The Portuguese Empire 1565 - 1665

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1. Recurring Questions and New Questions (Awareness of the Situation and of its Problems)

In September 1570 the Viceroy D. Luìs de Ataìde and his Council of State met urgently in Goa, because the capital was under threat from the Adil Khan of Bijapor and Chaul was under threat from the Nizam Malik of Ahmadnagar. Could the two Indo-Portuguese towns be defended or would it not be wiser to withdraw from the northern town so as to concentrate forces? The situation in India had changed when the Hindu Vijayanagar Empire was crushed by the Muslim Deccan Sultanates at the Battle of Talikota. Henceforth the Portuguese were alone to confront the expansion of Islam in the peninsula. Furthermore, the Sultans were allied with the Turks - and therefore the Portuguese presence and trade in the Red Sea and the Persian Gulf had cause to fear fresh raids from Ottoman squadrons in the Indian Ocean. On the other hand, piracy flourished in the seas between Ceylon and the Malabar coast, which interested the Portuguese less in that they had just conquered some fortresses on the Kannara coast whose pepper was more important than Malabar spice. This activity of the privateers was based on Calicut, an enemy from the outset. The conspiracy (as the Portuguese called it) involved in the East the King of Achem, the Sumatran kingdom that had always been hostile to the Portuguese presence in Malacca and to their domination in the Southern Sea. The Ottomans formed an alliance with the Kingdom of Achem and their trade with the Indian

Archipelago developed the long direct route between these islands, with their pepper and gold, and the Straits of Mecca. And so, in 1570, D. Luìs de Ataìde had to send a powerful armada to intercept the Mecca *nefs* that sailed in the seas of Sumatra and around the Sunda Islands. Other ships set sail from Goa in the following years, carrying off a governor of the Southern State and conquering Sumatra. At this point, the general rebellion of the Moluccas and Banda (the archipelagos renowned for expensive drugs) broke out and their trade fell into the hands of the Javanese and the Malaysians; the Portuguese then had to try to regain control of this extremely remunerative trade, together with the naval bases, starting with Ambon, that was conquered in 1566 but remained still under threat.

Since defending Goa was an absolute priority, the decision to defend or abandon Chaul was therefore not a regional matter, but concerned the struggle between empires and trading designs on a world-wide scale, from the Eastern Mediterranean to the Moluccas. The central issue was whether Turkey was in a position to intervene in the Indian Ocean. The Viceroy had set up a spy network and had collected all the information sent by the Portuguese fortresses and trading stations: he knew that the Ottomans were focusing on attacking Cyprus, and had recalled all their forces from the Red Sea and the Persian Gulf. Of course, the Porte instigated the Deccan kingdoms and Calicut and Achem, because it feared the growth of Eastern Christianity, just as Goa feared the spread of Islam in the East. However, at that time, the Portuguese, who had succeeded in annexing the Kannara and Konkan coasts, were in a position to deal with the threats on different fronts, since the great binding element in this conspiracy, the Turks, could not send squadrons and reinforcements. The war was led by the Portuguese in Konkan, Malabar, Malacca, in the Sea of Sumatra and in the Spice Islands. For in the distant Far East they came up against the rise of the Javanese and the Malaysians, as well as the new conditions caused by the Spanish presence. Since Fernäo de Magalhaẽs' voyage, this presence had caused problems; nonetheless, these problems were not serious until Legazpi and Urdaneta discovered the return route from Manilla to Acapulco in

1565. From this time on, the Spanish aided the revolts of the local petty kings and waged war on Portuguese bases: at first cloves, mace and nutmeg were at stake, but the new trans-Pacific route entered into competition with the Cape route for the supply of silver to China and the import of silks and porcelain at the same time as the Spanish merchants in the Philippines tried to interfere in the Portuguese trading of Chinese manufactured goods for Japanese silver. The role of Macao was also in question. Malacca had to send heavy squadrons as well as provisions to support Portuguese bases and trading in the South Sea, and was itself laid open to frequent sieges.[1]

The Portuguese Empire in the East Indies (from Sofala to Japan and the Moluccas) was connected to Portugal (Lisbon) by the Cape route, one of the fundamental axes of the new world system; however, it was also linked to the Mediterranean via the transcontinental routes of Asia and the Levant, and felt its repercussions. The Far East was connected to Spanish America via the Trans-Pacific route, and then finally to the Atlantic islands and the Peninsula ports. How was this other hemisphere viewed from Lisbon? Morocco remained within its sights, despite the mid-century withdrawal: in Portugal a faction would have liked to recapture the key-positions over there, and King Sebastian died in trying to bring this utopia into being. However, in the Atlantic, the pillars of the Empire were the archipelagos, not forgetting the Canary Islands which were Spanish: Madeira where the importance of sugar decreased as that of wine increased; the Azores which supplied Portugal with corn, live-stock and above all precious woad for dyeing; the Cape Verde islands with their leathers, their sugar and, most importantly, their role in the lucrative trading from the rivers of Guinea (slaves, gold and ivory), and soon their role as a spring-board towards Brazil; on the Equator the island of Sao Tomé, a great emporium for sugar and slaves. About 1570, Brazil became increasingly important, and its sugar dominated world markets; but alongside the *fazenda* (a large sugar plantation and factory) run by slave labour, there were

[1] For all the above, the sources are: A. Pinto Ferreira: *Historia da India no tempo de D. Luis Ataide, 1568-1571*, (Lisbon, 1617); Jorge de Lemos: *Historia dos cercos de Malaca, 1571-1575*, (Lisbon, 1585).

smaller tobacco plantations and large-scale cattle rearing, especially for leather. It was a three-way trade: negros were shipped over the Atlantic in exchange for spirits and tobacco, and Brazilian products went to Portugal in exchange for manufactured goods and food-stuffs. And so the rise of Brazil required settlements in Angola in order to obtain a work-force. On the other hand, the Portuguese had to increase their relations with the West Indies and with Rio da Prata to procure gold and silver; here again they were favoured because they controlled the slave trade. The Portuguese continued to be present on the Guinea coast and at Sao Jorge da Mina. Their pressing need for silver, which was essential for purchases in India, drove them to colonise Angola (we must mention the role played by Paolo Dias de Novais, the grandson of the discoverer of the Cape of Good Hope).

And so the Spanish and the Portuguese overlapped in the Atlantic: their interests made them clash at times, and at other times maintain complementary relations. The King of Spain became the King of Portugal, and the Portuguese took the *asiento* of the slaves. But both countries had to reckon with the presence of the French and the English on the seas: piracy was rampant around the Azores and the Canaries, as well as later in the West Indies. And the Berber pirates (in actual fact Turks) raided through the Straits of Gibraltar. Piracy again infested the routes between the Iberian Peninsula and the Low Countries, and the route from Laredo to Antwerp was abandoned. In Brazil, French attacks did not shake Portuguese holdings.

Between 1570 and 1595, both Portugal and Spain continued to expand their empires, despite trouble from pirate raids. But times were about to change: towards the end of the sixteenth century, the Dutch and the British began to build their empires. We shall try to detect these changes through the positions adopted by the King in Madrid and the municipal administration in Lisbon. In a letter of 18 October, 1631, the *Camara* took stock of the years since Philip I's accession to the Portuguese throne. On his accession, "*nao tinha ele por inimigos os holandzes, inglezes, nem outra naçao das partes do Norte, e com todos estava em paz e segurocomércio*", but "*em razao das inimisades com a coroa de Hespanha, vieram eles a infestar*

nossos mares e conquistas, de modo que se teem feito senhores da maior parte d'elas"; Portugal had thus lost the great profits from her conquests, and the enemies pillaged and seized almost all the merchandise the Portuguese ships transported. They became so powerful that "*jà as forças d'este reino nao sao bastantes para os lançar, nem para defender a navegaçao de nossas conquistas; e sobre tudo fica perdendo este reino e as alfandegas de Va Mgde, o muito que se interessava no comércio que tinha com os d'Europa, cessando quasi todo com o contrabando, mais em damno este reino que dos inimigos, e perdendo-se a estimaçao de nossas fazendas, e das que escapam de nossas navegaçoes, por nao terem reputaçao nem saìda d'este reino*". Portugal was powerless in the face of these threats, income from customs duties was reduced to nothing, and the people of Portugal became destitute.[2] The King had already stressed the unfavourable development of international events, especially as far as Eastern trade was concerned: "*Sendo o trato d'essas partes da India Oriental tao importante para minha fazenda e de tanto proveito para meus vassalos, antes que as naçoes da Europa e particularmente os holandezes e inglezes passasem a elas, por virem buscar a Lisboa as drogas e mercadorias que os portuguezes traziam, com que o reino estava rico e florescente, depois que os estrangeiros intentaram a mesma navegaçao e comércio se trocou tudo, de maniera que estao hoje em posse d'eles, e tem reduzido este reino e esse estado ao aperto que é notorio*", hence the urgency to reinforce the East India Company founded a year earlier in Lisbon.[3] In short, the transition on the part of the Dutch and the British from mere trading to conquests and settlements, and their entering the great trading circuits of the world changed the structure of the Portuguese Empire and the role the Portuguese played in these trading circuits. Of course, they no longer needed to worry about the Ottoman threat: Lepanto had struck a severe blow. Despite Mir Alebet's raids on East Africa in 1586 and 1589, the Portuguese reconquered everything. The newcomers

[2] *Elementos para a Historia do Municipio de Lisboa*, vol. III, pp. 451 et seq.)

[3] Alvarà from Philip III on 10 February, 1629, satisfying the request of the Lisbon Camara - *Elementos*, *op. cit.* pp. 314-317.

organised keen commercial competition on all fronts and waged war very fiercely on Portuguese bases and territories. After failing in the Bay of Guanabara, the French attacked Madeira in 1566, Sao Tomé the following year, Paraïba in 1583, and settled in Maranhao in 1594. The British attacked the Azores in 1597, after having taken Cadiz and Faro the year before. The British and the Dutch sacked several Brazilian ports, and the Dutch laid waste Sao Tomé in 1599. Without going into detail, we need only mention the tribulations between 1621 and 1624: Hormuz was lost, taken by the British and the Persians; the Dutch took possession of Banda - a terrible massacre - and laid siege to Macao; in Brazil, the Dutch conquered Bahia in 1624 (but were expelled in 1625); Malacca underwent another siege in April 1622; a squadron under the command of Jacob Dedel and Michel Green attacked Mozambique and defeated the Count of Vidigueira's armada in July 1622, and from December 1622 until March 1623 the same naval unit blockaded Goa; in 1624, Downton's British squadron inflicted another naval defeat on the Portuguese off the coast of Surat.

Several main themes emerge from this brief analysis. Firstly, Portuguese sailing and settlements covered the entire globe, and so Portuguese politics and strategies had to be set in a global context. Every ocean was involved; trading posts, fortress-towns in so far as they were bases for attacking or defending in wars, Portuguese-subjected territories or colonies, and *capitanias* which formed an extremely complex network, all grafted onto four continents, both in highly-developed, rich and powerful civilisations and in sparsely-populated societies with very primitive technology.

Secondly, Portuguese expansion took place in three ways: empire-building, the creation of routes for trade and other economic activities, and emigration with the Portuguese scattered to the four corners of the earth, settling as private citizens in all sorts of societies - in the Mogul Empire, in black villages in Guinea, on the banks of the Zambesi, in the Bordeaux region, in Spanish Peru (where the rich Portuguese colony dominated trade) and in Seville.

Thirdly, both the Empire and the expansion of trade suffered from the instability of this global dimension because they came up against

other empires and other commercial forces. The empires covered immense territories, and even the smallest were fairly extensive and powerful: the Turkish (Ottoman) Empire, the composite empire belonging to Charles V and Philip II, the Morocco of the shereefs, Vijayanagar, the Deccan kingdoms, China, the Grand Mogul, Achem and the Javanese Empire. The commercial (and industrial) forces were Venice, Genoa, Cambaye, Calicut, the Persian cities and many others. Empires often clashed with one another, if not fiercely, stubbornly; a stubbornness which was intensified by religious conflict which also weighed in the battle for trade.

