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## Building a World: Geography and Cosmology in Castilian Literature of the Early Thirteenth Century

In Illinois there is a circular vacuum tunnel, some twenty-five miles in circumference, down which sub-atomic particles are hurled at each other at colossal speed, so that the physicists observing the results of their collision may come closer to understanding the laws governing the smallest components of the universe. The experiments have not yet yielded the hoped-for results, and there is talk of replacing the tunnel, built at a cost of many millions of dollars, with an even longer and costlier one. Meanwhile, ever more powerful telescopes are enabling cosmologists to observe objects at ever greater distances (which, because light and radio waves travel at a speed that, though very high, is limited, means that the observations reach far back into time as well as far out into space). Black holes are now part of the common currency of the speech of educated persons, as is the big bang: the cosmologists' conquest of time has demolished the once apparently robust steady-state theory of the universe (I say "apparently robust" because the theory was always logically flawed).

These two investigations, to which some of the best scientific minds of our time are devoted, are part of a single quest:

Today scientists describe the universe in terms of two basic partial theories — the general theory of relativity and quantum mechanics. They are the great intellectual achievements of the first half of this century. The general theory of relativity describes the force of gravity and the large-scale structure of the universe, that is, the structure on scales from only a few miles to ... the size of the observable universe. Quantum mechanics, on the other hand, deals with phenomena on extremely small scales, such as a millionth of a millionth of an inch. Unfortunately, however, these two theories are known to be inconsistent with each other — they cannot both be correct. One of the major endeavors in physics today ... is the search for a new theory that will incorporate them both — a quantum theory of gravity. We do not yet have such a theory, and we may still be a long way from having one, but we do already know many of the properties that it must have.... Now, if you believe that the universe is not arbitrary, but is governed by definite laws, you ultimately have to combine the partial theories into a complete unified theory that will describe everything in the universe. (Hawking 11-12)

Throughout the Middle Ages, and for long periods before and after, there was indeed such a theory, whose most memorable summation is found in the last lines of the *Divina commedia*:

ma già volgeva il mio disio e'l velle,  
 sì come rota ch'igualmente è mossa,  
 l'amor che muove il sole e l'altre stelle (*Paradiso* 33: 143-45; Dante 1977b, 380)

In this view, the created universe and human history are equally the results of God's loving purpose for His creatures, though that purpose is temporarily frustrated by human sinfulness, by the long contamination of the Fall — our region of the universe, the sublunary world, polluted, and history too often appearing to justify Edward Gibbon's more recent view of it as "little more than the register of the crimes, follies, and misfortunes of mankind" (chap. 3). Yet the universe remains God's purpose spread out in space: "Caeli enarrant gloriam Dei, / et opera manuum eius annuntiat firmitatem" (*Psalms* 18: 1); and history is the working out of that purpose in time.<sup>1</sup> C.A. Patrides contrasts the Greek view of history as endlessly repeated cycles, for which he chooses the image of the phoenix, with the Judeo-Christian view of history as purposeful movement towards a destination, for which his image is a ladder (*Patrides* 1-13). The second image is not quite right: there is a cyclical element in history as seen by Jewish and Christian writers (Milburn, *Patrides*, *Linehan*), though — in contrast to the pagan Greek view — always at a higher or a lower point, so a spiral staircase is a more accurate image than a ladder.<sup>2</sup> This feature of history is, indeed, fundamental in two of the most important concepts in medieval thought: the figural or typological reading of the Bible, often extended to other texts, and the *translatio imperii* (or *studii*, etc.) (for figural readings, see Auerbach; for *translatio*, see Rico 1984, 111-15, 160-62, 205-06, with abundant bibliography). It explains the interweaving of sacred and secular history in universal chronicles such as Alfonso X's unfinished *General estoria* (Krüger; Rico 1984), and makes possible the structuring of historical accounts of medieval Spain — for instance, parts of the *Poema de Fernán González* and of Alfonso's *Estoria de España* (Deyermond 1986, 1990b).

1 At the very end of the Spanish Middle Ages, the anonymous author of the first act of *Celestina* has his self-centred protagonist Calisto turn the Psalmist's words to his own purposes by saying to the woman after whom he lusts: "En esto veo, Melibea, la grandeza de Dios" (Rojas 211). Yet the words retain their force, reminding readers of the standards by which the characters are to be judged (see Deyermond 1990a, 177-78).

