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Writing and Ancient Near Eastern Society

Papers in Honour of Alan R. Millard

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LITERACY IN AN ORAL ENVIRONMENT

M.C.A. Macdonald

In discussing the question of the use of the early alphabets we are looking at icebergs: visible to the sailor is one third or less of the icy mass. The surviving examples of ancient West Semitic alphabets are only a small proportion of what was written with them in the Levant. It is easy to assume that what we see truly represents the situation in antiquity, yet such an assumption is quite wrong; rather, we can assume there was a far wider use of writing than the range of specimens recovered can suggest. (Millard 1991: 110)

Alan Millard gave this wise warning in his study of 'The Uses of the Early Alphabets' and I quote it not only because it is a caveat which needs constantly to be kept in mind when approaching the subject of this volume, but also because at the heart of this paper I will present what is possibly a very peculiar exception to this rule, a case not of WYSIWYG ('What you see is what you get') but WYSIATW ('What you see is all there was').

For the purposes of this paper, I would define 'literacy' as the ability to read and/or to write at one of a number of different levels. I would define a 'literate society' as one in which reading and writing have become essential to its functioning, either throughout the society (as in the modern West) or in certain vital aspects, such as the bureaucracy, economic and commercial activities, or religious life. Thus, in this sense, a society can be literate, because it uses the written word in some of its vital functions, even when the vast majority of its members cannot read or write, as was the case, for instance, in early mediaeval Europe or Mycenaean Greece, where literacy was more or less confined to a clerical or scribal class.

By contrast, I would regard a non-literate, or oral, society as one in which literacy is not essential to any of its activities, and memory and oral communication perform the functions which reading and writing have within a literate society. Prehistoric and—at least until very recently—most nomadic societies were of this sort. There are, of course, gradations between these two extremes and, just as it is possible to have large numbers of illiterates in a literate society, so, perhaps surprisingly, it is possible to have many people who can read and/or write in an oral society, without this changing its fundamentally oral nature.

When large sections of the population of a literate society cannot read and/or write, they inhabit an oral enclave within that literate society, since their daily lives are usually touched by reading and writing only when they come into contact with the authorities, or when, in relatively rare cases, they need to use long-distance written communication. By contrast, groups of literate individuals within an oral society do not inhabit a corresponding 'literate enclave' for, it seems, they still operate socially as non-literates,¹ even though they can read and write.

In this paper I shall examine a few of the numerous forms literacy can take, some of the often surprising uses which can be made of it, and the overlapping relationships between literate and non-literate communities. In the first section, I shall look at some relatively well-documented attitudes to literacy, and the uses made of it, in the modern and early modern period. In the second section, I shall examine what can be learnt from these cases and, in the third, I shall try to use these lessons in an attempt to understand some examples of literacy in an oral environment in the ancient Near East. I should stress at the beginning that I shall not be dealing with the cognitive consequences of literacy and orality, as discussed by such scholars as Goody and Havelock, nor shall I examine the enormous cultural changes which they ascribe to the acquisition of literacy,² fields in which I have no competence. Rather, I shall be studying at a more basic—more mechanical level—the effects on scripts and on the people who use them, of particular types and uses of literacy in literate and oral environments.

I

Since the Second World War, the accepted model has been to regard it as necessary that reading and writing follow each other closely, that formal school instruction be almost the only conceivable teaching method, and that economic models provide us with a decisive explanation of a functioning literate environment.³

Egil Johansson lists these common assumptions—before exposing them as erroneous—in one of his many excellent studies of literacy in Sweden. The superficiality of such views, based on our own narrow experience in the twentieth-century West, quickly becomes obvious when one examines life with and without literacy in other cultures and at other times. Indeed, even a look beneath the surface of our own society reveals evidence that things are not so clear and simple as they might seem.

¹ I use the term 'non-literate' of those who cannot read and/or write within an oral society. I restrict the term 'illiterate' to those without these skills in a *literate* society.

² For an excellent summary of the debates on these aspects of literacy, and an important contribution to the discussion, see Thomas 1992: 16–28.

³ Johansson 1988: 138; repeated with minor differences in 1998: 59.

