony until 1856, when the



DAVID HISEK

island was turned over to the Pitcairners. Designed for dangerous criminals, the colony was "a place of the extremest punishment, short of death."

left Tahiti in April 1789 with its cargo of breadfruit plants, he shrieked at his crew—"damned thieving rascals!"—and vowed to drive them mercilessly on the hard voyage ahead. On the 27th of April, three weeks out, he hounded and humiliated his 24-year-old acting lieutenant, Fletcher Christian, calling him a scoundrel and a liar.

Other crew members whispered to Christian that if he would take the lead in a mutiny, most would follow him. He agreed.

No drop of blood was spilled. There were cries of revenge and anger, threats and gestures, but the worst bodily harm was that Bligh's wrists were pinched by a rope.

They put Bligh and 18 loyal crewmen into a boat, with enough equipment and provisions to give them a chance—including Fletcher Christian's own sextant, a good one. Bligh thereupon made one of the historic open-boat voyages of all time, sailing 3,600 nautical miles through an unpredictable Pacific to Kupang, on the island of Timor, in what is now Indonesia.

Under Bligh's extraordinary skill and willpower the boat, equipment, and provisions saw them through, with 11 days' rations remaining when they landed.

Why the mutiny? Certainly the Tahitian women, climate, and life-style were dizzyingly attractive. But something else was probably at work too, something in the air, something in the times.

In 1789, a spirit of rebellion against the old order was alight in many eyes. Within weeks of the *Bounty* mutiny Americans were inaugurating George Washington as their first President, and the French were storming the Bastille and singing "The day of glory has arrived." In a way the same day had dawned for Christian and his mates off the island of Tofua in the South Pacific.

The mutineers jettisoned the breadfruit cuttings and returned to Tahiti. Christian and eight others, together with a handful of Polynesians, finally sailed on to an uninhabited, mischarted island—Pitcairn. They burned *Bounty* and stayed. Their children, half English and half Tahitian, were the first Pitcairners.

TODAY THE PITCAIRNERS number 1,500 worldwide. Only 3 percent of them—45 people—still live on Pitcairn Island. About 160 reside in New Zealand, most of them families who left

WILLIAMS BRYCE



Pitcairn during the exodus of the 1960s. About 400 live in Australia, mostly people from Norfolk Island who left for better education and jobs in Sydney or Melbourne. (Many harbor a belief that they will return one day to Norfolk. Sometimes, when they die without returning, their ashes are ceremoniously sent for interment in Norfolk's small cemetery by the sea.)

Perhaps 150 or more Pitcairners live on Tahiti and other islands of French Polynesia. There are a few scattered elsewhere on islands in the Pacific and even in countries farther away.

The rest, nearly half of the Pitcairners, live today on Norfolk Island. It was almost exclusively theirs until World War II, when a small airstrip was built by the Allied forces in the Pacific. With air service, after the war, tourism began to boom in a small way. Newcomers moved in, attracted by reports of job and business opportunities in paradise. Islanders fretted about a "rush to big-city ways" when Norfolk's first—and still only—streetlight was placed at Middlegate intersection.

The airport has been upgraded to handle medium-size jets, and regular flights bring

in some 20,000 visitors a year from Sydney and Brisbane, Australia, and Auckland, New Zealand.

"Financially, people are far better off than in the early days," says Greg Quintal. "But life was more free and easy then. The islanders did not have very much, but they were much happier people. Now everyone is chasing the dollar."

Fortunately for Norfolk, most of the dollars stay on the island. Most accommodations are owned by residents, and the Legislative Assembly is trying to keep it that way rather than attract foreign investment.

Among the islands of the Pacific, Norfolk has been something of a miniature economic miracle in recent years, usually balancing its budget and having money in the bank rather than a national debt. It is governed under the authority of Australia, but receives no foreign-aid grants. The secret has been income from vacationing Australians and New Zealanders, worldwide sales of Norfolk's postage stamps, and frugal management. When the world recession of 1982 and 1983 reduced the island's revenues, necessary government spending was kept up by using some of the rainy-day money saved

Weaving a bond from one generation to another, Beattie Bigg (left) teaches her grandsons, Matthew and Simon, how to plait palm leaves for a Pitcairn-style basket. About a third of Norfolk's 1,800 people are Pitcairn descendants. Smaller numbers of Pitcairners live in New Zealand, Australia, Tahiti, and on several other Pacific islands.

At an administrative office in Kingston, Dolores Davies (right) puts together first-day covers of a new stamp series portraying great shipwrecks in the island's history. Philatelists around the world collect Pitcairn and Norfolk stamps, giving both islands a major source of public income. In 1982 Norfolk stamp sales brought in 750,000 Australian dollars, or 28 percent of the island's total income.



DAVID HILSER



Near the edge of a rocky coastline cliff, a graceful rider guides her horse over a jump during a day of equestrian trials. Island festivals, historical tours, low-duty



WELLSIA BERRY

shopping, and peace and quiet help make Norfolk popular with vacationers.

over the years, and the some 140 government employees—mostly Pitcairn descendants—helped by volunteering to do their work in 10 percent fewer hours, for 10 percent less pay.

The island's beauty and peace and its old-fashioned absence of taxes on either land or income have attracted several hundred families of settlers from New Zealand and Australia. Strict immigration and land subdivision control laws were enacted 15 years ago to keep Norfolk's small-farm countryside from becoming a new suburbia. But newcomers now somewhat outnumber Pitcairners on the island.

THE PITCAIRNERS' own language has been a powerful force in retaining their culture and keeping Norfolk their island. Jean Mitchell, an islander whose guesthouse, Aunt Em's, is known for its Polynesian feasts, tells her grandchildren they can't be real Norfolk Islanders if they speak only English.

"When we start talking 'Norfolk,' few outsiders can understand it," she tells me. "When somebody strange comes in, we speak slowly, and a little more English goes into it so they get some idea what we're talking about. This is in our upbringing, not to make outsiders feel strangers."

She tugs her grandson Gregory by the ear. "You know what 'eeyulla' means? Well, it's somebody that thinks he's grown up when he's not." Gregory whoops with pleasure and races out of Aunt Em's kitchen. Jeannie almost dissolves in laughter. "He can't get home fast enough to call his brother that," she beams.

The language was patched together between the *Bounty* mutineers and their Tahitian wives. It's a rollicking, seagoing, farmer's lingo. Jean Mitchell says, "It has a definite wit. A few words in Norfolk take quite a bit of explaining in English."

I have lived on Norfolk since the late 1960s, and was editor of the *Norfolk Island News* for a number of years. When islanders rip into a cross fire of their own jokes and gossip, I'm as mystified as a visitor just off the plane, but bits of it are easy. *Whattaway* is "how are you?" and *morla el do* is "tomorrow will be soon enough" and *weckle* is prepared foods: heavy, breadlike puddings

baked in banana leaves, succulent roast pig, the buttery sweet potatoes called kumara, tangy pastries baked full of periwinkles, which the Pitcairners call *hi-hi*.

Mavis Hitch, a woman with striking Tahitian features, is seriously concerned about the islanders' folk traditions. "I am a descendant of the *Bounty* mutineers—and the Tahitian women," she emphasizes. "Their heritage is worth saving."

At the moment she is weaving a hat from *mu-u*, a strawlike plant Pitcairners have worked for many generations. Later in the day she'll be coaching island girls to dance the hip-swinging Tahitian *tamoure*, which was doubtless a factor in the mutiny. "I don't think any Norfolk Island girl has been to Tahiti," she explains to me, "but whenever they hear the music, they get lost in it. When I'm teaching a pupil for the first time, you turn the music on and it does something to them. It's there in them."

In the late 1970s something else got turned on: television. Norfolk has no TV station yet, but nearly half the families have videotape sets. Shows recorded and mailed by friends overseas come in continually, and gradually make the rounds through island homes. There is talk of a broadcast satellite to be put up by Australia, which would be receivable on Norfolk. Can hat weaving and the *tamoure* compete with reruns of "Hawaii Five-0" and "Perry Mason" on the TV set day and night? The question remains in the Pitcairners' future.

A FUNERAL IS COMING to an end at the little cemetery at Kingston on Norfolk. At the seaward edge, where the white Pacific combers roll in, are the headstones of officers and convicts from the island's prison era. Then those of the settlers from Pitcairn Island, and then their children, interspersed with those of "mainlanders" who have ended their days here.

The grave has been dug by volunteer workers. The simple, cloth-covered coffin has been made without charge by the Norfolk government.

"And so another person has joined this growing little community down here at Kingston," says the Catholic priest, Father Des Scanlon.

The band of mourners sings the Pitcairn

To remember the day in 1856 when their forebears came ashore to take possession of the island, Norfolk residents each June 8 hold a gala celebration known as Bounty Day. All dressed up in the style of the first Pitcairn settlers, Peter and Juliette Yager (right) join a march from the Kingston jetty to the restored buildings of the former penal colony. Amid the ruins of the old jail walls, groups of families get together for a quiet picnic or an elaborate feast (below) of roast suckling pig and other Polynesian and Norfolk delicacies. There may also be a rugby match, a historical speech or two by government officials, and hymn singing in the cemetery.





BOTH BY DAVID HESSE



anthem, in three-part harmony. The words come from the Gospel of Matthew: "Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me." And hence the single-word motto on Norfolk Island's coat of arms, bestowed by Britain: Inasmuch.