Fourthly, voyages of discovery enabled vastly different economies, societies and civilisations to come into contact with one another. These contacts were often fraught with misunderstanding: sometimes they were cordial due both to efforts to reach mutual understanding and to the desire for trade, but at other times they were hostile because of political conflict in the contest for power and incomprehension of other mentalities or beliefs. Religious differences, especially when they involved religions which aimed at universal conversion, put all parties on their guard, and mistrust often led to armed conflict. This was a natural degeneration when religion constituted an empire's ideology and when competition in trade was sharpened by contempt for one party's beliefs and when the other party feared the policy of religious conversion, understood as a form of economic domination. From the early days of their expansion, the Portuguese embraced the crusading spirit as the ideology of their imperialism. They viewed it as a movement in favour of Christianity and Islam was therefore the enemy, all the more so because Portuguese trade often clashed with Muslim trading. And so, in this respect, their misunderstanding persisted and they always despised "*a seita do torpe Mafamede*". Religious hostility was responsible for many wars and policies of intolerance. Good relations with the Vijayanagar Empire and other Hindu and Buddhist territories meant that the adoption of strong measures was delayed for several decades. However the institution of the Inquisition at Goa in 1560 and the triumph of the Tridentine mentality drove the Portuguese to persecute others. In 1564 and 1565,

they destroyed the pagodes of Salsete and Bardez. In 1569, they conquered Onor: the Portuguese sailed up the river, "*queimando e destruindo povoaçoes, em que fez aos moradores grande perda, e muito maior magua pela destruiçam dos pagodes, que sam os seus templos e casas de oraçam tidas daquele gentio em tamanha veneraçam como se nao foram casas de idolatria e foram verdadeiramente lugares sagrados e templos da divindade*".[4] There was only one true belief - the others were lies, at best mistakes. Muslims saw Christians in the same way. When the Adil Khan prepared to attack Goa, he wrote that the Portuguese had come into India as merchants, but under this disguise they took possession of several towns, built fortresses and brought territories into subjection; by uniting power on land with power on the seas, they wanted to annihilate the Faith (Islam), wipe out the name of Mahomet, and, by oppression and tyranny, seize all wealth which was insufficient to satisfy their insatiable covetousness[5] But ecclesiastical power often acted autonomously and became an economic and political power, at variance with the State and/or the merchants. Thus ecclesiastical power controlled pearl-fishing between Coromandel and North Ceylon, and tried to control trade between Japan and China (silver was exchanged for silk) and the monasteries on the west coast of India took over the suzerainty of many Hindu villages. In South Brazil and Paraguay, the Jesuits organised the *reduçoes* to keep the Indians in their power.

Fifthly, the globalisation of Portuguese political strategies and economic activities was only partial, forming a sort of super-structure, but it was nonetheless real and prevailing. It was not yet Marx's world market; however, the roads leading to it were now beginning to be opened up and were increasing in number. Many economies became mercantile, although it was too soon to define them as market economies. Around the world different systems took shape: their spatial character changed according to circumstances over the long term, and their structure adapted to technical and social changes. Merchants and

[4] Pinto Pereira, *Historia da India*, Book I, p.61.
[5] *Op.cit.* Book II, pp.336-341.

industrialists had to fight hard battles against the hold of religions as obsolete ideologies that shaped politics. However, among the problems which arose, we should mention the organisation of enterprise and therefore the formation of big companies which gave rise to joint-stock companies - that fundamental instrument for the growth of capitalism, as Bertrand Nogaro liked to point out. In the Portuguese system, the State, as merchant and as the body that established the rules of the game, assumed a determinant role, and the nobility became involved in trade, but the merchants pulled the strings. Despite the weight of religious ideology in the State and the clergy's desire to manipulate economic activities to their own purposes, trading often determined politics and wars and matched the power of religion. For were not the Portuguese Empire and Portuguese presence everywhere connected by ocean routes, and was not their survival assured by maritime forces, which implied that money was the basis of everything?

Consequently, Portugal was part of a closely-knit world system. How did the Portuguese territory in the Iberian Peninsula react to the encirclment and penetration of this international network? We shall examine both the protests the city of Lisbon made against the requests from Madrid - remembering that Lisbon, "the head of the kingdom", was responsible for the whole country- and also the decisions of the central authorities between 1624 and 1629.[6] We have already seen that the invasion of Dutch and British imperialism changed the context of this framework. The first consequence to be noted was the deficit in the balance of trade (to use more recent terminology). Formerly, Portugal had re-exported spices and drugs, sugar, wool and other merchandise; now Northern Europeans brought these goods to Iberian markets which thus were forced to pay in cash for vital imports. This *saca do dinheiro* was inevitable, since Portugal did not produce sufficient bread (cereals) to feed her population and the population of the Moroccan presidios. Insufficient cereal production was the result of depopulation in Alentojo, Campo de Ourique and the lands of Santarém (Ribatejo); the *herdades* were abandoned, and land, laid

[6] *Elementos para a Historia do municipio de Lisboa*, vol. III.

fallow, became heaths; only sometimes did livestock-rearing take the place of cultivation, and there was a shortage of ploughmen and farm labourers everywhere; likewise, crafts were abandoned (artisans emigrated to Andalusia). It is strange that to explain why agriculture and crafts were abandoned, what we would call the inflation of the tertiary sector was blamed: the children of peasants studied because literate jobs were more highly considered. On the other hand, the number of unemployed, vagabonds and beggars increased enormously (alms distributed by the convents were blamed for this).

Already in 1613 or shortly afterwards *advertencias* which were "most necessary for the common good" were sent from the *Camara* to the Viceroy about the excessive number of *lettrés* - secular and regular clergy and nobles' servants. If this number were reduced, the productive sector, the armed forces and the number of seamen for the armadas could be increased[7].

The foreign trade situation worsened because of unwise international policies, and the burden of customs duties served merely to increase smuggling and so further reduce the State's revenues. The State was beset "*pelos grandes gastos e despezas que de minha* (of the King) *fazenda se fazem nas continuas guerras, que por mar e por terra tenho nas partes da India, Africa, Brazil e Guiné, e nas armadas para guarda dos mares de meus reinos e senhorios, contra infieis e outros enemigos que, com muita força e ouzadia, vem roubar e fazer dano a meus vassalos e outras pessoas que tem comércio com meus reinos*"[8].

On the other hand, salt-extraction and exports (from Setubal, the Tagus valley, Aveiro and the Cape Verde Islands) to Northern Europe increased considerably. Northern Europeans obtained money in Seville which they used to pay for Portuguese salt that was highly valued because of the development of their fisheries, and an effective rival to salt from the French Atlantic. Promoted to Portuguese trade's winning card, salt became the State's prey too: the State saddled salt

[7] *Elementos*, II, pp. 323-325.
[8] P. 446.

with tax upon tax, and wanted to secure the sales monopoly in Portugal (the Crown would keep up to one third of production). But the Lisbon *Camara* bridled: it would be too harsh a blow against the prosperity of Portuguese trade, and, furthermore, foreign buyers would withdraw because of the rise in costs.

The municipality denounced the contradiction between the predator State (taxes, customs duties) and the entrepreneur State (monopoly-holder). There was another contradiction between the State's financial-economic role and the interests of the merchants who wanted to have free play. However, they did not put up a united front, in that some groups took advantage of State monopolies (*estancos*), whereas others preferred trade which involved "several hands". There was a ruthless struggle between merchants based in Portuguese ports and the colony of numerous merchants who had settled in Seville and wanted Madrid to open up to them trade with Brazil, Guinea and the East Indies[9].

In the Portuguese world of the fifteenth and sixteenth centuries, state-enterprise existed alongside private companies belonging to a partnership of merchants and nobles, all of a limited duration. After 1565, the British and then the Dutch perfected the chartered company which became a company in which the State, the aristocracy and businessmen held shares. This replaced the family company of the great capitalists of earlier times. These chartered companies were powerful machines, and between 1610 and 1620 Portugal became aware of how backward their organisation was. Setting up companies was one of the Lisbon *Camara*'s main preoccupations; the King agreed to this on 10 February, 1619, and confided to the *Camara* "*que se trate de fazer neles /esses Reinos/ huma companhia para a navegaçao e comércio da India, em que entrem todas as pessoas, de qualquer qualidade e estado que o quiserem fazer*", with the participation of all the "*lugares do Reino, em comum*"[10]. A leading businessman, Duarte Gomes Solis, was the tireless champion of this

[9] Consulta da Camara to the King, 29-05-1932, *op. cit.*, III, pp. 500-501.
[10] *Elementos.* cit., II, pp.433-434.

cause, about which he wrote several memoranda and two books between 1619 and 1628, trying to win over the monarch, the court, the supreme councils and people of influence. Debate went on for ten years, and the municipality of Lisbon always stood in the breach. When the Portuguese Company was instituted, not only was the *Camara* in the front line to instigate investments, but also more ambitious projects came to light: it was intended to create in the same way an Imperial Company (Hamburg and Lubeck), a Spanish Indies Company, and a Company for the Levant (including Italy). Thus "*nos navegarao os nossos açùcares, pimenta, sal, tabaco e mais cousas, com o que tornarà a florecer esse Reino/Portugal/ e seus rendimentos.*"[11] And once these were instituted, the municipality's attention did not flag.

The efforts of a whole gamut of thinkers - politicians, military leaders, businessmen, clergy, and even poets - especially from the end of the sixteenth century - resulted in an awareness of the fundamental problems of all the components of the Portuguese Crown, which we have just seen was a major vehicle for institutions at every level. Among these was Luis Mendes de Vasconcelos, the Commander-in-chief of the armadas in the Indian Ocean, and later Governor of Angola. In his *Dialogos sobre o sitio de Lisboa* (1608), he wanted to prove that Lisbon, a key port for sea-trading, should be preferred to Madrid, which was buried too far inland, as the capital and residence of the court. Were these two contrasting concepts of empire - or was it the concept of two separate empires, despite the fact that one head wore two crowns? One was entangled in Europe, although its main links were maritime ones, and was a collection of heterogeneous kingdoms and seigniories, a military and political power whose lands bordered on the Turkish Empire. However, with Columbus' Atlantic crossings, it became linked to the vast states that had formerly been Aztec, Maya and Inca, the world of precious for coinage metals which secured for this enormous empire international supremacy based on *reales*. The other was present all over the world thanks to its sailing

[11] *Op.cit.* p.278, 24-01-1928.

ships, with a string of merchant factories, fortified port-cities and territories that were sometimes small, sometimes vast (Brazil, Ceylon, Angola), oscillating between war and trading. Dynastic union juxtaposed these two systems, each of which was a multiple reality in itself; therefore the central authorities could not accept the existence of these unresolvable conflicts nor create even more of them. Was the capital to be Madrid or Lisbon? These were divergent paths. The Portuguese always wanted to draw the centre towards the sea - and to prevent "*Que este Reino se nao una a Castella*", as was written in the Camara's *Advertencias*; in other words, the Portuguese wanted there to be a rigorous institutional separation[12] .

Mendes de Vasconcelos pinpointed a big problem for the Portuguese Empire: should they keep India, that swallowed up men and money, or abandon it and stake everything on the Atlantic where profits were assured? Of course, Portuguese maritime trade would continue in the Indian Ocean and the Southern Sea when fortresses were abandoned, but on condition that trade and navigation be open to all the Portuguese - which meant putting an end to conquests - not making war but devoting all efforts to developing trade. It was a very topical debate: should the Portuguese behave as warriors or merchants?

Mendes de Vasoncelos (and several others) believed that Eastern conquests would cause a fall in population and a decline in agriculture in Portugal. Although Lisbon's population had increased, this was to the country's detriment. On the other hand, the settlements in the archipelagos and on the coasts of Africa and Brazil provided solid bases for economic progress: trade in sugar and wine from Madeira, cereals and woad from the Azores, slaves, leather and salt from the Cape Verde Islands, and sugar, tobacco, leather and spirits from Brazil produced considerable profits and enriched the towns and villages (*vilas*) of Portugal. Evidently this Atlantic prosperity was not enough: emigration is proof of this. Food provisions for Lisbon had to be secured. We must keep in mind that cities only can grow large when their ports are linked to all maritime trade routes, and that their food

[12] *Op. cit.* II, p.324.

supplies require massive importations from distant markets which complement the production of the large surrounding area. However, national production had to be increased, and it was not the demand for luxury goods that would increase it. Mendes de Vasconcelos stressed how imperative it was to control the waterways (following the Dutch example), to avoid both floods and drought.

The *Descripçao do Reino de Portugal*, by Duarte Nunes de Leao (written in 1599 and published in 1610), was intended to stimulate debate on the problems of the Portuguese predicament. This debate was led by Severim de Faria in his *Discursos politicos* of 1624 and his *Noticias de Portugal* published in 1655 (a year after his death). Faria agreed with Mendes de Vasconcelos: the East Indies damaged Portugal, the fortresses should be abandoned and the Portuguese should engage only in trading, because the East Indies swallowed up the Portuguese population, a large part of which had to go and serve outside the Empire. On the contrary, expansion west of the Cape was extremely advantageous. Despite emigration, Portugal was teeming with vagabonds and beggars, because there were no trades offering jobs and in the South there was a shortage of land for growing crops. Depopulation was the main problem (everyone followed Giovanni Botero). The Alentejo region ought to be colonised by gathering the population in small towns (*vilas*), where they would benefit from a political (in the sense of social) life and the offer of work in the various trades; but large estates had to be reduced in size, and small and medium-sized properties encouraged. Crops were to be diversified wherever possible; near Vendas Novas, vines, orchards and vegetable-gardens could be found. But the State and the *Camaras* had to be responsible for building big irrigation systems, using the unemployed to dig drains and ditches; they also had to practise a policy of guaranteeing prices for the producer. The other aspect of economic recovery concerned industry. The fundamental principle was that profit on finished goods was higher than profit on raw materials. In other words, work created added value which was indispensable to the health of the economy (the Spanish *arbitristas*-advisers acknowledged this). Portugal exported wool - her own wool - and

Another precious source of information about seventeenth-century Morocco are the memoirs of the Governor of Mazagan from 1623 to 1628. They were written first for a group of friends, and then sent to King Philip III of Portugal, and published in Lisbon in 1629: *Discurso da jornada de D. Gonçalo Coutinho à villa de Mazagam e seu governo nella.*[23] Robert Ricard was able to verify the merits of the work, and to stress its contribution to our knowledge about the reign of Moulay Zidan: the activities of the Marabouts, the place of Jews and renegades in the *makhzen* of the Saads, the anarchy in Morocco, and the role of livestock in Mazagan's relations with the Moors. In our opinion, the spy network set up by D. Gonçalo Coutinho in Muslim circles should be emphasised[24].