2 When this adjustment of Patrides's imagery occurred to me some twenty years ago, I was unaware of the importance of the spiral in traditional symbolism. This has now been explored by Reckert (1993, 153-69).

Thus the observable universe, from the stars down to the human body, formed a single, complex, harmonious pattern, reinforced by a series of correspondences.<sup>3</sup> Geography, from world maps down to microtoponymy, was part of the pattern, as were human society and, as we have seen, history. Language too formed a part, not only because the pattern was inevitably expressed linguistically (as well as, from time to time, diagrammatically), but on the authority of the Bible: "In principio erat Verbum, et verbum erat apud Deum, et Deus erat verbum" (*Ioann.* 1: 1). Key events in the history of sin and of salvation are to do with language: Adam's naming of the animals (*Gen.* 2: 19-20), the confusion of tongues at the Tower of Babel (*Gen.* 11: 1-9), and its antitype, the gift of tongues at Pentecost (*Actus* 2: 1-13). At the end of the Castilian Middle Ages, in the year that Granada fell, the Jews were expelled from Spain, and Columbus set sail, the prologue to Antonio de Nebrija's *Gramática castellana* brings together language, history, and geography (Deyermond in press).

What has been said so far gives a misleading impression of unanimity and of beliefs that remained static over many centuries, whereas there was change as new phenomena were observed and new ideas were absorbed, and — as some reviewers of C.S. Lewis pointed out — there were always dissident voices. Nevertheless, the pattern just outlined was accepted as broadly accurate and satisfying by the great majority of educated people for well over a thousand years. It was seldom discussed theoretically in medieval Spain; the great exception is Dante's older contemporary, the Franciscan Ramon Llull (1235-c.1315), who devised an *Art general* which, starting from assumptions common to Christians, Jews, and Muslims, sought to demonstrate the truths of Christian faith by a series of complex logical processes (see Pring-Mill 1955-56, 1961, 1963; Hillgarth; Yates; Johnston).

More common than theoretical discussion is extensive geographical or cosmological description. An early and very interesting case is the anonymous *Semejança del mundo* (soon after 1222), which survives in three manuscripts, one (XIIIc) truncated and the others (XVc, one with an XVIIIc copy) full.<sup>4</sup> It seems to have been intended as a Castilian version of the *Imago mundi* of Honorius (the early XIIIc Honorius Inclusus?), which in turn draws heavily on the VIIc *Etymo-*

3 The pattern did not stop at the outer edge of observable phenomena, but included the invisible Primum Mobile, beyond the sphere of the fixed stars, through which God's love transmitted motion to His creation ("l'amor che muove il sole e l'altre stelle"); the music of the spheres, no longer perceptible to sinful human ears; and, of course the orders of angels. For details of the pattern and the correspondences, see Lovejoy, Tillyard, Bamforth, Lewis, Meyer-Baer. A useful survey of the pattern's reflection in medieval Spanish literature is provided by McMullan.

4 References are to MS B, edited in *Semejança*. Here and elsewhere I supply accents and regularize *ij*, *u/v*, and *c/ç*, whenever necessary.

*logiae* of St Isidore of Seville. As the work progresses, the Castilian author relies increasingly on Isidore for his content, while preserving the structure of the *Imago mundi*; a small amount of the work derives from minor sources, and about 12 per cent is original (*Semejança* 15-16). Since Isidore's encyclopedia incorporates a great deal of information from classical sources, the description of the world offered by the *Semejança* is not, as one might suppose from its date, a product of the XIIIc Renaissance, but a late representation of largely classical geographical beliefs.