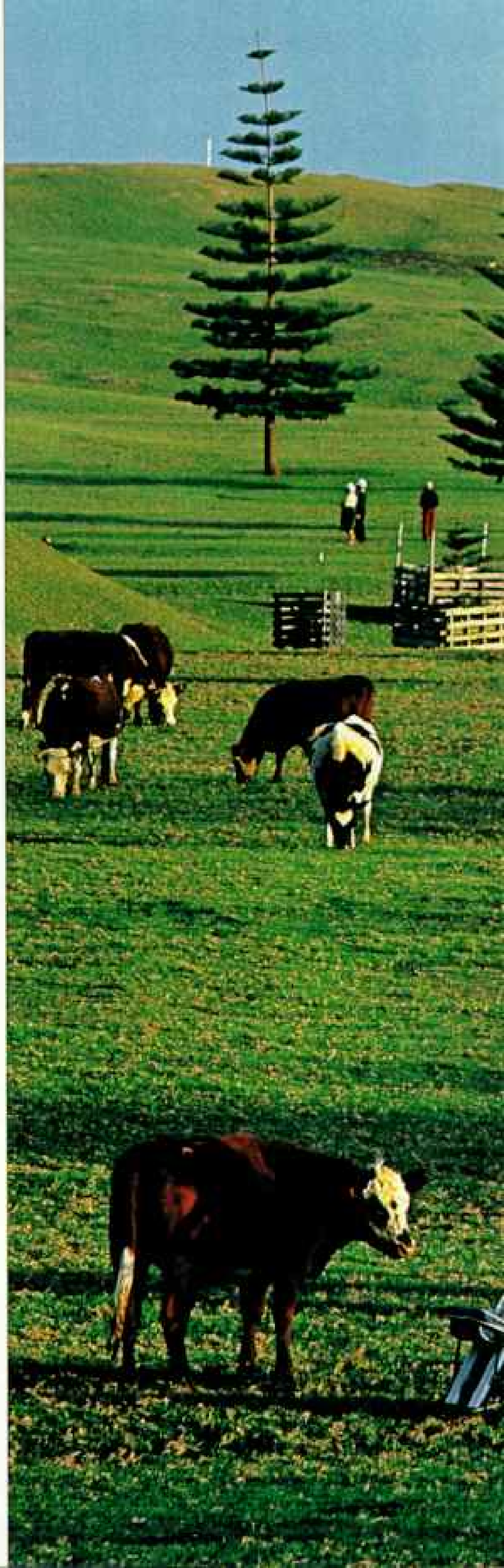
When I journeyed to Pitcairn, I carried a letter from Norfolk's Society of Descendants of the Pitcairn Settlers. Island Secretary Ben Christian read it to a public meeting in the courthouse in Adamstown: "We would like to take this opportunity of making it known, that should at some future stage any members of your Island community feel that they would like to resettle on Norfolk, it would be our privilege to help you in any way possible."

Andrew Young had visited Norfolk and liked it. "If I *had* to move away, I would move to Norfolk," he admitted to me. "Why I say I like Norfolk is because people there make you feel at home, while in other places you go, such as New Zealand, you feel you are in a strange place. You just don't know how to move."

Leaving the Pitcairners, waving farewell as they sang "In the Sweet Bye and Bye" from their longboat, I had to force back tears. Perhaps, I thought, they can hang on, loving the place because of and in spite of its hardships and isolation. If they can't, I hope at least some of them will give Norfolk a try.

For the Pitcairners on Norfolk Island the challenge is much less pressing but is more insidious. If the ways of the outside world continue to homogenize them, they will one day be as little different from their mainland neighbors as the descendants of "the original settlers" are in almost any place. But I think their chances are good. I think they will go on speaking their pungent language, marching at Bounty Day every June 8, and singing the Pitcairn anthem for a very long time. □

No handicap to seasoned island golfers, a herd of cattle grazes peacefully on the links. More modern in many ways than isolated Pitcairn, Norfolk still retains a bucolic tempo as it strives to preserve the Bounty legacy. MELINDA PEROE







Veiled by falling snow, Japanese cranes gather on the island of Hokkaido.

THE JAPANESE CRANE,

TEXT AND PHOTOGRAPHS



Japanese law proclaims the graceful bird a "special natural monument."

BIRD OF HAPPINESS

BY TSUNEO HAYASHIDA



COURTESY HOKKAIDO LTD., TOKYO

SYMBOL OF LOVE, a tancho, or red-crowned crane, adorns a yogi, an 18th-century coverlet, (above) in Tokyo National Museum. A favorite motif of Japanese artists, it also appears on scrolls, screens, porcelain, lacquer ware, and bronze mirrors.



SOLITARY SENTINEL (right) braces against sub-zero cold. One of 15 species of cranes, *Grus japonensis* inhabits portions of China, Siberia, Korea, and eastern Hokkaido near Kushiro (map, below). Threatened by hunting and loss of habitat, Japanese stocks dwindled from thousands of birds to a mere 33 in 1952. Conservation laws and establishment of a refuge in Kushiro marshland helped restore the population to its present level of 319 birds. China, Siberia, and Korea hold perhaps 700 more.

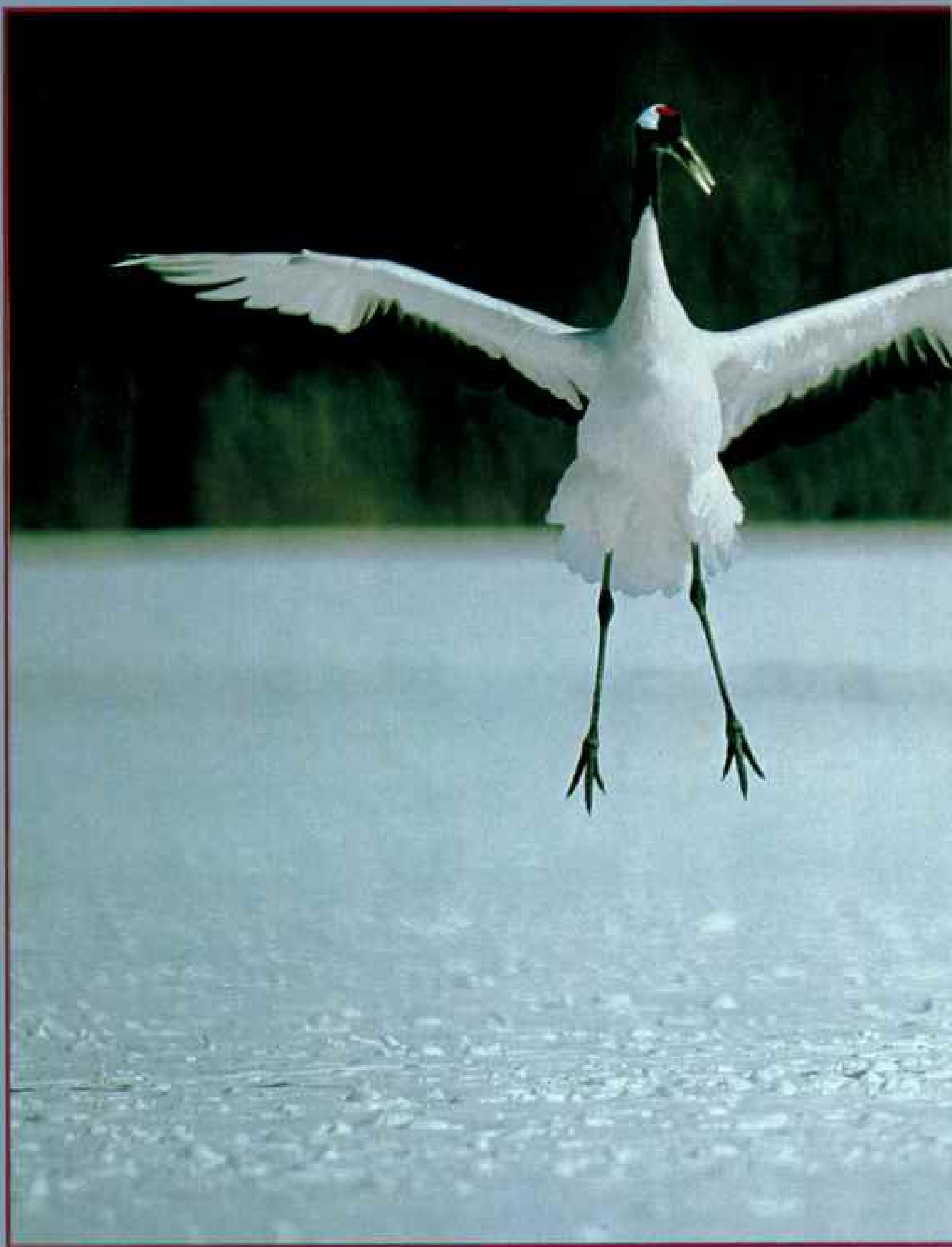
Historically revered by Japanese, the crane symbolizes happiness, longevity, and marital fidelity – the birds usually mate for life. The Ainu, Hokkaido's aborigines, worshiped it as Sarurun Kamui – God of the Marsh. Among the largest of cranes, the bird stands nearly five feet tall, weighs an average of 22 pounds, and can live more than half a century. Males and females are indistinguishable save for the latter's slightly smaller size. Both display the red crown peculiar to the species.

The male crane at right assumes a classic pose: wing outstretched to ease cramped muscles, one leg tucked under body feathers to shield the limb against temperatures as low as minus 4°F. The bird warms one leg, then the other, occasionally protecting its beak in the same fashion.

Cranes in Hokkaido spend the winter months at feeding grounds where local authorities substitute corn for the birds' summer diet of fish, frogs, and insects. In early spring adult pairs mate and fly to nearby summer nesting grounds. By contrast, the cranes in Korea and southern China migrate thousands of miles each spring to northern China and Siberia.

Several photographs in this article were originally published in *The Japanese Crane*, by Kodansha International, Ltd., of Tokyo.