Societies with no use for literacy

Even today, most nomadic societies in the Middle East have little use for writing. For a start, there are a number of severe practical difficulties. Writing materials are not readily available in the desert and have to be imported from the settled regions. In Middle Eastern deserts, the wind blows fiercely for at least half of most days and nights, with frequent dust or sand-storms, and the rains in winter and spring can be of tropical force. So, those who live in tents do not have much use for materials that can blow away, or be destroyed by dirt, wet and the attentions of hens, goats, dogs and rodents. It is no surprise, therefore, that nomadic societies living in these conditions have developed highly effective ways-of-life and social structures based on the use of powerful memories and oral communication, in which literacy can find no useful function.

Even when literacy is available, individuals and communities can often make the positive choice to remain non-literate. For example, in the 1970s, many Bedouin children in Jordan began to attend the schools which the Jordanian army was setting up in the desert, because it was thought that the ability to read and write would help them find jobs in the towns during years of drought. Unfortunately, however, these schools tried to inculcate a pro-urban and anti-Bedouin ideology and kept the children away from the long and complicated training in camel-herding, which 'can only be learned by doing'. So, after a few years, many children decided their time would be better employed in the traditional manner, looking after the herds and improving their desert skills.⁴

Thus these Bedouin made a deliberate choice to remain non-literate and preserve their oral enclave within the literate societies (Syria, Jordan, and Saudi Arabia) which surrounded them. Within this enclave, reading and writing has no function in the normal operations of everyday life, either at a communal or at an individual level. This does not mean that there are not some Rwala who can read and write—four of their nine shaykhs went to school and university in Europe and America, for instance. As I remarked at the beginning, just as one can have *illiterates* in a literate society, so one can have literate individuals within an oral community.

In a tribal society there are distinct disadvantages to the use of writing as a means of record. At its most basic, a tribal society is one in which all social and political relationships are conceived, expressed, and explained in genealogical terms. This requires what William and Fidelity Lancaster have called 'generative genealogy' (1981: 24–35). A Bedouin genealogy, for

⁴ Lancaster 1981: 102–3. Note that 'it must be pointed out that this is the view of the children themselves. Personal autonomy is so highly prized [among the Bedouin] that such decisions are made by the child, although the parents will advise'. (ibid. 103).

instance, has at the 'bottom' the individuals who make up the particular group of people for whom you are entirely responsible and who are entirely responsible for you.⁵ The upper part of the genealogy is what might be called the theoretical 'map' of the relationships between the different tribal sections (represented by the names of their eponymous 'ancestors'). Clearly, the lower part is fixed and the upper part is sufficiently well known that it can only be manipulated with great difficulty. However, between the upper and lower parts is what the Lancasters call a 'conceptual break' (1981: 25) where the joins between the top and bottom parts of the genealogy are extremely hazy and 'no one can 'remember' the genealogy between an individual and the ancestor of the tribal section' (1981: 26), they just 'know' that it must exist because everyone 'knows' that that individual belongs to that section. This circular method of arguing, based on the assumption that 'it must be so because that is how it is', is the basis of the explanation of social and political situations by generative genealogy.

Political or social events, such as the gradual merging of one section with another or hostility between sections of the same tribe, are 'explained' by the (usually unconscious) adjustment of the tribal genealogy. Naturally, this is only possible in a non-literate society which relies on memory. For memory can be questioned and in an oral society a 'historical fact' is only what a sufficient number of people agree they remember. Obviously, the exact structure I have described is by no means the same for all tribal groups. I have taken the Rwala Bedouin as an example, because of the very clear way in which the Lancasters have explained the system. However, this living, protean quality is characteristic of 'working' tribal genealogies and has driven to distraction scholars from urban societies (both Islamic and Western) who have tried to record and fix them in writing. It will be clear, therefore, that non-literacy is fundamental to the functioning of a vibrant, purely tribal society.

Thus, we should beware of the assumption that literacy is always desirable and advantageous. We need also to avoid assuming that reading and writing are inseparable skills.

Writing without reading or schooling

Since the 1960s, numerous studies have shown that the skills of reading and writing are acquired separately⁶ and that 'reading and writing are no more closely or necessarily associated than horses and carriages, or lovers and

⁵ The *ibn 'amm* (literally 'son of a paternal uncle') group.