We shall now turn to the Atlantic archipelagos: the Canary Islands, Madeira and the Azores. Obviously, they were well-known to the Portuguese and the Spanish, as they were part of their everyday life. Two great descriptive works were written during the period that concerns us. Gaspar Frutuoso between 1580 and 1591 wrote *Saudades da Terra,* a geography, a history, even a bucolic novel, covering the three groups of islands (and also the Cape Verde Islands). The complete work was published in six volumes in Ponta Delgada in 1964. Leonardo Torriani Cremonese wrote *Descritione et Historia del Regno de l'Isle Canarie, già dette le Fortunata, con il parere delle loro fortificazioni* in 1592[25]. The study includes references to the other archipelagos, maps and colour prints.

Born at Ponta Delgada, Gaspar Frutuoso was a Bachelor of Arts and Theology of the University of Salamanca and a Doctor of the University of Evora, who lived in the Azores from 1565 until his death in 1591. He combined his direct knowledge of the islands with his vast learning to paint a very complete and detailed picture of the islands' society and culture, based on their history and on the exact geography of, for example, their towns and villages. It is a work that is characteristic of ecclesiastical circles close to the people, to physical

[23] The work was re-edited by R. Ricard, (Paris, 1956).
[24] p.167 in the Ricard edition.
[25] Biblioteca Nacional Lisboa, Ms Fundo Geral 892; B.G. Universidade Coimbra, n° 314.

III. Type of enquiry: the nature of information and the means of obtaining overall knowledge of the various parts of the empire and the world as a whole

A. GENERAL BACKGROUND

Portuguese expansion had started with Morocco (Ceuta was captured in 1415) and, although in the mid-sixteenth century the Portuguese had had to abandon most of the *presidios*, D. Sebastiao wanted to recover the Portuguese conquests on the other side of the Straits, and the Kingdom of Fes was a major preoccupation for Portuguese politics. In the tradition of literature on Morocco (the map of which appeared in Mercator's Atlas, for example), a Portuguese, whose name unfortunately we do not know and who lived in Morocco from 1579 to 1596, wrote a *Copia do emperio e reynos dos Xarifes na Berbéria em Africa, e de algumas terras de Negros*[22].

The skeleton of the work is a set of road-maps, with the distances indicated in Portuguese leagues (5.5 kilometres). However, there is a fairly detailed geographical description, covering the area from Ceuta to Senegal and from the Atlantic coast to the Sahara of the Touaregs at the time of the reign of the Shereef Moulay Ahmed. Against a topographical background, which even specifies access to the sea-ports, we read of how settlement took place, details of agricultural production and livestock, of industries, commerce and the main towns, and of the physical characteristics and the mentality of the inhabitants, their clothes and their food. Sometimes the author sketches a picture of the landscape, and he also gives information that was important for military purposes. The Comte de Castries believed that this was the most significant presentation of Morocco from the time of Leo the African in the early sixteenth century until the nineteenth century. The author did not go straight back to Portugal; he had to send this work to his powerful patron from exile - was this to obtain a pardon?

[22] Edited by the Comte de Castries, (Paris, 1909).

relied upon a Council which did not become official until about 1570 with D. Luis de Ataide (confirmation by a letter from the King in 1591). This *Conselho de Estado* brought together the high-ranking magistrates and the presidents of the State departments and the town of Goa listed above, and, in addition, the archbishop and all the *fidalgos* and *captains* present, the canons and the *Camara*. Sometimes even a few other leading citizens and eminent persons were admitted to the Council[20]. It should be noted that at Cochin the assembly of the *Camara* was open to the *fidalgos* and the knights, as well as to citizens registered in the *regimento* and other *vizinhos* summoned by *pregao geral*[21].

However another hierarchical organisation played a role comparable to that of the State, although of a different nature: the Roman Catholic Church. Present everywhere in the Empire, it had at its disposal a body of well-educated men of letters. At times it was better organised than the State, and, because its tentacles went beyond the borders the State controlled, its activity benefited from a very vast and precise information network. The politics of the Church and its missions clashed in several areas with Crown politics, and the Church influenced Crown politics; clergy often occupied official positions in the State, and the State used missionaries' reports.

We are now aware of the principal systems for receiving and transmitting information, taking decisions and carrying them out. We have used the term systems because for the most part these processes were dictated by laws emanating from the central power. However, both the central power and information systems often operated through private citizens - merchants, missionaries, soldiers and artisans - for gathering information or passing it on. In their turn, private individuals often applied to the official channels to obtain pardons or rewards and circulated their stories and descriptions or reports, and even printed in order to become famous or influence the authorities' decisions.

[20] Pinto Pereira, *Historia da India*, Book II, chapter 3.
[21] *Assentos do Conselho de Estado*, I, pp.3-4, with regard to March 1618.

Védores da Fazenda and the Secretary of State, and some nobles or men of letters whose opinion was deemed important. However in the 1560s a permanent Council of State was set up. Furthermore, the King was in close contact with the High Court (*Desembargo do Paço*) and the directors of the Casas. In Portugal, Philip II, Philip III and Philip IV wanted to follow the more rigid Spanish model with a hierarchy made up of several Councils (*Conselho de Estado, Conselho da Fazenda* and especially with the 1591 Regimento, the short-lived *Conselho da India*); and they wanted to replicate them in Madrid which provoked strong opposition. After the Restoration, power swung between government by Councils and government by a few individuals chosen by the sovereign. However, awareness of the difficulty of governing such a vast empire led in 1569 to the nomination of another Secretary of State responsible for India, Mina, Guinea, Brazil and the Islands. The choice fell on a *fidalgo da Casa Real.* Duarte Dias was succeeded in 1584 by Diogo Velho, a former *Védor da Fazenda* in Goa. People who had served and proved themselves in some region of the empire were often chosen for positions connected with possessions overseas.

The distance involved and the time taken to reach Portuguese possessions in the East - a year and a half to go there and come back - taking account of the political and economic situation and the very different civilisations encountered there, explains why in 1506 the State of the East Indies began to be built, based on a duplicate structure of fortresses and trading-stations with a centre of power that had a flexible but complex organisation. The Government-General (or Viceroyalty) was at the summit of this organisation which consisted of the Secretary of State, the Chancery, the *Védoria da Fazenda* (Superintendence of Finances), the *Ouvidor Geral* (Public Prosecutor General) at the head of the High Court of Justice, the *Casa dos Contos* (State Audit Office) and the *Matricula Geral*, the *Capitao-mor do mar* (Naval Captain-in-Chief). However, sitting in the capital of the Eastern Empire, the heads of institutions in the town (the *Captain*, the *Ouvidor*, the Factor) and the *Camara* could not remain aloof from top government. The Viceroy (or Governor)

extended mobilisation in a town and its surroundings, even to general mobilisation. Each *capitania* had to have a permanent military corps (with some specialists - artillery, arquebusiers and cross-bowmen).

D. Sebastiao's campaign in Morocco required raising a large army and fleet. But the defeat and rout at El-Ksar-es-Kébir (1578) totally distrupted the Portuguese armed forces. Philip II, Philip III and Philip IV were not interested in organising a permanent army, since they had considerable forces at their disposal, except in exceptional circumstances (the Dutch in Brazil). And so it was not until the Restoration that the Council of War was instituted and the provinces became military governments.

Outside Portugal, the situation was different (the Moroccan *presidios* were directly subject to the mother-country). Some *capitanias-mores do mar* (Commanders-in-Chief of the Sea) were created in the early sixteenth century, in the Indian Ocean from 1506, in Brazil from 1516. Was not the Empire above all maritime? There were several *capitanias-mores do mar* in the East - the Malabar coast, the north coast of West India, Malacca and the Southern Sea, and so on. Military organisation had as its framework the territorial *capitainias*: some were vast (Brazil, Ceylon), others were fortress-towns, sometimes together with the surrounding territory (with limits). In Brazil, they were subject to the Government-General, in the East Indies to the central State established at Goa; but the pre-eminence of certain centres led to the formation of intermediate regional *captaincies* - in Ceylon a Government-General after 1612. There was even an attempt to divide the whole of the East into three governments in 1571-1572, but it was of no consequence. However Malacca, although subject to Goa, played this role for the Southern Sea.

This enormous, interlocking imperial system with its many networks had at its summit royal power, the King in Lisbon, and from 1582 to 1640 a Viceroy and a Government Council since the sovereign was in Madrid. In accordance with Portuguese tradition, the King governed with the assistance of his counsellors (but this title did not mean that the person in question was necessarily and regularly summoned) and especially with the assistance of the three

occasions. For war and merchandise were closely and complexly connected: sometimes the relationship between them was instrumental, sometimes it was adversarial. Until 1580 there had been no armed conflict in the Iberian Peninsula for a century (indeed, for almost two centuries, if we exclude the brief dynastic war which ended at Toro). Therefore there was no military organisation until 1570: before this date, there were only the groups of cross-bowmen *do conto* (of the Roll) throughout the whole Kingdom, together with the small baronial forces or the royal corps, which numbered very few, and the castle garrisons. However, in 1549 the law classified the male population between 20 and 65 years old according to both a criterion of property and the standard of the provinces, and made it compulsory for everyone to have a horse and arms. The law of 10 December 1570 decreed that in every *cidade, vila ou concelho* companies (or banners) be formed, each under the command of a captain who had under him an *alferes* (colour-bearer), a sergeant, a *meirinho* (chief of police) and a secretary. The company numbered 250 men (minimum 100), divided into 10 (minimum 4) *esquadras* of 25 men, each *esquadra* under the command of a *cabo*. A *capitao-mor* headed a group of companies. This post was very important at a regional level and was occupied by a nobleman, appointed by the king: it fell to the *alcaide-mor* (fortress commander) or the baron, if there was one; otherwise, he was elected by the *Camara*. The *Camara* had to pay for munitions, training and food out of its own revenue, and its officials had to keep the register of men for whom it was compulsory to carry arms and the register of which company they belonged to. Every year the *capitao-mor* summoned the *alardo* of the companies under his command whose sphere of influence often coincided with the *comarca* (moreover, the *corregedor* or the *provedor* presided over the election).

And so in this way Portugal's military organisation overlapped her territorial organisation in *concelhos*. The institution of *ordenanças* had been extended to Brazil in 1590 (around Sao Paulo, Pernambuco, Bahia). The Viceroy D. Luis de Ataide arrived in India in 1568 with the mission to introduce the same military organisation there, too, but it was not adaptable to oriental conditions, which required professional servicemen; only in very serious situations was there recourse to

the institution of the *Conselho Ultramarino*. It was difficult to combine this with the *Conselho da Fazenda* and the States of India and Brazil. Moreover, the Restoration's organisational fever led to the creation of other bodies: the *Junta dos Tres Estados* (of the Three Orders) which administered the enforcement and the collection of tithes to support the war effort (1641), and the *Junta do Comércio* which took the place of the privately-owned Brazil Trading Company.

The trading stations, *almoxarifados*, customs house and other connected local bodies all submitted their accounts to the audit judge, if there was such a person, but almost always to the *Casa dos Contos* which was also the court responsible for public finances and relations with private citizens. However, on the other hand, trading stations were the antennae of the *Casa da India* (on which the *Casa de Contratacion* in Seville was modelled) and the *Casa da Guiné e Mina*. This latter dated from the end of the fifteenth century, but had been preceded by a Guinea factory. The former dated from the early sixteenth century and had been managed by a factor, as the later one was to be. In the XVIth century there was to be a single agent for the two *casas*). In the seventeenth century, the management was handed over to a *Provedor*. Three treasurers were involved: one dealt with Guinea and Mina (therefore with gold - but this also fell within the province of the Casa da Moeda), another with spices, drugs and all merchandise, and a third *do dinheiro* (money in cash or bills of exchange coming from sales and other income, or destined for payments). The three treasurers were assisted by five secretaries, one for each branch of the *Casa da India* and two for the affairs of Guinea. There was a weights and measures service with assayers and a judge, valuation services with experts (goldsmiths, apothecaries and others), guard and police services (with *meirinho* and janitors). An *almoxarifado*, part of the *Casa da Mina*, dealt with slaves. Each *Casa* had its own judges. They were public bodies with a commercial role and they also organised shipping, but they still exercised customs and judicial functions.