AIRBORNE SUITOR leaps aloft with wings outstretched in invitation to his mate to dance. During spring the maneuver often precedes mating, though cranes dance year round out of sheer exuberance. Females as well.



as males may initiate the dance; mated couples generally perform together. Such antics are contagious: If one crane in a flock begins to dance, the action frequently spreads through the entire group.



MOMENT OF MATING (above) unites the male crane atop the female in a brief encounter. To steady himself, the male flaps his wings while crouched on the female's back. Here she rests her beak on the ground in a three-point stance to support his weight. Mating completed, the male slides forward over the female's lowered head and stands upright, wings still extended (right). He bows, she bows, and the ritual is complete.

Mating couples repeat the process two or three times a day well into the nesting period. Females who collapse under the weight of a male may be punished with a series of irate pecks. Males occasionally suffer injury to their feet or legs, rendering them incapable of mounting females.









LOVER'S LEAP lifts a courting crane high above its partner during a mating dance (left). In this form of courtship one partner jumps repeatedly in the air while the other circles below with wings outstretched. The performance lasts a few minutes, then roles are reversed. In the finale the couple strikes a courtship pose (above) in which the male flexes his muscles while his mate looks on.

Gathering speed for takeoff, two cranes (below) lumber across a feeding ground. Because of their weight, the birds require a run of more than 30 feet to become airborne. Every two years adult cranes molt their flight feathers and remain grounded for as long as two months.



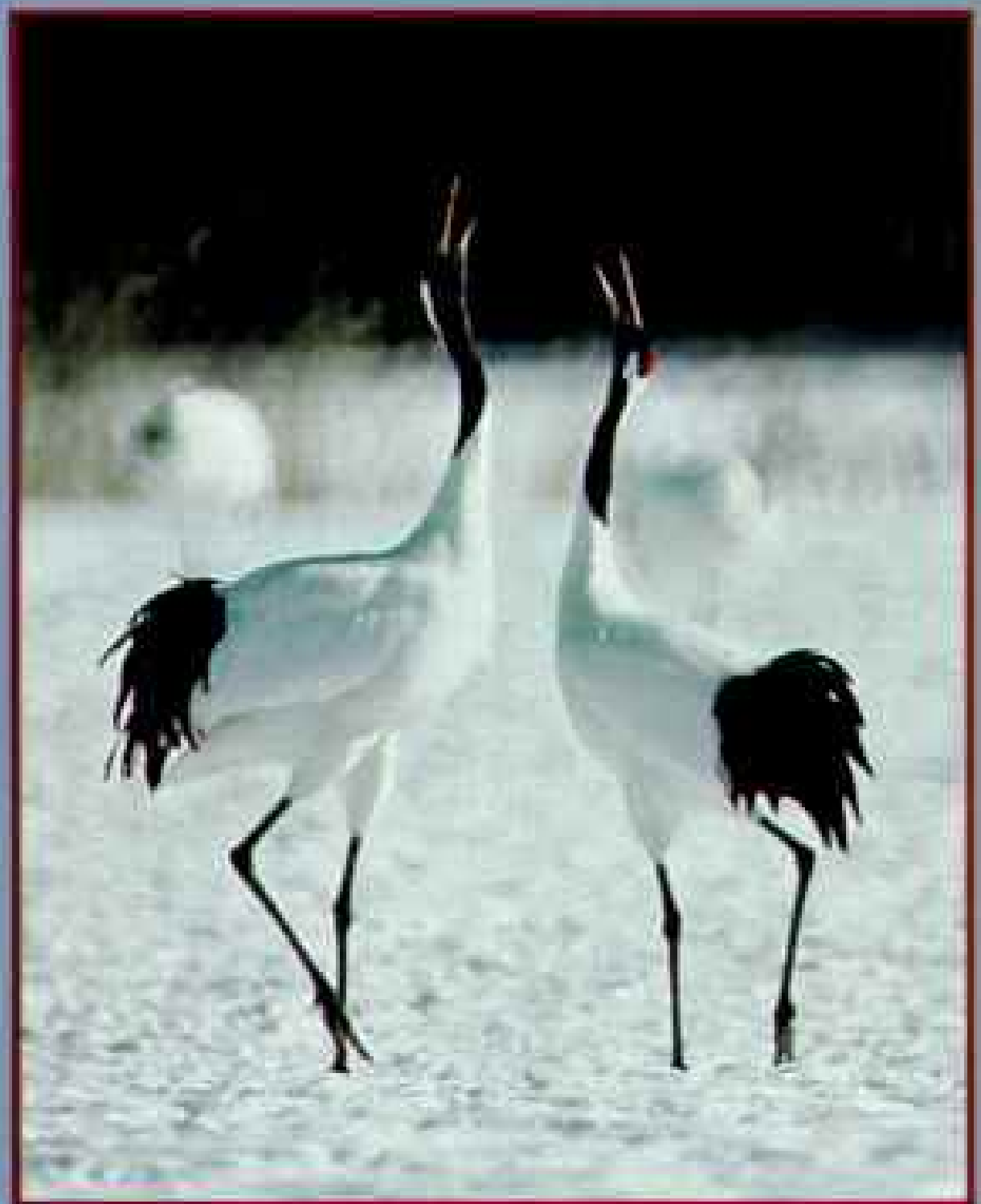


GRACEFUL FORMATION skims above snow-mantled hills en route from overnight roosting grounds to feeding areas. Unusually strong fliers, Japanese cranes may attain speeds approaching 40 miles an hour and



altitudes of several thousand feet. Yet they are no match for the common crane, capable of migrations from Siberia across the Himalayas to India at heights exceeding 30,000 feet – normal cruising altitude for commercial jets.





GLAZE OF WINTER forms a backdrop for cranes roosting in the Akan River (left). Though air temperatures dip well below freezing, the river remains many degrees warmer. Such scenes inspired the great 17th-century Japanese poet Bashō to compose a haiku to cranes along a seashore:

Cool seascape with cranes
Wading long-legged in the pools
Mid the tideway dunes.

A pair of cranes (above) joins in a duet, or “unison call,” often issued as a territorial warning. Such calls may be heard a distance of two miles, giving rise to the Japanese expression *tsuru no hitokoe* – “the voice of the crane” – meaning a tone of authority.



SOLO GAME OF CATCH occupies a young male crane with a corn husk. Tossing it in the air, the bird leaps to the same height, catching it in its beak or letting it fall.

A weeks-old chick (right) accompanies its male parent in a government preserve established to ensure the cranes' survival. Nests are built on the ground and tended by both parents during the four- to five-week incubation period. Though females normally lay two eggs, often only one chick survives. Foxes, wild dogs, crows, and birds of prey account for most casualties. This chick will fly by the age of three months but will remain with its parents almost a year. At that point the parents abandon it — to a life on its own. □



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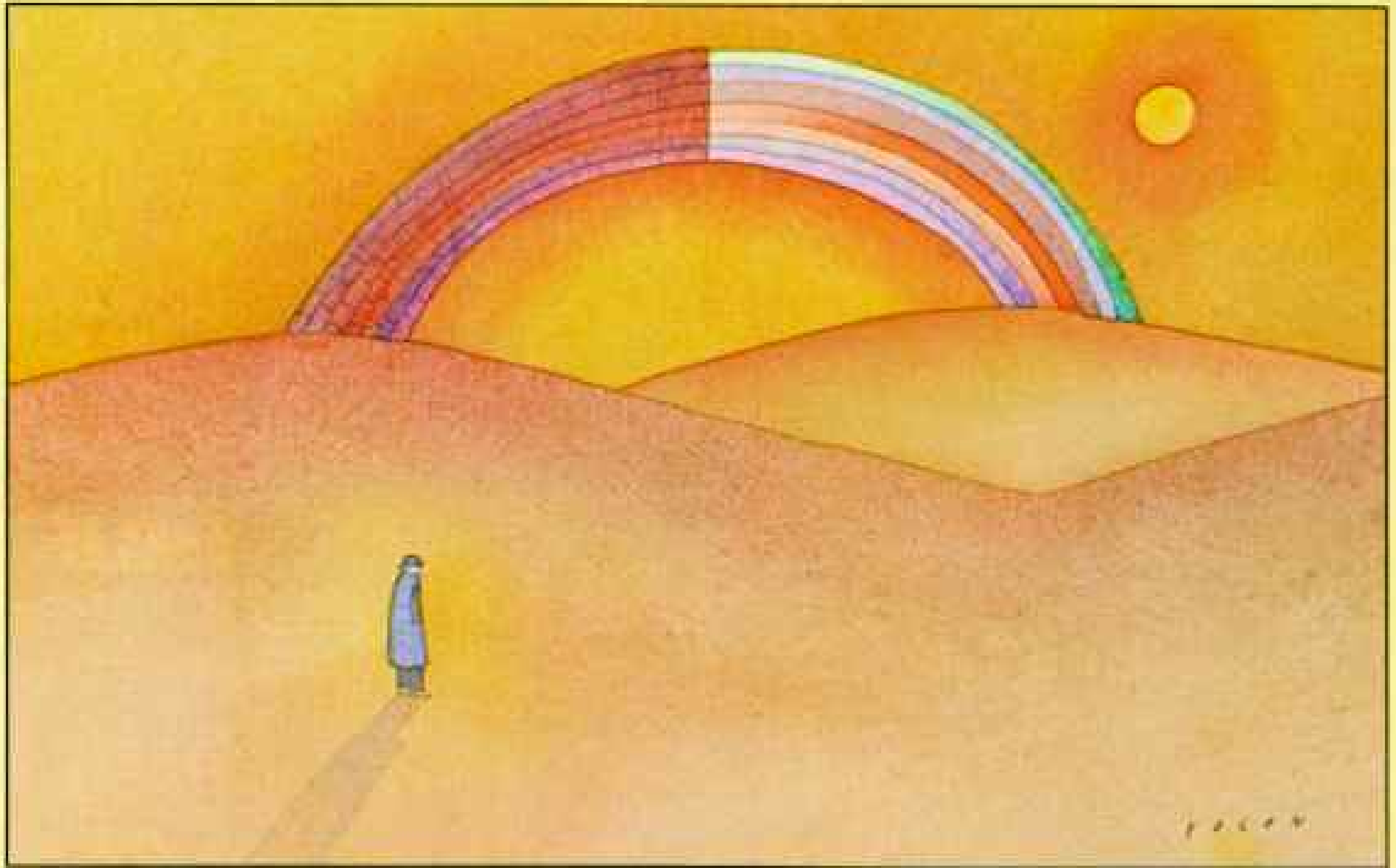
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T W O T H O U S A N D

ENERGY OPTIONS

The Practical and The Promising



The energy crises of the 1970's jolted America into greater awareness of alternative energy development. The question is, how much will the new alternatives be able to supplement our major energy sources?