⁶ See, for instance, works mentioned in Holdaway 1979: 38–61, plus those of Johansson, Smout, Thomas, etc. in the list of references.

marriages' (Smout 1982: 121). There are many examples of children who teach themselves to write before they can read and who often write at considerable length,⁷ both as self-expression, for their own amusement, and, ostensibly, to send messages to others.⁸

It has been suggested that a different sort of 'write-only' literacy can be traced in the Persian period in Egypt where 'there are docketts of various kinds, acknowledgements on tax receipts, names of witnesses accompanying legal contracts, and possibly some mummy-labels, where the impression is hard to resist that the writer is competent in this sort of text, but little else' (Ray 1994: 63). However, I would suggest that, if this was indeed the case, it represents *copying* from memory rather than the ability to write, for which surely the minimum criterion must be the ability to create an original text, however short. For the same reason I would not regard so-called 'signature literacy', that is the ability to write one's name but nothing else⁹ as writing-literacy. The example of the unfortunate Petaus, a 'village scribe' in Egypt in the second century AD, who practised over and over again writing his signature, his title and 'I have submitted this' (ἐπιδέδωκα), with minimal success,¹⁰ shows in action the process of someone memorizing a particular sequence of shapes without comprehending the function of each one,¹¹ and should make us question whether this can usefully be called 'literacy'. I shall not therefore be discussing cases such as these.

⁷ See, for instance, Chomsky 1971. When writing English, where there is a large divergence between pronunciation and conventional spelling, they work out for themselves a roughly phonetic spelling system based on the sounds and on the names of the letters. What is particularly interesting is that 'different children independently arrive at the same spelling systems. Systematic features that may appear from the records of an individual child to be idiosyncratic turn out on comparison to be common to all the children. Working with an inadequate number of symbols (26 letters to represent all the sounds of English), the children all reach their solutions to this dilemma in much the same way. They also share an interesting failure to represent certain phonetic features [such as a nasal when followed by another consonant] that they do have the alphabetic means to represent' (Chomsky 1971: 505). On this latter feature see the discussion of 'phonetic writing' in Safaitic, below.

⁸ 'They label their drawings, keep diaries, write letters, send notes—all systematically spelled and without their yet being able to read' (Chomsky 1971: 501). For example, Chomsky quotes two 'get well' messages and four messages to his parents written by a five-and-a-half year old boy confined to his room as a punishment, which he wrote on paper darts and launched over the banisters to glide downstairs (1971: 506).

⁹ For references see, for instance, Harris 1989: 4, n. 3.

¹⁰ *P. Petaus* 121 (P. Köln Inv. 328). See the photograph in Youtie 1966: 135 and the interesting discussion and references in Hanson 1991: 171–75, especially the comparison with a 'slow writer' who could however draft an original text (174–75).

¹¹ Hence, his spelling mistakes such as the omission of the initial epsilon in ἐπιδέδωκα in the last eight of the twelve times he practised the formula. Such a repeated mistake would surely have been impossible if he had been aware of the sense of what he was writing. See Hanson 1991: 174 on Petaus' mistakes.

*Reading without writing or schooling:
Sweden in the 17th and 18th centuries*

In Sweden in the 17th and 18th centuries, 90% of the population lived in scattered, mainly agricultural, settlements in the country (Johansson 1988: 135–36). In urban life, literacy could have practical benefits in certain occupations and there were some schools which could provide it (Johansson 1988: 135), ‘but on the whole, the rural population believed that, for everyday use, they did not need much bookish education’ (Johansson 1988: 136). However, the church held that to read God’s word ‘with one’s own eyes and understand it, was everybody’s calling and right according to the Lutheran accentuation of the priesthood of every man’, and in this it was backed by the state (Johansson 1998: 123). So, in the reign of King Charles XI, the Church Law of 1686 was passed requiring every man, woman and child in Sweden to learn to read, and this was augmented by further laws at various points in the course of the 18th century.¹²

The Lutheran principle of ‘the priesthood of every man’, according to which, in the household order, the husband was responsible for education, just as the clergyman was in the parish, also, conveniently, meant that this campaign could be pushed through without the public provision of schools.¹³ Children were to be taught at home whenever possible, with parish officers acting as backup if this was insufficient (Johansson 1988: 141). The principal aim was to enable each man, woman and child, to read and memorize Luther’s Catechism, the psalms, the biblical readings for the ecclesiastical year, the ‘Hustavla’,¹⁴ and prayers for home and church. Children were to be taught to read these aloud, clearly and diligently, until ‘they shall have become fully aware of the text they are reading and heed its utterance as if they heard it spoken by another. In this manner, the children should gradually acquire a firm grasp of the textual meaning and content, and be able to articulate such in words other than those given in the text’.¹⁵ Thus, reading was regarded not as a *substitute* for memory but, on the contrary, as a means to the end of memorization and understanding.

