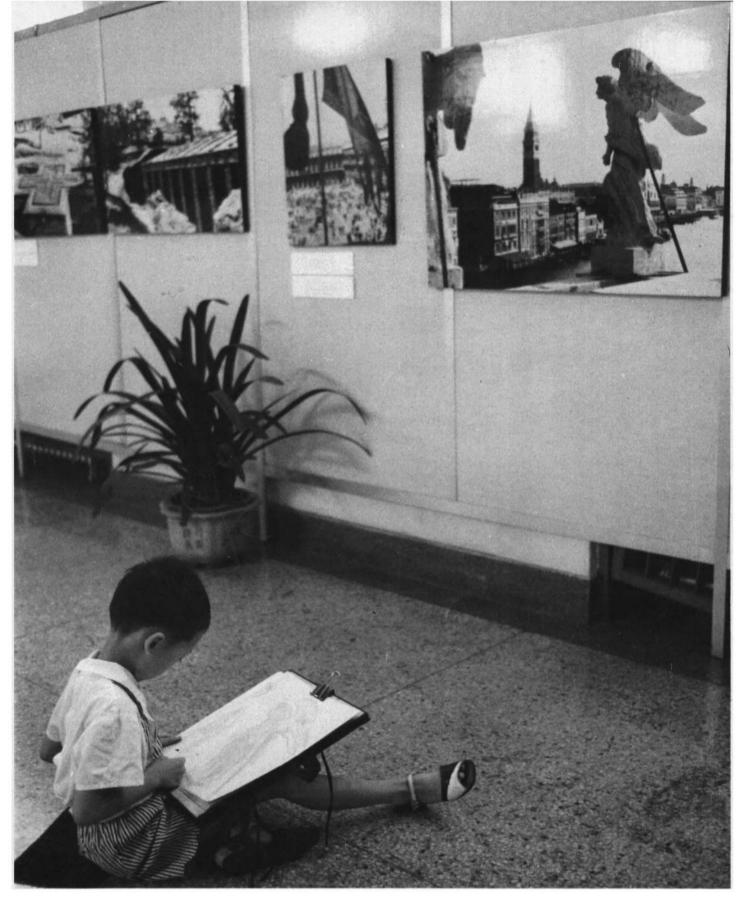
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Halley's comet The powers of language A giraffe's epic journey The Picasso Museum in Paris

Treasures of Mongolia





A time to live...

43 Luxembourg

Boundless visions

On the occasion of a Unesco-sponsored meeting of experts in the field of still photography, a photo exhibition entitled "Visions sans Frontières" was held in the city of Luxembourg from 11 December 1985 to 6 January 1986. Organized by the city authorities in collaboration with the Luxembourg National Commission for Unesco, "Vision sans Frontières" (an international association of professionals in the field of photography) and RTL Productions, the exhibition presented the work of several photographers including Luxembourg-born Edward Steichen (1879-1973). Among the works shown were a number of photos by Dominique Roger, including this one of a child learning to sketch during an exhibition on Unesco's work held at the Palace of Nationalities in Beijing in 1984. Photo Unesco-Dominique Roger

The Courier

Editorial

T the end of the nineteenth century the ruins of a vast city, "apparently watched over by a giant stone tortoise", were discovered in Central Asia. They were the vestiges of Karakorum, capital of the Mongol Empire founded in the thirteenth century by Genghis Khan and the jewel of the rich artistic and cultural heritage of the Mongolia of the Khans, a region whose influence was to dominate the history of Central Asia and reach as far as Asia Minor and Eastern Europe.

This issue of the Unesco Courier presents a glimpse of the artistic achievements of this ancient Mongol civilization, as well as a variety of other themes largely related to Unesco activities. Also under the heading "art" are articles on the magnificent Picasso Museum in Paris, opened last year, and on the great Chilean painter Roberto Matta, inspired by a recent retrospective exhibition of his work.

The "powers of language", a subject which falls within the scope of the social and human sciences, are explored in a thought-provoking article by a brilliant young French linguist, Claude Hagège, whose compatriot Elisabeth Badinter looks at the ways in which relations between the sexes are changing in the Western world today.

Two highly topical ventures in the fields of international scientific co-operation and communication between peoples—Halley's comet and the Channel Tunnel—also receive coverage in an issue which is completed by two features of broadly cultural interest: the curious history of the giraffe offered to the King of France by the pasha of Egypt in 1825 and the eventful biography of that enigmatic, evergreen figure from Latin America, the tango. Also in this issue, our usual 1986 feature devoted to the International Year of Peace.

Front cover: detail of a gilded bronze statue of the Buddha Vairocana (72 cm high, 46 cm wide) by the Mongolian sculptor Zanabazar (17th century). The symbolic hand gesture or *mudra* of this Tantric Buddha who "uproots stupidity and ignorance"—the upraised index finger of the left hand—is particularly remarkable. The statue is preserved in the Museum of Plastic Arts at Ulaanbaatar, capital of the Mongolian People's Republic.

Photo from Zanabazar, Eminent Mongol Sculptor, State Publishing House, Ulaanbaatar, 1982

Back cover: poster by the French artist Alain Le Yaouanc. Copies were sold in November 1985 for the benefit of Unesco's World Heritage Fund. Photo © Unesco

March 1986 ^{39th year}

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A major international venture to study a visitor from space by Howard Brabyn

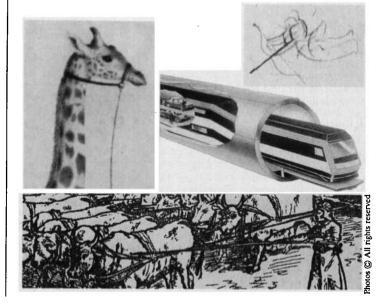
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Above, computerized photograph received from the European Space Agency's spacecraft Giotto when it encountered Halley's comet early in the morning of 14 March 1986. Picture was sent from about 1,500 km from the nucleus of the comet.

Rendezvous with Halley's comet

A major international venture to study a visitor from space

IKE courtiers dancing a stately quadrille, eight instrument-packed space probes (one launched by the European Space Agency, two by the USSR, two by Japan, and three by the USA) are weaving intricate patterns in space in the biggest international astronomic co-operative venture ever mounted—the investigation of Halley's comet.

Two space shuttle missions are also being in part devoted to observation of the comet, the trajectory of which will be continuously monitored by the world's most powerful land-based telescopes. Altogether some 900 professional astronomers from fortyseven countries are taking part in the investigation.

Why all this interest in what veteran US astronomer Fred Whipple has described as "a large, dirty snowball"?

The answer is that astronomers believe that comets consist of the remnants of the building blocks left over from the birth of the solar system some 4,500 million years ago. The history of the solar system is recorded, so it is thought, within their frozen hearts.

Today, for the first time ever, thanks to the genius of two seventeenth-century English scientists, Isaac Newton and Edmond Halley, and the achievements of modern space technology, we have in our hands an entrance ticket to one of these refrigerated, flying museums. For Halley's comet is the only vigorously active comet whose orbit brings it relatively close to the earth (this time round, its thirtieth recorded apparition, it is coming to within 62 million kilometres of our planet) and has been determined precisely enough to allow of detailed scientific planning for investigation well in advance; and for the very first time space technology is sufficiently advanced to enable us to go out and meet a comet beyond the blanket of the earth's atmosphere instead of waiting for it to come to us, to penetrate its coma (the fuzzy gaseous cloud, up to 100,000 kilometres across, that shields the nucleus from our sight), to have a close up view of its nucleus and to analyse the components of its tail, in short, to understand the elements from which our solar system was constructed.

In 1950, the Dutch astronomer Jan Hendrik Oort postulated that comets originate from a vast cloud of hundreds of millions of small bodies (now known as the Oort Cloud) that orbits the solar system at a distance of one light-year. The nucleus, or core, of a comet is thought to consist of about 25 per cent dust and lumps of rock or metallic matter and 75 per cent of ice, in which are mixed compounds containing ammonia, methane and carbon dioxide

by Howard Brabyn

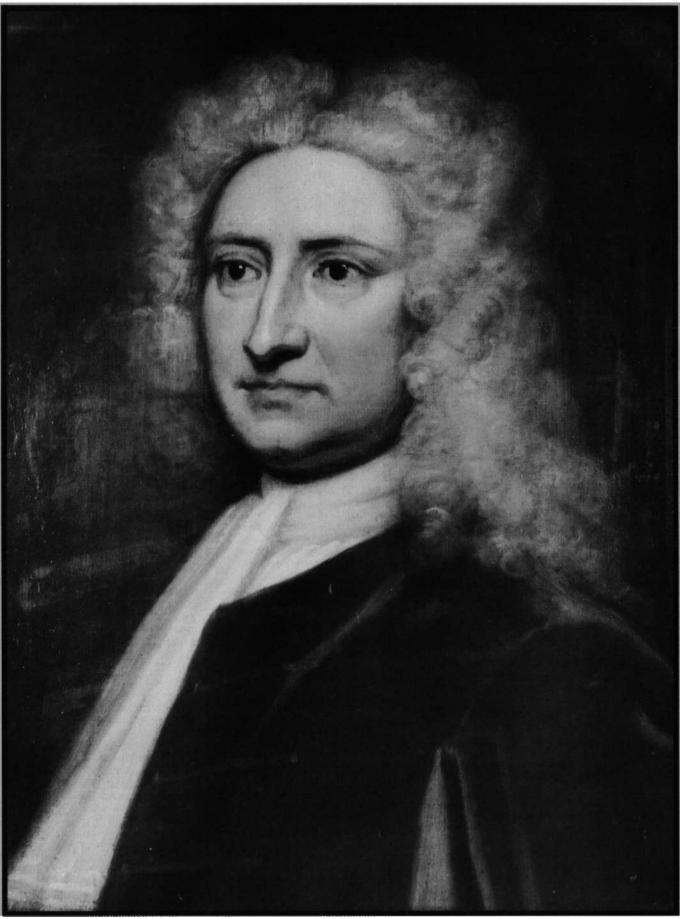
radicals. The 700 or so comets that have been scientifically recorded so far have had nuclei ranging in size from 0.5 to 70 kilometres in diameter.

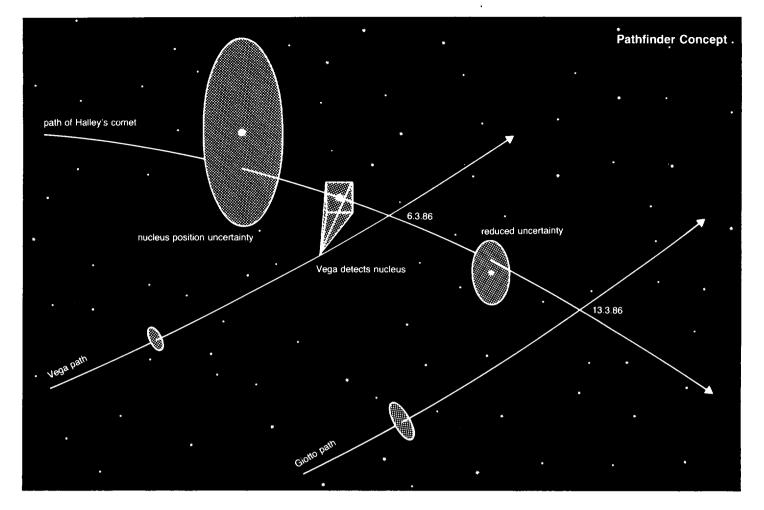
From time to time a passing star sends a gravitational ripple through the Oort Cloud sending a flurry of these "dirty snowballs" hurtling off into space. Some of them, the "short-period" comets, like Halley's comet, are projected towards the solar system and, influenced by its gravitational pull, become members of the inner solar system, completing their orbits around the sun in less than 200 years. The "long-period" comets can take millions of years to complete their orbital cycles. An average of five new comets are discovered every year.

The outer surface of a comet nucleus is thought to consist mainly of dust. As a comet approaches to within three astronomical units of the sun (one astronomical unit equals the distance between the earth and the sun, roughly 150 million kilometres) this outer crust heats up and the sub-surface ice begins to sublimate (a process by which a solid is converted directly into vapour without going through the liquid stage). The resulting gas streams out from the comet carrying dust particles with it to form the coma.

As it gets closer to the sun a comet develops two tails, a yellowish curved tail

4





composed of dust particles released during the process of sublimation, and a blueish stream of gas called the plasma tail which is formed when the gases released from the comet's nucleus become charged by solar radiation.

In a few months' time, when all the data have been gathered in, we shall have made a tremendous leap forward in our knowledge of the nature of comets and of the origins of the solar system. We should not, however, forget that this will be due not only to the brilliance of modern astronomers but also to a quite unprecedented effort of international co-operation.

Launched on 15 December 1984, the Soviet space probe Vega 1 flew through Halley's coma on 6 March 1986, at a distance of about 9,600 kilometres from the nucleus, and photographed and analysed the gases around it. Sister satellite Vega 2 encountered Halley's comet on 9 March 1986 and analysed its coma.

The Japanese probe Sakigake (pioneer), launched on 7 January 1985, rendezvoused with Halley's comet on 9 March 1986 and measured the speed and temperature of the solar wind blowing against the comet, whilst on 8 March 1986 its companion satellite Suisei (comet) flew past Halley's comet at a distance of 144,000 kilometres and studied the enormous cloud of hydrogen gas surrounding the comet.

Playing supporting roles are the veteran US space probes *Pioneer 12, Solar Max* and *ICE* (International Cometary Explorer). *Pioneer 12* is turning its attention away from its long-term task of observing the effects of the solar wind on planet Venus to focus its spectrometer on Halley's comet during and after the perihelion (the period of the comet's closest approach to the sun). At the

drawing Schematic above shows trajectories of the European Space Agency's (ESA) spacecraft Giotto (see caption page 18) and one of two Soviet Vega spacecraft which flew through Halley's comet in March 1986. To enable Giotto to pass near the comet's nucleus, which is disguised by coma dust and gas, the Soviet astronomers agreed to provide ESA with information derived from cameras on board the Vega probes, the first to fly through the comet. The US National Aeronautics and Space Administration (NASA) also supported this three-agency "Pathfinder Concept" to reduce Giotto targeting uncertainty.

same time Solar Max is studying the comet's dust and plasma tails for comparison with observations made by *ICE* last September on the nature of the tail of comet Giacobini-Zinner.