Although overall energy demand in the U.S. dropped slightly over the last decade, the use of electricity actually rose more than 20 percent. This electrification trend has gone on throughout the century and is expected to continue. The United States Department of Energy recently reported that "the economy is very likely to turn increasingly to electricity for its energy requirements."

As this reliance on electric

energy continues to grow, *all* the resources that can generate electricity are being examined. Some of the alternatives are discussed here.

Sun, wind, earth, and water

SOLAR. For the heating of water, solar systems are now economically competitive in some regions of the U.S. with plenty of sunshine. Also, there are new buildings benefiting from "passive" solar designs. They utilize the sun through nonmechanical means such as skylights and heat-storing rock beds.

For the generation of electricity, however, solar technologies are in early stages of development. Although some limited uses are being made,

solar electricity is still too expensive for widespread practical use.

One possible system is the solar-thermal electric station, or "power tower." A small solar-thermal plant in the Mojave Desert uses a large field of mirrors to track the sun and focus its heat onto a centrally mounted steam boiler that drives a turbine-generator.

Another solar electric technology is photovoltaics. It uses silicon or other semiconductors to convert the sun's rays directly into electricity.

WIND. Wind power depends on geography. It is most promising where winds are strong and steady.

Some of the larger wind projects have had problems. But they are being addressed,

and utility companies today are involved in well over 100 wind-power research proj-



Reliability and strength of the wind play an important role in the location of "wind farms" like this one in Allamont Pass, east of San Francisco. Wind generators are spread over hundreds of acres of land.

ects. California's Energy Commission has predicted a wind-power potential of 1000 megawatts for the state by the year 2000, if current trends continue. That's the equivalent of one major electric power plant, or approximately 2 percent of the state's present electrical capacity.

GEOTHERMAL. Geothermal energy is captured from hot water or steam created by hot or molten rock. 1300 megawatts of geothermal electric capacity are now available in this country, mostly in California.

HYDRO. Falling water generated almost 14 percent of the nation's electricity last year. Most U.S. sites for large-scale hydro projects are already in use, but there is potential for further development of low-head or "minihydro": the use of small and medium-sized dams, either newly built or upgraded. By 1985, there may be about 400 new small-scale hydro projects, largely in the Northeast. Hydro limitations include the environmental changes that can be caused by damming a river, as well as the uncertain reliability of power that is fed by rain and snow.

BIOMASS. This term refers to a wide variety of fuel sources, including plant and animal waste, wood, algae, and garbage. The largest user of biomass in the U.S. today is the forest products industry,

which gets about 50 percent of its energy from wood wastes.

Energy sources we can count on today

Some of our important energy options involve not new production technologies but more efficient ways of delivering and using energy. So conservation methods, including industrial cogeneration, will also help meet our energy needs.

With all of America's energy alternatives, it's easy to forget how much of our electric power will still be generated from conventional fuels. The Department of Energy projects that by the year 2000, over 80 percent of the country's total electricity generation will still come from the abundant domestic resources of coal and uranium.

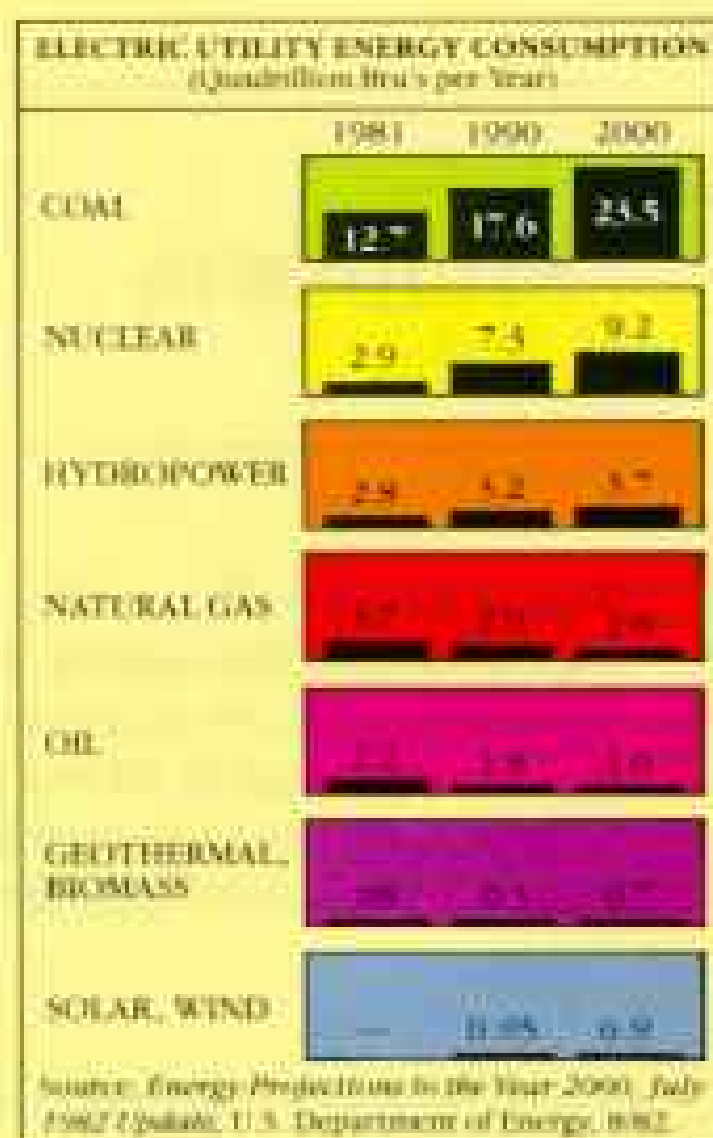
Oil and natural gas are more valuable fuels for transportation and manufacturing than for burning in power plants. Also, these fuels, especially oil, are subject to uncertainties over price and future supply.



We have enough coal in the U.S. to last hundreds of years. It is estimated that by 1990, electric utilities will be burning over 780 million tons of coal a year to supply more than half of America's electricity.

On the other hand, we have enough coal to last hundreds of years. Coal will remain our dominant source of electricity. And advanced technologies like coal gasification and fluidized-bed combustion are creating new ways to burn coal cleanly.

To secure a well-balanced



The Department of Energy foresees sizable growth for both nuclear energy and coal in this country's electrical future.

supply of energy, America is also relying on nuclear power. Aside from the 80 plants already generating nuclear electricity in the U.S., 56 more have been granted construction permits by the U.S. Nuclear Regulatory Commission. And they are being built.

A steady and secure supply of electricity is critical for a healthy economy. Some of the alternative energy sources discussed here may eventually become significant contributors to America's electrical supply; some may not. Whatever the future holds, we need to take advantage of the domestic energy resources already within our reach.

For a free booklet on *Energy Options* and the electrical future of America, send this coupon to:

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329

Information about energy
America can count on today

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Members Forum

UNIVERSE

"The Once and Future Universe" (June 1983) should be required reading. I learned more about the workings of the universe and physical workings of space than in all my previous 25 years. I also must say that this article contained some of the most breathtaking pictures I've ever seen.

Scott Golding
Austin, Texas

Simply elegant. Elegantly simple.

Leota Skirvin
Nashville, Indiana

Rick Gore quotes an astronomer as speculating that the universe might eventually collapse in a big crunch and possibly be reborn in a repeat of the big bang. Who is to say that that has not already happened? Perhaps we are now living in a rerun or second-hand universe?

James R. Bitgood
Laurel, Maryland

In the account of the expanding proto-universe, it is theorized that it reached softball size in 10^{-21} second, and solar-system size in a millionth of a second. These figures suggest the outward movement of "something" at speeds averaging perhaps 20 million billion billion times the speed of light for a couple of inches. How does the layman reconcile these speeds with Einstein's "nothing exceeds the speed of light"?

Colby B. Rucker
Arnold, Maryland

Einstein's 1905 theory of special relativity holds that matter cannot travel faster than the speed of light. But his 1915 theory of general relativity opens a loophole—the universe, or space itself, can stretch, and there is no limit to the speed at which this can happen. This allowed the universe to expand at rates far in excess of the speed of light just after the big bang.

I would like an explanation of the theory that the age of the universe is about 15 billion years when astronomers have detected quasars more than 15 billion light-years from the earth. Even traveling at the speed of light from the big bang, it seems obvious they would have been en route to that position at least an additional 15 billion years to emit their signals from that location.

Charles D. Anderson
Sierra Vista, Arizona

Scientists estimate the age of the universe at between 8 and 20 billion years. Quasars formed in the rapidly expanding universe sometime after the big bang. They, the earth, and all other objects in space have been racing apart ever since. The light of the most distant quasars we now can see has taken some 15 billion years to reach us.