Expansion began with the capture of Ceuta in 1415, and henceforth the war always played a fundamental role in the building and the development of the empire, even causing it to change its shape on several

letters, and four *escrivaes* - one for Portugal, one for Brazil, Guinea and Mina, the Cape Verde archipelagos and Sao Tomé, one for the Azores and Madeira, together with the heads of the religious-military orders, and one for Africa (Morocco), the *Casa dos Contos* (the State's Audit Office) and the *terças* of the *concelhos*. The Restoration reinstituted the three *Vèdorias*, while retaining the *Conselho da Fazenda*. Each *Vèdor* was president of one of the three branches of the new division (1641): one was responsible for Portugal itself, another for the Moroccan *presidios*, the State Audit Office and the *terças dos concelhos*, and the third was responsible for Brazil and India, the naval dockyards and depots and the armadas (fleets and squadrons). Beside the three *Vèdores* (nobles), the new Council consisted of between three and five counsellors 'of the robe', a Crown fiscal attorney, and four ordinary secretaries. The State Audit Office, the Casa da India e Mina, the Mints, non-military shipyards and warehouses, the consulate and the other branches of taxation and duties were all subject to the Council. However the State of India had another *Vèdor da Fazenda*, and later three or more, in accordance with geographical imperatives, and, in the seventeenth century, a *Conselho de Fazenda* of its own. Goa had a State Audit Office and the General Register (where all soldiers and sailors were listed, according to the arrival and departure fleets to the Kingdom and other destinations, together with the fortress garrisons - precious information).

The king of Castile, who became the king of Portugal too, was obsessed with the idea that the State should have a complex and complete structure. The Portuguese monarchy evolved in the same direction in the sixteenth century, especially after 1540 (the Castilian influence must be considered). And so, in 1604, the *Conselho da India* was set up in Lisbon, with authority over the whole empire (except the Azores, Madeira and the Moroccan presidios which were part of the Kingdom). The president was a former governor of the State of India, and there were four counsellors (two of whom were men of letters), assisted by two secretaries, some *escrivaes* and two door-keepers. However, it did not function very well and was suppressed in 1614. It was not until 1643 that the idea was taken up again with

example and their organisation was very rudimentary. On the other hand, the factories acted as intermediaries in trade relations, and sometimes also in political relations, with other countries: the trading stations in Antwerp, Venice, Andalusia (Moroccan *presidios*, the supply of silver to Lisbon), and even in Chios (corn supplies). There were some in the Shereef Empire, on the coasts of Black Africa and everywhere in the East, even in China and Japan. They were the economic-financial bodies whose duty it was to look after trading done by the State, to act as commission agents in operations that were by law subject to commission, and to oversee the implementation of State monopoly contracts which had been farmed out to private individuals. In the less important ports, the agent held a plurality of offices: he did the work of *alcaide-mor* (responsible for security) and of *almoxarife* (receiving public payments), he collected the one third of the municipal revenue which had to be paid to the royal Treasury, and he checked the customs (or the *mandovi*) and the financial running of the fortress. In the large emporia, there was often a *Vèdor da Fazenda* (Superintendent of Finance), and the customs, the *almoxarifado* of the stores and the *Ribeira das Naus* (shipyards) tended to be autonomous. In fact, the trading-stations' principal role was be the mainstay of a mercantile empire, in the service of a merchant-king. We need mention only the trade in Asian spices and drugs, gold from Mina and Rios of Guinea, and the slave-trade to Brazil and the Spanish Indies. Alongside each fleet's *capitao-mor*, as on board isolated vessels, agents controlled all commercial operations and all income and expenditure. However, income from customs and *estancos* (royal monopolies) was the mainstay of the Empire, because the contribution from the *sisas*, which prevailed in the fifteenth century, became constant due to *encabeçamento*.

All this imposing structure was governed from Lisbon by three *Vedores da Fazenda*. However, in the 1560s, a Council of Finances was set up and its role increased in importance during the reigns of Philip II, Philip III and Philip IV. In accordance with the *Regimento* of 1561, the *Conselho da Fazenda* in 1591, under the presidency of only one *Vèdor*, was composed of four counsellors, two of whom were men of

local courts were subordinate to the *corregedores*, who also kept a watch on the functioning of the local organisations and dealt directly with the disputes in which important people were implicated; but the *juizes de fora* were more independent as far as *correiçao* was concerned. The *corregedor* (or *ouvidor*, especially overseas) was at the head of a *comarca* (there were 25 of them in the mother-country). This was an essential rung in the hierarchy that went from the local organisation to the Appeal Courts (Lisbon and Porto) and the High Court (*Desembargo do Paço*). The *provedor de comarca* (generally) protected the interests of orphans, absentees, prisoners and others unable to look after themselves, as well as communities like the *misericordias*, hospitals, confraternities, and even the *concelhos* themselves. Administering property, controlling the administration carried out by individuals or by institutions, and auditing the accounts of certain public works and services were all tasks assigned to the *provedorias*, who had both judicial and fiscal functions.[19]

The financial organisation of the State kept a check on local and regional situations through its peripheral organs: *almoxarifados*, customs houses, warehouses or trading stations, stores and shipyards. The kingdom was divided into 27 *almoxarifados* (not to be confused with the Spanish *almojarifazgos*); each one collected the *sisas* (tax on property transactions or personal transactions – alcabalas – in Spain) in its district through the respective *encabeçamento* and other public receivers' offices, sent part of the money to the central treasury and administered another part that was assigned to the region's needs. However administering the *armazens*' (stores) income and expenditure, and checking certain branches of trade also created some *almoxarifados*. Territorial *almoxarifados* were not found overseas, except in some colonies (including the Atlantic archipelagos) where they functioned often in association with the trading stations.

Trading stations, together with fortress-captaincies, were one of the buttresses of the Empire's framework. There were only very few of them in the mother-country, concerning slaves and textiles, for

[19] For all the above, see A. M. Hespanha, *As Vésperas do Leviathan*, vol.I, (1986).

that of Lisbon in Portugal; its craftsmen corresponded directly with the king (or the viceroy), even though the central power wanted to keep them out of certain matters; the *Camara* participated in the Council of State and the high powers negotiated with the open municipal assemblies (mainly over financial aid).

In Portugal, the *concelhos* (organised communities or mere territorial districts) were surrounded by domains administered by the king or a baron and by the judicial, fiscal and ecclesiastical hierarchy. Although they did not have full liberty, they enjoyed a fair amount of independence. In the islands and abroad, the situation was somewhat different. The islands formed *capitanias-donatairias*, certainly subordinated to the central authorities, but the *Camaras* came up against the authority of the captains who had been invested with a significant delegation of functions. It was the same in Brazil, although the government-general came to balance the spheres of functions; the entire territory was divided according to that formula: it was a question of population. On the other hand, in the East the *capitanias* of the fortress-towns were not *donatarias*, and the captains exercised their office in a limited way and for a limited period in the king's name. Sometimes they tried to have themselves considered *donatários* (the system was applied to some groups of Indian villages), and so to enjoy greater privileges; but the *Camaras* often managed to thwart this abuse. Several Portuguese towns in the East had no *Camara*. Moreover, as the Portuguese town or fortress simply backed onto a native town, the captain exercised a very important military function, and tended to overide the law and interfere in public finances. It must not be forgotten that Portuguese law was in force throughout the Empire.

Justice was administered locally by municipal magistrates, jurymen and *pedaneos* judges (who judged while on their feet in the hamlets), all of whom were elected. In 164 to 200 communities, instead of an elected magistrate sat a *juiz de fora*, a man of letters, appointed by the king after having been examined by high court *desembargadores*. This judge from outside possessed greater powers and was more effective in establishing law and order as promulgated by the central power; he also had more authority to stop fights among factions. All

the nobility and the men of letters had increasingly claimed a role in the leadership. Municipal assemblies became less frequent, their field of intervention narrowed - and their opening up to the humbler classes, as well as to people of high standing (*homens bons*), was often postponed at the restricted meetings. Oligarchies appeared and seized power. At all events, the food policy, the apportioning of quotas for the export of produce, the administration of the common land, the fixing of prices (if necessary), the agreement with the Treasury on the total number of *sisas* (*alcabalas* in Spain) to be paid in each district and the distribution of this *encabeçamento* per tax-payer - in short the economic policy of the area belonging to the *concelho* - all fell within the sphere of the *Camara*. Furthermore, it was to the *Camara* that the central authorities appealed for the coming into effect of laws, decrees and other resolutions, and it was the *Camara* that sent the central authorities information about its territory, together with lists of grievances and petitions for measures to be taken. In earlier times, a considerable number of *concelhos* were represented in the *Cortes*, and had the possibility of seeing their grievances satisfied or their *merces* granted. This representation - between 40 and 100 *concelhos* - continued, but the *Cortes* was summoned only too rarely; moreover, regional and local business was no longer dealt with there, and the *Cortes* was confined to ratifying the decisions of the ruling circles. But there was no hierarchy among the *Camaras:* they could all correspond directly with the king. Their assent outside the *Cortes* was still requested, especially on fiscal matters. Nevertheless, Philip II, Philip III and Philip IV tried to establish the Lisbon *Camara* as a unique intermediary and even to consider its opinion instead of that of the *Cortes* assembly.

Municipal organisation, which in Portugal characterised about 165 towns *vilas* (a very small number being towns), spread to the whole of the Empire, mainly during the sixteenth century (to Luanda a little later). The *Camaras* played an important role in the Atlantic islands, and indeed in sugar-producing Brazil, despite its "anti-urban mentality" (Aroldo de Azevedo). Beyond the Cape, Goa and Macao were in the forefront, without forgetting Cananor, Cochim, Chaul and Malacca. Goa occupied a position in the State of India comparable to

assembly of different societies and civilizations under the canopy of an ideology of State, and its unity was woven by a network of trade sea routes. Under the overlordship of the Crown, Portuguese settlements abroad, sometimes integrating exisiting native villages or towns, were territorially organised as *capitanias,* governed by a captain appointed by the King. A set of *capitanias* covering a vast region, formed a subordinate State headed by a general government or even a viceroyalty – so in India from 1505, Brazil from 1549, Angola after 1571. The Atlantic archipelagos, the Maesidios in Morocco, and São Jorge da Mira were directly linked with Lisbon.

Hierarchical organisations, divided into sectors (although different functions were sometimes performed by the same person at certain levels) that formed the sides of this pyramid, bound the levels together vertically, and at every level bound together the branches of activity, and interconnected integrated regions. At the base of the pyramid, we find the *concelhos* (municipalities) and the royal or baronial domains, as well as some institutions and organisations: the church, the law-court, the trading-station, the customs-house, the *almoxarifado,* the fortress and the *misericordia,* both in towns (*cidades*) and villages (*vilas*); then again there were the big estates, farms, villages and hamlets (with small and medium-sized units od cultivation).

The Portuguese territory had been integrated by the fortresses (belonging to the king or to the great families), the parishes which bound together the faithful, and the municipal communities of landowners, artisans and merchants. It was these municipal communities which acted as the best basis for power and information because, although all the population of the respective districts did not participate in them, the entire population fell within their sphere of influence, with the exception of the privileged classes. The *Camara* was made up of elected magistrates, exercising judicial and administrative functions, assisted by clerks (*escrivaes*), attorneys, police officers and *almotacés* with an economic role. The degree of organisation depended on the size of the population, the nature of its activities and the constitution granted by the king. Crafts were represented in many, but not all, cases. During the sixteenth century,

huge deficit, because (as both Mendo da Mota and Duarte Gomes argued) of the "*grande quantidade de drogas e outras mercadorias da India que os estrangeiros metem por diversos portos dos reinos de Castela, com que sacam grandes quantitades da prata e aumentam o seu comercio na India*". The same went for all European manufactured goods, since industry had developed abroad because of the attractions of the Iberian market where silver was cheap and abundant. The example of China and India herself was put forward: "*queriendo que sus naturales se ocupen en las artes mecanicas, que son las que enriquecen el Reyno con les buenos entretenimientos de ocupacion para la mayor propagacion, en que andan a porfia sobre el aumento de las gentes, y de les invenciones que sobre todo genero de pieças ricas labran*". Arts and crafts were not only extremely useful, but their development, together with the abandoning of 'trafficking in exchange' (putting an end to financial speculation), would increase the number of merchants, which would suit the population of the Iberian Peninsula better "*en consideracion de las navegaciones y comercios*"[18]. Wealth was to be found not in gold and silver mines, but in the fruits of the earth, in the products of the mechanical arts and in trade (local, regional and world-wide).

But were not all these problems and plans concerning the different classification and the different areas of the two empires subject to one preliminary constraint: the institutional evolution of the dynastic union, including the disarray of public finances? How did the decision-makers manage to grasp all these big questions, in all their complexity and in all their contradictions, and by what criteria did they make their decisions?