The campaign was backed up with harsh sanctions. Confirmation was forbidden to anyone who could not read, and no unconfirmed person was permitted to take Holy Communion or to marry.¹⁶ By a decree of 1723,

¹² Johansson 1977: 152, 163 [=1998: 58, 69]; 1988: 141.

¹³ Johansson 1977: 152, 163 [= 1998: 58, 69]; 1988: 141.

¹⁴ Luther’s *Haustafel*, a plaque to be hung on the wall of every house, with biblical texts outlining the Christian duties and obligations of each of the three sections of the social hierarchy: church, secular government and household (Johansson 1977: 157–61 [= 1998: 62–67]).

¹⁵ An admonition from the Rural Dean to those instructing young children in the parish of Norrbotten in 1720, quoted in Johansson 1988: 142.

¹⁶ Johansson 1988: 137 and see the description by the Scottish evangelist, John Patterson writing of his visit to Sweden in 1807–8 (quoted in Johansson 1988: 137–38).

parents and godfathers who neglected ‘diligently to see to it that their children applied themselves to book reading and the study of the lessons in the Catechism’ had to pay a fine which would be used for the ‘instruction of poor children in the parish’ (Johansson 1988: 141). There was also strong social pressure to learn to read. Each year the bishop and rural dean visited every village in the diocese and held rigorous public examinations of all the inhabitants to test their reading abilities (Johansson 1988: 137–38, 141).

This campaign was extraordinarily successful. Already by the mid-18th century, Sweden had well-over 80% reading-literacy in the rural areas and over 90% in the towns. Travellers from both Sweden and from other countries remarked that even the poorest rural house contained books of devotion (Johansson 1988: 137), and this is confirmed by the inventories of property made when villagers died.¹⁷ At the same time, only 25% (at most) of the urban populace (itself only a tenth of the population of Sweden as a whole) and only 10% of those in the country (representing nine-tenths of the total population) were able to write.¹⁸ Writing, after all, brought with it no religious gain comparable to reading,¹⁹ and most people simply did not need it in their daily lives.²⁰

In Scotland too in the 1740s—if the Cambuslang records are at all typical—there was very widespread reading-literacy, though here it was taught primarily in schools, with back-up from family or employer when necessary (Smout 1982: 125–27). As in Sweden, this was to enable each individual to read and absorb the Word of God.²¹ All those questioned at

¹⁷ ‘The books in a rural parish, for example, in Dalecarlia, Rättvik, are listed for each household in the church examination register of the 1720s. In this parish of approximately 600 families, around 400 ABC-books, 650 to 750 Catechisms, more than 1,100 psalters, 29 Bibles, and about 200 other religious books were registered. [Rättvik Church Examination Register, 1723–1759]’ (Johansson 1988: 140). By 1800, ‘More than three hundred titles ... could at that time be found in the homes in Västerbotten county in northern Sweden. ... A comparable offering of books could also be seen in the other Scandinavian countries’ (1998: 121). It seems likely that, as in Scotland, non-devotional books would also have been read, if they were available. However, if they were present in the houses, they were not declared, or perhaps not counted since they were irrelevant to the purposes of the examination.

¹⁸ Johansson 1988: 155–57 (statistics based on Church Examination Registers from two urban and six rural parishes in the deanery of Skytt, Scania, for the years 1702, 1721, 1731 and 1740, covering approximately 1000–1150 individuals each time).

¹⁹ A view also maintained by English Sabbatarians of the late 18th and early 19th centuries who were quite prepared to teach reading in Sunday Schools, but not writing (Smout 1982: 122–23).

²⁰ Johansson 1977: 155 [= 1998: 61]. Even the representatives of the peasantry in the Swedish *Riksdag* (Parliament) in the 1760s could read but not write (Johansson 1988: 157). There were approximately 150 representatives from the peasantry in every *Riksdag* at this period (Johansson 1977: 161 [= 1998: 67]).