The *Semejança* begins by describing the four elements (chap. 1-2), and proceeds to the standard division of the world into five zones, two of which are uninhabitable because of extreme cold and one because of extreme heat, thus cutting off the northern temperate zone from the southern and denying us knowledge of the latter (chap. 3). Behind this account lie the ancient and medieval zone maps (Bagrow 43-44; J.K. Wright 17-18, 55-57, 156-65; Harley and Woodward, index s.v. *zones*). From the earliest Greek maps of the sixth century BC, the *oikumene*, or inhabited earth, was coterminous with the regions known to the cartographer; beyond its frame lay mysterious regions peopled by legendary races and beasts (Heidel 12-13). The known world expanded as the centuries passed (for successive phases, see Hay; Rico 1983; Oakeshott), but the idea persisted of a frame beyond which were mystery and danger. The northern temperate zone ("esta partida en que moramos," 55) is further divided into three: "depártela el mar Mediterraneo en tres partes; e la una ha nonbre Asya, e la otra ha nonbre Ehuropa, e la otra tercera ha nonbre África" (55). This statement is too brief to give us a clear indication of how the author visualized the division, though it may well have been in the form of the T-O map (discussed below), and — as Ian Michael points out (1970, 197n) — the extended comparison of the earth to a human body, found in the *Libro de Alexandre*, stanzas 2508-13 (*Alexandre* 550-52) is hinted at by a simile at the end of chapter 2: "e la tyerra ha sus cannos e sus aberturas entre sy por donde se rriega por todas partes, asy como el cuerpo á sus venas" (*Semejança* 55).<sup>5</sup> Within each of the three continents there is a sub-division into countries, and the information given about countries comes ultimately from a variety of sources: the bestiary, the lapidary, travellers' tales of monstrous races, the Alexander romance, and so on. Thus the fifteen chapters on India tell us, in addition to strictly geographical matters, about the legend of Gog and Magog (see Anderson; Michael 1978):

En esta tierra de Yndia ay un lugar que dizen Got en que ay gentes muy malas e muy viles. Según que dizen unos, estas gentes encerró Alixandre quando corrió el mundo, e estas gentes comen las carnes crudas quier de bestias quier de omes, e non dudan de comer ninguna cosa que sea. (chap. 11, 59)

about monstrous races:

En tierra de Yndia ay otrosy unas gentes que an los pies aviesos e an los calcannares adelante, e lo que nós avemos adelante an ellos atrás, e tyenen en cada un pie ocho dedos.... En tierra de Yndia ay otras gentes que an cabeças como perros, e an las unnas corvas, e visten pieles de los ganados e de qual quier bestia que pueden aver, e ladran como perros.... En esta tierra ay otrosy otras gentes manocli, porque éstos non an más de un ojo, e ay otras gentes que dizen armyaspidi, e otros á que dizen los cinopes, e éstos son muy espantables e muy grandes de cuerpos, e comen los omes byvos... (chap. 15-17, 59-61)<sup>6</sup>

and about ferocious composite animals from the bestiary:

E otrosy ay otra bestia que ha nonbre cale, e esta bestia ha cuerpo como asno, e á carrillos e mexillas como puero montés, e ha la cola como elefante, e á los cuernos tan grandes como dos braças, e el uno ha encorvado fázia el esynazo e el otro contra adelante con que lidia contra las bestias; e esta bestia es negra e muy espantable, e lidia dentro en el agua tan fuerte como fuera.... En esta partida ha otrosy otra bestia que á nonbre mantigora; e esta bestia á la fáz como ome, e ha en la boca tres órdenes de dientes, e ha cuerpo de león, e ha la cola como escorpión, e ha muy mala catadura, ca ha los ojos verdes e bueltos en sangre, e sylva como syerpe, e come carne de ome muy de grado; e esta bestia da bozes de muchas maneras, e corre más que ave puede bolar. (chap. 20, 61, 63)

— these beasts are the yale (Druce; McCulloch 1966; George; McCulloch 1970, 190-92) and the manticore (McCulloch 1970, 142-43); an earlier chapter describes the griffin, but because of a scribal or authorial omission the description is garbled (chap. 13, 59; McCulloch 1970, 122-23). Indeed, by far the greater part of the *Semejança*'s account of India is taken up with such matters, and although this heavy concentration is atypical within the work, it is so only because India receives far more attention than other countries. Whether India is thus singled out by the geographical tradition from Isidore onwards because of the number of legendary animals and races located there by travellers' tales, or whether the geographers chose to set such accounts in India, is a matter for further investigation.

5 The comparison, part of the complex series of correspondences that I have already mentioned, more often works in the other direction, with references to the human body as a microcosmos (Bamborough 20-26; Rico 1986 — it should be noted that the coincidence in title between these two fundamentally important books is deceptive: although there is some overlap between Bamborough and Rico, they deal with quite different subjects) (see Barkan).