II - Institutions, Organisations and Agents that Collected Information and Proposed / Operated

The Portuguese Empire covered huge distances. Its shape varied according to the modifications it underwent. It was a composite

[18] *Alegacion, op. cit.*

for foodstuffs, and because of rising prices "*y por los tributos impuestos para sustentar las guerras y estas conquistas se vee despoblado este Reino de las mejores ciudades y villas*"; the lords and the *fidalgos* flocked to the court, abandoning the land and agricultural investment. And yet agriculture came before (and had to come before) all other kinds of activity, including trade. The farm labourer, the peasant, was the mainstay of the common good. In the Iberian Peninsula, people had to complain about "*no aver cultura y grangearia en las tierras para abundar los fructos naturales y remedear con ellos las necessidades suyas y de los reinos de Espana sus vizinos*". Portugal alone exported every year one million *reales* to pay for cereal imports[15]. There were two reasons for this, according to Duarte Gomes: firstly, lands were not very fertile, and secondly, the lack of labour to improve the waterways and set up an irrigation system. Rural environments were poor and the taxation system weighed heavily. Since the merchants and *fidalgos* had scarcely any interest in crop-growing, the necessary capital for investment was lacking[16]: "*es dano tan immenso el no ser ricos los labradores que, por falta de cabedal, dexan de cultivarse en Espana floredisimas tierras*". Poor as they were, the peasants were not spurned by society; on the contrary, they ought to be favoured (they should be granted privileges, and even aristocratic titles, according to Severim de Faria), and the taxes and duties they had to pay should be reduced. Investment was called for, on condition that crops were diversified; cereals, whose poor returns were the result of unfavourable conditions, should no longer be the only crops; rather, seeds and plants should be chosen "*conforme al natural de sus tierras*".

But Duarte Gomes went even further: he wrote that since land was badly cultivated, peasants could become richer only through the development of rural industries; and he added: "*con la ocupacion de la cultura y artes mecanicas se vean los Reynos mas ricos y prosperos, que si tuvieran minas de plata y oro*"[17]. The trade balance showed a

[15] *Paracer* by Mendo da Mota Valdares, of the Council of Portugal, 1621).
[16] *Arbitrio sobre la plata*, 1621.
[17] *Alegacion en favor de la Compania de la India Oriental*, 1628.

re-exported Spanish wool. The *saca* of raw materials ought to be prohibited, and industrial establishments created where serge and all kinds of textiles - using wool, silk, cotton and linen - would be produced locally, together with ropes and all the naval tackle and leatherwork etc. The union between agriculture and manufacturing blossomed as trade took off.

The rich businessman Duarte Gomes was most concerned about the Cape of Good Hope route and trade with the East Indies. Although his horizons spanned the whole world, he agreed fundamentally with Mendes de Vasconcelos and Severim de Faria. The King (and his Councils obviously) should be present in the coastal towns and reduce expenditure on land (war *presidios*) in order to strengthen naval forces. Seville and Lisbon were the two pillars of the dynastic union[13]. Both empires' destinies would be decided in the South Sea and not in Flanders. This posed the problem of the drain of Mexican silver to China through Manilla, which was prejudicial to the interests of both Seville and Lisbon. The remedy was to close this route completely; if this were impossible, then trade should be free for everyone. In order to win this crucial battle and so rule the South Sea, it was essential to coordinate the policies of the two empires, both the Spanish and the Portuguese, and to make the two routes - the Cape route and the West Indies route - complementary; naval forces had to fight jointly against the Dutch and the British. However, trade and commercial transactions were more important than arms, and political decisions had to be subservient to the interests and designs of trade. The big mistake the Portuguese made was that they had conquered the empire as knights but they had not succeeded in administering it as merchants[14]- the *leitmotiv* of all these writings. Duarte Gomes and the other writers of the time believed that the predominance of trade did not prevent depopulation in the Iberian Peninsula. As a result of conquest and the flow of precious metals, the population struggled against rising prices

[13] *Discursos sobre los comercios de las dos Indias*, 1622 ff 171, 43; *Arbitro sobre la plata*, 1621.
[14] *Discursos*, f.80.

reality and the cultural set-up. On the other hand, Leonardo Torriani, born in Cremona, was an engineer who specialised in military construction, and who visited the islands on an official mission: he had to inspect the state of the fortifications and, taking into account the terrain, he had to propose how to repair them and, if need be, build new ones. However, he paid a great deal of attention to the behaviour of social groups that survived in the Canary Islands and to economic activities, and he illustrated his study with detailed plans and an analysis of the archipelagos' position in the Atlantic world.

The first stage of expansion followed three routes: Morocco, the archipelagos and Guinea. Even when the Empire had possessions all over the world, Atlantic Black Africa remained one of its fundamental pillars, although the British and the French, and later the Dutch interfered more and more. And so the last decades of the sixteenth century and the seventeenth century were characterised by reports from Portuguese reconnoitring missions. We shall examine two of them: André Alvares de Almada: *Tratado breve dos Rios de Guiné do Cabo Verde, desde o Rio de Sanaga até aos Baixos de Santa Ana,* 1594[26] , and Francisco de Lemos Coelho: *Descripçao da Costa de Guiné desde Cabo Verde até à Serra Lioa com todas as Ilhas e Rios a que os Brancos assistentes nella navegao,* 1669.[27]

These two geographers and ethnographers lived almost all their lives on the island of Santiago (Alvares de Almada was born there), and travelled widely in this negro world from Senegal to the extreme south of Sierra Leone. Alvares de Almada, a captain, an attaché with official functions, visited most of the region personally and interrogated its inhabitants and travellers systematically, in a rigorous search for truth. He described very precisely all the negro nations and their ways and customs, their weapons, their dress, their way of waging war and what we could call their institutions. He examined carefully movements of people and social and cultural changes, and wrote of

[26] Ed. Luis Silveira, (Lisbon, 1946).

[27] This work was revised as: *Discripçao da Costa de Guiné e Situaçao de todos os Portos e Rios delle, e Roteyro para se poderem navegar todos seus Rios,* 1684 ed. Damiao Peres, *Duas descriçoes seiscentistas da Guiné,* (Lisbon, 1943).

the migration of the Peuls, white nomad herdsmen, towards the coast: consequently, the negroes of the coast became nomads and abandoned agriculture to become herdsmen. Another example was the migration of the Sumbas or Manes, who came from far inland (in the South-East) and conquered Sierra Leone in the mid-sixteenth century, merely one of a succession of waves of invaders as they advanced; they were invaders, with the unfortunate reputation of being cannibals, who laid waste, but every wave of invaders, once settled, changed its ways and organised itself into a state. Almada wrote this treatise to make known these regions and "nations", because he cherished the hope of promoting the colonisation of these countries, which he believed preferable to Brazil. And he presented reports to this effect to the Council of State in Lisbon and the Council of Portugal in Madrid, insisting on the work of evangelisation and ecclesiastical organisation. This same double aim induced Francisco de Lemos Coelho to write his two descriptive works. He was a merchant who had lived in Santiago and in Guinea since 1646, and all his large family had settled on the island and frequently visited the Rios where hundreds of Portuguese traders and officials met. To be more exact, some of these families had formed whole mixed villages. Although the conversion of the negroes and the development of Portuguese and mestizo colonies were two of the aims Lemos proposed, it was mainly with a view to trade that he collected this information, so that merchants and travellers might be enlightened in their activity and know how to negotiate with the natives. The high "scientific" content of the works of the merchant Alvares de Almada and the captain de Lemos Coelho, showing concern about the consequences of a total seizure of these peoples and respecting their ways of life deserve mention.

For a century the Cape of Good Hope route constituted the backbone of the Empire. To catch this immense oriental world in the net of Portuguese trade, to establish long strings of fortresses that sustained the Empire's political presence and served as bases for the squadrons that would protect these huge trading projects, demanded a detailed knowledge of world geography and of the societies and

civilisations round the Indian Ocean and in the South Seas. This undertaking had begun and been carried out successfully in the early sixteenth century: it is sufficient to remember Duarte Barbosa and Tomé Pires (1512-1516). This knowledge increased greatly during the sixteenth century, at different levels (from world-wide to local perspectives), and the descriptions fill a good part of the chronicles of the history of the Portuguese in the East Indies (Barros-Couto, Castanheda, Gaspar Correia). As far as our period is concerned, we must mention the *Livro das Cidades e Fortalezas que a Coroa de Portugal tem nas Partes da India, e das Capitanias e mais cargos que nelas ha, e da importancia delles*, by an anonymous author, which can be dated to 1582[28]. Its explicit aim was to inform the King about all the factories, fortresses and public offices of the State of the East Indies so that he could administer justice. In actual fact, this work went far beyond the aim it set itself. It was written in Lisbon, but by someone who had an intimate knowledge of the East. The author had a similarly intimate knowledge of the institutions of the State of the East Indies, and of all its economic life. The author may well have been Diogo Velho, *fidalgo da Casa Real,* who had been *Védor da Fazenda* in Goa (he instructed the *contador* Antonio de Abreu to set up the 1574 *orçamento*, capital); in 1584, he was appointed Secretary of State for India, Mina and Guinea, Brazil and the Islands. The work dealt with twenty-four fortresses, plus some non-fortified trading stations, and concerned either a territory (the Kingdom of Pegu) or even a whole island (Ceylon). An entire section is about all the aspects of regular voyages trading in the Indian Ocean and the South Sea, not forgetting the Cape route: navigation conditions and seasons, the flow of merchandise transported, discounted profits, the legal system and the people who participated. For every town or region, the work records the latitude, specifies its exact location and the distance between it and the other ports or towns, describes the topography (rivers, hills) and the fortifications and weapons of war, names the surrounding villages, lists the natural resources and examines trade

[28] Mendes da Luz, (Lisbon, 1960).

in detail - its legal conditions, the forms of transaction, the groups involved, the political environment and its probable evolution, and the ports' activity. There follows the list of the positions in the public hierarchy and the jobs connected with the State, according to the *regimentos* decreed in 1564, and the estimate of their net profits. These profits obviously depended on the commercial situation - and so it resulted in a geography of merchandise. This *livro* is of great importance for the discussion of the policies that were practised.

We should also mention Pedro de Barreto Rèsende's *Livro de Estado da India Oriental*, of 1635[29]. First of all secretary of the *Matricula Geral*, then audit magistrate in Goa, and lastly Secretary of State, Rèsende collected a number of plans of fortresses and towns and some maps drawn by Pierre Berthelot, a ship's pilot and Royal Cosmographer in the East Indies; he also produced a *Livro de todas as despesas e rendimentos de todo o Estado da India por menor*, a task for which he was particularly well prepared and situated. At the request of the Lisbon Government, passed on by a message from the Viceroy Comte de Linhares, the Head Archivist and chronicler Antonio Bocarro had prepared a *Livro do Estado da India* (finished in February 1635); however, aware that the cartography that Rèsende had compiled was better, Bocarro agreed to Rèsende's using his text. Rèsende rewrote the descriptions, correcting the mistakes and added some regions that were outside Portuguese dominion. Rèsende's book was divided into three sections: first, a treatise on the viceroys and governors and the armadas of the Cape route; secondly, descriptions of towns and fortresses; and thirdly, income and expenditure of the State of East India (B.N. Paris, Ms Portugais n° 36, without maps). Rèsende altered it later, amalgamating the second and third sections and adding Pierre Bertholet's rich illustrations (B.N. Paris, Ms Portugais n° 1; British Museum, Sloane n° 197). Rèsende's work was thus the vehicle through which Bocarro's work was published. Barreto Rèsende went back to Lisbon in 1636, accompanying the Comte de Linhares.

With only these two *Livros*, - the anonymous one of 1582 and

[29] 1st ms; 2nd m, about 1646.

Rèsende's of 1636 - the governments of Goa and Lisbon (and therefore the government of Madrid) had in their possession very complete and precise overall pictures of the East Indies. However, other books and voyages, mainly concerning countries outside the Empire, provided abundant information on particular regions, their peoples, ways of life, technology, political systems, social set-ups, beliefs and rituals and even their mentalities. And so for that part of Africa that faced the Indian Ocean we have a book by Frei Joao dos Santos - *Ethiopia Oriental e varia historia das cousas notaveis do Oriente*, published at Evora in 1609. It reveals the fascinating world of gold and ivory - the most lucrative trades - but also the world of the slave trade. The natives, in crowded villages with enclaves of herdsmen, lived mainly on *milho zaburro* and rice, yams, poultry and pork; but they had to import both cereals from India, together with cotton, beads and metals. Before the Portuguese, Muslim trading towns lined the coast from Sofala to Malindi. The Portuguese succeeded in taking most of them, but trade continued, especially with the Goujrat region, and competition, even open fighting, raged, with the Ottomans trying to help African Islam. Frei Joao dos Santos lived for many years in the Cafraria missions of the Zambesi. His book disseminated information that was useful for evangelisation and imperial politics, which were imbued with an all-absorbing social-cultural perspective.

We shall now look at the Far East. Trading in Chinese silk and Japanese silver had become vital for the Portuguese in India who had become increasingly integrated in the life of the region and less interested in the Cape route. The rise of Macao led to the need for first-hand knowledge of the Chinese Empire and the island kingdoms. Frei Gaspar da Cruz was a Dominican friar who set sail from Lisbon in 1548 and lived in Goa and Malacca. Disappointed after a year in Cambodia, he went to China as a missionary in 1556. On his return to Portugal in 1569, he gave us the first eye-witness account of the Celestial Empire by a European : *Tractado em que se contam muito por extenso as cousas da China, com suas particularidades, e asi do Reyno de Ormuz*, Evora. Although he used an earlier work written by another Portuguese traveller who had been in China, Frei Gaspar da Cruz described for the most

part his personal experiences in South China, complemented by information he had managed to gather, mainly from *lettrés* attached to government. His greatest concern was the spread of Christianity. His description took in the whole Empire, as well as its bordering regions and peoples: the vast Mongol domains, stretching over the Euro-Asian steppes to Russia, and the Indo-Chinese kingdoms in the South. Gaspar da Cruz described a people that worked the land hard and thoroughly - in the paddy-fields, the corn-fields and the gardens - whereas in the many crowded towns artisans and merchants busied themselves producing and trading porcelain, silks, brasses and rich furniture - all delights for Europe. Like other Portuguese of that time, Gaspar da Cruz was fascinated by good government in the hands of men of letters - *Quam polida é esta gente, no regimento e governo da terra e no comum trato* - although, on the other hand, he violently abhorred "idolatry" and "witchcraft", those beliefs and practices that were the work of the Devil, and to which he remained impervious. In compensation, he understood and brought to public attention certain traits of the Chinese character: their pride in work well done, their hostility to laziness and begging, the plurality of languages and the paradoxical uniformity of their hand-writing with its symbolic characters, understood even in Japan and in Tyampa (which explains why men of letters were so powerful). He noticed the Chinese reserve regarding anything new (this was one of the obstacles to Christianisation), and indeed noted how innovation met with persecution.