²¹ Smout 1982: 122–27, though note that some of those questioned at Cambuslang said that they enjoyed reading ballads and chap-books as well as the Bible (1982: 123, 124). Smout also quotes a contemporary of Burns recalling the first publication of the latter’s poems, ‘I can well

Cambuslang could read. But although writing was also taught in schools, between a third and three-quarters of the men questioned at Cambuslang could write, and no more than about 10% of the women had learned the skill (Smout 1982: 121, 124). Again, reading and memorization seem to have gone hand in hand, with religious works, particularly the Catechism, the psalms and, later, other parts of the Bible, being used as the texts. One Gaelic-speaking Highlander explained that he was ‘put to school’ when he was about twelve years old and taught to read the Bible in English (though he was allowed to read the psalms in Gaelic).²² It was only much later that he learnt to speak and understand English, through contact with English speakers, ‘but I could have read most of the English Bible before I knew anything of the sense or literal meaning of what I was rendering’.²³ This contrasts with the general emphasis in Sweden and in Lowland Scotland on *understanding* the religious texts being read.

Practical literacy in an indigenous language and script: Vai

The Vai language²⁴ is written in a syllabary invented by Duala Bukare in the 1820s or 1830s. Each character in the syllabary represents a consonant + vowel, but there is no way of showing vowel tone, nor is there an established method of indicating vowel length, both of which are semantically significant

remember how that even ploughboys and maidservants would gladly part with the wages they earned the most hardly and which they wanted to purchase the necessary clothing if they might but procure the works of Burns’ (1982: 123, n. 29).

²² The translation of the Psalms into Gaelic was published by the Synod of Argyle in 1694 and was widely available from then on (www.electricscotland.com/history/literat/irish.htm), but the New Testament in Gaelic was not published until 1767 (thus some 25 years after this Highlander gave his testimony), and the translation of the Old Testament did not appear until 1801 (Meek 2001: 521). It had been Scottish government policy since the early 17th century to try to eradicate Gaelic by teaching reading through English (Durkan 2001: 562), and this young man’s experience may have been one of the unexpected results of this policy.

²³ Smout 1982: 124. Compare this with Goody, Cole and Scribner’s description of the way children in West Africa are taught to read and pronounce written Arabic in order to memorize the text of the Qur’ān, without understanding the meaning of the individual Arabic words (1977: 290–91). See note 29 for more details.

²⁴ The Vai language is spoken by approximately 105,000 people in western Liberia (89,500) and in Sierra Leone (15,500). About 35% of the Vai people also speak a second language (20% English, 10% Mende [in Sierra Leone] and 5% Gola). About 10% are literate in the second language (English or Mende). [Source: http://www.ethnologue.com/show_country.asp?name=Liberia] and in the 1970s between 20% and 25% of Vai men were literate in the Vai syllabary (Scribner and Cole 1978: 453). Apart from being predominantly Muslim, they are ‘virtually indistinguishable from their neighbors in terms of ecology, social organization, economic activities, and material culture’ (Scribner and Cole 1978: 453). For a more detailed description of the Vai and their way of life, see Scribner and Cole 1999: 23–4. I am most grateful to Professor John Baines (Oxford) for this reference.

in the spoken language. There is also no word-division, so ‘a string of syllabic characters runs across the page without spacing or segmentation. Each character, depending on its semantic function, may represent a single-syllable word, one of several such words differentiated by tone, or a component unit of a polysyllabic word’ (Scribner and Cole 1978: 456). As a result, the traditional method of reading is to pronounce, out loud, strings of syllables, varying the vowel lengths and tones until they fit into meaningful units, at the same time keeping the separate syllables in mind until they can be integrated into words and phrases (Scribner and Cole 1978: 456). This is similar to the method of reading the Tifinagh, described below.

Approximately 20–25% of Vai men can read and write in the script, which is learnt informally, not at school.²⁵ For the Vai, ‘their writing and reading are not activities separate from other daily pursuits, nor does learning to read and write require a person to master a large body of knowledge that is unavailable from oral sources’ (Scribner and Cole 1978: 453). Writing in Vai is normally used for a variety of practical purposes: short letters, and relatively simple administrative tasks in personal, social and commercial life, etc.²⁶ But although ‘literate are accorded high status’ (Scribner and Cole 1978: 454), nothing in Vai life is *dependent* on literacy in the Vai script.