6 For the monstrous races, see Friedman. They were often located by medieval cartographers not in India, as here, but in the Antipodes (Woodward 1987, 332).

When we turn to later chapters of the *Semejança*, we find that, although the accounts of monstrous races and bestial animals die away, other kinds of non-geographical material are frequent. Thus, chapter 28, "De tierra de Caldea," devotes three of its ten lines to Moses in the wilderness and another two to the Chaldean origin of astronomy, while ten of the dozen lines of chapter 93, "De tierra de Ytalia en Grecia," are occupied by the mythological background of "Great Greece," the southern part of Italy that for a long time belonged to the Byzantine Empire (the chapter heading is an error). Nine chapters (168-76) describe Hell, and 32 (206-37) are a miniature lapidary. To balance this, there are many chapters towards the end of the *Semejança* that are exclusively concerned with meteorological information, but, looking at the work as a whole, we see that for its Castilian author geography and meteorology are set in a wider context that includes the Old Testament and such favourite medieval bodies of knowledge as the bestiary and the lapidary. This was not an eccentricity on his part: if God's creation formed a harmonious and interdependent whole, then a description of any aspect of it would bring other aspects to mind.

Only a few years after the *Semejança*, a poet — probably a teacher at the newly-founded University of Palencia, and if so probably trained at the University of Paris — inaugurated the literary school or movement that we know as the *mester de clerecía* by writing a romance of Alexander the Great.<sup>7</sup> Its main sources are the *Alexandreis* of Gautier de Châtillon, the *Roman d'Alexandre*, and the *Historia de proeliis* (an interpolated translation of Pseudo-Callisthenes), but other sources are woven into these, and there are sections in which the poet writes without reference to any source (the details are set out in Michael 1970, 287-93). There are two descriptions of the world, the first at the beginning of Alexander's invasion of Asia:

La materia lo manda por fuerça de razón,  
avemos nós a fer una desputación,  
cómo se parte 'l mundo por triple partición,  
cómo faze la mar en todas división.

El que partió el mundo fizolo tres partidas,  
son por bracos de mar todas tres divididas,  
la una es mayor, las otras son más chicas,  
la mayor es calient e las dos son más frías.

7 Both the date and the place of composition are disputed, but I continue to believe that the late 1220s are the most likely date, and Palencia the most likely place. To discuss these problems here would occupy a disproportionate space. I should, however, note that the case for earlier composition, in the first years of the thirteenth century, when Alfonso VIII was on the throne, received its most cogent support so far when Amaia Arizaleta defended her dissertation, in Paris, a few days after the Paris symposium at which this paper was initially presented. The starting-point for any study of medieval Alexander literature is, of course, Cary.

La una meatad es contra oriente,  
fizole una suerte el Rey Omnipotente;  
las otras dos alcançan por medio occidente,  
fiende la mar por medio a ambas igualmente.  
Es llamada por nombre Asia la primera;  
la segunda, Europa; África la tercera.  
Tiene el Christianismo a Europa señera;  
moros tienen las otras por nuestra grant dentera.

Qui asmar cómo yazen los mares, de cuál guisa,  
el uno que comedia, el otro que quartiza,  
verían que tien la cruz essa figura misma,  
ond devién los incrédulos prender la mala cisma. (st. 276-80; *Alexandre* 184-86; see Michael 1970, 196).

The source of this part of the poem is the *Alexandreis*, but in stanza 180 the Spanish poet adds the visual impression of the known world's division by seas that take the form of the Cross (Willis 1934, 71). This is the T-O map, a favourite of medieval cartographers: a T within a circle divides the world into three segments, the largest, Asia, being at the top, Europe to the left and Africa to the right (see Lelewel, plates v-vii; J.K. Wright 66-68, 121-22; R. North 90-91; Woodward 1987, 296-97). It is foreshadowed by Herodotus's scorn for the boundaries of the world shown in the Greek maps of his time (Aujac *et al.* 136-37; cf. Heidel 11-13), and it assumes its familiar shape in maps from the VIIIc onwards, becoming probably the most frequent form of the medieval *mappaemundi* (Bevan and Phillott; Andrews; Destombes; Woodward 1985 and 1987).<sup>8</sup> The obvious Christian symbolism of the T (Lanham), explicitly mentioned by the *Alexandre* poet, must have been the major factor in the popularity of the T-O maps, but there may be more to it than that. In a paper read only eleven days before the Paris symposium, Stephen Reckert drew attention to the Egyptian hieroglyph for "city": a cross, with vertical and horizontal arms of equal length, within a circle. This hieroglyph, quite unlike the ancient Chinese ideogram for "city," represents the city walls and, within them, the intersection of the two principal streets (Reckert 1994). I do not suggest that the T-O map derives from the hieroglyph, but neither do I think that this is a mere chance resemblance: the association between the little world of the *polis* and the wider *oikumene* is too

