

THE INFLUENCE OF ISLAMIC CULTURE ON MEDIIEVAL EUROPE ¹

BY SIR HAMILTON GIBB, M.A., LL.D., F.B.A.

LAUDIAN PROFESSOR OF ARABIC IN THE UNIVERSITY OF OXFORD

THE professor of Arabic who writes or speaks about medieval Europe is certain to invite the warning *ne sutor supra crepidam*. But it is a wholesome, if often chastening, discipline for the specialist to wander occasionally far enough from home to obtain a fresh perspective of the landscape which bounds his daily labours. At least he himself should learn something from his adventure. The present subject is not, in any case, an exploration of new country, but rather an excursion into a territory whose fields and landmarks have been frequently, though sometimes capriciously, charted. The equivalent of the Ordnance Survey is that storehouse of facts, *The Legacy of Islam*, by now a little dated (it was published in 1931), but still fascinating to read in parts, and full of good guidance. No doubt some of its landmarks and dimensions are a little dubious, but most of those who contributed to it were experts who had thoroughly explored their particular regions, whether of the arts, or law, or medicine, or mathematics, or music.

It is, of course, impossible for a layman to attempt to cover more than a fraction of this ground. What I hope to do is to suggest some general principles and conclusions, within which the individual facts may find their proper place and interpretation. There is, in addition, one important field which I must leave aside altogether on this occasion, although I suspect that the same general principles apply to it also—namely, the whole range of economic and commercial contacts and the possible transference through these of agricultural, seafaring, or commercial techniques. The many Arabic terms relating to these activities which have passed into the languages of western Europe

¹ A lecture delivered in the John Rylands Library on Wednesday, the 9th of March 1955.

are suggestive (even excessively so for some lively imaginations), but the subject is too complicated for anyone but a trained economic historian to handle.

In limiting myself, therefore, to the intellectual aspects of Islamic culture, it may be useful to begin by defining the term a little more closely. The starting-point of this investigation is that complex of cultural achievements which found its literary expression in the Arabic language, and which is often called "Arab culture". I am not concerned here with the argument about the relative contributions of the Arabs and other racial stocks to this culture; much of this argument seems to me to be, in any case, conducted with a remarkable disregard for elementary sociological facts. The medieval Islamic culture was a collective achievement, and not only of Arabs and Persians, but also of Copts, Aramaeans, Jews, Byzantines, Turks, Berbers, Spaniards, and not even excluding contributions from Africans and Indians. But there were two factors which gave it its unity and cohesion: one was the religion of Islam, the other the Arabic language. The language furnished the instrument of intercommunication between its widely separated regions, and the influence or contribution of Islam cannot be dissociated at any point from the whole complex of cultural activities. Islam supplied the external principle of organization, which facilitated the spread of Arabic culture in space, in the sense that wherever Islam established itself this culture was introduced along with it, and maintained in time by the cultural cohesion of all the regions of Islamic obedience. It was due to Islam that Arabic Spain continued to share all the elements of Islamic culture which were developed later in the east, and as the limits of Islam shrank, the elements of Arabic culture which survived the *reconquista* were torn out of their former matrix and gradually merged into the culture of Christian Spain.

Secondly, Islam served as an internal principle of order, which set (or was regarded as setting) a scale of values, and constituted a central core of spiritual and psychological energy round which all other cultural activities revolved as satellites. It is self-evident that not all the cultural activities in Arabic-Islamic civilization owed their origin or their energy to Islam—

for example, Arabic poetry (which reached one of its climaxes in pre-Islamic Arabia), or medicine and the natural sciences (which came from older civilizations), but all of these were in varying degrees attracted into the gravitational field of Islam, and affected by their interactions with the other constituent elements of the medieval Muslim civilization. The fact is obvious in the later development of Arabic poetry; and Arabic medicine, for example, had to operate within the limits of the ban placed by Islam on the dissection of human bodies.

Outside the area of Arabic-Islamic culture, the Islamic principles of organization and order were clearly irrelevant. Whether the cultural activities which will concern us owed their origin to Islam or by attraction into the energy-field of Islam acquired particular features and characteristics is, though not totally immaterial, of minor importance for us at this point; consequently the term "Islamic Culture" must, for our purposes, be quite properly interpreted in the wider sense of the whole complex of related institutions and products which constitute the medieval Arabic culture, particularly in the Mediterranean area.