The Portuguese presence in the South Seas was based on Malacca where porcelain, silks and furniture arrived from China and where Moluccan careers in drugs trading began and ended. But the Portuguese were also involved with gold in Sumatra and Borneo, pepper from Sumatra and aromatic and therapeutic woods. The opening up of Japan, followed by the settlement in Macao and then the Spanish annexation of the Philippines all reinforced the role of that area and increased its attraction for evangelising missions. Great strides in knowledge about this world had been achieved through the numerous reports, letters, historical accounts and other documents which often came from ecclesiastical circles. In 1548 captain Jorge

Alvares and two Jesuits - St. Francis Xavier and Father Nicolau Lanciloto - sent Viceroy Garcia de Sa an *Emformaçao* on Japan which gave precise details on all the fundamental subjects: geography and landscape, economic activities, trade with China, clothing and diet, housing, family organisation and the condition of women, the king and the nobles, fortresses and the way of waging war, shipping, religious beliefs and practices (seen in attempting to draw them close to Christianity, and emphasising Buddhism). Three very subtle observations were made. In Japan there were some very large agglomerations, but no towns (there were no surrounding walls). The Japanese wrote chronicles of their history and their achievements, comparable in every way to European chronicles of that period. The writing they used was Chinese, read from Tyampa to Meaco (the capital, Kyoto), although the Japanese did not speak "Chinese".

Although the South Sea and the East in general were still very much in the foreground as far as awareness of the Empire and the world's problems were concerned, this ocean-born imperial construction was from now on founded more and more on the South Atlantic - Brazil and Angola. It is therefore not at all surprising that from the 1570s a considerable number of geographical studies (in the broad sense of the term) dealt with the immense Brazilian "continent". The first were the works of Pero de Magalhaes Gandavo, who lived several years in Brazil, mainly in the *capitanias* of Bahia, Sao Vicente and Ilhéus, and perhaps in two different periods - before 1570 and after 1576. He was a man of Latin culture, impressed by ideas on the Portuguese language, an admirer of the Jesuits, but a layman working for the State (perhaps he would be *provedor da fazenda real* in Bahia, perhaps he had worked at the Torre do Tombo). He wrote *Tratado da Provincia do Brasil* (Ms, about 1570) and *Historia da Provincia Santa Cruz a que vulgarmente chamamos Brasil*, Lisbon, 1576[30] .

The dedications tell us that the books were intended for the King's circles and were aimed to attract "*todos aqueles que nestes Reinos vivem*

[30] See Luis de Matos, in *Boletim Internacional de Bibliografia Luso-Brasileira*, III, n°4, (1962).

em probreza" (especially the peasants from Entre Douro and Minho) to go and settle in Brazil where they would find work and better living conditions - without forgetting, of course, the evangelisation of the Indios and the transformation of their customs, described as *bestiales*. In these two books (note that the *História* is, in fact, not history), Gandavo describes the general geography (with special attention to rivers), the organisation of the *capitanias* and the way of life of the Portuguese, the flora and the fauna, the settlements (villages with collective houses) and the customs of the Indios, and the policies adopted concerning them. It was a vast complex based on sugar, cotton and Brazilian dye wood, a complex which lived on slave labour; people ate *milho zaburro*, yams and manioc, bananas and pineapples. Stock-rearing began when animal species were imported through the Cape Verde Islands; when these books were written, there were already horses in Brazil.

From 1583 to 1598 and from 1601 until his death in 1625, the Jesuit Fernao Cardim lived in Brazil and the different missions he ran enabled him to have a personal knowledge of several *capitanias*. And so he wrote "The Climate and the Land of Brazil" and "The Beginning and the Origins of the Indios of Brazil" during his first stay, which was completed by the "Epistolary Narrative" of the voyages and missions in which he took part, written by his companion Father Cristovao Gouveia[31]. The first book describes the flora and fauna in great detail, but it is most interesting when it reveals the progress in livestock-rearing - horses, cattle, smaller livestock (pigs and sheep) - as well as the progress in cereal-growing. The second book, which is fairly short, deals with techniques, the patterns of life, ceremonies, and ethnical differences and puts forward an interpretation of the natives' beliefs and rituals, pointing out that these people " have no knowledge of their Creator, nor of heavenly matters, nor of the punishments or glories after this life; they do not worship, nor do they have any religious ceremonies or divine services". These short treatises (manuscripts) were useful to the Jesuits, but they were widely distributed because Samuel Purchas published an English translation of them in 1625.

[31] Ed. B. Caetano, Capistrano de Abreu et Rodolfo Garcia, (Sao Paolo, 1939).

A third book was the *Tratado descritivo do Brasil em 1587*[32] written by Gabriel Soares de Sousa. He was *senhor de engenho* in the *capitania* of Bahia, and the Jesuits accused him of trading in Indians. With his brother, he discovered the silver mines near the Sao Francisco river, went to Madrid to obtain the concession, returned to Brazil in 1590 and died soon afterwards. While in residence at court, he wrote the *Tratado*, dedicating it to Cristovao de Moura in order to obtain access to the king. The book is a lay and sociological treatise, but, like the others, is confident about the future of this overseas province.

Without forgetting to mention the *Rezao do Estado do Brasil* of 1612, attributed to Diogo de Campos Moreno[33], we now come to Ambrosio Fernandes Brandao, who in 1618 wrote an in-depth study of Brazil and her role in the Empire: *Dialogos da Grandeza do Brasil*[34]. Brandao, who settled in Brazil in 1583 and stayed there until 1618, during which time he made several voyages to Portugal, resembled Gabriel Soares de Sousa, although he was a wealthier man. A collector of sugar tithes in Pernambuco (in that he was the agent of the tenant-farmers in the contract), as a captain of the merchants who made up an infantry corps he took part in several expeditions against the French and the Indians. Brandao then became an engineer in Paraiba, where he came to own three industrially-equipped *fazendas*. Probably Jewish, since he was familiar with the Bible in Hebrew and in the vulgate, he had a vast knowledge of "classical" medicine and astronomy. He was very well-read in Portuguese literature, and was a remarkable writer. Like Luis Mendes de Vasoncelos, he thought that Brazil and the Atlantic world should carry more weight in the Empire than the East Indies. Brandao wrote pertinently about the populating of the Americas: man came to America from Asia, and America was peopled after Africa and Euro-Asia. Brandao studied Brazil *capitania* after *capitania*, and his analysis shows clearly the composition of Brazilian society. There were five social classes:

[32] Published by F. A. Varnhagen, (Sao Paolo, 1938).
[33] Edited by De Sluiter in the *Hispanic American Historical Review*, vol. XXIX, pp. 518-562.
[34] Edited by Rodolfo Garcia and J. Cortesao, (Rio de Janeiro, 1943).

a) people connected with navigation and maritime trade, owning ships and caravels which carried sugar, Brazil wood and cotton to Portugal;

b) merchants who dealt in trading these goods with Portugal where they had their correspondents; they were concerned merely with making money from the goods and did not care about Brazil's interests;

c) artisans and mechanics, of whom there was already a considerable number;

d) wage-earners - those who filled the sugar chests, or worked in the sugar-fields, cow-herds, carters, domestic servants;

e) landowners.

At the top were the *senhores de sngenho*; lower down, people engaged in agriculture and horticulture. All these categories used slave labour (1st Dialogue).

Brazil therefore needed, imperatively, the slave trade of the African coasts on the opposite side of the Atlantic. The Kingdom of the Congo, whose high-ranking citizens had been converted to Christianity, and which had links with Portugal, and the Kingdom of Angola, where in 1570 Paolo Dias had established a *capitania* which was soon to become a government-general, were described in 1588-1589 by Duarte Lopes in a document sent to Filippo Pigafetta, who published the *Relatione del Reame de Congo e delle circonvicine contrade* in Rome (preface dated 7 August, 1591). Lopes had spent several years in the Congo, where he became the confidential agent of the Congolese king, Alvaro I. He came back to Europe to enlist the support of Philip I and Pope Sixtus V in converting the Congo to Christianity. He failed, but was not discouraged, and in Pigafetta he found the person to launch a book aimed at convincing public opinion in Rome and Madrid, indeed in Europe. At the same time, Duarte Lopes fought for the development of the slave trade: black Africans from Angola and Sao Tomé were sent to the West Indies. This trade developed in fact, with the Portuguese seizing the *asiento*. Basing his study on maps (e.g. Bartolomeu Velho's of 1563), and the Portuguese and African voyages (it seemed that a route connected the Zambezi (Cuama) to Kouanza and Zaire), and drawing on his own experience of the African

countries, Lopes enabled Pigafetta to paint a picture of sub-equatorial Africa: starting from the island of Sao Tomé, he followed the coast-line round the Cape and up to Suez, but he also described the continent's inland areas (e.g. Monomotapa with its gold, and the invasions of the terrible Jaccas). Economic and social life, political organisation, arms and military techniques, beliefs and the attitude to Christianity are all described. Some interesting details include the industry which produced cloth from palm fibre, the lack of written chronicles and the ensuing difficulty of reconstructing the past, the lunar calendar, and the fact that the notion of the "hour" (as a division of the day) did not exist. The observations on exchange are particularly important: there was no currency, and precious metals were not used as instruments of payment: shells collected all along the sea-coast, especially the cowries from the island of Luanda (*zimbos*) were used as currency. The comparison is clearly drawn with the shells in China and in the kingdoms of Senegal and Niger; in Bengal, these cowries were used like metal currency (Book I, chapter 4).

There is no doubt that the picture painted by Duarte Lopes (who was certainly a merchant, but perhaps also a slave-trader) contained several geographical mistakes, which did not prevent its being translated into French (by T. de Bry), Latin and Flemish. However, other descriptions and reports correct and complete it: the *Sumario e descripçao do reino de Angola* by the official investigator Domingos de Abreu de Brito (1592), all the material on the-period from 1570 to 1630 collected by Luciano Cordeiro (1878), and the voyage of the Jesuit Antonio Gomes who between 1620 and 1648 sailed up the river Cuama to the Monomatapa Empire.[35]

This rapid and incomplete survey of publications enables us to conclude that both central and peripheral authorities, merchants and missionaries had at their disposal fairly valid and pertinent information about a wide range of subjects. Paradoxically, information regarding the Kingdom of Portugal does not bear comparison with that regarding the Empire as far as quality and quantity are concerned. The first

[35] *Studia*, n. 3, 1959.

overall picture (in the period concerning us) is the *Geografia antiga da Lusitania* by Frei Bernardo de Brito (Alcobaça, 1597), which dealt with topography, hydrography and demography. Despite the pictorial style of some descriptions, the author's fundamental aim was to connect sixteenth-century Portugal with ancient Lusitania (understood in its extended form, including Entre Douro and Minho). However, this example of baroque literature has two characteristic features: the hotchpotch of quotations from authors of different periods, used as though they were contemporary authors, and the inclusion of myths concerning the founding or the destiny of the nation, to justify the identity of Portugal. The *Descripçao do Reino de Portugal* (1599, published in 1610) by the jurist of Jewish stock, Duarte Nunes de Leao, (*Desembargador da Casa da Suplicaçao*, Court of Appeal), gives further information about the geography of production and the economy and about public administration. Fundamentally, Nunes de Leao aspired to illustrate the character peculiar to the Kingdom of Portugal in the whole of the Iberian Peninsula, rather than to inform politicians or merchants[36] . Later works do not add anything of importance to Duarte Nunes' book: on the contrary, they "improve upon" the plurality of indications drawn from disparate sources and dwell on hagiographical and genealogical themes as can be seen in *Portugallia sive de Regis Portugalliae Regnis et opibus commentarius*, by an anonymous author, published at Leyden in 1641, which aims to justify the Restoration juridically. It was not until the end of the century that a complete and detailed geography of Portugal appeared (Carvalho da Costa, *Corografia*, circa 1690-1700).