Three-quarters of the way through the tumultuous article I was forced to put it down. I could no longer understand the words, the concepts, although I read with a fervor to comprehend. Mind refused to expand. Whereupon I looked out a window and saw a simple tree, another universe, expanding. And for a split second, 10^{-11} to be exact, I understood everything. I remembered my own self, and the sky was blue once again. Thanks for the journey and your great journal.

Caroline Wadland
Melrose, Massachusetts

Before using much more time trying to figure out where the universe was even before 10^{-43} second, I think astronomers and other "thinking" people should answer the questions God puts to us in Job 38:31,33 (The Jerusalem Bible): "Can you fasten the harness of the Pleiades, or untie Orion's bands? Have you grasped the celestial laws?"

Stephen M. Sturm
Delaware, Ohio

THAMES RIVER

Ethel A. Starbird's assertion (June 1983) that when the centurions left in 410, the population was "pretty much Romanized" is misleading. W. E. Hunt of Haverford College wrote in his *History of England*: "The Roman culture was too superficial in character to long survive the reversion [to a simpler mode of life]. No institutions . . . in Britain . . . can be assigned with any high degree of probability to the Roman period."

John Fooks
Windsor, Ontario

The Romans left their mark in the cities they founded and in roads and architecture. Citizens of Londinium were well steeped in Roman culture. But just as Europe slipped into the Dark Ages following the fall of Rome, so Roman Britain faded in the conflicts of the native Celts and the invading Saxons, Angles, and Jutes.

Enjoyed very much your article "The Thames: That Noble River." However, I question the caption for the photograph on page 779. If you are correct in stating that the excavation depth must be only six inches, then those mud larks in the photograph appear to be breaking the law.

Michael S. Heartfield
Ottawa, Ontario

Six inches is a depth not everyone adheres to.

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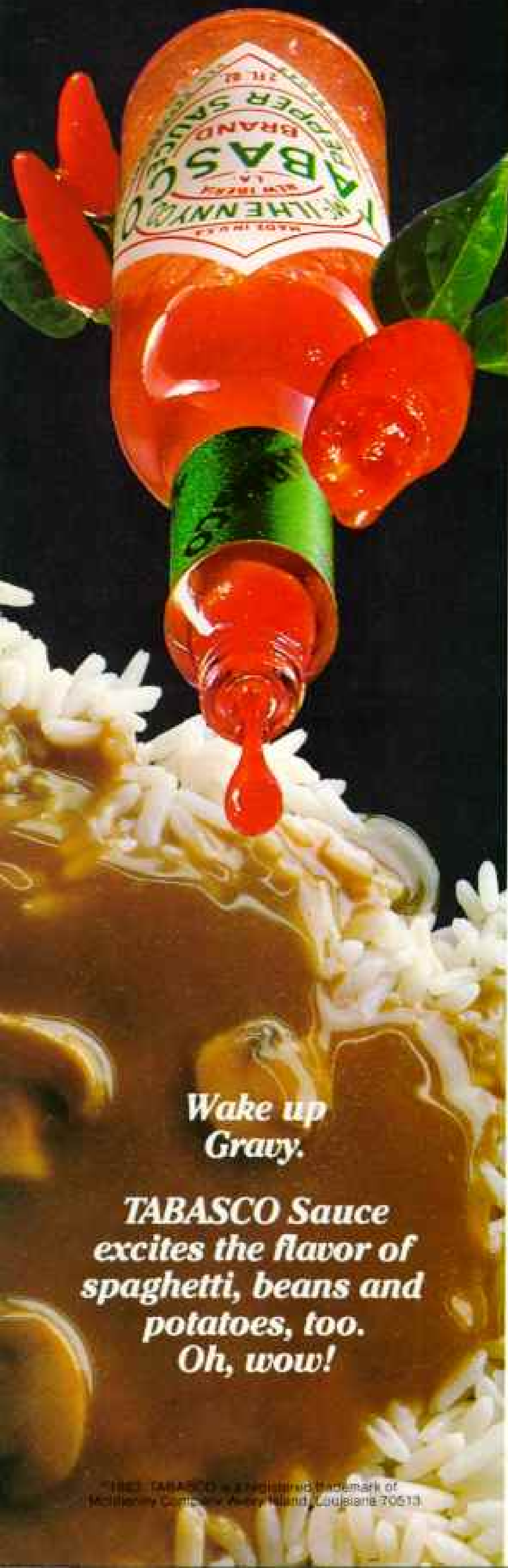
PLAYGROUND GEOGRAPHY

I share your concern about the geographic ignorance of many of our children and adults (Editor's Column, December 1982). We began a jumbo map of the continental United States on our playground; unfortunately, our paint is just about

exhausted. Could the National Geographic Society possibly help us complete this project?

John P. O'Connor
Baldwin, New York

We did. The entire student body of Milburn School surrounds the result.



**Wake up
Gravy.**

**TABASCO Sauce
excites the flavor of
spaghetti, beans and
potatoes, too.
Oh, wow!**

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In "The Thames: That Noble River" it is stated that Oxford's Somerville College has educated "two of the world's three women prime ministers—Indira Gandhi, . . . and Margaret Thatcher." If the reference is to current prime ministers, there are four: Mary Eugenia Charles of Dominica and Milka Planinc of Yugoslavia are the others.

Juan Jorge Schäffer
Pittsburgh, Pennsylvania

There are indeed four. Milka Planinc is considered a prime minister, though her official title is President of the Federal Executive Council.

MARY ROSE

"Henry VIII's Lost Warship" (May 1983): Another distortion of history by the masters of that art—the British. No serious reader will believe that the English fleet of 60 ships fought a French fleet of 235 to a standstill. Why not report the event from the viewpoint of a French historian?

Charles J. Semrad
New Iberia, Louisiana

The Battle of Portsmouth was only a tentative invasion attempt by the French. The superior tactics of the English fleet helped make up for their inferior numbers.

It is stated that "the cause of *Mary Rose's* death remained in doubt over the next four centuries." In *A Complete History of Transactions at Sea* (Josiah Burchett, London, 1720), it is stated the *Mary Rose* "was overset and lost, with her whole company." Any weekend sailor will recognize the meaning of "overset."

William P. Herzstock
Wolfeboro Falls, New Hampshire

A nautical dictionary defines "overset" as "to capsize." That was obvious, but what caused it was not.

ROADRUNNER

The roadrunner (May 1983) is not a flightless bird. I know from my own experience that the roadrunner indeed can and does fly.

Erwin G. Culley
Van Nuys, California

Roadrunners are not "flightless" in the same sense as are ostriches or emus. However, they are capable only of gliding short distances, often from tree roosts to which they have jumped or climbed.

Letters should be addressed to Members Forum, National Geographic Magazine, Box 37448, Washington, D. C. 20013, and should include sender's address and telephone number. Not all letters can be used. Those that are will often be edited and excerpted.

National Geographic, October 1983

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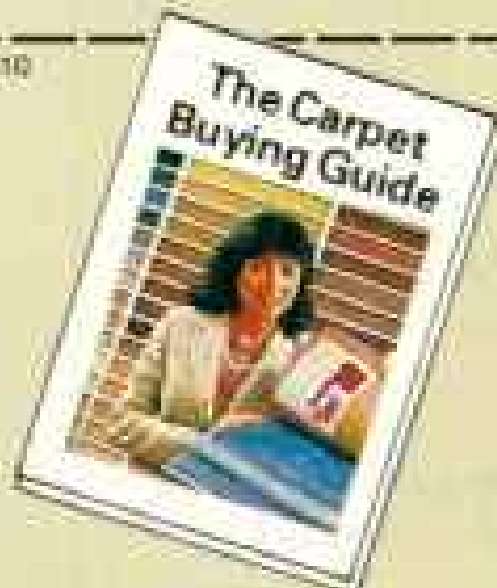
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Who Makes The Brightest Projection Television? Mitsubishi. Mitsubishi.

Very often, claims like brightest, or sharpest are passed off as just so much more advertising puffery.

Well, such is not the case with Mitsubishi projection television.

For, whether you're talking front projection or rear, the brightest, the sharpest picture commercially available

is brought to you by the people bringing you this ad.

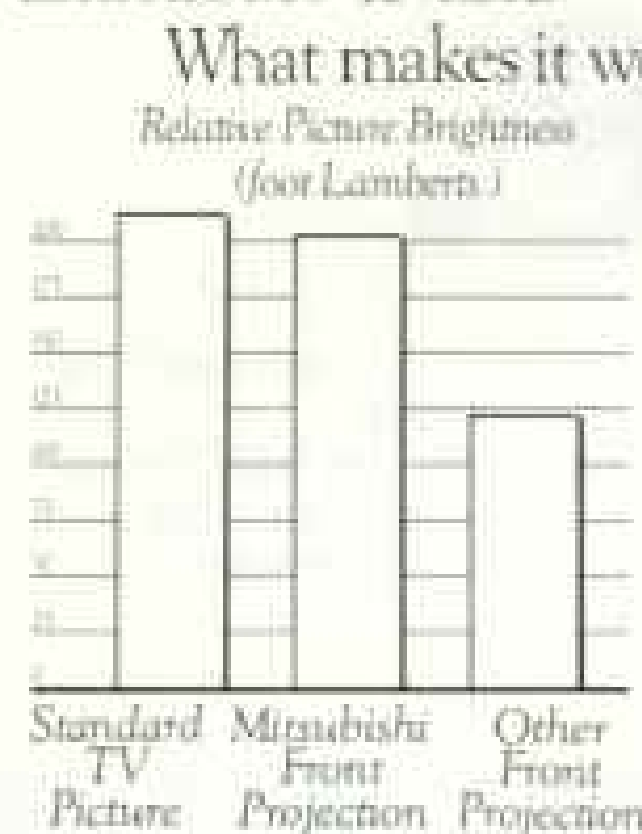
YOU'RE LOOKING AT THE
PROJECTION TELEVISIONS MOST
PEOPLE ARE LOOKING AT.