It cannot be too often pointed out that in studying the development of a given activity in a given society, the extent to which it draws on new materials from outside and the way in which it modifies or adapts them are problems of great difficulty and complexity. Mere parallelism of expression or production proves nothing, especially when two cultures draw from the same roots. This warning is particularly needed in handling our present subject, since the field is already cluttered with extravagant statements and generalizations made in the past (and still being made all too often), which rest on nothing more than fortuitous resemblances and parallel constructions from common roots. We all know the ingenious efforts of amateur linguists to prove the relationship of two distant languages by casual assonances and the assumption (or neglect) of sound-changes which would make Grimm turn in his grave. One of the most fantastic examples of the same kind of reasoning is the belief firmly held in some modern Arab circles that Dante's *Divine Comedy* was imitated from or at least greatly influenced by a kind

of celestial fantasy called the *Epistle of Pardon*, written in 1033 by the famous Arab poet Abu'l-'Alā al-Ma'arrī. But not a shred of evidence has ever been produced that Abu'l-'Alā's *Epistle* was translated into any western language in the Middle Ages, or even that any part of its content entered into any Arabic work which was translated and might by chance have come to the knowledge of Dante. Whether certain other elements from Arabic literature may have reached Dante is quite another question.

It is, however, true, and probably a universal phenomenon, that when, for any reason, some particular body of ideas, or technique, or theory has begun to attract men's interest, they will readily take advantage of all other sources which may be available to them for developing this particular activity. It seems to me to be in these circumstances almost exclusively that the factor of "influence" by other cultures arises. I should go so far as to say that it is rarely, if ever, that any element from a foreign culture is introduced or taken over as an entirely *new* constituent in the receiving culture. We may almost formulate it as our "First Law", therefore, that cultural influences (by which I mean, of course, not purely superficial adjuncts, but genuinely assimilated elements) are always preceded by an already existing activity in the related fields, and that it is this existing activity which creates the factor of attraction without which no creative assimilation can take place.

One of the most striking examples is offered by the instance which at first sight seems to contradict this "law"—I mean the movement of translation of Greek philosophical and scientific works into Arabic in the eighth and ninth centuries. There was nothing in the primitive Arab tradition or in the Koran, as originally understood, to account for this apparently sudden development. But the Muslim Community, in the process of expanding, absorbed large bodies of peoples whose cultural traditions were Hellenistic, and this led in time to a conflict *within* the Muslim Community between Hellenistic traditions and the primitive formulations of Islamic concepts, so that Muslim religious circles found themselves confronted by the intellectual problems raised by Greek philosophy. One of the

chief functions of the schools of translators who rendered the Greek texts into Arabic was to furnish the corpus of materials required to clarify the issues and lead to a solution of the conflict. These materials were logical and philosophical (which included, in accordance with the Aristotelian tradition, natural science)—to which medicine was added, for parallel but practical reasons.

This kind of give-and-take has characterized all living societies in historic times. Not only have all cultures expanded by developing their own resources with the assistance of elements derived from other cultures, but when they cease to do so—when their peoples begin to regard their cultural achievements as self-sufficient and to imagine that they have nothing to learn from outside—then decline and stagnation set in. It is arguable, I think, that our modern western culture is already in considerable danger of stagnation, in spite of our expanding scientific techniques, because nothing or not enough is coming in to stimulate its inner growth.

In the conflict of cultures, then, it is more blessed to receive than to give ; and the real quality of any civilization is shown less perhaps by its indigenous products than by the way in which it constantly grafts new shoots on to its own trunk, to stimulate further growth and to achieve richer and more differentiated products. But there must clearly be some limit or limits to this process. Every culture is a living organism, which derives its nourishment from specific roots. It does not matter very much for our present purpose how these roots are defined ; one definition which seems to me adequate, and will at any rate do well enough for the moment, selects three factors as basic : its appreciation of art, its rationality (or the liberty it allows to the pursuit of thought), and its religion (or conception of the relation of man to the universe), and adds as a fourth factor the common social tradition which binds all these together. If any one of these factors is radically changed, the whole complex of culture is affected, and a new culture is created, which is quite different from the older culture. This then would seem to supply us with two further " laws ", which may define the limits of cultural borrowing. Firstly, the borrowed elements conduce to the expanding vitality of the borrowing culture only in so far as they

draw their nourishment from the activities which led to their borrowing in the first place. If they develop so luxuriantly as to substitute themselves, or threaten to substitute themselves, for the native spiritual forces, they become destructive, and not constructive, elements. The graft (to return to our metaphor) must not replace the original living branches. In historical terms, this means that a living culture allows the borrowed elements to develop to the extent that they are adaptable to and blend with its native forces, but resists with all its power their over-luxuriant growth. Thus the Arabic-Islamic culture, once the grafts from Greek philosophy had attained their original purpose, deliberately stabilized them at that stage of growth, and set itself to cut back all the other shoots which seemed to be developing independently and to disturb its now established constitution and balance.