Last in the field is the European Space Agency's satellite *Giotto*. Named after the famous fourteenth-century Florentine painter Giotto di Bondone, who included Halley's comet in his Paduan fresco *The Adoration of the Magi* (see colour page 19) after witnessing its apparition in 1301, space probe *Giotto* was launched on 2 July 1985. Basing its trajectory on data supplied by the two Soviet *Vega* probes, *Giotto's* mission was to pass near the comet's nucleus, examining the material streaming from it and transmitting photographs to earth every four seconds.

This might well have been a suicide mission. The slightest error in calculation of its trajectory could have sent *Giotto* crashing into the surface of the comet. As a precaution against the particles which surround the comet, some of them large enough to have inflicted fatal damage, the satellite was fitted with an outer aluminium skin and an inner casing made of Kelvar, the material from which bullet-proof vests are made. As it happened, the spacecraft functioned perfectly until 2 seconds before the scheduled time of closest approach when the telemetry signal was lost owing to dust impacts on the spacecraft. Just over half an hour later, however, the signal was recovered at ground stations in Australia, and data from all experiments was again being received.

The results will take months to analyse fully but first impressions are that they are spectacular. The Halley Multicolour Camera on board Giotto, appears to have determined the size of the nucleus as approximately fifteen by eight kilometres, and the spacecraft has contributed a mass of other information to the International Halley Watch, perhaps the most complex international astronomical project ever undertaken. And as scientists sit down to assess the information as it comes flooding in from the space Armada, they will surely sense the presence of two great figures from the past peering eagerly over their shoulders-Isaac Newton, the man who first propounded a workable theory of the orbits of comets, and Edmond Halley who applied this theory to the comet named after him, which he had seen in 1682 and which he accurately predicted would return at regular seventy-six-year intervals, thus blazing the trail for the amazing adventure we are living through today.

HOWARD BRABYN is a Paris-based British writer and journalist with a special interest in the popularization of science. He was formerly editor in charge of the English-language edition of the Unesco Courier. T was the year 1825, ten years after the fall of Napoleon and the restoration of the monarchy in France, and all Cairo was buzzing with excitement. Muker Bey, a Sudanese nobleman, had sent two giraffes as a gift to the viceroy of Egypt, Muhammad Ali Pasha.

No one was more excited than the French Consul-General in Cairo, an engaging if somewhat eccentric Piedmontese called Bernardino Drovetti. Drovetti was a great connoisseur of Egyptian antiquities and his collections were later to form the nucleus of the Egyptian departments of the museums of Berlin, Turin and the Louvre.

Relations between France and Egypt at that time were stormy. Aroused by the writings of Victor Hugo and the paintings of Delacroix, the youth of France was fired with enthusiasm for Greek independence. In 1822, however, Egyptian troops had assisted their Turkish allies in the massacre of Greek revolutionaries on the island of Chios.

Considering it to be the primary duty of any true diplomat to do all in his power to reduce tension between countries, Drovetti saw in the arrival of two giraffes in Cairo an opportunity which he was quick to seize. Remembering that it was an ancient tradition among Egyptian sovereigns to present one of these fabulous beasts to other monarchs whom they wished to honour, Drovetti requested that one of the two newcomers from Sudan be offered to the king of France, Charles X. An exceptional gift it would indeed be, since no giraffe had ever before been seen in France.

Muhammad Ali Pasha readily gave his consent, but, alerted by the mysterious bush telegraph that operates within the diplomatic corps, the British consul, almost simultaneously, put forward a similar request on behalf of his own royal master. His reasons for doing so were similar—the deplorable state of relations between Britain and Egypt.

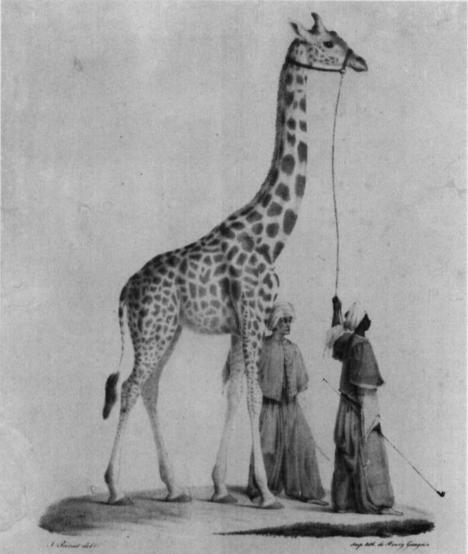
Appreciating the advantages to be gained from this double proposition, the viceroy decreed in a Solomon-like judgement that one giraffe should go to each country, the choice between the two beasts to be made by the two consuls drawing lots.

A few days later, Drovetti wrote triumphantly to his superior, the lugubrious Baron de Damas: "I am happy to inform Your Excellency that fate has been kind to us. Our giraffe is strong and vigorous, whereas the one destined for the King of England is sickly and will not last long." And indeed, the "English" giraffe was to die a few months later. Not, perhaps, a complete revenge for Waterloo—but all the same...!!

Then came the problem of transporting the animal to France. Drovetti prepared the journey with painstaking care. In Alexandria he found a Sardinian brig, *I Due Fratelli* (The Two Brothers), whose captain undertook to treat the creature like his own daughter. Since the space between decks was not high enough, a hole had to be cut in the upper deck. The giraffe was installed below with her head (for she was a female) Home by a neck

A giraffe's epic journey from Cairo to Paris

by Georges Poisson



Engraving above depicts the first giraffe to have been brought to France alive. The two-and-a-half-year-old, 12-foot-tall animal was sent as a gift to King Charles X by the ruler of Egypt. The engraving shows the giraffe in the "King's Garden" (now the Jardin des Plantes) in Paris, in July 1827, shortly after its arrival.

protruding into the open. The edges of the hole in the deck were lined with straw to protect her from bumps caused by the roll of the ship. A tarpaulin was rigged overhead to shield her from the rain.

The next problem that arose was how to feed an animal that consumed twenty-five litres of milk a day. Drovetti decided to embark three milch cows and, for good measure, put aboard two antelopes, a cowhand to do the milking and three Sudanese to make the giraffe feel at home. As a final talisman to ensure that providence would be on his side, he hung about the animal's neck a parchment inscribed with verses from the Qur'an to protect her from the powers of evil. Preparations were completed with a letter addressed to his colleague M. Bottu, an agent of the French Foreign Office in Marseille, advising him of the arrangements to be made for the giraffe on her arrival in France.

Off sailed the brig, and on 13 October 1826 it dropped anchor at Marseille after an uneventful journey, the only casualty one cow suffering from seasickness. Passengers, both two-legged and four-legged, were placed in quarantine in a hospital near the port, this respite giving M. de Villeneuve-Bargemon, Prefect of the *Département des Bouches-du-Rhône*, time to prepare a welcome fit for a present for a king.

This was the first time that such a task had been entrusted to a member of the corps of Prefects and M. de Villeneuve-Bargemon devoted himself to it with conscientiousness and enthusiasm. Naturally, the only place that an immigrant of such distinction could be housed was at the Prefecture itself. An enclosure was erected in the courtyard as well as a heated stall with direct access from both floors of the building.

There the giraffe wintered, her transfer to Paris awaiting a more clement period of

In 1984, the Musée de l'Ile de France organized an exhibition entitled Une Girafe pour le Roi (A Giraffe for the King) which attracted several thousand visitors. Gabriel Dardaud, who made a major contribution to the preparation of the exhibition, gave its title to his book about the story of the Charles X's giraffe, Une Girafe pour le Roi, Dumerchez-Naoum publishers, Creil (France), 1985.

 the year. Meanwhile, the Prefect kept the Minister of the Interior regularly informed of all the arrangements made...and also raised the delicate question of the reimbursement of the expenses incurred.

For fear of provoking a riot, the creature from the tropics was transferred from the quarantine centre to the Prefecture at dead of night on 14 November. For seven months M. de Villeneuve-Bargemon watched tenderly over his lodger, even allowing a touch of lyricism to creep into his administrative correspondence in which he referred to her as "my ward", or "this beautiful child of the tropics".

For her part, his wife gave a series of receptions, or "routs" as they were called in those days, to display the animal to the upper-crust of Provençal society. Day and night a constant stream of members of the Academy of Marseille came to gaze upon the beast, noting every detail of her behaviour and marvelling at her silence, only to discover later that the long-necked creature possessed no vocal chords.

Meanwhile, to keep her in good condition, the Prefect decided that his protégée should be exercised, thus providing a choice spectacle for the people of Marseille. Every day, preceded by mounted gendarmes with sabres drawn, the giraffe calmly ambled through the streets of the city, to the great joy of the citizenry and to the great terror of the horses.

The king, however, was eager to receive "his" giraffe and, the following spring, the question arose of how she should make the journey from Marseille to Paris. Should she go by sea, circumnavigate Spain and then sail up the Seine? This would be as long a journey as that which had brought her across the Mediterranean. Should she travel on the internal waterways, the Rhône, the Saône and the Seine? In the end, since the animal had become accustomed to walking, it was decided that she should go to Paris on foot, in short stages. Clearly, an experienced man was needed to supervise the convoy and the choice fell on Geoffroy Saint-Hilaire, an illustrious naturalist noted for his theory of the "compensation of organs", and, moreover, a veteran of Napoleon's Egyptian expedition and perhaps the only man in France who had ever been anywhere near a giraffe.

Geoffroy Saint-Hilaire was fifty-five years old and suffered from rheumatism and other ailments. Nevertheless, he accepted the mission with enthusiasm. "Throwing a few essentials into a bag, he took the next stage-coach and within six and a half days had covered the itinerary he was later to retrace with the giraffe," writes Gabriel Dardaud in his book Une Girafe pour le Roi (1985). At a meeting of the Academy of Marseille, on 10 May 1827, one of the members, a certain M. Jauffret, announced the arrival of his eminent colleague, and read out three fables he had written on the giraffe.

Each stage of the journey to Paris was prepared down to the last detail. The caravan included the giraffe, the cows, one of the antelopes—the other one had died in Marseille—two moufflons, the cowhand, the Sudanese, an interpreter and a cart loaded with forage, seeds and a variety of other impedimenta, all ordered by the illustrious leader of the expedition.

To protect her from the spring rains, a



Photo © Bibliothèque du Muséum d'Histoire Naturelle, Paris

Two days before the giraffe's arrival in Paris, the French naturalist Georges Cuvier (1769-1832) made the above drawing during a session of the Council of State. He had never seen a living specimen and his not very realistic representation was inspired by depictions of giraffes made in earlier times.

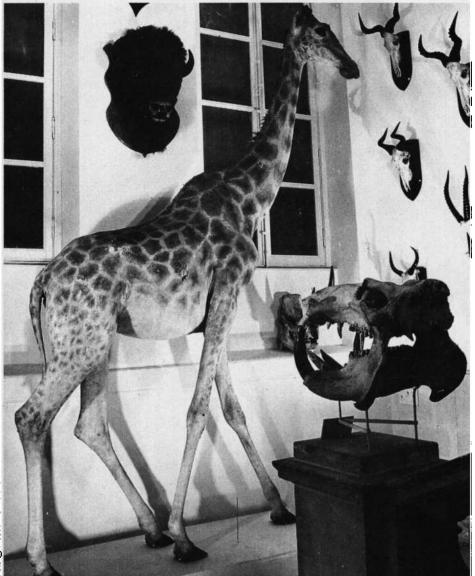
A giraffe-craze swept France and led to the creation of many objects inspired by the giraffe's distinctive silhouette. The claviharp (below), a musical instrument invented in 1819, was renamed the "planogirafe" after the animal's arrival in Paris.



two-piece set of lined oilskins with a hood was made to measure for the giraffe. On it were emblazoned the arms of the King of France and of the Pasha of Egypt. Villeneuve-Bargemon had provided for an escort of mounted gendarmes and took care to write to all the mayors of the communes within his jurisdiction through which the caravan would pass, as well as to his colleagues in the other *Départements*, giving them instructions and advice.

At dawn on 20 May 1827, the caravan sallied forth with Geoffroy Saint-Hilaire at its head. In the open country he would rest his rheumaticky joints beside the driver of the cart, but when the cortège passed through a town, or arrived at a staging-post, he was usually to be found at the side of the giraffe, reinvigorated by the enthusiastic welcome of the populace and the local authorities.

Aix, Avignon, Orange, Montélimar, Vienne—and then, on 6 June, they arrived at Lyon, having achieved the respectable average rate of progress of twenty-seven kilometres a day. At Lyon, Geoffroy Saint-Hilaire wrote to Villeneuve-Bargemon to give him the latest news. An incident had occurred which had slowed their progress. "The giraffe had picked up a nail in the membrane of a hoof"; she seemed weary of the continual walking and was somewhat fatigued yet "very obedient". A period of rest was needed and, for five days, installed



The giraffe as it is today, preserved in the Natural History Museum at La Rochelle, in France.

in the *Place Bellecour*, the giraffe happily stripped the lime trees of their leaves and accepted titbits from the onlookers.

Then they were on the road again, wending their way through ever-larger crowds. "In 1827," writes Gabriel Dardaud, "some thirty or more inns, shops and staging-posts adopted the sign of the giraffe to commemorate her passage".

When the cortège was within fifty kilometres of Paris, excursions were organized to go and meet it. The crowds streamed out in charabancs, four-wheelers and gigs. Even Stendhal did not disdain to join the ranks of the sightseers and, at the Court, it was only with the greatest of difficulty that the Duchess of Berry was restrained from doing as much. As for the great scientist Georges Cuvier, instead of giving his attention to the discussions of the Council of State, of which he was a member, he spent his time covering his papers with drawings of a giraffe based on what little he knew of the animal and coming up with some bizarre results.

After a journey of 880 kilometres in forty-one days, most of it on foot, Geoffroy Saint-Hilaire arrived in Paris at the head of the caravan on 30 June, thoroughly exhausted. He installed the giraffe in its enclosure at the Jardin des Plantes (the Zoological Gardens of Paris). But scarcely had he regained the comfort of his armchair, his slippers and his own fireside than he was obliged to forsake them again. The king, who was spending the summer at his château at Saint-Cloud, demanded to see "his" giraffe the very next day.

The cortège made a fine sight as it wended its way along the bank of the Seine. Troops from the garrison of Paris lined the route; plume-bedecked generals caracolled at its head; among the robed ranks of professors from the Museum and university dignitaries, ermine-lined hoods vied for attention with medals and decorations; and the mace-bearers of the faculties sweated under the weight of their insignia of office. For Geoffroy Saint-Hilaire, decked out in ceremonial dress and walking at the side of the giraffe, these last fifteen kilometres were sheer martyrdom.