Indeed, your own critical eyes have made our sets the best sellers in either



Simulated TV picture.

category. A fact that is even more remarkable when you consider that Mitsubishi's are generally higher-priced and harder-to-find.



And equally impressive as the picture on the screen is the Mitsubishi technology behind it.

Three state-of-the-art, 7-inch cathode ray tubes (CRT's) specifically designed by Mitsubishi for projection TV use only.

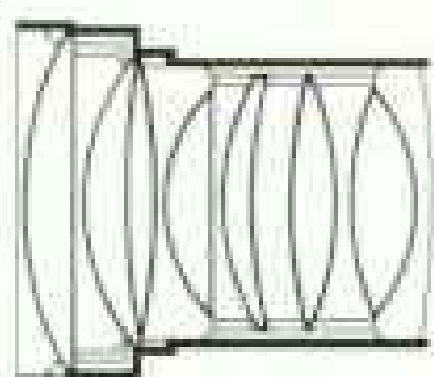
A six-element lens instead of the more common, cheaper three-element

lens. Glass lenses instead of the plastic lenses many are content to use. (Each Mitsubishi lens is precision-ground from costly optical-quality glass, then coated to further reduce reflections that rob contrast.)

Also contributing to the color purity and fine picture detail are features like electromagnetic focus and front-plated, optical-quality mirrors.

Capturing the high-resolution

and the trip is, finally, big-screen television (over four feet measured diagonally) with the brightness and overall picture quality



Mitsubishi's 6-element glass lens vs. conventional 3-element plastic lens. There is no comparison.

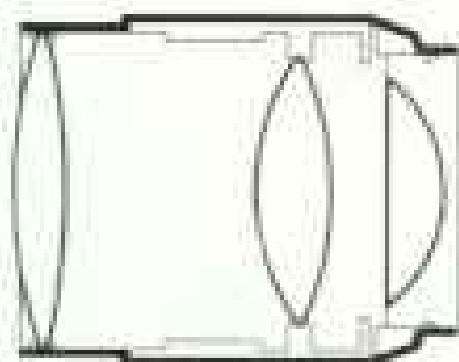


image is a screen that displays a minimum of 120 degrees of viewing, giving you a bright, undistorted picture from just about any seat in the house.

Pry your eyes from the picture, and you'll notice just about every amenity ever found on a television. Not the least of which is a wireless remote control that puts you comfortably in command of up to 20 functions, including power, volume, 139 channel cable-ready random-access tuning and tint adjustment.

And wait until you hear how Mitsubishi projection television sounds.

Two separate amplifiers and speaker systems, with bass,

treble and balance control, deliver exceptionally clean, crisp stereo from



Close its doors and the screen is discreetly hidden from view.

stereo video discs, stereo cassettes, and stereo simulcasts from the built-in digital FM tuner.

The real beauty is that all this high technology comes discreetly hidden in the fine, hardwood-finished, meticulously-crafted furniture you see here. The 50-inch front-projection VS-524R. The 45-inch rear-projection VS-453R.

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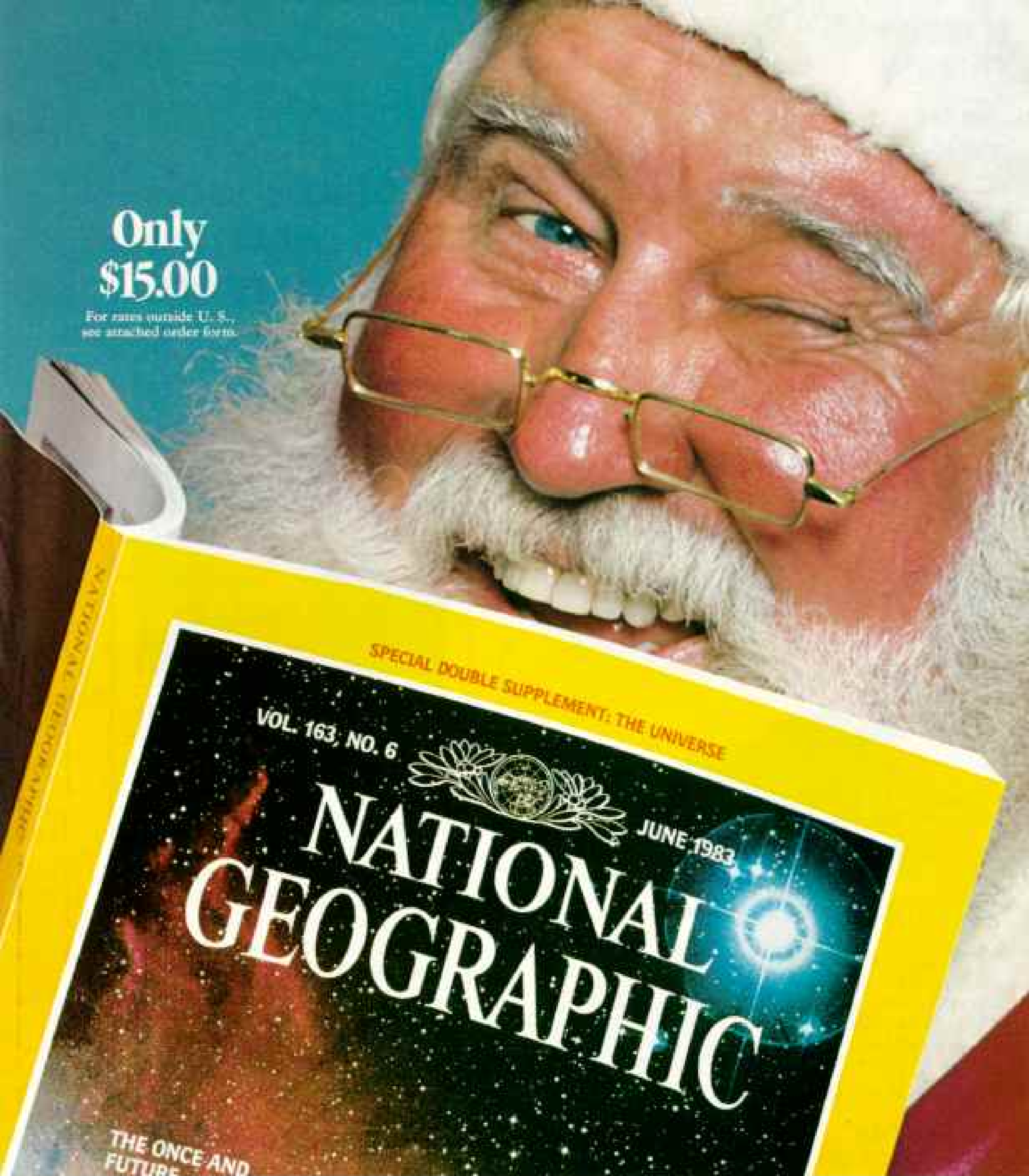
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American Heart Association

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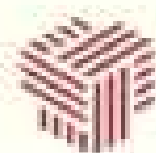


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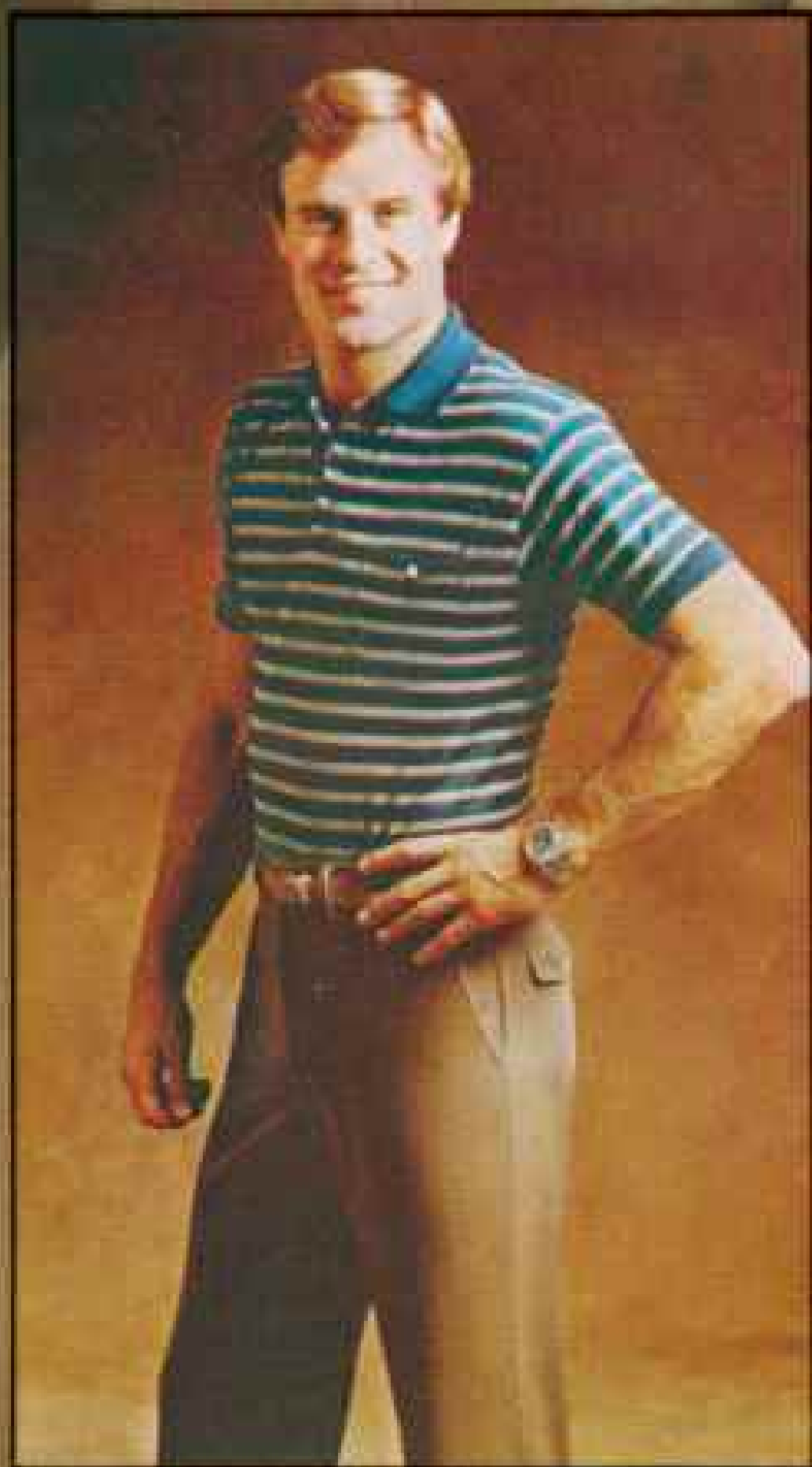
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2 This is the first time in history that the U.S. Mint has issued Olympic commemorative coins.