The second new "law", or third of our three "laws", is that a living culture disregards or rejects all elements in other cultures which conflict with its own fundamental values, emotional attitudes, or aesthetic criteria. Attempts may be made to graft them, but the grafts do not "take" and simply die off. So the Arabic culture rejected all Greek poetry and drama (which conflicted with its appreciation of art) and Indian philosophy (which conflicted with its concepts of the relation of man to God), although it was on the other hand positively affected by Indian mysticism, which found a congenial host in the mystical tendencies already developed within the Islamic Community.

If I have insisted on formulating these so-called "laws", it is mainly because it seems to me essential to avoid a common source of loose thinking and error in this field—namely, the conception of knowledge as lumps of inert matter passed from hand to hand. The basic factor is psychological; and even if we grant the metaphor of a statement of fact or a theory as a lump of matter, the important question is what happens to it at the receiving end; and that depends on the kind of mind by which it is received. The most striking example of static reasoning is the extravagant assertion, made not only by irresponsible publicists but even by men who should have better knowledge and judgement, that the western Renaissance of the fifteenth

century was largely due to the materials transmitted to Europe by the Arabic-Islamic civilization. This assertion involves a complete misunderstanding of what is implied by the Renaissance: a moral, even more than intellectual, crisis, which created a sense of total break with the past—a sudden increase of intensity and vigour in all fields of activity, accompanied by a new desire for self-expression—a rejection of old claims and standards, and the adoption of secularism in politics and economic life. These are all *psychological* facts, and without these psychological conditions there could have been no Renaissance. Knowledge—yes; but not the simple acceptance of a received body of knowledge. Where the “official” mind files its lumps of knowledge neatly in pigeonholes, where the “orderly” academic mind tries to integrate them with other lumps, the “renaissance” type of mind pokes and probes them, delighted with nothing so much as discovering how to blow them to pieces. With such an approach every “fact” becomes an adventure of ideas or an invitation to adventure.

But while the Renaissance mind, bursting out of the bounds of existing structures of knowledge, sought for new experience of every kind, it did nevertheless start from the body of knowledge and with the techniques formed and cultivated for some two or three centuries previously. In the field of the natural sciences, at least, this existing body of knowledge not only supplied materials for the inquisitive and experimental minds of the Renaissance, but must evidently have been informed with something of the same spirit as that which came to full consummation at the Renaissance. The real problem for investigation, therefore, is not what the Renaissance may owe to Arabic-Islamic culture, but in what directions and to what extent materials derived from the Islamic culture contributed to the intellectual revival of the period extending from 1050 to 1300 or so, sometimes called the “Little Renaissance”.

Here, of course, there has never been any dispute as to the fact of the translation and circulation on an extensive scale of both Greek works previously translated into Arabic and original works written in Arabic. The translated works are there, in large numbers; and the medieval scholars make no secret of their

regular consultation of these works, and sometimes of their fervent admiration for those Arabic writers who, by composition or commentary, had enriched the subjects of their studies. For in those centuries, when Europe was slowly rebuilding its cultural life under the aegis of the Christian Church, not only were its psychological conditions entirely different from those of the Renaissance, but in both intellectual attitudes and assumptions it stood much closer to the Muslim world. Both cultures were characterized by the same primacy of faith, which provided a defined and finite universe and allotted to reason a certain function and range of activity ; and faith and reason alike in both sprang from the same roots. Both laid the same emphasis on continuity, prizing and clinging to the heritage of the past as the surest guide, and envisaged no future different from the past, except for the millennial aspirations cherished in both. These conditions supplied an almost ideal opportunity for fruitful interaction or penetration, in which elements from the one could stimulate the other by assimilation. Islam in India, during the same centuries, offers a complete and striking contrast : a situation in which, save in the one field of mysticism, there was no point at which the two cultures touched at all.