At Saint-Cloud, in front of the orangery where, twenty-eight years earlier, Napoleon had seized power—a memory it was wiser not to recall under the Restoration the dignitaries in all their finery were drawn up in strict order of precedence, with the giraffe in pride of place. After a few minutes, as the soldiers presented arms, the king arrived wearing a blue sash and, as usual, cutting a fine figure. He was followed

by his son the heir to the throne, the Duke of Angoulême; with him were his wife the duchess, and the petite Duchess of Berry, gracious, elegant and holding the hands of the two royal children who had eyes only for the strange beast that peered at them with no trace of emotion. The king was his usual amiable self, courteously attentive to Geoffroy Saint-Hilaire, whom he congratulated and questioned at length, and to the giraffe, to whom he did the honour of offering some rose petals in the royal hand. "Once the audience was over," says Gabriel Dardaud, "Geoffroy Saint-Hilaire jumped into a carriage and drove off to the hospital for a check-up. The giraffe went back to the Jardin des Plantes without him, passing between two rows of spectators held back with some difficulty by the armed soldiers of the garrison.'

The occasion gave rise to the production of innumerable "giraffe" objects that were hawked the length and breadth of the land. First came chinaware on which figured more or less diagrammatic representations of the animal's characteristic profile. But the image of the giraffe also featured on printed cloth, in popular drawings, on smoothing irons, warming-pans, ink-wells, fans, snuff-boxes and almanachs and publications of every sort. Women wore "giraffe" hair-styles and the claviharp invented in 1819, was re-named the "giraffe-piano".

The giraffe was installed at first in the great greenhouse of the Jardin des Plantes. Later she took possession of the "apartment" specially prepared for her in the rotunda. There was one room for her which was lined with mattresses and heated by a stove as well as by the cows and other animals who, throughout the winter, maintained the temperature at the fifteen degrees necessary for the health of this native of Africa. Above was a room for her Egyptian keeper.

Between July and December 1827, the Jardin des Plantes did a roaring trade, with 600,000 Parisians going to visit the new inmate. Curiosity died down a little the following year, but the giraffe remained the star attraction at the Jardin, where she could be seen out walking when the weather permitted. In about 1835, plans were made to find her a mate, but the husband earmarked for her never left Italy. She grew old peacefully and died in 1845 in her twen-ty-first year, outliving both Charles X and Geoffroy Saint-Hilaire.

She was stuffed, and her motionless silhouette long graced the zoological gallery of the museum, until, one day between the two World Wars, the curator of the museum of La Rochellé succeeded in getting her ceded to him. And so it came about that this creature, which had been born near the source of the Nile, which had travelled across part of Africa, the Mediterranean and France to delight Parisians for eighteen years, set out again to the ocean shore, where now she savours a kind of immortality.

GEORGES POISSON has been curator of the Museum of the lle de France for 30 years. He is a specialist in the history of architecture, which he has taught in a number of institutions of higher education. He has published some 40 historical works on the architecture of Paris and the surrounding region. Several of them have been awarded prizes by the Académie Française or the Académie des Beaux-Arts.

That squall the tango, that devilry, challenges the crowded years; man made of dust and time lasts less than the flighty tune, which is only time. *Jorge Luis Borges*, El Tango

Tango Time

The Latin American song and dance that swept the world onto its feet

by Luis Bocaz

NE of the tango's many mysteries is its mixed cultural parentage. To explain its origins, its chroniclers have had to investigate the aftermath of slavery in a region of old Spanish colonies. Vicente Rossi, for example, suggests that the tango was born in the African communities of Montevideo, a view not always enthusiastically shared on the western bank of the estuary of the Rio de la Plata.

Apart from the inevitable wranglings over paternity, there is no disagreement about the influence of the candombe on this dance in its early years, or about the contribution to its development made by the two Rio de la Plata capitals, Buenos Aires and Montevideo. The sprawling Argentine metropolis was, in the end, to monopolize the sobriquet "City of the Tango", but in both ports (*La Cumparsita*, one of the best known tangos, is Uruguayan) the intermingling of its African and mestizo ancestors, together with other local and European strains, gave birth, in the space of a few decades, to one of the most distinctive cultural creations of the American continent.

Where did the name come from? In writings and lectures on the subject, Jorge Luis Borges pokes fun at those who bend over backwards in their attempts to trace its origins to a Latin root. The distinguished writer's amusement is provoked by the lowliness of its earliest surroundings, the suburbs, and by the creature's undeniable connections with disreputable establishments.

In Buenos Aires, the scale of the suburban fringe was a consequence of spectacular urban growth. This unpretentious colonial town, founded twice in the sixteenth century, was chosen in 1880 as the federal capital, and rapidly became a thriving port. Thereafter, it absorbed wave upon wave of immigrants, who disembarked with their cargo of dreams and solitude and, on the so-called *orillas*, established a sort of frontier way of life. People were washed up here by the tides of fortune, as they were on the Pacific coast, in San Francisco of the Gold Rush, or Valparaiso, with their nostalgic atmosphere of turn-of-the-century sailing ships.

In this murky urban quarter, lone men fought one another over fortunes and brief affairs of the heart. So it is not difficult to understand how this branch of humanity found in the *cortes* and *quebradas* (literally "cuts and slashes") of the tango a means of escape from the teeming solitude of the tenements.

Those heroic times have left us with the stereotyped image of the original dancing couple. She, with her tight-fitting dress, split skirt and scarcely concealed hint of erotic aggressiveness; he, perched on high heels and wearing a narrow-brimmed hat. Even today, magazines and shows continue to reproduce this vignette of a bygone age. One thing is undeniable: in the last ten years of the nineteenth century, the music to which they danced was held in high esteem in musical circles, and, at the turn of the century, a whole galaxy of distinguished composers ushered it out of the suburbs and into the city centre.

By the time the Republic celebrated its centenary, definite rules had taken shape governing the instruments on which it was played. Flutes and guitars had been banished, making way for the ensemble that would henceforth be known as the orquesta típica, consisting of piano, violins, double bass and a little-known instrument called the bandoneón. This emigrant accordeon from Central Europe came to symbolize the essence of the tango. Why did it become so prominent as a popular art form? After all, as musicologists point out, it was very difficult to play. There is no convincing answer to this question, but the fact remains that from the legendary Ramos Mejía to Astor Piazzolla in our own time, the roll of honour of those who played it includes such glamorous names in tango history as Eduardo Arolas and Aníbal Troilo.

On a wave of popular creativity, this suburban adolescent rose irresistibly to fame. Before the First World War, Paris (Tangoville, some historians would claim) had given her the keys to Europe. From London to Moscow, the great cities were held spellbound by the mysterious creature. Her triumph heralded that of jazz, another child of miscegenation in the landfall cities of America. The tango craze spread through the ballrooms and fashionable watering places. Handbooks on how to dance it appeared by the dozen, and a certain shade of orange came to be called "tango". In February 1914, an engraving in the French magazine L'Illustration showed the Pope thoughtfully watching the circlings of a dancing couple. The Holy See found itself obliged to make a pronouncement, having heard voices raised in condemnation of the morals of this Latin-American upstart. Its concern was justified. Some of the vituperation came from Argentine circles. The poet Leopoldo Lugones called the tango a "reptile from the brothel", and more than one diplomat showed distaste for the disconcerting way in which this ignoble compatriot had won general acceptance.

The international renown of this ambassador of working-class descent was decisively heightened by a man of obscure extraction with an extraordinary voice. His name was Carlos Gardel. He came to the tango when it had already acquired cosmopolitan status. Nevertheless, his indisputable artistic talent and and a modicum of publicity in the media, combined with the strange circumstances in which his life began and ended, were enough to give him mythical stature: the accident at the airport of Medellín, which cost him his life, and the shadows which, for years, surrounded his birth. More than one town boasted of being his birthplace. After his death, in June 1935, conflicting evidence came to light. An official document announced that his place of birth was Tacuarembó, in the Republic of Uruguay. Meanwhile, the Argentine Gardel cult reconstructed the childhood of its idol in the market quarter of Buenos Aires and exhibited a signed handwritten document referring to his birth in Toulouse, France.

A reproduction of the birth certificate of a baby boy, Charles Romuald Gardès, born in the maternity wing of the La Grave hos-

pital at 2 a.m. on 11 December 1890. in Toulouse, finally put an end to the arguments. The singer was the illegitimate son of an unknown father and a laundry worker, Berthe Gardès. Like others from southern France, she emigrated to the Rio de la Plata region, taking her two-year-old son with her. Moreover, on the occasion of the fiftieth anniversary of the death of Carlos Gardel, the Toulouse municipal authorities mobilized its cultural facilities to pay him an impressive tribute. The programme, which lasted for several weeks, included the unveiling of a monument, public exhibitions and the first scientific congress on the tango. This was convened by the University of Toulouse, a highly respected centre for Hispanic and Latin-American studies, and was attended by specialists from Latin America, Europe and the United States.

The 1970s witnessed a partial revival of the tango on the European scene as a form of music for instruments and voice. Following a fairly long period of eclipse, this renewal was foreseeable, in view of the admiration that it still commanded in the cities of Latin America, and, indeed, in such an unexpected country as Japan, where a huge trade in recordings is to be found, together with orquestas típicas, collectors and specialized magazines. Nevertheless, some observers would point to a paradox: while Cuba organizes tango festivals, and while Amsterdam and Paris are enthralled by the classical rigour of Osvaldo Pugliese, the formal audacity of Piazzolla or the splendid voice of Susana Rinaldi, there are signs in its cities of origin of a slackening of the fervour that gripped them from the

1930s to the 1950s. The great tango orchestras and soloists have watched their sources of work drying up one by one, partly as a result of changes in public taste, which seems less drawn to this art form than it was in days gone by.

It can be argued that, since the "codification" by Julio de Caro, in the 1920s, the structures which shaped the tango have changed in ways comparable to the changes occurring in the societies which produced it. and in the various attitudes of mind and feeling which embraced it as their own. Perhaps for this reason, following the truce between traditionalists and modernists, creators and performers have come to agree that the tango can change and develop. Accordingly, such essential works as Recuerdo (1924) by Pugliese or Adios, Nonino (1959) by Piazzolla are valued in their contemporary context as innovative landmarks, and the tango is seen to embody the pathos prevailing in the painting, the films or the poetry of the day.

Worth noting is the enthusiasm with which, in the first few months of 1986, tango demonstrations are being greeted in New York. Will they, perhaps, provide the necessary impetus for this complex Latin American character to make a glorious and majestic come-back to the international stage?

LUIS BOCAZ, of Chile, is a specialist in Latin American literature and culture. A lecturer at the Sorbonne, he also directs a seminar on "Cultural production and society in Latin America" at the Institut des Hautes Etudes de l'Amérique Latine, in Paris. He has served as a consultant with Unesco's culture sector.

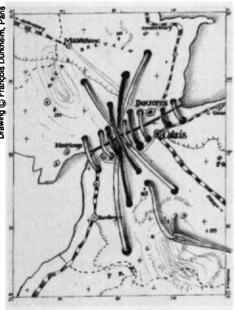
With the urbanization of popular culture at the turn of the century, the tango appeared in suburban bars around the cities of the Río de la Plata, in the so-called "low-life" houses, in the districts near the abattoirs and in the homes of the poor like these photographed in Buenos Aires at the beginning of the century.





The Channel Tunnel

by John Ardagh



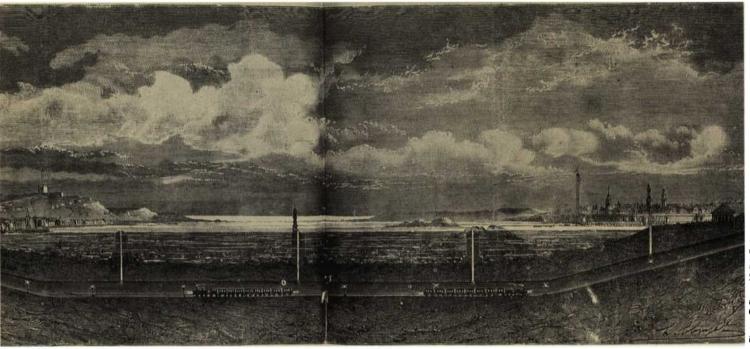
Right, artist's impression of the "Eurobridge" ("Europont") concept of a fixed link between Britain and continental Europe: a suspension bridge with 5,000metre-long spans. Two 6-lane motorways would be enclosed with the protective concrete tube.

Opposite page: section of the project for a Channel Tunnel which was adopted by the British and French Governments in January 1986. Passenger trains and special shuttle trains for transporting vehicles and their passengers will run through twin tunnels (diameter 7.3 metres) bored 40 metres under the sea bed. Between the two main tunnels is a smaller service tunnel (diameter 4.5 metres). THE Channel Tunnel between Britain and France, a dream nearly two centuries old, is to become reality at last. And this is most warmly to be welcomed by all those who care for the future of Europe, for in all kinds of ways—economic, touristic, political, even psychological—it will serve to strengthen Britain's links with the Continent, and especially with France. Thus it will strike a blow at that old insularity which has shrouded the island of Britain for so long. We shall be islanders no more.

The joint decision to build the Tunnel was announced by President François Mitterrand and Prime Minister Margaret Thatcher in a ceremony at Lille on 21 January. The project chosen from among several contenders is for a twin-bore railway tunnel. This is what the French wanted, for express railways are France's forte. The British might have preferred a combined road and rail tunnel, but this would have been more costly. However, it has been agreed that a separate road tunnel might be added some time after the year 2000. In the meantime, so long as the two parliaments ratify the plan, digging will begin next year on a fifty-one-kilometre tunnel from a point near Folkestone, in Kent, to a point near Calais. British and French banks are providing the main part of the budget, which will be at least £2.3 billion.

When the Tunnel opens, in 1993, it will be able to carry up to thirty million passengers a year. Fast trains will link London with Paris (some 450 km) in just over three hours, and London with Brussels in even





Two 19th-century conceptions of a Channel Tunnel. Above left, a scheme for a "submarine railway between France and England" by Hector Moreau (1851). Above, drawing of a project for a Dover-Calais tunnel devised by French engineer Thomé de Gamond in 1875. Smoke from the steam trains was to be evacuated by ventilation chimneys one of which, in mid-Channel, is topped by a lighthouse.

less time. And a rail shuttle service will carry freight trucks and private cars between terminals at either end of the tunnel, with trains leaving every three minutes at peak periods.