8 The *mappaemundi* were, of course, not purely graphic: the legends could be not only numerous but also extensive, so that an annotated map could come close to being an illustrated text. The term could, indeed, be used for an entirely verbal account (Woodward 1987, 287-88) — note, however, that Woodward's reference to the XVIIIc MS of the *Semejança* is mistaken, being based on a misreading of what Bull and Williams say (*Semejança* 1). *Mappaemundi*, in the strict sense, may be regarded as the graphic and spatial equivalent of the universal chronicle; it is not surprising that a world map frequently accompanied the text of Ranulf Higden's *Polychronicon* (Woodward 1987, 287).

close for that (we are reminded of the association each year by the Pope's address *urbi et orbi*, to the city and the world). Another point made in Reckert's paper has more startling implications: the hieroglyph for "city" is also, metaphorically, "mother" — as if the walls of the city (and the frame of the *oikumene*) are symbolically the protecting wall of the womb. If the O is, however distantly, linked to fertility and thus to sexuality, what of the T? Over two centuries ago, Richard Payne Knight wrote: "The male organs of generation are sometimes represented by signs of the same sort.... One of the most remarkable of these is a cross, in the form of the letter T, which thus served as the emblem of creation and generation, before the church adopted it as the sign of salvation; a lucky coincidence of ideas..." and he illustrated his statement with "an ancient medal, found in Cyprus, which, from the style of workmanship, is certainly anterior to the Macedonian conquest" (Knight 53-54, plate on 77). Thomas Wright produces from a later period evidence that links Reckert's observation with Knight's: lead amulets, from the XIV to the early XVIc, recovered from the Seine, "bearing on the obverse the figure of the male or female organ, and on the reverse a cross, a curious intimation of the adoption of the worship of the generative powers among Christians."<sup>9</sup> The cross is in each case not a T but one with vertical and horizontal arms of the same length, so that the reverse of each of the ten amulets illustrated is very similar to the "city" hieroglyph. The evidence is tenuous, and may be the result of no more than coincidence. Recent books on the Bermuda Triangle and on the Holy Grail show how dangerously easy it is to assemble stray data and, by shaking the kaleidoscope, to produce dazzling conclusions. I have no wish to emulate the authors of such books; nevertheless, it would be unwise to exclude the possibility that the visual similarities between T-O maps, "city" hieroglyph, and sexual symbolism may be more than coincidence.

Later in the *Libro de Alexandre* there is another description, this time topographical: the description of Babylon (which Alexander has just conquered) in stanzas 1460-1533, derived principally from the *Roman d'Alexandre* (Willis 1935, 24-31; Michael 1970, 201-04, 261-63). This long digression from the narrative of Alexander's conquests contains two sub-digressions, which between them take up exactly half of its space: an account of the precious stones found in Babylon and of their properties (st. 1469-92), and a narrative of the building and fall of the Tower of Babel, with an enumeration of the resulting languages (st. 1505-17). The lapidary section derives from Isidore's *Etymologiae* ("ca lo diz Sant Esidro, que sopo la manera," 1476d). Thus into a narrative of secular history is set a toponymic account which contains a lapidary (with its

cosmological and medical associations) and an episode of sacred history which is also a key episode in the history of language. The Spanish poet has taken a rich pattern of topographical, historical, and linguistic information from his principal source, and has made it even richer.