Nevertheless, the opportunity of interaction, the possibility of interchange, does not imply its actuality ; and before any assertions can be made, every case must be studied in the light of its own circumstances, techniques, and instruments of transference. In some forms of cultural activity this investigation is a fairly simple and straightforward one. The clearest case of all is medicine, in which the great names of the Middle Ages are all those of Arabic writers, superimposed to some extent on Galen : Mesue (Māsawaih), Rhazes (ar-Rāzī), Haly Abbas ('Alī b. al-'Abbās), Abulcasis (Abu'l-Qāsim al-Zahrāwī), Rodoham ('Alī b. Ridwān), and above all Avicenna (Ibn Sīnā), whose authority may be said to have remained unchallenged until the time of Vesalius and Paracelsus. So also in mathematics and in the crafts—metal inlays, lusted pottery, enamelled glass, ivory carving, weaving and papermaking—the range of influences from the Mediterranean world are clearly demonstrable, even where they are combined with indigenous traditions and

techniques. And in the case of paper—itsself an importation into the Arab world from China—the ultimate cultural effects have, of course, been incalculable.

But the position is entirely different when we come to the three most important fields, those of natural science, philosophy, and literature—the three fields which impinge most closely on what we have defined as the three basic differentials of a given culture: its rationality, its religion, and its appreciation of art. Here there is no such simple and direct relationship between the Islamic and the evolving European culture, and the reason is clear: that since these activities were concerned with ideas and aesthetic expression, they could not be effectively taken into European culture in their Islamic contexts, but had to be adapted in some way to the intellectual and aesthetic attitudes of the recipients.

This principle might not seem, at first sight, to apply to natural science, which stands for us on much the same footing as medicine and mathematics. But natural science in the Islamic world was a Hellenistic importation, and shared the predominantly speculative character of its sources. It was a system of demonstrated proofs from given axioms or postulates, erected by Aristotle into one of the three branches of philosophy, and almost inseparable from the Aristotelian universe. This is not to say that the Greeks had no experimental science; still less, that the Arabs had no experimental science. Not only were there Arabic scientists who showed great ingenuity in the practical application of scientific theory and the improvement of scientific instruments, but their works were eagerly sought after in the eleventh and twelfth centuries. Nevertheless, these scientists (I am excluding physicians in this context) operated on the margins of Islamic society; empirical science scarcely, if ever, entered into its educational structure, and much experimental work was bound up with astrology and alchemy (though I think Mr. Christopher Dawson goes too far in identifying Arabic science as a whole with magic).¹ In both principle and method Arabic science remained throughout within the framework of the Aristotelian system.

¹ In *Mediaeval Essays* (London and New York, 1953), p. 159.

In Europe, on the other hand, the attitude to natural science was from the first conditioned by a practical approach. The whole problem seems to me to have been immensely clarified by Dr. A. C. Crombie in his solid study of Robert Grosseteste.¹ After summarizing the technical inventions in western society between the ninth and twelfth centuries, he makes the pertinent observation that the earliest western interest in Arabic learning was directed to the acquisition of practical knowledge, and that a large proportion of the earliest translations were of works on mathematical subjects, medicine and chemistry. Furthermore, the technical arts began to be included in higher education as early as the twelfth century, when already some of the leading scholars were beginning to conceive of the study of "natural causes" as an interest in itself. Crombie has made it clear that the subsequent eagerness to study the natural science of the Greeks and their Arabic commentators was due to the need to relate the old-established western empiricism in the practical arts to the concept of rational explanation. It was out of this confrontation that there arose a new methodology, which utilized *inter alia* the observations of the Arabic physicians, but which independently laid the foundations of modern science by replacing the metaphysical question "Why things happen" with the scientific question "How things happen".

I should be straying too far from my last to pursue this topic any further, in spite of the temptations offered by the strange figure of Roger Bacon, which has also recently been elucidated afresh by Stewart Easton.² Enough has been said to bring out the point that, while western scholars undoubtedly read and utilized such genuinely scientific works as the optics of Alhazen (al-Haitham), their acquisitions from these sources were from the first integrated into a distinctive and developing native system of experiment and thought. Its actual progress was due neither to taking over an inert body of knowledge nor to bare experimentation, but to the rise of new concepts of scholarship, linked with the development of new craft techniques and the interplay between ideas and techniques, all of which issued in a new kind of scientific thinking.