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4 All profits from the sale of the coins will go toward the Olympic effort for training expenses, the ever-rising costs of sending our team to the Olympic Games, and the staging of the Games in Los Angeles in 1984.

5 These are "coins of the realm" which, as legal tender, will be highly prized by collectors.

6 The coins are works of art. The 1983 silver dollar coin was designed by Elizabeth Jones, chief engraver at the Mint. The front of the coin shows a dramatic depiction of the classic Greek discus thrower. The 1984 silver dollar coin was designed by Robert Graham, a renowned Los Angeles sculptor. The front of the coin bears a representation of the Gateway to the Olympic Coliseum. The 1984 gold ten dollar coin was designed

by John Mercanti, a member of the U.S. Mint engraving staff, developed from a concept created by James Feed, a visual information specialist at the Mint. The coin captures the penetrating scene of the Olympic Torch bearers in delicate detail.

7 The 1984 Olympic commemorative coins are handsomely packaged and protected. There could be no greater thoughtfulness for special gifts than an Olympic commemorative coin. They are a memento of a great event and will become a possession of lasting value. Most importantly, they may serve as an inspiration; not everyone can be an Olympic champion, but with sufficient opportunities we can all achieve our personal goals.

8 The cost is minimal. For only \$32 you can buy a U.S. proof commemorative silver coin that will help our U.S. Olympic team compete in the Games.

9 These magnificent commemorative coins are "proof" coins produced by a technique involving specially pre-

pared dies and planchets and special multiple striking, resulting in particular sharpness of detail and a high luster. The result is a brilliant mirror-like finish and high square edge—"a gem coin."

10 Even though the value of silver and gold fluctuates daily, the fair market value of the gold in your coin is approximately \$200, and of the silver approximately \$10*. All sales will include an Olympic contribution of \$50 for each gold coin and \$10 for each silver coin sold.

11 Each set includes an official message of validation signed by the Director of the Mint describing all you might wish to know about your prized acquisition.

12 It is easy to buy the coins. Just fill in the order form, enclose a check or your credit card number and mail it to the U.S. Mint.

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*Based on a price of \$415/oz of gold and \$10/oz of silver.



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On Assignment



PONTIFICIA/POTIQUANFIS

RETRACING THE LIFE and times of Martin Luther for the 500th anniversary of the theologian's birth, Assistant Editor **Merle Severy** met Pope John Paul II (**above**) and enjoyed considerably more cordiality than Leo X accorded Luther, excommunicated in 1521 for his radical teachings.

Tackling such blockbuster subjects as the Reformation is a familiar challenge to Severy, who last reported on the Celts, and whose article on the Byzantine Empire will appear in the December issue. "It's not everyone," he says, "who has met both Pope and Patriarch and gets to write about them in **NATIONAL GEOGRAPHIC** in a space of two months."

Severy joined the Geographic in 1954 and became its first Chief of Book Service, editing 20 volumes including *Everyday Life in Bible Times*, *Greece and Rome*, *The Renaissance*, and *Great Religions of the World*.

Off-hours he plays trumpet, piano, French horn, and flute. Conducting a student dance band at Columbia University in the early 1940s, Severy found rehearsals dissolving into laughter from antics of one tenor-saxophone player. "So I wrote a special cornball arrangement in which he played a mad conductor, breaking batons and throwing fits. That was

comedian Sid Caesar's debut. When Caesar later starred on TV's 'Your Show of Shows,' I got a job orchestrating his music."

IN SEARCHING out vivid images for her sketch pad and camera, free-lance artist-photographer **Carol Beckwith** throws herself into her subjects. Studying calligraphy in Japan, Carol lived in a Buddhist temple under the stern tutelage of a Zen master. Photographing the Masai of Kenya and Tanzania, she had red ocher and animal fat rubbed into her skin and hair to join warrior ceremonies.

For Carol's story on Niger's Wodaabe nomads, her first for the **GEOGRAPHIC**, she adapted her appearance so much that a documentary film crew couldn't distinguish her from Wodaabe women. "To tress my hair, the Wodaabe pulled so hard that for a few nights I couldn't sleep," she recalls. But when her guide, Mokao (**below**), urged her to permanently beautify her cheeks with tattoos, she tactfully declined.

The Boston native also photographed New Guinea tribesmen as part of a fellowship from the Boston Museum of Fine Arts. "I haven't given up painting entirely," she says, "but I've come to view photographs as more than mere documents. Using color, light, and form, I try to make them function as works of art."

MARY A. HURILL



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4. When are you likely to visit Alaska?

a. 1984 b. 1985 c. 1986 or later

5. What time of year are you likely to travel?

a. Winter (Dec. - Mar.)

b. Spring (April - May)

c. Summer (June - Sept.)

d. Fall (Oct. - Nov.)

6. Your Age _____

7. Have you taken a foreign vacation in the past three years?

a. Yes b. No

8. Have you been to Alaska before?

a. Yes b. No

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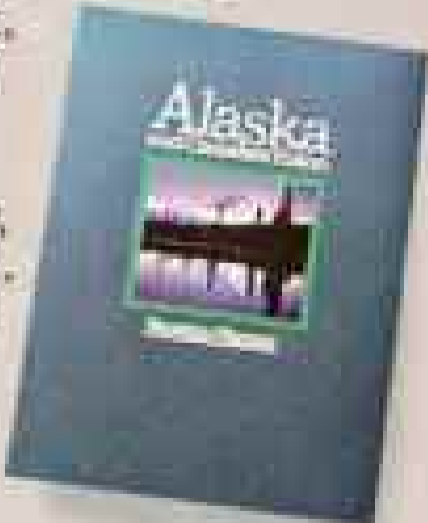
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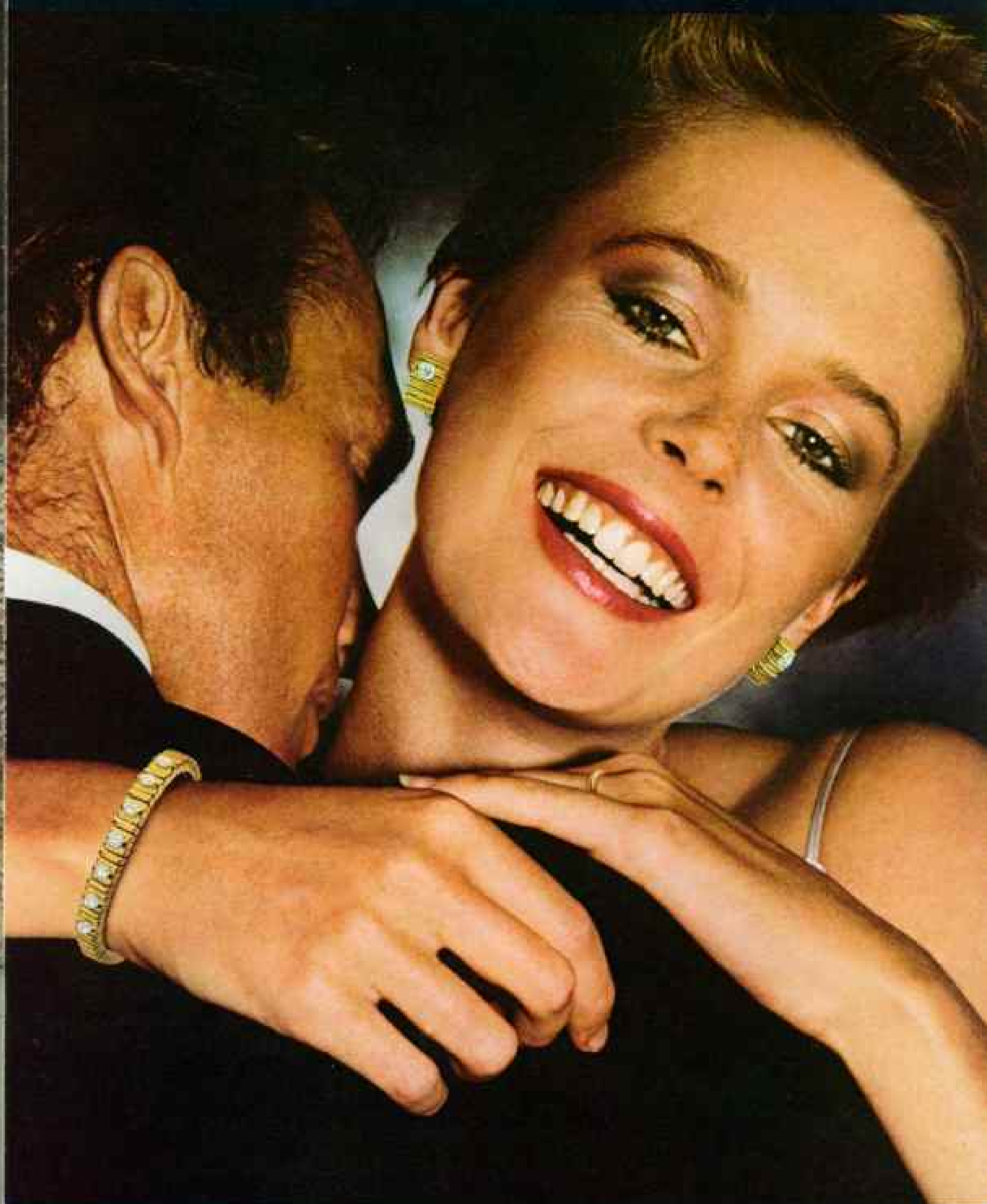
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Let her know how it's going.