After taking Babylon, Alexander continues his eastward march, encountering some of the Wonders of the Orient that are a staple element of travellers' tales from classical antiquity onwards (see Wittkower). The poet's accounts of these marvels, derived chiefly from the *Historia de proeliis*, are grouped at two points of the narrative: one (st. 2146-84) after Alexander's first battle against Porus, King of India, and the other (st. 2469-95) at the climax of his conquests, before he begins the long — and never to be completed — journey home. They are prefaced by two stanzas (2470-71) of inexpressibility *topoi* ("non cabrien en cartas bien de quinze cabrones," etc.). The marvels include wild men and women:

Entre la muchedumbre de los otros bestiones,  
falló omnes monteses, mugieres e barones;  
los unos más de días, los otros moçajones,  
andavan con las bestias paciendos los gamones.

Non vistí ningún dellos ninguna vestidura,  
todos eran vellosos en toda su fechura,  
de noche como bestias yazién en tierra dura,  
qui non los entendiesse avrié fiera pavura.

Ovieron con cavallos dellos a alcançar,  
ca eran muy ligeros, non los podién tomar;  
maguer les preguntavan, non les sabién fablar,  
que non los entendían e avían a callar. (st. 2472-74; 545)

Only two aspects of these terrifying folkloric figures (Bernheimer; Bartra) are displayed: their visual appearance, very close to that of wild beasts (note the words "de los otros bestiones," 2472a), and the problem of language (it is not merely the general post-Babel difficulty of understanding a foreigner's speech: the language of the wild men seems remote from that of other humans). Their traditional lust and violence are not mentioned, not merely because of limitations of the source material — the poet would have been familiar with other accounts of wild men —, but, presumably, by choice. The description of the wild men is immediately followed by that of the phoenix (Hubaux and Leroy; McCulloch 1970, 158-60; Lugones — the *Libro de Alexandre*'s sources, like those of the *Semejança del mundo*, draw on the bestiary, though the poet also knew the bestiary at first hand):

Falló el avezilla que Fenis es llamada,  
sola es en el siglo, nunca será doblada,  
ella mesma se quema desde es mediada,  
de la ceniza muerta nace otra vegada.

9 T. Wright 1866, 60, plate on 61. It is not necessary to accept Wright's conclusion in order to see that there was, at some level and for some serious or comic purpose, an association — however sporadic — between sexual and religious symbolism.

Quando se siente vieja, aguisa su calera,  
enciérrase e quémase dentro en la foguera,  
finca el gusanillo como grano de pera,  
cría como de nuevo, ésta es cosa vera. (st. 2475-76; 545)

For the *Alexandre* poet as much as for the author of the *Semejanca*, fabulous beasts and other marvels are an integral part of geographical description. There is, however, another side to be considered: the interest of the poet — like the majority of the medieval authors who wrote about Alexander — in the hero's submarine and aerial explorations.

These episodes are a curious blend of scientific and technological interest, adventure, bestiary tradition, didactic intent, and — in the second — geographical and anatomical description. The descent into the sea (st. 2297-2323) is motivated not only by Alexander's scientific curiosity but also by his insatiable ambition. He is an overreacher: "La tu fiera cobdicia non te dexa folgar, / señor eres del mundo, non te puedes fatar," say his men (2274ab; 513). They invent absurd ambitions to illustrate the point: "Si meterte quisieres en las ondas del mar, / o en una foguera te quisieres afogar" (2277ab), little thinking that their King will literally undertake the first of these. He replies:

Non conto yo mi vida por años nin por días,  
mas por buenas faziendas e por cavallerías;  
non escriví Omero en sus alegorías  
los meses de Achiles más sus barragánias.

Dizen las escripturas — yo lei el tratado —,  
que siete son los mundos que Díos ovo dado:  
de los siete el uno apenas es domado,  
por eso yo non conto que nada he ganado.

.....  
Enbíonos Díos por esto en aquestas partidas:  
por descobrir las cosas que yazen sofondidas.

.....  
Con todos vós a una quentíndome seguir,  
buscaré los antípodas, quiérollos conquistar;  
éstos están yus tierra, com'oyemos dezir,  
mas yo non lo afirmo, ca cuido de mentir. (st. 2288-89, 2291ab, 2293; 515-16)

The existence of the Antipodes and the origin of any inhabitants they might have were vigorously disputed points in the Middle Ages (Betten; J.K. Wright 55-57, 160-61, 385-86; Woodward 1987, 319). Their existence is, however, robustly affirmed in the fourth recension of Beatus of Liebana's map:

outside the three parts of the world there is a fourth part, the farthest from the world, beyond the ocean, which is unknown to us on account of the heat of the sun. We are told that the Antipodeans, around whom revolve many fables, live within its confines. (Woodward 1987, 304)