¹ Oxford, 1953.

² Oxford (Blackwell), 1952.

In philosophy, it seems to me, the facts, though superficially similar, fall into a rather different pattern. Here again the starting point is an existing tradition in western Europe, or rather two traditions: the Christian Platonism derived from St. Augustine, and the Latin Aristotelian tradition based on Boethius. It looks as if the Arabic "Aristotelian" tradition¹ came in, in the first instance, almost accidentally, through its connection with the scientific and medical works translated in the eleventh century, and by contact with the old Boethian tradition produced a new spurt of intellectual curiosity. It must be remembered that Avicenna died in 1037, and that his works were translated only a century later, that Averroes' dates are 1126-98; and that already by the end of the twelfth century the works of Aristotle were beginning to circulate in translations made directly from the Greek, as well as in translations through the Arabic versions. The western scholars were not wholly dependent, therefore, on the Arabic versions for the *text* of many of Aristotle's writings (indeed, Grosseteste was already reading him in the original Greek); but the text of Aristotle (as generations of students know) is not infrequently obscure, and it was chiefly for the sake of their commentaries that the Arabic works were prized, and above all the works of Avicenna and Averroes. The consequence of this confrontation of medieval Europe with Aristotle was the creation of scholasticism, exactly as four centuries earlier the same confrontation had created Muslim scholasticism; and the first task of scholasticism was to assimilate Aristotelianism. As in Islam, so also in the west, Aristotle was inescapable, as well in theological as in philosophical thought; and the theological problem was solved (on their own ground, of course) by Albert the Great and St. Thomas Aquinas—drawing partly on the works written with a similar object in relation to *their* religious systems by the Muslim al-Ghazālī and the Jewish scholar Moses Maimonides. And all of them, Muslim and Christian alike, stand on

¹ I put the term "Aristotelian" in inverted commas, since the character and constituents of Arabic "Aristotelianism" are still very imperfectly known. There was certainly a considerable Platonic or Neoplatonic element in its metaphysics (as pointed out later); and I am provisionally implying by the term a system of philosophic thought based on the physics and methodology of Aristotle.

the shoulders of those forgotten late Alexandrians and Syrians who first trimmed Aristotle into conformity with revealed theistic religion. The *Summa* (which I have not read, and do not expect ever to read) is, no doubt, a masterpiece of creative synthesis; but so, in different degrees, are the writings of al-Fārābī, Avicenna and Averroes. The differences between them are almost entirely functions of one of two things: either how much Platonism (neo or genuine) is mixed up with their interpretation of Aristotle, or where they draw the dividing line between rationality and dogma. Hence the violent conflict in the thirteenth and fourteenth centuries between the Christian Aristotelians and the Averroists—those proclaiming the dogmas of revelation, these the dogmas of reason; but both were in reality quarrelling largely over the dead bones of once living thought.

I doubt whether Aristotelianism as a system has ever been congenial to the living thought of the west. It is relevant to observe, therefore, that even during this medieval interlude the Platonist and mystical tendencies in Europe also found reinforcement in Arabic learning. Not only were there the neoplatonic elements in the systems of al-Kindī and Avicenna, but in addition there was a whole corpus of neoplatonic writings recovered through the Arabic translations, notably the materials from Proclus in the version known as the *De Causis*. Furthermore, the works of the Arabic mystics, though they perhaps influenced directly only Ramon Lull, scattered their seeds far and wide, to flower not only in the religious literature of Spain, but also in the Florentine poets and perhaps even in the later German mystics. It is, I think, arguable that the contribution of Arabic Platonism to European thought at its more intimate levels was far more important than the contribution of Arabic Aristotelianism.

The conclusion that seems to emerge from this brief discussion of the two fields of natural science and philosophy is rather a curious one. The western scholars were looking for something in the Islamic culture, but what they were looking for was entirely different from what the Arabs had looked for in Greek culture. The Arabs were looking for a logical methodology to

subserve the dogmatic structure of Islam, the westerners were looking primarily for a logical methodology to subserve the practical arts. Both found what they wanted, but in the process they acquired a great deal more than they bargained for. The Arabs acquired the physical and mathematical science of the Greeks, the westerners the corpus of "Aristotelian" philosophy. In both cases these additional acquisitions were able to establish themselves for a time, because of their intimate connection with the desired objects; but finally (in accordance with our third law) they either became inert or were superseded. Natural science in the Arabic-Islamic culture was pegged to that stage at which the Arabic scientists had developed the concepts and methods taken over from the Greeks. In Europe the metaphysics of Aristotle affected for a time scholastic thought, but was ultimately displaced, partly by the older and more congenial currents of Platonism, partly by newer philosophies, and survived only in those circles which carried on the traditions of medieval scholasticism.