Seven one-quarter carat brilliant cut diamonds give this extraordinary bracelet a total weight of 1.75 carats. Each of the matching earrings contains a diamond of one-half carat. If she's willing to share the pressures, doesn't she deserve to share the profits?

A diamond is forever. De Beers



ZENITH INVENTS THE NEXT STEP IN COLOR TELEVISION. THE SMART SET.

Thanks to cable, computers, video cassette recorders, video games, disc and more, your next television will have to do more things than ever before.

That's why Zenith invented The Smart Set, the only television with Zenith's exclusive



Exclusive Computer Brain

Computer Brain. All picture tubes change color balance over time. But only the exclusive Computer Brain senses these changes and automatically compensates, to keep the rich, true color Zenith is famous for.

And only The Smart Set is smart enough to give you 178 channel capability now, so you can receive every broadcast and cable channel offered in most areas.

Plus every Smart Set gives you the convenience of Zenith's most advanced Space Com-



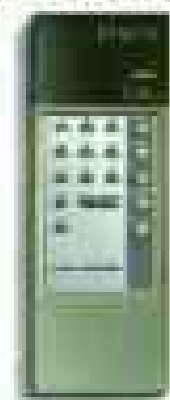
Broadcast and Cable

mand Remote Control. And some models offer Zenith's exclusive Space Phone.[™]

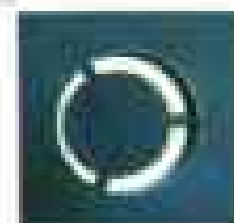
Every Smart Set model is built around Zenith's new Z-Tech chassis. It's so automatic it constantly monitors itself for outstanding picture performance and reliability. And only The Smart Set has Redi-Plug, for easy connection of currently available and future technologies such as broadcast TV stereo sound or selected tele-text and cable services.

Advanced System 3, The Smart Set, exclusively Zenith. Available in 19 different tabletop and console models, all with remote control.

Zenith makes desktop computers, too.



Space Command Remote Control



Exclusive Redi-Plug

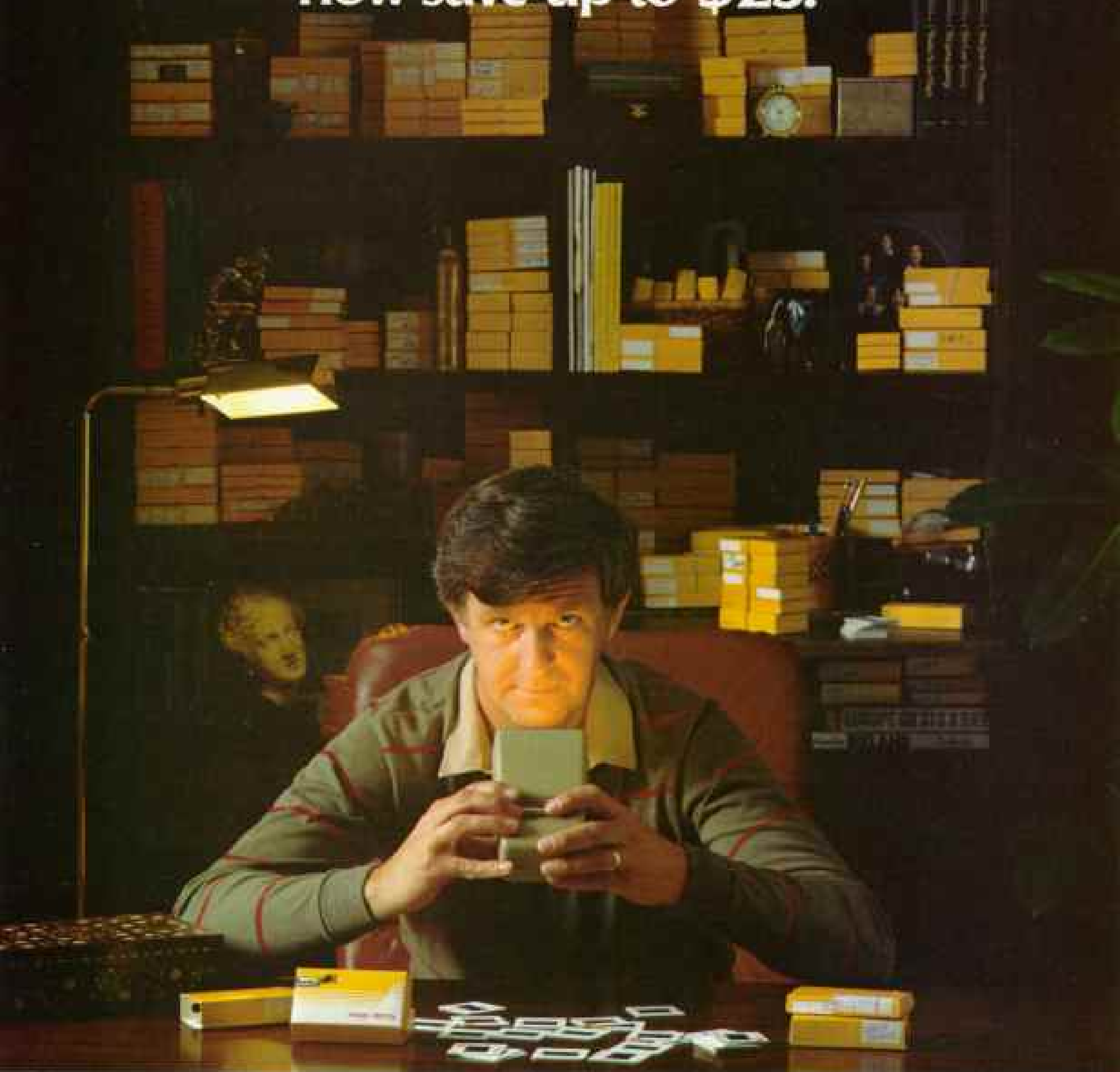
ZENITH
TELEVISIONS
SYSTEM 3

THE QUALITY GOES IN BEFORE THE NAME GOES ON.[®]



Model SZ2537K, The Satellite II shown. Unique space-saving design. Genuine oak veneers on top and ends. Simulated TV picture.

If you've been saving up for a Kodak Carousel® projector, now save up to \$25.



If you've been putting off buying a Carousel projector, you've been missing the brilliance, size, and clarity that only high-quality projection can give your slides.

Now Kodak has an enticing offer for you. Buy a Carousel projector, and get up to \$25 back.

You'll get a projector with legendary dependability. All models include gentle



gravity feed, an illuminated control panel, reading light, and more. Some models have our exclusive Slide-Scan screen. Buy one now and get money back.

Details are available at your local photo retailer. Purchase must be made by December 31, 1983.

Kodak Carousel projectors.

What a way to show!

© Eastman Kodak Company, 1983



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A royal crew to cater to your every wish.
Rare imported delicacies.
And entrée to bejeweled cities of the world.

Royalty?

Yes. Royal Viking

A large white cruise ship is docked at a pier. In the foreground, there is a historic building with a golden dome and a small boat. The scene is set against a clear sky.

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Photo: Norman Kest
Skydiver: Galahad Gibben

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Photographed by Dieter Plage. *Asian Elephant: Genus: Elephas Species: maximus*
Adult size: 244cm tall at the shoulder. Adult weight: 5 tons average
Habitat: Hill forests and grasslands in India, Sri Lanka, Burma, Thailand, Indonesia, Bangladesh, Nepal
Surviving numbers: Now estimated to be less than 35,000



Wildlife as Canon sees it: A photographic heritage for all generations.

From Hindu mythology to Persian miniatures to tales of the British Raj, the Asian elephant occupies a very special place in culture and tradition. A world without it is unthinkable. Until recently, this animal ranged in forests extending from India to Indonesia. Today, it is an endangered species.

The Asian elephant could never be brought back should it vanish completely. And while photography can record it for posterity, more importantly photography can help save it and the rest of wildlife.

Loss of habitat is the biggest threat to the Asian elephant. It is being edged out by rapidly growing human populations and land development. As a research tool, photography could help find a solution to the conflict between human development and the preservation of this animal. In addition, photography today can do for people throughout the world what folklore, popular theater and

festivals have done for Asians through centuries. It can help cultivate a proper appreciation and understanding of this wonderful work of creation.

And understanding is perhaps the single most important factor in saving the Asian elephant and all of wildlife.



New F-1

New FD500mm f/4.5L

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