Was the lack of studies concerning Portugal as a whole compensated by studies concerning single regions or single towns? Frei Joao de Sao José, who was born in Beira and lived first in the Algarve and then in Lisbon, in 1577 wrote a *Corografia do reino do Algarve* in four parts. Parts 2 and 3 are about the region's history; part 1 contains a general description with much erudite debate, which is

[36] See Romero Magalhaes, *As Descriçoes geograficas de Portugal 1500-1650*, RHES, (Lisbon, 1980).

not particularly useful. But part 4 is innovative and valuable: according to Romero Magalhaes, it is the first ethnographic study of the Algarve. We are presented with a country making rapid progress, enriched by international trade, using well-developed techniques (admirably described) in agriculture and fishing. The description pertinently divides the region into two sub-regions: the mountains where the main activity was animal-rearing (cattle and smaller livestock, mostly exported to Andalusia), and the coast which exported salt (in exchange for *reales*), figs and tunny-fish. A lawyer from the Algarve at court (at the *Casa de Supliçao*), Henrique Fernandes Serrao, completed the picture painted by his predecessor with a *Historia do Reino do Algarve* (1607, finished perhaps a little earlier). By now it was a country where the rural economy was developing, described by means of itineraries. Ethnographical aspects are dealt with more briefly, but there is a more complete survey of towns, *villas* and villages with their respective economic activities. This *Historia* is dedicated to the Governor of Algarve, and had a political purpose.[37]

After this, no description of a region of Portugal appeared for over a century. Lisbon was the subject of a very detailed study, the *Livro das Grandezas de Lisboa,* by Frei Nicolau de Oliveira (1619, published at Lisbon in 1620). This work is more factual than descriptive (its greatest interest lies in its statistics). The *Tratado da cidade de Portalegre* by Father Diogo Sotto Maior (1616-1619) recounts the bishops' lives and describes ancient monuments; only chapter 3 provides us with some information about the geography and economy of the town. In fact, it was not until the end of the seventeenth century that studies about single localities appeared.

B: JOURNEYS, ITINERARIES, CARTOGRAPHY

Any knowledge of geography and social and political conditions presupposes a journey (a "philosophical" journey in eighteenth-century

[37] For all the above, see *Duas Descriçoes do Algarve no século XVI*, presented by Romero de Magalhaes and Viegas Guerreiro, (1983).

terms) and its instruments (itineraries, road-maps and charts), and this knowledge acquires a greater utility with descriptive accounts.

There are very few descriptive accounts concerning Portugal in the sixteenth and seventeenth centuries. The canon of Evora, Manuel Severim de Faria, a scholar who analysed Portugal's great problems of the period, travelled over much of the country between 1604 and 1625: upper Alentejo, Ribatejo, middle Beira, and inland upper Beira as far as Douro. In his company, we travel along several Portuguese roads, we visit towns and villages, contemplate landscapes, learn about food and customs, about farming and what houses looked like[38]. The mathematician, cosmographer and engineer Joao Baptista Lavanha accompanied Philip II when he travelled to Lisbon in 1619, and on the king's orders wrote an account of the journey with valuable illustrations (Madrid 1622: the book was financed by the Lisbon Camara). The route was from Badajoz to Estremoz, Evora, Montemor-o-Novo, Coina and Almada where the Tagus was crossed to reach Belém; expeditions were made to Setubal and Tomar and the group made a slow return to Badajoz after six months. This is the classical route of Upper Alenteja.

After this it was an Italian who undertook a journey covering most of Portugal: he described vividly the towns, villages and countryside, giving precise information about institutions, population, economic activities and some aspects of social and cultural life. The Tuscan Lorenzo Magalotti accompanied Cosimo de Medici in 1669 on his journey through Portugal and wrote a detailed account; they travelled throughout the Alentejo region between Elvas and Setubal, and then along the northern road via Tomar and Coimbra to Porto and Viana. The text was published, which enabled it to be used in Portugal.

These journeys, together with the movement of troops and the events of the War of Independence imply that itineraries and maps and lists of place-names existed. Unfortunately, no pre-eighteenth-century road guide has survived. Fernando Alvares Seco drew the first map of the whole of Portugal about 1560. At his request, Seco sent a

[38] *Viagens em Portugal*, ed. Verissimo Serrao, 1974.

copy to the humanist Aquiles Estaço who was living in Rome. Estaço dedicated the copy to Cardinal Guido Sforza, protector of the Kingdom of Portugal. In 1561 the map was etched and published in Venice, with a licence granted by the Pope and the Seigniory. Later editions appeared in 1565 and 1590. This map was included in the big *Atlas of the Iberian Peninsula* compiled between 1577 and 1585 by Pedro Esquivel, Diego de Guevara and Lopez de Velasco by order of Philip II: the publication, however, was not authorised by the King. All the great atlases and encyclopedias included it: Ortelius' *Theatrum Orbis Terrarum* (Antwerp, 1570 - 41 editions, half of which were in Latin), Gérard de Jode's *Speculum Orbis Terrarum* (1578), Hondius' of 1597, Mercator's of 1595 and the Hondius-Mercator of 1606 (30 editions up to 1640).

Seco's map names 1,154 places. It implies that there was a list of place-names with information and locations drawn up before 1540. It has a scale of latitudes, but was very probably drawn based on compass readings and estimates of distances covered. The marked distortion of the meridians towards the east, north of the Tagus, is to be explained, in our opinion, by the fact that the needle deviated 8° east.[39]

It was not until 1640 that Joao Texeira Albernaz drew another map of the whole of Portugal, but it remained in manuscript. The system of representation seems to be the same, since it is decorated with two compass-cards, and the north of the country still slants towards the east, although to a lesser extent; the edges of the map show a scale of latitudes and another of leagues. The same cartographer was responsible for the Atlas of Brazil, which was first attached to the book of the *Rezao do Estado do Brasil* (22 maps), and then published on its own, with several editions up to 1640 (32 maps), and for a Universal Atlas, published about 1628, with several editions varying from 20 to 31 maps.

In 1622 Philip III ordered a survey of all the Iberian Peninsula's coasts, and entrusted the task to Pedro Teixeira Albernaz (brother of

[39] For this map, see A. Ferreira, C. de Morais, J. da Silveira, A. Girao, *O mais Antigo Mapa de Portugal*, (Coimbra, 1957), P.M.C., vol. II, pp. 83-86.

the above). The resultant *Descripcion de las costas y puertos de Espana* gave a very precise picture of the Portuguese coast, which was not only cartographical (the maps have been lost), for it contains information about the physical conditions and the commercial activity of the mouth of every river and every port. Joao Texeira also compiled an atlas of the Portuguese coasts, with 16 maps, in 1648. However, in 1662, Marcus Orozco etched and published in Madrid the *Descripcion del Reyno de Portugal y de los Reynos de Castilla que parten con su frontera delineada por D. Pedro Texeira Albernaz.* The dedication to Philip IV was not written by the author (who died that year). The arms of Philip IV appear as well as the arms of Portugal: the map's publication was part of the annexation policy, which ended soon after with a peace treaty. Work on the map took place in the preceding decade: this map replaced Seco's map which was out of date, and served as a model for a long time because of the better positioning of the latitudes, its greater accuracy and wealth of detail.

The defence of the coasts against the "rebels" and other enemies from the north, the problems in the Peninsula with its own nations and the central power's growing role in politics are responsible for the boom in maps between 1565 and 1620. There were maps of the Correiçoes de Portugal (circa 1640), of the Alentejo border (circa 1646) and there was the *Livro das Praças de Portugal* by Joao Nunes Tinoco (1663) (P.M.C., vols. IV and V). As well as the Texeira Albernnaz brothers there was Joao Baptista Lavanha, who seems to have been the movement's leader and scientific director: we need refer only to the itinerary and map of Aragon, drawn between 1610 and 1615, to his *Regimento de Nautica* (1594) and to his mathematical teachings.

The fact that the means of learning about the kingdom itself and its internal traffic were noted as being insufficient shows that the State was heavily involved in economic and political affairs on a global scale. In fact, there was a wealth of studies concerning the network of routes and itineraries abroad.

The Eastern route (i.e. the connection between Goa and Hormuz at the eastern end and Lisbon at the western end, via the Persian gulf, with the Persian routes to Aleppo or from Basra across the desert to

Tripoli in Syria and then via Venice or Marseilles to Portugal) played an essential role in the life of the Empire: it was a channel for passing on news. However it was also a channel for diplomatic action in Persia and in eastern spheres. In 1565, Mestre Alfonso, the Viceroy's chief surgeon, accompanied Joao de Mendonça, who had finished his term of duty, on his return voyage to Portugal. However, the boat could not reach the Cape, and had to go back to India. Joao de Mendonça disembarked alone and sailed to Hormuz on a merchant vessel. He was instructed to journey "overland" to inform Lisbon what had happened to the ex-governor. With his mission accomplished, Mestre Alfonso wrote the account of his journey for two reasons: the desire to learn about new things in the world was his chief inspiration, and secondly, he believed his experience would be very useful to others who might make the same journey - and it would soon become common practice to undertake this journey. This "itinerary" was therefore dedicated to the King.

Mestre Alfonso's education and his profession can be seen in his attitude and his book. The itineraries are mapped out with all the details: the place-names are transcribed from Persian and Turkish. Mestre Alfonso always specified with the compass-card the directions followed (undoubtedly he had a compass with him), and the latitude of every town or important place (generally fairly accurately - he probably had an astrolabe in his bag). He indicated the number of days' march between the stops, and sometimes the distance in leagues. A remarkable observation: the specifications of overland itineraries are less precise than those of maritime navigation because countless detours had to be made overland. Mestre Alfonso described the march , taking into account all the physical details - hills, rivers, vegetation, climate and meteorological conditions. The dates of departure and arrival, as well as remarkable events, are always recorded, and sometimes the length of time or, better still, the hour is noted, or at least the time of day. Mestre Alfonso made notes and wrote his book during the entire journey at short intervals, in fact day by day. There are some recurring themes: the organisation of the camel caravan, under the command of a captain, the people involved (Venetians,

Armenians, Persians, Turks, Jews and Portuguese) and what they carried with them, transport charges (according to the weight of the camel's load), the tolls paid, the ransoms paid to brigands en route, the difficult relationship between the merchant and the camel-driver, the flow of merchandise and the forms of payment, the use of bills of exchange.

Armed conflict near Basra barred the desert route to Tripoli in Syria. And so the Portuguese surgeon took the *cafila* that went from Bandar (an excise port) into Persia; leaving Shiraz to the left and Ispahan to the right, the caravan passed through Kashan and then Qom, and, bearing north-west, reached Tabriz. Then, crossing mountains and plateaux to the East, the caravan, reduced in numbers for greater security, reached Urfa and arrived in Aleppo in mid-January. Six months had elapsed. Mestre Alfonso proposed this alternative route, discussed its advantages and disadvantages, and mapped all the routes between the Mediterranean and India, between the Indian Ocean and the Caspian Sea and the Black Sea. He wrote of the characteristics of the different peoples, of the political and religious conditions, of the arms of the Persians and the Ottomans and their methods of waging war. The Ottomans used artillery and arquebusiers, whereas the Persians used many cavalry, archers and some blunderbuss yeomen. Towns such as Kashan, Qom, Tabriz, and Aleppo (and then Venice) were carefully described, with details of their industry, trade and agriculture. Mestre Alfonso noticed that in Persia people preferred to cultivate vegetable-gardens and orchards, and to build houses and sumptuous palaces. The landscape was often characterised by cotton-fields: rivers were used to work water mills. The plague which was so widespread and frequent in Persia and Turkey worried the doctor, who was amazed at the backwardness of medicine in these countries. From Cyprus Mestre Alfonso set sail for Venice, whence he journeyed via Lyons to La Rochelle. From here he set sail for Lisbon, arriving on 31 August, fourteen months after having set off from Hormuz. One last note: there is no doubt that Mestre Alfonso was familiar with the cartography of the regions through which he journeyed: did he have a map with him?

On 30 December 1605, two ships set sail from Goa for Lisbon.

Navigational errors and unexpected difficulties led them astray on the north coast of the island of Sao Lourenço (Madagascar) and in the end, by hugging the African coast and the island of Socotra, they landed in Hormuz. Here two Portuguese decided to go home to Portugal overland. One was a monk, Frei Gaspar de Sao Berbardino; the other, Nicolau de Orta Rebelo, was a middle-ranking civil servant (he had been a customs judge at Diu and had gone to India to be captain of a voyage to the Moluccas for which he was turned down). The two wrote separately about their journey together to Aleppo (Frei Gaspar went on to the Holy Land from there). They left Hormuz on 7 August 1606, and via Bandar, the frontier customs-port for Comoran, and Lar (where the coins known as *larins* were minted), they arrived at Shiraz. Following the route that ran parallel to the coast (to the north-west), and then journeying between the two rivers, the *cafila* reached Babylon (Baghdad) on 11th November. Continuing in the same direction, they crossed the Euphrates and arrived at Aleppo on 16 January, 1607. Orta Rebelo stayed there until 11 March when, together with some French people, he left with a caravan. After several adventures (the caravan was "relieved" of 27 camels carrying bales of silk), Orta Rebelo reached Alexandretta (Iskenderun) and set sail on a French ship on 27 March. After a short stay on Cyprus, where the French merchants took on board a cargo of cotton for France, the voyage continued via Crete, Malta and Corsica, and on 16 May they reached Marseilles. Curious to see France, Orta Rebelo travelled through the country (singing the praises of its inns) to Portugal. Orta Rebelo's book is more precise, with better descriptions of the towns, but does not rise to the level of Mestre Alfonso's work.