We turn now from the world of scholarship proper to the realm of literature. And here we must begin by again emphasizing some distinctions. Firstly, there is a distinction between genuinely creative influence and what I shall call "borrowings", that is to say, the casual utilization of literary materials. Such stories as the Squire's Tale in Chaucer, isolated episodes of eastern origin in western romances, and even whole books translated from the Arabic which circulated more or less widely in the Middle Ages—all these come into the category of borrowings, and correspond in literature to the motives and elements of technique introduced from the Arabic culture into the western plastic arts. Secondly, there is a distinction to be drawn between literary productions which exercised an influence in the aesthetic sense, and those whose influence was technical rather than strictly literary. It was inevitable that the philosophical writings that we have just been considering should have produced some reflections in western literature, directly or indirectly, and that the moral and didactic writings of European scholars should have drawn on works of the same kind in Arabic. One of the most interesting examples is the Syrian work attributed to Aristotle

called the *Secreta Secretorum*. It had a peculiar fascination for Roger Bacon, and it keeps turning up over and over again in medieval literature in a variety of adaptations, besides furnishing materials for such writers as Gower. One may say without much fear of contradiction that there was a kind of legacy of prose writings of Arabic provenance which entered into the common patrimony of medieval Europe and which added some touches of colour to its native hues. But whether as quarries for moral *exempla*, or as handbooks of ancient wisdom, or simply as sources of romantic anecdotes, the materials they supplied were inserted into patterns of native origin, and it was only in Spain that they exercised any determining or formative influence upon any branch of western literature.

On the whole, therefore, " borrowings " can fairly easily be established, even when the borrowed materials have been more or less adapted to a different structure. Genuinely " creative " literary influences, on the other hand, are exceptionally hard to establish. The nature of the proof does not lie, as might be imagined at first, in mere mass or quantity. The factor excluding proof of this kind is covered by our Second Law, which implies that no structural aesthetic element can be effectively transferred to another culture unless in the process of transference it is adapted to the aesthetic tastes and requirements of the recipients. This necessity of adaptation has two effects : one, that it almost always conceals the actual process, and makes it difficult to reconstruct because of the absence of detailed documentary evidence (how many, for example, would trace James Thomson's *City of Dreadful Night* to the *Arabian Nights* if they had not his own evidence for it ?) ; the other, that *one* single successful adaptation may be enough to serve as the starting-point for a whole series of new and independent developments. For the very fact of adaptation means that both in the first example and in the later development all kinds of other cultural factors are co-operating, and all of them are so intermingled that it is scarcely ever possible to make precise attributions.

There are, I believe, only two branches of medieval western literature in which any question of the creative literary influence of Arabic culture can arise. One is that of Spanish literature,

which I have already mentioned. The other is the interminably-argued relation between Spanish-Arabic and Provençal poetry ; and it is precisely because of the two difficulties I have just discussed that this question is a question at all. In this instance, moreover, we come up against a third problem. The most striking fact about the new Provençal lyric is the suddenness with which it emerges, not only without any known western ancestry, but with a completely developed form and technique. This is often stated as an argument for its introduction from outside ; but, on the contrary, by our First Law this fact would seem to exclude the hypothesis of a creative influence from Arabic culture, if there were no already existing cultural activity to furnish the factor of attraction.

Yet there are certain unchallengeable facts, though they are sometimes obscured in the controversy. There is the parallelism of metrical techniques in some early Provençal poems of the courtly type and some Spanish-Arabic poems ; there is the persistence in the same Provençal poetry of certain themes or motifs which are traditional constituents of Arabic love-poetry. These call for a reasonable explanation. Granted that no poetry of this kind is known to us from Provence or the neighbouring regions until the end of the eleventh century, are we to suppose that it had no antecedents there at all? The suggestion is clearly absurd, and is indeed disproved by the surviving traces of earlier Romance poetry. In reality, I believe, we have in this problem a situation parallel to the apparent exception which I discussed earlier, in reference to the introduction of Greek philosophy into Islamic culture. The Islamic empire of the eighth century was a crucible in which the contributions of old Arab and Persian culture were compounded with the Hellenistic culture of the Syrians and Aramaeans. Just in the same way, in tenth and eleventh century Spain, the Christians, in the north as well as in the south, intermingled with the "Moors", who themselves not only brought in and disseminated their Arabic culture, but also incorporated large numbers of the Romance-speaking population.