It was a French engineer in 1802 who first proposed a tunnel under the English Channel: Napoleon was interested, for he thought it might assist his planned invasion of England. In the 1880s the scheme was revived, and private companies began to bore pilot tunnels; but the British Government took fright, mainly for defence reasons, and the project was stopped. Not until the 1950s did it surface again, and after much discussion new preliminary diggings began in 1974. But again the British Government cancelled the scheme (in 1975), this time for economic reasons.

Throughout that long period, the French showed noticeably more enthusiasm for a Channel tunnel than the British. This may seem curious, seeing that France already has many land frontiers, whereas for Britain a tunnel would be its first fixed link with the Continent, and thus more valuable. But the British were held back by their insularity, and especially by fears that an invader might be able to make use of the scheme. Happily, all that is past. Today Britain's politicians and business circles have shown themselves as eager as the French.

It is true that ordinary British public opinion remains sceptical. Some people point out that the train shuttle for cars will take almost the same time as the hovercraft service (thirty-five minutes) and will be only forty minutes faster than the present ferry



crossings: these critics wonder whether enough people will use the tunnel to amortize its huge costs. The inhabitants of the Dover and Folkestone areas are alarmed for their environment, and for the future of jobs with the ferry services. And many experts predict that in economic terms the tunnel will benefit France more than Britain if, as they believe, the new industry attracted to its vicinity opts less for prosperous Kent than for the struggling Nord-Pas de Calais region with its wider spaces, lower costs and more central position in the European Economic Community.

However, those who take a wider and longer-term view believe that these possible drawbacks for Britain will be far outweighed by the advantages. Passengers by express train will be able to do the journey at least an hour faster than by air, city centre to city centre, and without any tedious waits at airports. Also the fares will be cheaper. So the tunnel will probably stimulate a vast increase in tourism and business travel between London and Paris and Brussels, much of it in the form of day excursions. It will also encourage new export trade by train and truck, and it will help to build the Kent and Pas-de-Calais areas into a vital nerve-centre of the European Economic Community, buzzing with new modern industry. Above all, as Mrs Thatcher has said, the tunnel venture is a symbol of Britain's involvement in Europe and of its close ties with France. In my own view, it will strengthen the exchanges between peoples and thus lead to better understanding, for it is ignorance that breeds prejudice and chauvinism.

JOHN ARDAGH is a British journalist who has written a number of studies of French life including The New France (Pelican Books, 1970-1977) and France in the 1980s (Penguin Books, 1982). In 1983 he was awarded the Enid McLeod Prize for books promoting Franco-British understanding.

The changing relationship

His n' Hers

by Elisabeth Badinter

TE have known for a long time that the organization of any particular society is influenced by the definition of the sexes and the distinction drawn between them. But we have realized only recently that the identity of each sex is not so easy to pin down, and that definitions evolve in accordance with the different types of culture known to us, scientific discoveries and ideological revolutions. Our nature is not considered immutable, either socially or biologically. As we approach the end of the century, the substantial progress made in biology and genetics is radically challenging the roles, responsibilities and specific characteristics attributed to each sex; and yet, scarcely twenty years ago, these were thought to be "beyond dispute".

We can safely say, with a few minor exceptions, that the definition of the sexes and their respective functions remained unchanged in the West from the beginning of the nineteenth century to the 1960s. The role distinction, raised in some cases to the status of uncompromising dualism on a strongly hierarchical model, lasted throughout this period, appealing for its justification to nature, religion and customs alleged to have existed since the dawn of time. The woman bore children and took care of the home. The man set out to conquer the world and was responsible for the survival of his family, by satisfying their needs in peacetime and by going to war when necessary.

The entire world order rested on the divergence of the sexes. Any overlapping or confusion between the roles was seen as a threat to the time-honoured order of things. It was felt to be against nature, a deviation from the norm.

Sex roles were determined according to the "place" appropriate to each. Woman's place was, first and foremost, in the home. The outside world, i.e. workshops, factories and business firms, belonged to men. This sex-based division of the world (private and public) gave rise to a strict dichotomy between the attitudes which conferred on each its special identity. The woman, sequestered at home, "cared, nurtured and conserved". To do this, she had no need to be daring, ambitious, tough or competitive. The man, on the other hand, competing with his fellow men, was caught up every day in the struggle for survival, and hence developed those characteristics which were thought natural in a man.

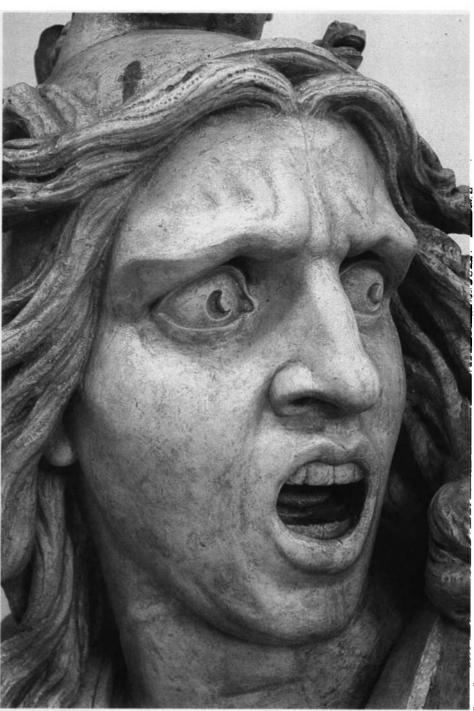
Today, many women go out to work, and their reasons for doing so have changed considerably. Besides the traditional financial incentives, we find ambition and personal fulfilment motivating those in the

"Passivity, patience (...) are no longer the salient characteristics of the female sex." Right, detail of The Departure of the Volunteers of 1792 (also known as La Marseillaise), a high-relief sculpture by the French sculptor François Rude (1784-1855) which adorns the Arc de Triomphe in Paris. most favourable circumstances, and the wish to have a social life and to get out of their domestic isolation influencing others. But, for all women, work is connected with the desire for independence. Above all, they do not wish to be forced to live with a man whom they can no longer tolerate; they want to reclaim their freedom without unduly harming their standard of living.

Whether we like it or not, these shared experiences profoundly alter the relationship between the sexes and the specific definition of each. The change assuredly makes for greater equality, but also, perhaps, for a degree of fraternal similarity. By dint of experiencing the same situations as the other, one learns to react as he does, and although he may thereby lose some of his mystery, he gains in being better understood.

Furthermore, contraception has made it possible to keep motherhood at bay. Now that it is neither a physiological necessity nor a moral obligation, child-bearing is no longer endured but chosen. It thus becomes something contingent and voluntary; it is no longer left to "chance" in the form of nature.

Late twentieth-century woman is no longer automatically to be regarded as a



between the sexes in the Western World

mother. For the first time in our history, women are allowed to find fulfilment in spheres other than procreation. One reason for this development is probably women's increased life expectancy. Active motherhood no longer takes up more than an average of fifteen years in a woman's life, and is one stage among others in female existence.

This change of attitude towards childbearing has gone hand in hand with a modification of the stereotypes of female identity; moreover, there has been a change in those which, not so long ago, still defined male identity. Passivity, patience, devotion and altruism are no longer the salient characteristics of the female sex. For one thing, women no longer recognize themselves in this summary description, which conceals other, equally real characteristics, once thought to belong exclusively to the male: ambition, activity, selfishness and independence. For another, because for the past ten or fifteen years women have tirelessly urged their companions to share in the joys and duties of "mothering", men in turn are displaying virtues which used to be considered feminine: gentleness, devotion and attentiveness to small children. It is undeniable that young fathers who take care of their newborn offspring quickly acquire a body language and set of attitudes, concerns and feelings which in the past were alleged to "come naturally" to women. In reality, and within a very short time,

In reality, and within a very short time, the specific characteristics of fatherhood and motherhood have begun to converge. It is no longer the mother alone who shows affection, and the father is no longer the exclusive embodiment of authority, law and the outside world. All these roles are shared between the sexes, and attitudes vary more according to personal temperament than in alignment with sexual differences.

If women no longer define themselves as mothers first and foremost, nor do they recognize themselves any longer as wives. Their lives are an alternation between celibacy and togetherness, with the result that autonomy is taking precedence over complementarity, and women, like men, are coming to define themselves as beings in their own right and no longer, as formerly, in terms of another person. The bi-polar relationship is still sought after by both men and women, but is nevertheless losing ground, in actuality, to periods of solitude.

This new lifestyle is conducive to the emergence of new psychological and social characteristics in both sexes. Men and

"The level of civilization attained by the different human societies is proportionate to the independence enjoyed by women in these societies," wrote Flora Tristan (1803-1844), the pioneer French feminist and socialist (right) in her book Pérégrinations d'une Paria (1838). The daughter of a Peruvian nobleman and a Frenchwoman, she married the engraver and lithographer André Chazai and was the grandmother of Paul Gauguin (1848-1903). women are tending to express that "other half" of themselves which their upbringing in the past would have taught them they must repress. Archetypal androgyny has returned, sweeping before it the inequality of the sexes and their strict complementarity.

Another new development is eroding the age-old stereotype of the male warrior, an image that we find confronting us as far back as we are able to trace it in history. Today, the threat of nuclear war on a world scale renders meaningless to us the warrior virtues attributed to men when we try to imagine the future. We see ourselves, men and women, rightly or wrongly, as the immediate victims of such a war, with neither the time nor the ability to defend ourselves individually. The spectre of the atomic bomb emphasizes still more the idea of fate, passivity and the indistinguishability of the sexes. On the one hand, men would be as passive as women. On the other, the person to "press the button" might equally well be female or male.

Apart from this apocalyptic image of war, other forms of modern warfare have brought us pictures of women, and even children, carrying weapons. This image is no longer startling: it shows that war is no



longer the prerogative of men and that action or passivity are likewise no longer the property of one sex rather than the other.

Oddly enough, male identity has not so far given rise to as much discussion and controversy as that of females. And yet we venture to predict that male identity will be a major issue in the next half-century.

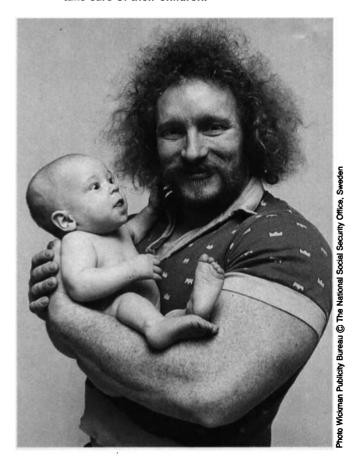
Women seem to have interiorized male otherness without thereby abandoning their traditional female identity. Twentieth-century Western woman is truly an androgynous creature. She is both virile and feminine, and she slips out of one role and into another according to the time of day or at different times in her life. She is unwilling to forgo anything, and walks a tightrope—by no means always easy to do—between her female and male desires. By turns passive and active, devoted mothers and ambitious egoists, gentle and aggressive, patient and commanding, modern women have shuffled the identity cards that they were dealt.

In this period of upheaval brought about by women, men's resistance, not to say uneasiness, is immediately apparent. The changes occurring in their partners and the latter's new demands are forcing them to call their traditional model in question. The fact that women can do everything men can do, and that they have claimed men's timehonoured characteristics for themselves, is often felt by men as an experience of dispossession and loss with which they are unable to come to terms.

Trapped between an outdated model which women no longer want and a new model which men seem to fear, many men are reacting by fleeing from women and from family responsibilities.

Their difficulty in fully assimilating female otherness and in expressing it outwardly without any inhibitions stems from the threat that they feel to their virility. This dilemma does not seem to affect women in the same way. The most convincing explanation for this male conflict is given by the American psychoanalyst Robert J. Stoller. Disagreeing with Freud, he claims that "male" identity is not the stronger or the more natural of the two. Throughout the first few months of life, the male newborn

"Because for the past 10 or 15 years women have tirelessly urged their companions to share in the joys and duties of 'mothering' (...) young fathers in turn are taking care of their newborn offspring and quickly acquiring a body language and set of attitudes, concerns and feelings which in the past were alleged to 'come naturally' to women." Below, "Men's roles as fathers," a photo used by Sweden's National Social Security Office in a campaign to facilitate the leave of fathers to take care of their children.



Lausanne

Photo André Kertész, Manchester Collection C Musée de l'Elysée.

"Oddly enough, male identity has not so far given rise to as much discussion and controversy as that of females. And yet we venture to predict that male identify will be a maor issue in the next half-cen-

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baby identifies strongly with his mother, with whom he lives in a state of symbiosis.

Sexual differentiation, therefore, is achieved only as the culmination of an intense and painful struggle to break away from this symbiosis. The male child must thus "de-identify himself with his mother" in order to jettison his female nature and develop his subsequent gender identity: maleness. But, observes Stoller, maleness is always under latent threat from the experience of bliss with the mother. Hence men's much greater fear of androgyny, which is experienced as a danger of homosexuality, i.e. a loss of virility.

The dawn of the third millennium is coinciding with an extraordinary reversal in the power structure.

Not only will the patriarchal system be dead and buried in most of the industrialized West, but we shall see the birth of a new imbalance in the relations between the sexes, this time exclusively to women's advantage.

Women may at last be sharing control of the outside world with their male companions as they create and produce on an equal footing with them. But the fact is that they also have absolute control over procreation. They can, at any time, refuse to have children. Tomorrow, thanks to sperm banks, they will be able to produce children without men's active assistance. But the contrary is not true. A man still needs a woman's body in order to procreate. The complementary relationship between the sexes that seemed incontrovertible where procreation was concerned is now being challenged. And when we consider that biologists and geneticists predict that before long it will be possible to fertilize a female nucleus without any need for a spermatazoon, we can see how close we have come to achieving the powerful age-old fantasy of parthenogenesis: in this case feminine.

Even if women in the third millennium refrain from using this inordinate power, it is probable that men will be painfully aware of their possible eviction from the process of fertilization and of the new imbalance in their disfavour. There are probably hard times ahead for men. Perhaps they will experience an even greater feeling of loss of identity, uniqueness and necessity. So it is by no means absurd to suppose that they will do all they can to win back some of their power. Already, biologists are predicting the incredible possibility that men will be able to "carry" a child, within less than half a century. The hypothesis no longer belongs to the realm of science fiction. It will soon call for some entirely new thinking about the relationship between the sexes, their identity and their equality.

To be continued in the third millennium.