At the end of 1662, the Viceroy Melo e Castro had a pressing need to inform Lisbon about the situation in the East. The Dutch and the British were constantly seizing bits of the Portuguese Empire; reinforcements and urgent measures were necessary. Then again, Christianity was in a pitiful state, in marked regression, and the clergy were divided. The Jesuit priest Manuel Godinho, who had been in India since 1655, was charged with this mission. On board an Indian merchant's ship, he set sail from Surat, the new oriental emporium.

Times had changed a great deal and the priest thought that the Empire had sunk into decay. From Hormuz he travelled to Baghdad with a caravan, and thence to Aleppo: the route is familiar to us. From Aleppo he travelled to Alexandretta and sailed to Marseilles; he travelled through France to Bordeaux, but then went on to La Rochelle whence he sailed to Lisbon, arriving there on 25 October 1663. His descriptions show us that the geography of the global economy had changed as a result of Dutch and British expansion. In the Indian Ocean, the town and port of Surat had become the richest and most famous commercial centre, the scene of heavy Portuguese defeats. People from every nation in Europe and Asia met there, staying in two luxurious caravanserais. The *cafilas* of oxen and camels came overland, ships arriving from everywhere between China and East Africa put into the harbour, and Surat had connections with the Mediterranean via the Red Sea and the Persian Gulf. At the north-west tip of this bay, near the mouth of the Tigris and the Euphrates, more than forty ships put into the port of Basra with its 100,000 inhabitants. These ships carried cargoes of drugs and spices, fine cloths, construction timber and iron, which were then dispatched by caravans to Turkey and the ports of the Levant, whence the merchandise was shipped to Italy and France. Food supplies came from the north of Mesopotamia and Persia. All the great Asian and European products were to be found there. Basra had become the principal port between East and West, reflecting the revival of trading in the eastern Mediterranean which competed with the Cape route. However, brigandage carried out by the Alarves made these routes dangerous: it was impossible to capture these nomads of the desert, and the Grand Turk himself could not eliminate this threat to caravans and settlements. At Basra, Father Manuel Godinho hesitated about the choice of route, since speed was his greatest concern. Letters from the Dutch Company arrived from Comoran with news of the capture of Cochin; these letters were then to be forwarded to Aleppo or to the Dutch consul in Syria, who would send them on to Holland by sea: the post was well organised. Godinho decided to set off immediately, by the most dangerous but the quickest route to reach

Lisbon with the fatal news before these reached the enemy's ears. This episode shows how important this Eastern route was for sending information.

Such transfers of intelligence by this route, vital for the Portuguese Empire from the early sixteenth century and for Northern countries later, together with Portuguese interests in Mediterranean trading (importing corn and exporting sugar) were responsible for the blossoming of maps of the Mediterranean Sea and the East. Strangely enough, when mapping this area, the Portuguese remained faithful to the Italian and Spanish tradition: latitudes were distorted from west to east - lands were placed further north than they ought to have been. Diogo Ribeiro had corrected this in the maps he drew between 1527 and 1529, as had Bartolomeu Velho about 1560, but his compatriot Diogo Homem did not follow his example (it is true that he worked in Venice). However Diogo Homem drew several maps of this region between 1557 and 1576. There are many maps in the atlases, starting with Joao Freire's in 1546 (and even before) and ending with Joao Teixeira's in 1643. The Portuguese school established the rule of dividing the map into two sheets: on one, the Atlantic coast and the western Mediterranean, and on the other the eastern Mediteranean and the Near East. In Joao Texeira's atlas, one half of the Mediterranean was attached to the North Atlantic, and the other half to the Indian Ocean. The oceans now gave the world its framework, despite the Mediterranean axis.

This framework was formed by the world-wide network of routes, some of which formed the main axes. The accounts of journeys along these routes have been collected and re-assessed critically in the *roteiros*, and imply that nautical charts existed. As far as the East Indies route is concerned, years of collective and personal experience resulted in Vicente Rodrigues' two *Roteiros da Carreira da India*. One appeared circa 1575 (reproduced by Van Linschotten) and the other, a revised and corrected version, in 1591 (e.g. the Baixo da Judia, first situated at 22°, was situated at 22°1/4 in the revised edition). This work was based on the *Roteiro* by Diogo Afonso (circa 1530). Until 1527, the route from Cochin or Goa to Lisbon passed between

the island of Madagascar and the African coast; then from 1527 to 1597 it cut across the Indian Ocean to the east of Madagascar: from 1597, both alternatives were possible. Vicente Rodrigues' work remained a model, but its place was taken by other *rotieros* of a high scientific level, such as the *Roteiro de navegaçao da India* by Joao Baptista Lavanha, a mathematician and cosmographer, circa 1604, the *Roteiro da Carreira da India* by Gaspar Ferreira Reimao of 1612, and the more practically-biased *roteiro* by Alexo da Mota, circa 1621. However Vicente Rodrigues' remained the fundamental work.

Between 1608 and 1622, Manuel de Figueirido drew up a collection of *roteiros* which connected the main areas of the Portuguese-Spanish Empire: from Lisbon to India and Malacca, from the Portuguese ports to Brazil and Rio da Prata, Guinea and Angola, and also the *Roteiro da Indias Ocidentais*. From the end of the sixteenth century until 1681, the list of *roteiros*, often published in several editions, is very long and diverse, covering the whole of the Atlantic Ocean, the Indian Ocean and the Far East. The list culminated in 1681, with the three works by Luis Serrao Pimentel, which embraced all the Spanish and Portuguese conquests and the Mediterranean.[40]

This wealth of documentation of accounts of journeys, itineraries, route-books and maps provided those who needed to make choices with useful information on which to base their decisions. However, the different regions needed to be integrated in order to formulate policies and undertake actions that took into account such an ever-changing and diverse whole. Unfortunately only a few journeys covered immense distances over land or sea. For example, the Fleming Jacques de Coutre lived amongst the Portuguese in the East from 1592 to 1627, and twice made the outward journey by sea: once he returned to Madrid by the Levant trails (1608-1609), and another time he tried this route again, but was taken prisoner, and brought back to Goa from where he was sent back to Lisbon via the Cape. De Coutre stayed in Malacca, was in Siam and in the Indian Archipelago, travelled through most of inland India, was in the Golconda diamond mines

[40] see Fontoura da Costa, *A Marinharia dos Descobrimentos*, (Lisbon, 1960), chapter 9B.

and in the Adil Khan's kingdom, travelled from Hormuz to Basra and via Baghdad to Aleppo, and in Persia visited Ispahan and Shiraz. He and his brothers became rich, but allowed the Portuguese to treat them badly. The account of their adventures was intended to obtain the King's favour in Madrid: written in Portuguese, it was translated into Spanish by Jacques'son in 1640. However, de Coutre presented pleas as well as *arbitrios* (preaching free trade in particular). In this book, the study of Goa's world trade and its decline at the time are worthy of note. We should also mention the accuracy and the importance of the descriptions of countries and economic trends, and other information.

We shall not dwell on the long list of overseas journeys undertaken by foreigners (Pyrard de Laval, Tavernier etc.). We need consider only the *Itinerario de las Misiones del'India Oriental* written by Frei Sebastiao Manrique, an Augustine friar, which was presented to Cardinal Palloto. He travelled to India via the Cape and settled at Cochin, from where he set out on missions to Bengal, Arrakan and Pegu; on his return to Cochin, he went to Goa and set sail for Malacca. The Philippines were his next port of call, but we see him later in Macao and in Cochin China, on the island of Macassar. Returning to India, he travelled up the Ganges to Agra and Lahore; later he travelled down the Indus to Sind, staying in Multan and Kandahar. Frei Manrique gives us a precise picture of the Grand Mogul's empire. He travelled back to Europe overland: crossing Khorassan and Persia - he visited Ispahan - via Baghdad he reached Damascus and Port Said from where he set sail for Rome. His thick *Itinerario* was published in Rome in 1653. His journeys had taken place between 1628 and 1643. Frei Sebastiao Manrique takes his reader on a trip covering the whole of the Euro-Asian world, covering the two oceans, and provides a great deal of information.

In this way, cartography was the means by which people in the sixteenth and seventeenth centuries could have access to a global vision of the world. However, one fact must be born in mind. Strictly nautical cartography has not survived (maps of coastal areas are mistakenly referred to as nautical). Atlases use such scales, and maps

have been drawn using such systems so that it is not possible to plot routes accurately or to have an adequate knowledge of topography (except for coastal areas) or of topographical and hydrographical configurations. The artistic aim is obvious in most of the maps that have survived. But from the mid-sixteenth century (discounting examples from the earlier period), although the skeleton map continued to utilise the orientation of the compass-card (represented often enough, and very beautifully), it was also formed by the squaring of the parallels (with the scale of latitudes marked) and the meridians (equidistant point), and also by the scale of leagues for distances.

At the beginning of our period two very fine atlases appeared: Bartolomeu Velho's collection of maps of 1561 (called the Florence maps, because that is where they were discovered) and Lazaro Luis' atlas of 1563 (Lisbon Academy of Sciences). Both atlases already feature maps of Japan. Velho's is noteworthy for the register of inland areas (e.g. the division of Brazil into *capitanias*). The areas drawn in the maps of Luis Lazaro's Atlas are:

1. the North Atlantic (excluding the British Isles);
2. from the British Isles to the Gulf of Guinea (including the Western Mediterranean);
3. the South Atlantic (including the islands of Tristao da Cunha and Rio da Prata);
4. South America - the southern half (with the Straits of Magellan);
5. Southern Africa (the Indian side) and Madagascar;
6. from Pegu to Borneo and Timor, with Sumatra and Java;
7. the Indian Ocean;
8. China, Indo-China and the Indian Archipelago as far as Japan and Borneo;
9. Persia and Mesopotamia;
10. South America (northern part) and Central America;
11. Florida, Antilles and the Caribbean Islands;
12. the Persian Gulf;
13. the Red Sea;
14. the Mediterranean and Europe (with the British Isles and the Canary Islands).

Between 1568 and 1580 Fernao Vaz Dourado compiled a considerable number of atlases in India. The first was for the Viceroy D. Luis de Ataide, which explains why there were special maps of Achem (Sumatra), Ceylon, Japan and Korea. The map of the Persian Gulf, Persia and Mesopotamia is also to be noted, with its plan of the fortress of Basra and representation of the cities of Hormuz, Lar, Shiraz, Baghdad and other less important towns. Lazaro Luis' atlas showed how much the Persian Gulf - and the Red Sea - preoccupied Portuguese imperial politics. However the atlases of 1575 and 1580 were more complete. This collection of atlases enables us to understand how government decisions at all levels took into account the portrayal of the globe, seen mainly, but not exclusively, from on board ship (what was visible to caravaneers is also recorded).

The Portuguese school of cartography compiled many atlases. Bartolomeu Lasso's appeared in 1590; the Luis Teixeira - Joao Baptista Lavanha partnership produced atlases in 1597 and 1612. Then from 1628 onwards there was the series by Joao Teixeira Albernaz (Luis Teixeira's son) which culminated in the *Livro Universal das Navegaçoes*, compiled by the royal cosmographer in 1643. The title in itself is significant, in that it brings sea voyages into play and covers the entire world known at the time. This work was continued in the numerous *Theatrum Orbis Terrarum* or *Speculum* or *De fabrica mundi* of Abraham Ortelius, Gérard de Jode, Joseph Hondius and Mercator, culminating in 1606 with the Mercator - Hondius Atlas. Each one had dozens of editions.[41].

The essential conclusion is that European global expansion had the means, by way of documentation, to be launched on a world scale.

[41] For all Portuguese cartography, see *Portugaliae Monumenta Cartographica*, vols. II-V and album, (Lisbon 1960), re-published in 1987.

ADDENDA

A. - The settlement places in portugal and overseas ranged in three levels:

CIDADE = town, often enclosed by walls, with a fuel municipal corporation, an important church, markets and shops.
This category is created by royal charter.
Citizens (or *vizinhos*) are the inhabitants who take part in the self-government of the town.
VILA = small town or large village (century-town), with a reduced municipal corporation, a market, a church and/or chapels.
This category is also created by royal chart.
The CIDADES and the most important VILLAS send deputies to the CORTES (three-orders Assembly). They correspond to the *boroughs*. In all, they were 41 in 1535, 99 in 1619.
ALDEIA = village

B - Some other connected notions

CÂMARA = the municipal institution of self-government in a town or *vila*. It has judicial powers, a police force, administrative, economic and financial functions.
CONCELHO = territory under the government of the *Câmara* (town or *vila* and the surrounding lands). The municipal organisation with its territory.
JUIZ DE FORA = judeg appointed by the King; he comes from outside the concelho; generally a *lettré*.
ESCRIVÃO = clerk - person employed to make entries, copy letters, keep accounts, and in charge of records.
ENCABEÇAMENTO = collective assignement of the taxes perceived by the fiscla district, based on the tax-roll. Global sum of a fiscal branch from a given territory, fixed by contract with the local population, sometimes imposed by the central authorities.