It would be flatly opposed to all that we know of medieval Spain to exclude exchange of aesthetic as well as other cultural

elements. There is, however, no evidence at all that the Christians were attracted by the highly formalized art of the classical Arabic *qaṣīda* or ode. On the contrary, it was the Moors who—as has now been shown with tolerable certainty—were attracted to certain types of Romance popular poetry, and who developed from them the new stanza forms of the *muwashshah* and the *zajal*.¹ In doing so they of course adapted them, firstly to Arabic prosodic structure, and secondly by elaborating their content and imagery with themes and motifs derived from their own courtly or popular love-poetry. There can hardly be any doubt that in the cultivated mixed society of the Spanish Marches the developing Romance poetry was in its turn affected in some degree by the Arabic techniques and themes.² That there is nothing improbable (still less derogatory, as some scholars still seem, curiously, to think) in the seepage of Arabic techniques into Romance literature is demonstrated by the Northern French *Aucassin et Nicolette*. Consequently, the adaptation of elements of the Arabic prosodic structure, and the transference of its traditional motifs, would conform entirely to our First Law; and in the Provençal courtly lyric both were brilliantly exploited within a new western literary art that nevertheless stood essentially on its own feet.³

Finally, as Christopher Dawson has shown,⁴ in its Tuscan descendant it was coloured by the newer metaphysical ideas which had permeated western secular thought from the neoplatonism of the Arabic commentators and mystics, to create the almost perfect synthesis of Mediterranean romantic art in the *dolce stil nuovo*. As for the *Divina Commedia* itself, the demonstration by E. Cerulli⁵ of both the extent and the limits of Islamic

¹ Strictly speaking, it was only the stanza-form and structure of the *muwashshah* that were entirely new to Arabic poetry; in the very different *zajal* the novelty lay in technique rather than in structure.

² On the crucial question of themes see especially the articles of Father J. Denomy in *Mediaeval Studies* (Toronto), 1944, 1945, and 1949.

³ Since preparing this article, I find a similar conclusion expressed in the detailed study of P. Le Gentil, *Le Virelai et le Villancico* (Paris, 1954), p. 249: "Je pense que ces contacts n'ont été suivis d'effet que dans le cas où un exemple étranger se trouvait rejoindre des traditions indigènes préexistantes."

⁴ *Mediaeval Essays*, pp. 234-5.

⁵ In the Appendix to his edition of the *Libro della Scala*, Vatican City, 1949.

themes drawn upon by Dante seems to have shown that all the so-called Arabic influences are in fact "borrowings" from secondary materials, in the sense in which I have distinguished these two terms above.

To sum up this discussion very briefly, there is a fairly clear distinction to be drawn between "neutral" borrowings from the Arabic-Islamic culture and the "shaded" influences or adaptations. In the neutral sphere of science and technology, the medieval Catholic world took over everything that it could use. In the intellectual and aesthetic spheres, it is very remarkable that all the elements taken over into western culture prove to be either elements of European origin adapted into the Arabic-Islamic culture, or elements with very close relations in western culture. On the whole, therefore, the contributions to the west from Arabic sources, although at first some of them seemed to be alien and dangerous, tended ultimately to reinforce the medieval Catholic culture rather than to disturb it. I see no argument for the assumption, still fairly often made, that these importations in themselves struck at the roots of medieval thought and prepared the way for its overthrow, with the one possible exception of Averroism—but this itself had become stagnant and inert by the end of the fourteenth century.

This conclusion seems finally to conform to what may be a universal psychological law in human societies. On the one hand, natural science and technology are indefinitely transmissible, and constitute the only truly international element in human culture. On the other hand, art, aesthetics, philosophy and religious thought retain their distinguishing characteristics within each separate culture. Every society jealously guards its own, and although not wholly impermeable to influences from without, it will absorb elements from other cultures only within a limited range and in forms adapted to its own temperament and psychological structure.