ELISABETH BADINTER, of France, was trained as a philosopher and directs a seminar on the history and psychology of the family at the Ecole Polytechnique, Paris. She is the author of L'Amour en plus, of Emilie, Emilie—une Femme du 18e Siècle, and of the forthcoming L'Un est l'Autre, a study of the relations between men and women. The above article has been extracted from a paper entitled "Le Rapport des Sexes: Egalité, Différence, Altérité", which Elisabeth Badinter presented to an international seminar on the new roles of men and women in private and public life, held in Athens under Unesco auspices from 26 to 29 November 1985.

The powers of language

by Claude Hagège

I OR the sake of simplicity, let us divide the powers of language into two categories: internal and external. The former concerns language as a system and its relationship with those who use it and whose attitudes of mind and activities are shaped by it. The latter has to do with the use of language in the activity of speech or *parole*, and the capabilities that this confers on its users.

Language is older than the individual. From birth to adulthood, we have no choice but to learn it. True, the individual can also steer language in a particular direction: indeed, it is he who shapes it and causes it to change by the way in which he uses it. But this process is spread over very long periods. In what linguists call synchrony, that is, the time in which the user is actually living, he seems to be a receptive substance on which language stamps its indelible imprint. That imprint shows itself in two essential ways: in representation of the real world, and in the sphere of psycho-social symbolism and nationalism.

We can all see for ourselves, in our daily lives, that different languages construct different images of the universe. Far from mirroring the world's phenomena in a way that is universally identical, languages tend to organize them according to their own ever-changing systems of classification, reinventing and even creating them so that they exert considerable influence over the way in which each community thinks about these phenomena.

Some would even claim that there is a causal link between language and worldview. Such a link, for example, provides the basis for the so-called Sapir-Whorf hypothesis, named after two twentieth-century linguists who most openly defended it. "It is quite an illusion," wrote Edward Sapir (1884-1939), "to imagine that one adjusts to reality essentially without the use of language, and that language is merely an incidental means of solving specific problems of communication or reflection. The fact of the matter is that the 'real world' is to a large extent unconsciously built up on the language habits of different cultural groups." ⁽¹⁾ Benjamin Lee Whorf (1897-1941), Sapir's pupil, believed that we cut up nature along "the lines drawn by our language (...) No individual is free to describe

nature with absolute impartiality; on the contrary, he is forced to submit to certain modes of interpretation, even when he believes he is free." $^{(2)}$ Whorf adds that the Hopi Indians, who live on the desert plateaux of northern Arizona, are quite unable to imagine such places as heaven or hell as described by missionaries.

The Jesuits in China ran into difficulties which were probably similar. Their experience prompts a number of doubts about the universality of the ten grammatical categories which Aristotle established and which are still used as guidelines for research by many linguists. "What Aristotle gives us as a checklist of universal and immutable conditions is merely the conceptual projection of a particular linguistic state (...) Beyond the terms of the Aristotelians, and transcending this categorization, there stretches the concept of 'being' which encompasses everything (...). Greek not only has a verb 'to be' (which is by no means a necessity in every language), but it has developed wholly distinctive uses for this verb."(

So we find that the existence of a verb "to be" in Greek and the way in which Greek maps out grammatical categories in the universe of the sayable have given rise to the grammar which is used by all Western linguists and which is artificially overlaid on the languages of other parts of the world. Father Matteo Ricci could find nothing better than the expression "Lord of the Sky" to make the concept of God acceptable to the Chinese. He encountered a very thorny problem in his attempts at adaptation, for "Chinese thought (...) does not deal in positive and negative, being and non-being, but in contraries which follow one another in succession, combine and complement one another (...). Using the Chinese language brings other thought processes into play, and develops other abilities, than those which have been given pride of place in the West".⁽⁴⁾ The same problem arose concerning the concept of substance, of the adjective (which is a verb in Chinese), and of everything in language which gives form to representation.

We all pay less attention to that which our language does not name, even if we are quite capable of conceiving of it. The power of objects and concepts over individuals is much greater when language gives them a CONTINUED PAGE 23

Colour pages

Opposite page

Above left: On 2 July 1985, the European Space Agency's (ESA) spacecraft Giotto began an 8-month journey that would take it to meet Halley's comet on 13 March 1986. On 18 October 1985, the Halley Multicolour Camera (HMC), the high-resolution imaging system on board Giotto, looked back at the earth from a distance of 21 million kilometres. On this image, taken at 6:00 UT (Universal Time), cloud formations above Australia and Antarctica can be seen. Photo © ESA. Paris

Above right: Halley's comet photographed on 19 May 1910 at the Lowell Observatory (USA). The comet, which had passed through its perihelion (the closest point of its orbit to the sun) a month earlier, was then at a distance of 0.9 AU from the sun and 0.3 AU from the earth (one astronomical unit or AU is equivalent to around 150 million km).

Photo © ESA, Paris, by courtesy of Lowell Observatory and the National Optical Astronomy Observatory, USA

Below: The Adoration of the Magl, a scene from a fresco cycle executed between 1303-1305 in the Scrovegni chapel, Padua, by the Italian painter Giotto di Bondone (1266-1337). Halley's comet appeared in 1301 and served as a model for Giotto's Star of Bethlehem. The European Space Agency named its mission to Halley's comet "Giotto" in recognition of the fact that Giotto di Bondone made the first recorded "scientific" depiction of the comet. Photo © ESA, Paris

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Carlos Gardel (1890-1935), the celebrated composer and singer of the Argentine tango, can be seen at top of this pastel drawing on canvas, Te Fulstes sin que Nos Dieramos Cuenta (You Left Without Our Noticing, 250 x 200 cm) by the Argentine painter Antonio Segui (1976).

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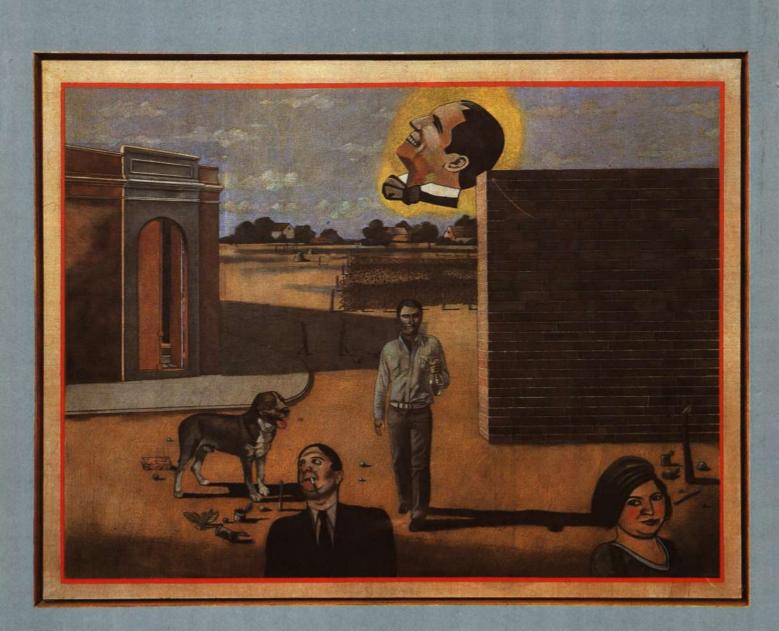
The Earth is a Man, 1942, oil on canvas (183 x 239 cm) by the Chilean painter Roberto Matta. Joseph R. Shapiro Collection, Chicago.

Photo Bétrice Hatala C Centre Georges Pompidou, Paris

Correction

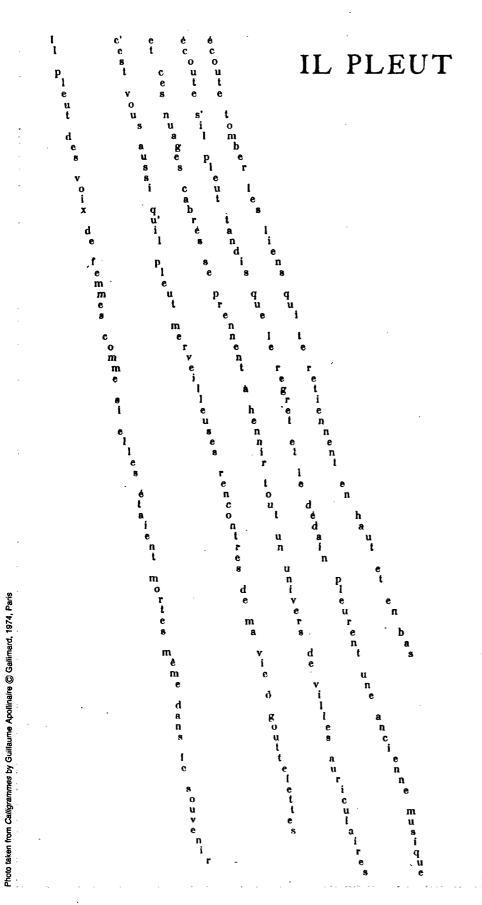
We apologize to our readers for the fact that a technical error in our February issue, The New World of the Ocean, resulted in the inversion of two captions Identifying the photos of relief maps of the Pacific and Atlantic ocean floors reproduced on page 19 and on the back cover.











Colour page opposite

Gilded bronze statue of the Buddha Vajrasattva (possessor of the vajra, a thunderbolt or diamond) by the sculptor Zanabazar (1635-1723), one of the masters of Mongolian religious art. In one hand the Buddha is holding a vajra (symbol of the male principle) and in the other a small bell (symbol of the female principle); his head is very slightly tilted to the left. The statue is in the Choljin lama temple museum, Ulaanbaatar.

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In his book L'Homme de Paroles, Claude Hagège writes that "The autonomy of the written word establishes it as an end in itself. (...) Disposed on a flat surface, writing can exploit the possibilities of combinations between directions: vertical, horizontal, left to right, right to left." The French poet Guillaume Apollinaire (1880-1918) considered his famous Calligrammes, as "an idealization of poetry (...) and a form of typographical precision at a time when the career of typography is ending in a blaze of glory..." Above, Apollinaire's calligramme II Pleut.

CONTINUED FROM PAGE 18

name than when it does not. Nevertheless, this power of language should not be overestimated. We may feel some reservations at Nietzsche's enthusiasm when he writes, in order to explain "the strange family resemblance shared by all Hindu, Greek and German thought", that "when there is linguistic kinship, it is inevitable that a common grammatically-based philosophy (...) predisposes thought to produce philosophical systems which develop along the same lines". All we can say, and this is already a large claim, is that the parallels between language structures and thought patterns in substantially differing cultures are sufficiently regular to appeal to the observer's imagination.

Psycho-social symbolism and nationalism constitute another sphere in which the powers of language operate. The use of a language is experienced by the individual as an umbilical cord to which he owes his identity and even his existence. Language is much more than the straightforward tool that it would be if we were to accept the reductionist definition which sees it as a mere instrument of communication.

What is true of the individual is even more so of the community elevated to the status of a nation. A Hungarian linguist writes: "In 'minor' countries which are prevented by statistical and geographical circumstances from aspiring to the rank of great powers, there is often a certain cult of the national language and of various other components of the national and folk heritage, on which patriotic feeling feeds and thrives".⁽⁵⁾ There is a Hungarian proverb, likewise, which says: "nyelvében él a nemzet", or "a nation lives through its language".

Language, then, has the power to rally support for a national cause that it embodies more effectively than any other component of the culture. This can be seen in the nationalist claims of many minorities which appeal for justification to their distinctive languages: Catalans, Berbers, Ukrainians, Kurds, Tibetans, Bretons, Welsh, Basques and Macedonians. And nationalism which arms groups to defend their culture by defending their language can take such violent forms as military clashes, rebellion in the world of school against the obligation to teach children in an alien tongue, and demonstrations. Such reactions have occurred in the past in India and in Greece (where, in 1901, the conservative uprising against the translation of the New Testament into demotic resulted in several deaths).

Some great nations impose their language through the power that it derives from their own power. This is true today of the United States of America, and it is also true on the scale of that largest of countries, the Soviet Union. The Indian languages of North America have all yielded to the pressure of American English, and those which, like Navajo in Arizona, are still spoken in scattered village groups are exceedingly rare and, in any case, threatened. In the Soviet Union, Koryak in north-eastern Siberia, Chechen, Ingush, Circassian, Abkhasian of the Caucasus, Udmurt, the Turkic languages such as Kirghiz or Uzbek, and many other languages such as Cheremiss of the Volga basin, the Samoyed dialects spoken by the nomads of the Lower Ob, and Zyryan of the Pechora basin-all ▶ these languages seem helpless before the onslaught of Russian, which they absorb haphazardly, with a great many uncontrolled borrowings from it.

As they become aware of the powers of language, States set up official planning machinery. History is, as a result, studded with the foundation of academies for a great many languages: Italy (Academy of La Crusca, 1582), Germany (1617, 1633, 1641), France (1635), Spain (1713), Sweden (1786), Hungary (1825), Romania (1879), Syria (1919), Egypt (1932) and Israel (1953). These bodies are set up in order to harness the power of language in a rational manner, by singling out national languages in cases of multilingualism, by publishing lists of officially recognized neologisms, thereby defending the prevailing idea of the purity of the language, by systematizing spelling or reforming it, as the case may be, by compiling lexicons of dialects regarded as the most archaic (as in the case of Turkey under Atatürk), and by compiling grammar books and dictionaries.

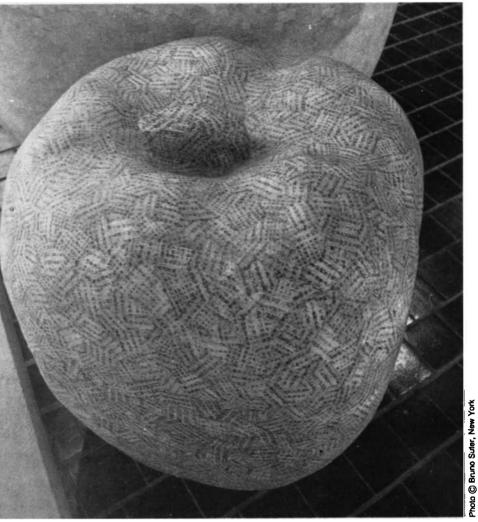
The internal power of language pertains not to a system but to an activity. We are concerned here with what linguists call parole. It is not a matter of chance if those who use speech for purposes of command, in all organized structures, starting with that of the State, are nearly always highly attentive to questions of language. In their support for or participation in scholarly research, governments are very eager for standardization, and, when it suits them, for linguistic reform. This is no innocent flirtation on the part of lovers of words and phrases, but very definitely a political activity. This is brought out by explicit statements of position, such as that of Stalin in the famous Pravda article which, in 1950, put an end to the reign of the linguist Marr, whose linguistic theories, dominating the Soviet scene, had long been a hindrance to all progress: "As regards Marxism in linguistics", wrote Stalin in the article, "... this is a matter which concerns me personally".