Alexander's desire to reach the Antipodes and 'descobrir las cosas que yazen sofondidas' anticipates the words that another famous overreacher was, in conversation with Dante three generations later, to recall uttering to his few remaining sailors:

"O frati," dissi, "che per cento milia  
perigli siete giunti a l'occidente,  
a questa tanto picciola vigilia  
d'i nostri sensi ch'è del rimanente  
non vogliate negar l'esperienza,  
di retro al sol, del mondo sanza gente.  
Considerate la vostra semenza:  
fatti non foste a viver come bruti,  
ma per seguir virtute e canoscenza."  
(*Inferno* 26: 112-20; Dante 1977a, 276-78)<sup>10</sup>

The two plans turn out very differently. Ulysses has misled his men (Dante places him in Hell among the false counsellors), and he and they suffer the fate that, nearly two centuries later, many predicted for Columbus:

Tre volte il fe girar con tutte l'acque;  
alla quarta levar la poppa in suso,  
e la prora ire in giù, com'altre piacque,  
infin che'l mar fu sopra noi richiuso. (26: 139-42)

It seems at first that this is the fate in store for Alexander:

Fueron a poca d'ora en alta mar entrados,  
andudieron grant tiempo radíos e errados;  
eran los maríneros fierament embargados,  
ca non sabién guiar do non eran usados.  
Como rafez se suelen los vientos demudar,  
camíose el orage, ensañose la mar;  
enpeçaron las ondas a premir e alçar,  
non las podía el rey por armas amansar. (st. 2299-2300)

In one version of the *Roman d'Alexandre* the ship sinks, and only Alexander and the captain survive (Ross 1967, 10), but in the Spanish poem the storm abates just in time, and the descent into the sea begins. There is a curious inconsistency here: the original motive for the voyage — the exploration of the Antipodes —

<sup>10</sup> See Kirkpatrick 324-48. It may not be by mere coincidence that Ulysses is mentioned a little later in the *Alexandre* episode: "Ulixes en diez años que andudo errado / non vio más peligros nin fue más ensayado" (st. 2304ab). The parallels between this episode and *Inferno* 26 need more attention than they can receive here, and I hope to return to the question in a separate study. Babcock deals with an important aspect of the Atlantic that Ulysses and his men would, in Dante's mind, have faced.

is forgotten, and a different kind of curiosity leads Alexander to order the construction of a glass barrel from which he can inspect the fishes:

Dizién que por saber qué fazién los pescados,  
cómo vivién los chicos entre los más granados,  
fizo cuba de vidrio con muzos bien cerrados,  
metióse él de dentro con dos de sus criados. (st. 2306)<sup>11</sup>

The story is frequent and varied in medieval Alexander literature and iconography, as Ross has shown (1967; see also Ross 1971), though it does not occur in the *Alexandreis*, and it is no doubt the change in source that causes the inconsistency. The Spanish poet's account of the maritime expedition derives from Gautier, but that of the submarine adventure comes — either directly or by recollection of passages read some time before — from the *Historia de proeliis* and the *Roman d'Alexandre* (Willis 1935, 31-39; Michael 1970, 254-55), with a moralizing addition that comes from the bestiary.

Alexander is, as we have seen, spared the maritime catastrophe that is to overwhelm Ulysses, but his descent into the sea nevertheless proves ultimately fatal. Nature resents his prying into her secrets, and the poet endorses her view:

En las cosas secretas quiso él entender,  
que nunca omne bivo las pudo ant saber;  
quisolas Alexandre por fuerça conocer,  
nunca mayor soberbia comidió Lucifer. (st. 2327)

— there is even, in the combination of "por fuerça" with the sexually suggestive "conocer," a hint of rape. God condemns Alexander, but he will have time, before the blow falls, to venture again into technological innovation in pursuit of knowledge, "por veer tod el mundo cómo yazié o qué era" (2496d). He uses two griffins — ferocious composite animals from the bestiary, located by the *Semejança del mundo* in India — to power his flight. It is not surprising that the story caught the imagination of writers and artists, producing a wide variety of details.<sup>12</sup> Alexander's ambition is fulfilled, and he sees the whole world spread out below him:

Solómoslo leer, dizlo la escriptura,  
que es llamado mundo del omne por figura;  
qui comedir quisiere e asmar la feçura,  
entendrá que es bien a razón sin pressura.  
Asia es el cuerpo, según mi oçient,  
sol e luna los ojos, que nacen de orient,  
los braços son la cruz del Rey Omnipotent,  
que fue muerto en Asia por salut de la gent.  
La pierna que decende del siniestro costado  
es el reino de África por ella figurado;  
toda la mandan moros, un pueblo muy dudado,  
que oran a Mafômat, profeta muy honrado.  
Es por la pierna diestra Europa notada,  
ésta es más católica, de la fe más poblada,  
tienen Petrus e Paulus en ella su posada,  
ésta es de la diestra del bispo santiguada.  
La carne es la tierra espessa e pesada,  
el mar es el pellejo que la tiene cercada,  
las venas son los ríos que la tienen temprada,  
fazen diestro e siniestro mucha tomaviscada.  
Los huesos son las peñas que alcan los colados,  
cabellos de cabeça, las yervas de los prados;  
crian en esta tierra muchos malos venados,  
que son por majamiento de los nuestros pecados. (st. 2508-13; 550-52)

This linking of macrocosm and microcosm is found elsewhere (J.K. Wright 147-50; Barkan; with specific reference to the Spanish poem, Michael 1970, 196-97; Rico 1986, 50-59, 304-08). The passage ends with a reference to "nuestros pecados," which both ties the description to the history of sin and salvation (already alluded to in 2509cd), and prepares the way for the denouement of the poem: immediately after his aerial journey, Alexander returns in triumph to Babylon, and it is there that, God's protection having been withdrawn, he is assassinated by the traitor Jobas.

The *Alexandre* poet is fascinated by technological inventiveness (which seems to have held no attractions for Gautier de Châtillon), by geography, by the broad sweep of history, by intellectual curiosity, by the harmonious blending of different areas of knowledge in a unified theory, but all of this is contained within a moral discipline in which overreachers bring disaster on their own heads and excessive curiosity is impiety. Both he and his contemporary, the *Semejança* author, are learned and pious men — the poet probably more learned than the prose-writer if he was indeed a teacher at the University of Palencia, founded only a decade and a half earlier. Both, in their use of their source material, display the educated imagination at grips with large themes, though the poet shows more imagination as well as more education in his range of sources, the way that he blends them, and what he adds to them.

11 This is not the only motive given in the tradition of the Alexander narrative: in Pseudo-Callisthenes the descent is motivated by the wish to gather large pearls (Ross 1967, 5).

12 See Miller; Ross 1971; Settis-Frugoni; and Michael 1974. Hart provides valuable background information. This episode of the *Libro de Alexandre* (2496-2514) derives, through an unknown intermediary, from Pseudo-Callisthenes (Willis 1935, 39-41; Michael 1970, 114-15).

There is no time to go beyond the literature of the 1220s and see how Alfonso X, el Sabio, and his teams of collaborators dealt, in a series of works, with cosmology.<sup>13</sup> I cannot pass over in total silence the effect on learning and culture in the rest of Europe that was achieved by their transmission of Greek science with its Arabic accretions (the *Alfonsine Tables*, adapted in Paris and in Oxford, enjoyed the longest life). In this respect, Alfonso's court took up and amplified the work from the Toledo school of translators, an international collaborative effort from the mid-XIIc, rendering Arabic scientific and philosophical works into Latin (Thorndike 66-93; Millás Vallicrosa; Menéndez Pidal), with Jewish scholars as vital intermediaries (Gil, Márquez Villanueva), making Spain for a time the intellectual powerhouse of Europe, and providing much of the fuel for the soaring achievements of the School of Chartres and the University of Paris.<sup>14</sup>

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- 13 See Alfonso 1863-67, 1954, 1961, 1978, 1980; Wegener 1905a, 1905b; Dreyer; Procter; J. North; Cárdenas; Pingree; Domínguez Rodríguez; Poule 1984, 1988; Samsó; Vernet Ginés; Amasuno; Comes; Gingerich.
- 14 I have taken into account comments made at the symposium, and I am particularly grateful to Professor James F. Burke for helping me to clarify one stage of my argument.

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