Indeed, political regimes which rest on a particular way of manipulating *parole* are, in a way, logocracies, i.e. systems which build their dominion on the power of words. In fiction, Orwell's newspeak was the very essence of a "language" aimed at eradicating all unorthodox thought by banishing the names which might sustain it. In the real world, logocracies abound. To varying degrees, all political power is tempted to exploit the force of words that have been drained of their meaning and moulded into stereotypes, in order to disguise the facts.

Officialese provides some examples of special techniques. One of these, which has already been studied, consists of replacing the greatest possible number of verbs and adjectives by nouns, thereby manipulating parole to avoid the head-on confrontation with reality which the views of verbs would convey. For example, in the shift from my views are right to the rightness of my views, there is a real transition from an assertion, which might call forth criticism, to an implicit assumption, which purports to reflect something already evident. The user of this type of *parole* thereby not only sidesteps explicit responsibility for a claim: he also dodges any objections. For it is much less easy for a listener to disagree with the unfinished sentence that begins: the rightness of my views, than with a complete sentence: my views are right.

With his "object poems", the Czech artist Jirl Kolar seeks to make poetry "immediately clear to everyone" and to fulfil his prediction that "one day it will become possible to make poetry out of anything at all." As the materials of his art he uses small objects such as razor blades, matchboxes, keys, and remnants of fabrics as if they were the embodiment of words. In collages such as The Apple (1967), above, he incorporates all the graphic techniques invented by man: fragments of ancient manuscripts, letters, dictionaries, and various forms of writing: Arabic, Hebraic, Chinese, Persian, Gothic, Cyrillic, Latin and Greek.







"The oral style is a literary genre in its own right. It is a cultural tradition which seems to justify the creation of a term, orature, which would be symmetrical to that of literature (...), in the sense that it preserves the monuments of a culture but leaves no material trace." (Claude Hagège, L'Homme de Paroles). Above, 40-cm-high ceremonial carved axe of the Lelé people of Zaire symbolizes the power of language and the spoken word. Left, wooden stool adorned with an ancestor-figure (height 76 cm) is used by the latmul people of Papua-New Guinea as a ceremonial chair during debates about myths and genealogies.

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In some languages, words say explicitly that they confer power, whereas, in others, that distinctive capacity of language to be a secret power, and hence a power inevitably attractive to dictatorships, usually reluctant to be identified as such, is not explicitly stated. Nahuatl, the language of the Aztecs, belonged to the former category: "He who in Mexico City was called 'emperor' bore the title tlatoani, 'he who speaks', from the verb tlatoa, 'to speak'; the same root is to be found in words connected with speech, such as tlatolli, 'language', and in words connected with power, such as tlatocan, which designates the supreme council, the place where one speaks and from which authority emanates. It is no accident that the sovereign is known as *tlatoani*: at the root of his power is the art of speaking, the palavers in council, the skill and dignity of those high-flown and colourful speeches so greatly appreciated by the Aztecs". (6)

So, whether by virtue of the pressure that language exerts from birth on the mental representations of the person who speaks it in his natural environment, and whose thought it fashions, or whether by virtue of the use to which language-in-action can be put, i.e. parole, for purposes of domination, the powers of language are universally manifest. The human science which studies them, linguistics, is necessarily also a study of the innermost being of humanity. The human race, which has brought nature under its yoke, transforms biological data by making a persevering and thorough study of their properties and of ways of acting on them.

The human race acts in the same way on language. What about the machines with which the computer revolution and studies of artificial intelligence are lavishly supplying the market? Will human beings find in these no more than a pale reflection of their inimitable abilities, or will they see new masters coming to rule them, after the fashion of the sorcerer's apprentice, victim of his own inventions? Only time will tell. But the linguist who studies the power of natural languages has a number of reasons to believe that the power of artificial languages is not something that will develop overnight.

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2. B.L. Whorf, Language, Thought and Reality, New York, The Technology Press, 1956.

3. E. Benveniste, "Catégories de Pensée et Catégories de Langue", Les Etudes Philosophiques, 4, 1958, reprinted in Problèmes de Linguistique Générale, Paris, Gallimard, 1966, pp. 70-71 (63-74).

4. J. Gernet, Chine et Christianisme: Action et Réaction, Paris, Gallimard, "Bibliothèque des Histoires", 1982, pp. 326-327.

5. J. Erdődi, as reported by G. Barczi, A magyar nyelv életrajza (Budapest 1975), Etudes Finno-ougriennes 12, 1976, p. 304 (304-307).

6. J. Soustelle, La Vie Quotidienne des Aztèques à la Veille de la Conquête Espagnole, Paris, Hachette, 1955, p. 114.

CLAUDE HAGEGE, French university teacher, is director of studies at the Ecole Pratique des Hautes Etudes and a member of the language laboratory of the National Centre of Scientific Research (CNRS). He is the author of 10 books on language, the most recent of which is L'Homme de Paroles (1986). His linguistic research has taken him from Africa to Oceania, from Europe to the Arab world and from China to the Indian reserves of the United States.



Cheikh Anta Diop (1923 - 1986)

Professor Cheikh Anta Diop, who died in Dakar on 7 February 1986, was an outstandingly versatile man of culture whose name will always be associated with the renaissance of African history. His works revealed uncharted areas of the African past and filled many gaps in our knowledge of the evolution of humanity. Today it is no longer possible to write a history of ancient Egypt without referring to his work on the origins of African and pharaonic civilizations. A man of science and a man of letters, Cheikh Anta Diop was anthropologist and historian, physicist and Egyptologist, linguist and philosopher. After working for several years with the French physicist Frédéric Joliot-Curie, he specialized in nuclear physics at the Collège de France. In the human sciences, he was trained by two eminent French scholars, the philosopher Gaston Bachelard and the prehistorian André Leroi-Gourhan. He submitted a thesis at the Sorbonne on the comparative study of the social systems of Europe and black Africa from Antiquity to the formation of modern States. Professor of Egyptology at the University of Dakar, founder-director of the Radiocarbon Laboratory at the University's Institut Fondamental d'Afrique Noire (IFAN), Cheikh Anta Diop was one of the most active members of the International Scientific Committee for the Drafting of a General History of Africa. Sponsored by Unesco, this major work in eight volumes, some of which have already appeared, is now in the final stages of preparation.

The Picasso Museum in Paris

The Picasso Museum in Paris, which opened its doors to the public on 1 October 1985, contains Picasso's collection of works by other artists and the major dation of "Picasso's Picassos" which was made by his heirs to the French State in 1979. The total amounts to some 230 paintings, 150 sculptures, 90 ceramics, 1,500 drawings and 1,500 engravings. This outstanding ensemble is housed in one of the finest historic buildings in the Marais quarter of Paris, the Hôtel Aubert de Fontenay, commonly known as the Hôtel Salé (built in 1659) which has been specially restored and altered for the purpose. Below, a *Unesco Courier* interview with Dominique Bozo, who played a leading part in the creation of the Picasso Museum.

Courier: Can Picasso's personal collection (whether of his own works which he kept for himself or of the works of other artists which he acquired) offer the art enthusiast any indications as to the line of direction taken by the artist in his work? *Bozo:* This is a difficult question to answer inasmuch as a personal collection is not necessarily intended to be either a guide to an artist's work or the reflection of a confrontation of ideas. What is remarkable in Picasso's case is that he started to establish



his personal collection, by purchase or by exchange with other artists, very early on, from the beginning of the century. It has therefore been possible to assemble in the Museum works of others that he selected at the same time that he was producing key works of his own. Thus the paintings of Henri Rousseau "Le Douanier", acquired by Picasso around 1919 and 1920 at the time when, after a foray into cubism, he was returning to the classical style, are, in a way, a recognition of the scope for figurative art that derived from the cubist revolution. Similarly, the thirty works by Cézanne, even though they did not become part of the collection at the time of the birth of cubism, around 1907, are important to the understanding of space and light in the work of the great native of Aix-en-Provence, and, indeed, of the cubist upheaval. The paintings of other fellow artists-André Derain, Georges Braque, Henri Matisse-give rise to encounters which enable us to assess the directions being taken by Picasso in his work.

Courier: Does the panorama presented by the collection give any indications as to Picasso's ability to encompass the "universal" implications of art-contact with other cultures, continuity and rela-tionships with preceding artistic periods? Bozo: From the beginning of the century up until the start of the Second World War, Picasso collected and hung in his studio works of primitive art from Oceania and, in particular, from Africa. The bulk of these works are on display at the Picasso Museum. What we learn from them is that Picasso did not actually copy primitive art, but that he found in the reasoning that lay behind its creation, its colour and its style of cubism, a kinship, an emotional affinity which reinforced him in his own approach. Picasso was also an observer of prehistoric art, in particular Iberian prehistoric art, and these works too can teach the art enthusiast something about his creative development. Primitive art, however, never encroached upon Picasso's artistic or philosophical autonomy.

Seen in this way, and in so far as it brings together the testimony of other cultures and the works of contemporaries who might be considered as sources, the Picasso Museum is a place in which we can learn about and learn to understand an exceptional personality.

One great achievement of the Museum is to have brought together almost all Picasso's preliminary studies, to have, as it were, catalogued the archives of his thought. Through this experimental laboratory of his work (the testimony of other cultures, or affinities with other artists), the Museum has developed an extraordinary pedagogical tool which enables us to select themes or subjects from Picasso's work and to show

The staircase of the Hôtel Salé, home of the Picasso Museum in Paris. The chandelier is by Diego Giacometti. their continuity and development, or the deviations during a given period or throughout his work as a whole. We know that he always went further than he had expected to go, that at times his creativity deserted him and that he felt the need to pause from time to time to consider what he had achieved. This led him to acquire a certain mastery over his thought, and this re-ordering of his ideas took place by reference to the works of the great masters who had preceded him. Regularly in his work we find paraphrases of the great universal artists; and as a consequence of these confrontations there is a very great sense of liberty in his work as compared to other attitudes and methods that are fixed once and for all. The other great achievement of the Museum is that it also contains a collection of major works and series of paintings leading up to or developing from them.

Courier: Did wide-ranging considerations such as those we have discussed influence the organization of the Museum?

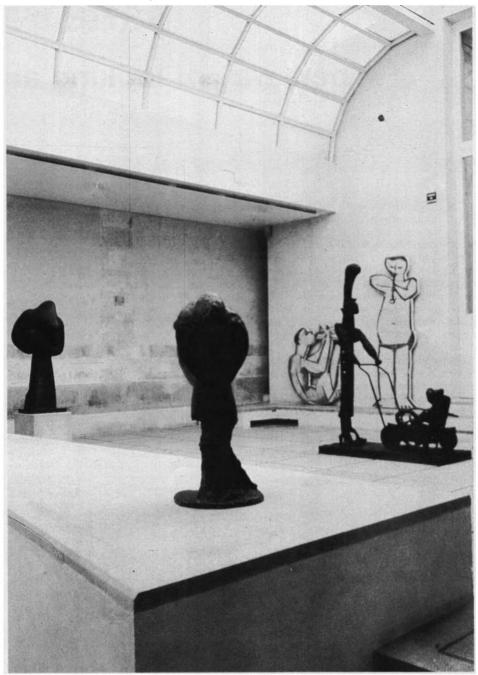
Bozo: The Museum was conceived with the aim of showing that each of Picasso's works stands alone and of highlighting the masterpieces, while at the same time demonstrating the strength of the artistic renewal from one period to another and the way in which each period draws inspiration from the one that has gone before. For example, a work from the 1950s may be placed beside a work dated 1919 to show the continuity in form or theme. This gives the public food for thought. Similarly, sculpture and paintings are juxtaposed, for Picasso turned to sculpture when a spatial problem arose in his painting.

Courier: Is the current layout and presentation of the Museum definitive?

Bozo: By no means. Our attitudes to have changed since the museums nineteenth century. Nowadays, the more one is involved with a museum the more one appreciates its wealth and the potential for modification. The inner resources of the works themselves are such that it should be possible to present them in different combinations. At the moment they are hung in such a way as to show off the richness of the collection, to make it easily accessible to the public and to provide a harmonious contrast with the seventeenth century building in which it is housed.

Courier: Are there other museums in the world conceived and established on the same principles?

Bozo: There are several museums of this kind in the world: the Rodin museum in Paris, the Matisse museum at Nice, the Van Gogh museum in Amsterdam and the Edvard Munch museum in Oslo are just a few examples. Almost all countries would like their greatest national artist to have a museum. This is fine if the artist in question is of a high standard and if the country owns the best or the largest collection of his or her work. In this case it is less a matter of creating a museum in the practical sense of the term than of an artistic "space" close to the place of creation. We are very fortunate to have the Hôtel Salé as a setting for the Picasso collection since this enables us to demonstrate that twentieth-century art can cohabit with and indeed be an extension of the art of the seventeenth century. On the great staircase, for example, Picasso's



In this part of the Picasso Museum are 5 sculptures from different periods of the artist's life: left and foreground, two bronze Heads of a Woman, 1931; right, the famous Woman with a Baby Carriage (bronze), 1950; in background, two ceramics, Standing Flautist and Seated Flautist Playing a Double Flute, both 1958.

monumental sculptures from the 1930s mingle happily with the works of Flemish sculptors who came to work in France during the seventeenth century. Furthermore, during the 1930s and later, Picasso lived in private town houses or country residences very similar in style and atmosphere to that of the Hôtel Salé and many of his works were created in this kind of setting. Finally, the fact that the furnishings are the work of another artist (Diego Giacometti, the brother of the sculptor Alberto Giacometti) gives another dimension to the concept of artistic encounter.

Courier: What lessons can be learned from such a venture?

Bozo: Today members of the general public

are encouraged to go to museums, but they often lack the necessary knowledge and the means of informing themselves to benefit fully from them. They often feel somewhat lost even though fascinated. Twentieth-century art is something of a problem. There is such a wide variety of seemingly contradictory trends, ranging from a continuation of the classical tradition to the most severely critical art of today, that it is easy to become lost in the diversity of modern thought. The Picasso Museum gives the general public an introduction to twentieth-century art. Getting to know a particular artist is a good way of acquiring an understanding of the century, especially when his work spans eighty years of creative activity. In short, we are concerned with the work of an artist who was also a humanist; and his relationship with the past, with art as part of our heritage and of the historical process, gives the Museum a universal character which is both instructive and stimulating.

DOMINIQUE BOZO, of France, is director of the National Museum of Modern Art at the Georges Pompidou Centre in Paris.

Matta

A new way of looking at the world

ULTURE has never been so much discussed as it has since technocratic societies have tried to get rid of it. At major exhibitions in Paris, Milan, Moscow, Tokyo and New York, swarms of visitors file at top speed past ancient and modern masterpieces on display. The success of these exhibitions is not measured by the rarity of the works displayed or by the quality of the aesthetic pleasure they give, but by the number of spectators they attract.

The trend towards uniformity imposed by the media and by cultural mass production not only outlaws the works of a particular artist, film-maker, writer, philosopher or musician, but inhibits the very function of culture and art as a means of expressing, exploring and recording the world of the imagination. The way is barred, not to masterworks, superficial and furtive though our

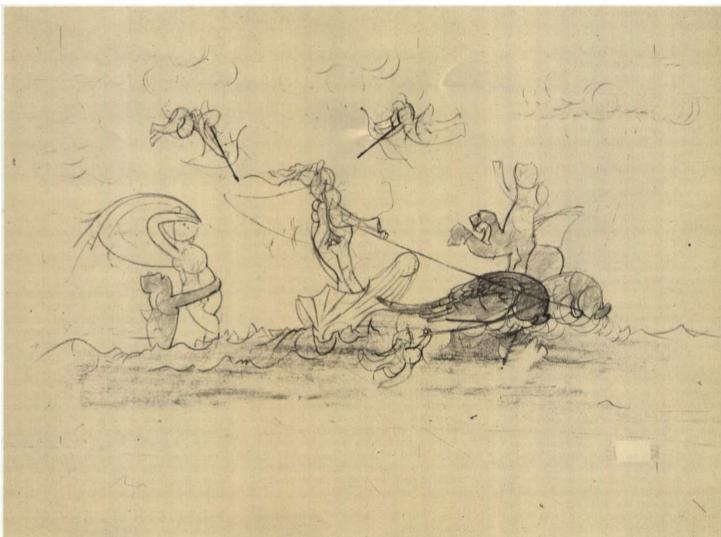
by Jean-Jacques Lebel

perception of them may be, but to the imaginative powers and the creative genius of each one of us. Surely the total monopolization of communication technologies and the media of creation for exclusively political or commercial ends is having the crushing effect, not only of controlling the behaviour of ordinary citizens, but of preventing them from seeing, feeling, imagining or desiring anything except that which it is considered appropriate for them to see, feel, imagine or desire.

We may well wonder whether the increasingly harmful environment created by the media will not bring about a retrogression: in other words, the disappearance of certain cultural activities that are regarded as too subjective or too complex. Desertification and the steady poisoning of the environment have, as we know, resulted in the extinction of many animal species. The sole survivors are species which have adapted by mutation to deleterious changes. Does the same fate lie in store for those artists, poets, philosophers, musicians and film-makers who refuse to adapt to the equally harmful mediocrity and money grubbing of the cultural industry?

These were the unanswered questions raised by three recent exhibitions in Paris which, simultaneously but from different points of view, tested the ability of consumers to see anything but soap operas or pop singers. These were the exhibitions of Rembrandt's engravings at the Petit Palais, the Bernard Saby retrospective at the Museum of Modern Art of the city of Paris, and the Matta retrospective at the Beaubourg Centre. Three oases, three pockets of resistance to cultural desertification.

Take Matta, for instance. Marcel Duchamp said of him, as long ago as 1946,





Above, George and the Dragon, 1965. Wax crayon and lead pencil on paper (54.5 x 75.5 cm). Private collection, Paris.

Left, The Birth of Venus, 1965. Wax crayon and lead pencil on paper (50 x 66 cm). Private collection, Paris.

that he was "the profoundest painter of his generation", and yet he calls himself not a painter but a seeker-a seeker of himself and of the Other. He is an archaeologist of human desire and a reorganizer of Reality, and has coined the term econography to describe his work. Here we have one of the most highly inventive minds to have explored the problem of what it means to see. For half a century, he has kept the social and mental structures of the West perpetually shifting, and hence in danger of losing their balance and finding, subsequently, a new kind of balance. He is an architect who started out working with Le Corbusier, but whose Utopias have been built only in mythical and linguistic space, transcending the urban context in which the citizen of the nuclear age is locked. He is an exceptional person, a man who has crossed the Andes and the Atlantic and travelled through surrealism and communism; who was a friend of Pablo Picasso, André Breton, Victor Brauner, Max Ernst, Henri Michaux and Salvador Allende; who studied with de Sade, Marx and Lautréamont; who has illustrated Cervantes, Shakespeare, Rimbaud and Jarry, and been acquainted with Marat, Gramsci and Lao Zi; who was a lover of Danaê, Penthesileia and the Scarlet Empress, and dreamed of being Genghis Khan, Leonardo de Vinci and Che Guevara. Here is an artist who wanted to paint what no one had painted before him: the living being in the process of rethinking the world and its place in the world. His was

one of the most important exhibitions to be

held in this last quarter of a century. How can one "consume" this painting, which defies market forces? What did the endless crowds flowing through the Beaubourg Centre find in this major retrospective exhibition, by turns dazzling and arcane? This polyglot Chilean nomad clearly cannot be reduced to fit any school, style or dogma-he is neither abstract nor figurative, neither an expressionist nor a social realist, nor even wholly a surrealisthe refuses to align himself with a fixed idea or specific doctrine. This creates problems for people who need an ideological "key" in order to feel that they can appreciate a work of art (thereby confusing art with a puzzle or a locked door). Matta can be bewildering in his playfulness and the youthful, quicksilver, changeable side of his nature. What he offers us is an art of seeing.

"Potentiating space

space in Space

expanding space"

wrote Henri Michaux about Matta's painting, which seizes on reality only in order to transform it. Matta makes no secret of this. Indeed he proclaims it: "Obviously! Art is revolution".

JEAN-JACQUES LEBEL, French writer and theatre and film director, is the author of several books including La Poésie de la Beat Generation (Poetry of the Beat Generation) 1965, Le Happening, 1966 and L'Amour et l'Argent (Love and Money), 1979.



Treasures of Mongolia

by Namsraïn Ser-Odjav

Granite tortoise forms part of the remains of Karakorum, the ancient capital of the Mongol ruler Ogdal, son of Genghis Khan. The ruins lie on the right bank of the Orhon river at the foot of the Khangal mountains. The tortoise once formed the base of a stela engraved with ancient texts. Stones on its back are offerings made in accordance with a still current tradition known as obo in Mongolian.

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The soyombo ideogram (left) which features on the national flag of the Mongolian People's Republic is regarded by Mongolians as their national emblem of liberty and independence. Each sign takes its meaning from ancient symbolism. For instance, the fire-sign situated above a sum and a quarter moon (legendary father and mother, respectively, of the Mongolian people) here signifies: "May the Mongolian people always live and prosper!"

N the late nineteenth century, the world scientific community learned of an extraordinary archaeological discovery in the valley of the upper Orhon Gol in Central Asia. Where this river emerges from deep gorges and flows in a wide curve into the plain, the ruins of a vast city had been discovered, apparently watched over by a giant stone tortoise, symbol of eternity.

This was the famous Karakorum, capital of the Mongol Empire founded in the thirteenth century by Genghis Khan. It was situated on the right bank of the river, 400 kilometres south-west of Ulaanbaatar, the present capital of Mongolia, in an area which was suitable for both crops and livestock and which possessed very old-established mining deposits, the Dalakyn-tal-an area which, indeed, had been the cradle of many Central Asian civilizations. The strange inscriptions found on the statues and stone stelae discovered in the city were later attributed to the "Blue Turks"; many writings from the period between the sixth and the eighth centuries describe this people's glory and its tragic destiny.

Karakorum was a settlement of several thousand inhabitants. Its agriculture and crafts were highly developed, trade flourished, and it boasted a sophisticated intellectual community. Its foundation has been traced back to 1220, when Genghis Khan's headquarters were transferred to the banks of the Orhon Gol, probably near Mount Melekhit, the "Tortoise Mountain". On the heights which today overlook the village of Kharkorim, one can see the imposing granite tortoise which probably gave the site its name.

All around this stronghold, craftworkers' and traders' quarters and other houses were graudally built, until, by about 1230, the area had taken on the appearance of a town. Subsequently, in order to house the administration that was his gift to the Empire and to receive ambassadors with all due ceremony, the great Khan Ogödei, third son of Genghis Khan, ordered major construction work to be carried out.

In the various foreign sources which mention it, the capital of Genghis Khan's immediate successors is described first as a sort of mysterious reservoir from which wave upon wave of savage conquering hordes come pouring out; later it is seen as the economic, political and cultural centre of the united Mongol tribes in the thirteenth century; and, ultimately, as an archaeological cemetery. But the real Karakorum was quite different.

An envoy from King Louis IX of France, the monk William of Rubrouck, who was received in 1256 by Möngke Khan, has left us a detailed description of the community. Twelve different religions coexisted in Karakorum, where mosques, Buddhist monasteries and a Christian church clustered cheek by jowl. The earth rampart which surrounded the city had four gates, each with its own market.

The palace of Ogödei Khan was a masterpiece of the architecture of the period. The two-storey building contained a vast central reception hall, supported by sixty-four columns and tastefully appointed; its walls were adorned with paintings and the floor was of green glazed tiles. All the roofs, made of green and red tiles, had ornamentation in relief. This love of ornament and the inventive use of a few decorative motifs, characteristic of the architecture of the time, gave this palace a festive air.

The archaeological excavations carried out in recent years in Karakorum add to the written records on a number of points. The palace and the other major constructions were built of sun-dried bricks, some of which still bear the trade-mark of the manufacturer, and the houses could be warmed by a system of underfloor heating. The aristocratic areas extended to north and south along the Orhon river. The craftworkers' and traders' quarters and the administrative districts that have come to light have yielded rich finds: fragments of porcelain and glazed pottery, farming implements, craftworkers' tools, cast iron hubs of wheels, domestic utensils and all sorts of ornaments in gold, silver and bronze. Coins >



were particularly numerous, of both Mongol and foreign minting.

In 1380, Karakorum was destroyed. But approximately two centuries later, on the same site, there arose the yurt of Avtaï Khan, founder of the Erdeni Dzu Monastery. The great circular platform which formed its base is still visible today.

The Erdeni Dzu architectural complex is an outstanding example of Mongol architecture, and its establishment by the Khalkha Mongol chief Avtaï Khan can be traced precisely to the year 1586. Its lavout was quadrangular, and in the seventeenth century an unusual precinct was added, consisting of 108 small buildings in the shape of pagodas, the soubourgan. On each of these is inscribed the name of the person to whom it is dedicated. Erdeni Dzu contains other remarkable monuments, either restored or under restoration, in particular the Labrang, a palace, and three large temples. These are set side by side on an earth terrace raised for that purpose, and form a harmonious whole, despite certain dissimilarities: the temple in the centre has two storeys, whereas those on either side have only one, and each has a double pitched roof.

The monastery of Erdeni Dzu is a focal point in the history and culture of the Mongol people. Besides paintings, ornaments and embroideries dating from the fifteenth to the seventeenth centuries, it houses a whole library of rare manuscripts and wood-block printed editions. Here, too, are preserved the works of the seventeenthcentury painter and sculptor Zanabazar, great illustrator of the Buddhist canon and one of the first Mongol artists to have attained universal stature. In his day there was an extraordinary flowering of the arts and culture in Mongolia.

One of the most remarkable monuments of the Orhon valley is the funerary complex of the Turkish chiefs Köl and Bilge Kagan. Besides the tombs, it contained tall commemorative stelae with runic inscriptions and a great many stone statues. More than ten centuries ago, the roofs of the sacrificial temple collapsed, and gradually the clay soil formed a protective shell over the ruins. An avenue lined with sculptures representing princes and great army chiefs used to form an approach to the temple from the east. Apart from two grey marble statues, headless but still virtually intact, this ceremonial guard had been reduced to a shapeless mass of rubble.

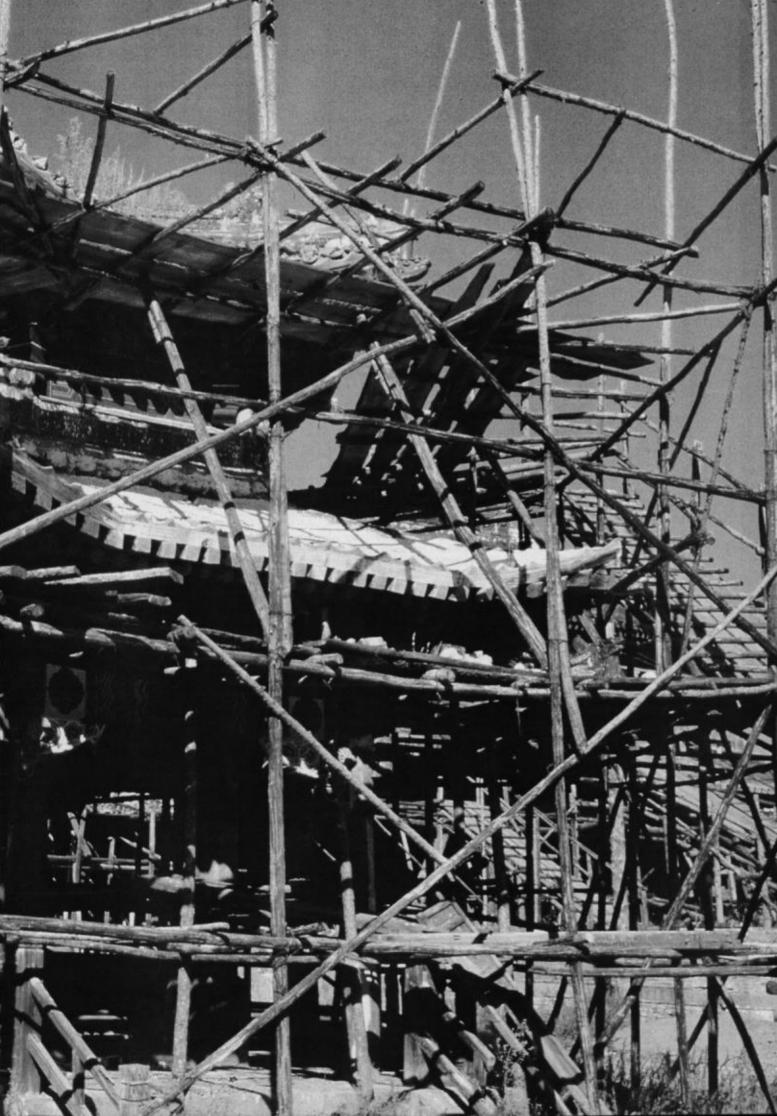
A section of marble jutting out of the ground was the sole clue to the whereabouts of the great stone tortoise. The stela erected on its back was covered with ancient, angular Turkish characters, inscribed in regular lines. More than two centuries of history of the nomadic tribes of Central Asia were contained in that narrow compass. These CONTINUED PAGE 37 Statue of a warrior-guardian on the site of a cemetery for Turkic chiefs (7th-8th century) in the Orhon vailey. Stones in front of the effigy of the valiant warrior are known as balabal and indicate the number of enemies he had vanguished.





The temple of Labrang (above) is situated in the vast precinct of the Erdeni-Dzu monastery, a monument of major architectural and cultural importance located some 400 km west of Ulaanbaatar, the Mongolian capital. The building is a massive Tibetan-style edifice with a flat roof, trapezoidal windows and walls whose exterior face inclines slightly inwards. Dating from 1780, it was the residence of the Lama and a place of worship.

Stela, (left) which once stood on the back of a sculpture of a tortoise at Karakorum, is carved with inscriptions in ancient Turkic letters which relate episodes from the history of the nomad tribes of Central Asia. One passage declares: "Listen until the end to what I say to you here, you who come after me. O Turkic people! May the Turkic people never perish, may they be a people forever!" Since 1980 Unesco and the Mongolian Government have been carrying out restoration work on the monastery of Amarbayasgalam, which stands 2,000 metres above sea level, 300 km north of Ulaanbaatar. The roofs are being covered with varnished tiles manufactured using the same techniques as those with which the original tiles were made. The monastery consists of some 30 buildings.





The traditional dwelling of the Turkic and Mongolian nomad herdsmen of central Asia, the yurt is a collapsible circular tent in which a wooden latticed structure is covered with felt. In the past massive royal yurts were transported from place to place on ox-drawn platforms. In the 13th century, William of Rubrouck claimed to have seen a yurt drawn by 22 oxen. Although such great mobile dwellings have disappeared today, the yurt itself (Rül In Turkish; gher in Mongolian) is still a striking feature of the Mongolian landscape. Above, a 13th-century scene as depicted by an artist in the 19th century.

Photo taken from Art de la Mongolie de l'Antiquité au Début du 20e Siècle by Niam Ossorine and Tsuiten, Plastic Arts, Moscow, 1984

Photography, the memory of peoples

From 9 to 12 December 1985, some forty specialists attended a meeting on still photography held in Luxembourg (see page 2). Most of the leading press agencies from the industrially developed countries (AEP, Reuters, Tass, Keystone) and the developing countries (PANA, XINHUA) were represented at the meeting, the first organized by Unesco in this field of creative activity.

The participants recommended a number of guidelines for Unesco's action in the field of photography. They suggested that Unesco should carry out studies on the economic and socio-cultural impact of modern communication techniques, including photography and "visual writing", considered as a new mode of expression. They also proposed that Unesco contribute to the publication of monographs relating to photography, especially in the developing countries. Finally they asked Unesco to bring together users and manufacturers of photographic equipment and to encourage the manufacturers to produce robust, reliable cameras adapted to conditions in countries where the climate is unsuitable for highly sophisticated equipment, as well as durable photochemical and photomagnetic material.

The participants encouraged Unesco to contribute to the creation of photo archives, in which to preserve the memory of peoples. They also expressed the wish that a meeting of specialists be held to bring the copyright conventions up to date and to include in them the protection of photographic images. Unesco was also invited to support photography training programmes in developing countries.

CONTINUED FROM PAGE 32

The 18th-century drawing below depicts

the entrance of the palace of Karakorum as

it appeared in the 13th century, when it

was adorned with a magnificent silver tree

wrought by a French craftsman. In his

Travels in the Mongol Empire (1253-1255), the monk William of Rubrouck, envoy of

the French King Louis IX to Möngke Khan.

left a detailed description of this extraor-

dinary tree, "at the roots of which are 4

silver lions, each vomiting white mare's

milk. At the top, one of the four ducts pours

forth wine; another caracomos, clarified

mare's milk; another bal, a drink made

from honey; and another rice-beer. As a

receptacle for each drink a silver bowl is

placed at the foot of the tree. At the top of

the tree he has made an angel holding a

trumpet, and beneath the tree a vault

where a man can hide."

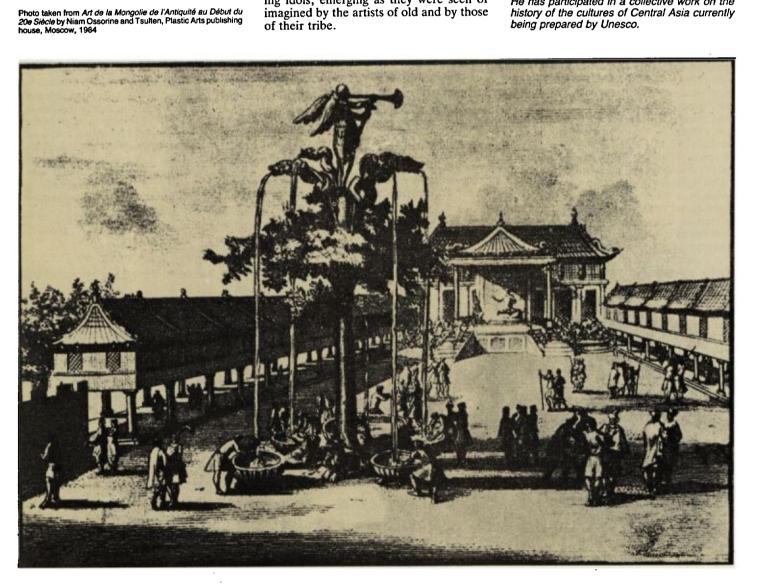
tombs, then, are outstanding examples of the art and culture of the Turks of the Mongol steppe, but they are also an essential link in our knowledge of the past.

The sculpted stone warriors are powerfully original works of art. They are usually represented in a traditional upright pose, holding a chalice in the right hand. Their costumes, hairstyles, earrings and belts, decorated with a variety of plaques, to which their weapons are attached, are depicted with great precision. The faces have slanting eyes set very close together, a long nose and a small mouth with a moustache. But the realism of this model is combined with considerable imagination in the invention of individual features. These statues stood as silent witnesses to the ceremonies and funeral rites which took place in the monuments raised in their honour, facing east. In front of the statue of the valiant warrior was set up a row of rough stones, balbals, which indicated the number of enemies he had killed.

In the Orhon valley there are also an incalculable number of ancient rock drawings: animals, people, signs and decorative patterns of various kinds. When we begin to decipher these scriptures in stones, a whole world starts once again to stir into life and meaning. For a moment we feel the joy and the fear aroused at night, before the fire, by the sacred ceremonies. In the rock formations of the steppe, worn away by wind and rain, we see the faces of divinities or terrifying idols, emerging as they were seen or imagined by the artists of old and by those of their tribe. Horses, the valiant steeds of the steppe, were held in high esteem. They appear in complex compositions, often with necks outstretched, caught in full gallop. Sometimes the horse is bestridden by a horseman, drawing his bow or reaching out an arm. The oven-hot air makes the drawings shimmer and seems to give them a life of their own, adding to their evocative power. The stag is another animal often portrayed. It was apparently an object of worship and an important factor in the economy of these tribes.

This rapid survey of the Mongol cultural heritage is necessarily incomplete. And the Orhon valley undoubtedly still holds countless hidden riches. Such a fine historical site deserves a place among the treasures of the world cultural heritage. For here, on the banks of the Orhon, dwelt the people who, for twenty centuries, set the course of history not only in Central Asia but in Asia Minor and Western Europe by mapping out this vast area where flourished what is commonly known as the "Empire of the Steppe".

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1986: Year of Peace / 3

Messages from young people

O encourage young people to reflect on "the maintenance and strengthening of peace", Unesco recently asked its National Commissions to send in essays on this theme written by young people between the ages of fifteen and twenty-four.

Forty-four young people from all over the world responded with messages expressing their desire for peace and their awareness of the fragility of peace. They unanimously condemn the arms race, considering that the money swallowed up in arms spending should be devoted to the development of the poorer nations, and that peace is inconceivable as long as hunger, poverty and sickness prevail in many parts of the world-in short, that peace is inseparable from development and justice. They believe that armed conflicts mainly originate in ideological and political intolerance, racism and social inequality. They all see the conflict between generations as a form of social injustice, especially in a period of economic crisis. Misunderstood by older generations, young people, they say, often feel they are outsiders.

Most of the young people advocate the same road to peace. In politics, they consider that solutions to disputes should always be negotiated, and describe the United Nations as the only international body capable of ensuring peace. Many of them feel that the family should instil the values of peace in young people from a very early age. They deplore literature and mass media programmes that encourage violence for its own sake, and render human suffering commonplace. Most of them consider fraternity and generosity to be the fundamental values and maintain that the latter will only become a living force when they are professed by each individual. For them, everything begins with the individual. Hence the decisive role of family unity, the keystone of a peace that will extend to join communities and nations.

Below, extracts from some of the letters:

.



"I should like to be part of an organization of children between the ages of ten and thirteen which would try to influence and convince younger children that war is a bad thing for all mankind."

Branimir Majcica (Yugoslavia)

"War does not necessarily mean bombing. Today certain dictatorships use torture or psychological terror. Thus people do not die from bullets, but from malnutrition or pneumonia, or if the machine of State is strong and allows it, by 'suicide'. It is difficult to challenge this, because only falling bombs can be seen."

Christine Kasper (Austria)

"¡When elephants fight, the grass suffers.' The struggle for military superiority between the super-powers has hit the Third World countries hardest."

Basanta Raj Sharma (Nepal)

"In the developing countries there is only one doctor for every 3,700 people, but the figure for army personnel is one for every 250."

A.R.M. Saifuddin Ekram (Bangladesh)

"When I ask a child who has not yet reached the age of five 'What does peace mean?' he replies, 'I don't know'. If I ask him what war means, he says: 'People fighting, that is dying'. The child knows much about war, but nothing about peace."

Issam Ali Abdel Rahman (Egypt)

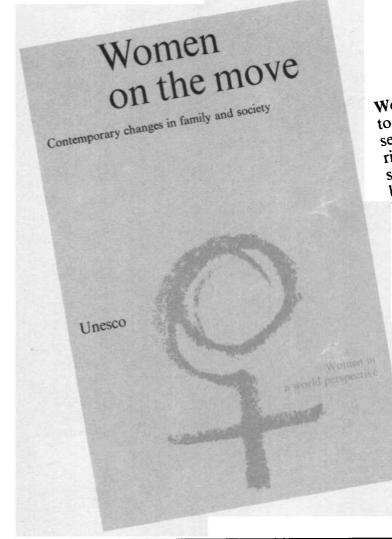
"Holding out a bunch of flowers the little girl said with a smile: 'Buy flowers, sir. Flowers are the messengers of the heart.' 'I do not want to buy,' he said. 'I would like to ask you a question. Do you think selling flowers is appropriate in the present circumstances? Thousands of people are dying. Innocent people are being swept away. They are darkening children's eyes. And you? You sell flowers!' In a sad voice she said, 'You are not the only one who is surprised about this All the flowers in the world would not be enough to decorate the graves of those of whom you speak with such pity. The dew on the flowers reminds me of the tears of my young brother who lay in the dark sucking my mother's breast smeared with blood. I know why I sell flowers. Their beauty is the beauty of life. But it seems that you have not yet understood their message ...

Gadah Al Qudsi (Jordan)

"Mothers, when you give birth, say 'Peace'!"

Alejandro Angel Puja Campos (Chile)

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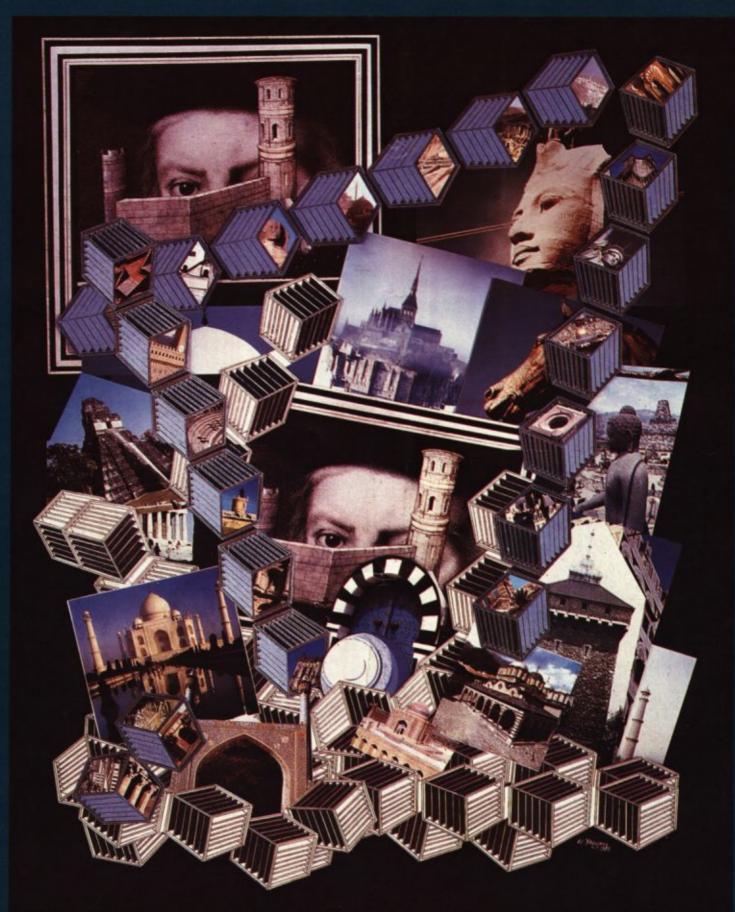
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