By contrast, English is not simply the vehicular language²⁷ of Liberia, but is the language and script in which it functions as a literate society. It is not

²⁵ Scribner and Cole 1978: 453, and see Scribner and Cole 1999: 62–4 for tables showing percentages of literates in the Vai, Arabic and English scripts, and in combinations of the three. For the ways in which the Vai script is learnt, and the motives for learning it, see *ibid.* 65–68.

²⁶ A few very skilled individuals have used it to write histories, books of aphorisms and diaries. See for instance the merchant’s ledgers and the constitution and membership records of a religious association recorded in the Vai script, described and discussed in the interesting article by Goody, Scribner and Cole (1977). However Scribner and Cole make clear that ‘the Vai book is generally intended for the writer himself’, though, on occasions, extracts may be read out in public, for instance to settle a dispute. But ‘these are relatively rare occasions notwithstanding, Vai books, including those containing literary contents, are not intended for general distribution. They are a private affair, compiled by individuals for their own use and pleasure, and for that of their close friends and kin. *Vai books are not used as part of the process of teaching Vai script, nor are they produced in any quantity.* The few exceptions to this generalization occur, significantly, among people who are close to the Americo-Liberian culture that dominates the capital city of Monrovia and that uses formal schooling in English as its literate base. Thus, we found multiple copies of biblical stories translated into Vai, occasional government posters advocating a policy or candidate for public office, and a section of a newsletter produced by the YMCA office in Robertsport devoted to local news, all written in the script’ (Scribner and Cole 1999: 81–2 [my italics]). Compare this with use of the Tifinagh by governments and other political organisations in North-West Africa, mentioned below, and cf. Fig. 5.

²⁷ I use this calque of the French *langue véhiculaire* rather than the term ‘lingua franca’ since historically the latter was a specific mixed language used in the eastern Mediterranean, which was based on Italian with the addition of French, Greek, Arabic and Spanish words and phrases. By contrast, a ‘vehicular language’ is a *single* language used for communication between people whose mother-tongues are mutually incomprehensible.

only taught in the schools but is the medium of all teaching and all official communications. Thus a Muslim Vai, educated at school, will know at least two languages (Vai and English)²⁸ and possibly three scripts (Vai, English and Arabic).²⁹ However, the mere existence of the Vai syllabary does not make the Vai a literate society (in the sense of my original definition), either within their own community or within the wider Liberian community. Only *c.* 10% of Vai people are literate in English and someone who knows the Vai syllabary but not the English alphabet will be *illiterate* within the literate society of Liberia.

On the other hand, since the Vai syllabary is used by only a small minority of the Vai population and is used only for personal, not for political, bureaucratic or religious, purposes, writing in the Vai script has not penetrated the fundamental functions of the Vai community, which still works as an oral society. When the wider, literate Liberian society impinges on the Vai it does so in English³⁰ and, as with all non-literates faced with the demands of a literate society, the Vai turn to those who can speak, read and write the language of the authorities, to act as intermediaries.

*Literacy for fun: the Tifinagh*³¹

As far as I know, the only nomadic desert society in the recent past and today in which literacy is widespread, is that of the Tuareg in north-west Africa.

²⁸ In some areas, particularly in Sierra Leone, some Vai people also speak Mende which has its own indigenous script known as Kikakui. Mende is a recognized language of education in Sierra Leone (information from: [http://www.ethnologue.com/show_country.asp?name=Sierra Leone](http://www.ethnologue.com/show_country.asp?name=Sierra+Leone)).

²⁹ A reading knowledge of the Arabic script, for the purposes of memorizing the Qur'an is taught to Muslim children. However, Goody, Cole and Scribner comment 'by and large, "learning book" means being taught to find the rough phonetic equivalents of Arabic letters so that individuals can memorize verses of the Koran, the meaning of which may be explained by some learned man who has actually acquired some Arabic or who has memorized a translation or a commentary. ... *However the use of Arabic itself was relatively restricted ... because the number of people who could decode the meaning (i.e. read) as distinct from decode the sound was very limited*' (1977: 290–91, my italics). See also the more detailed description of the acquisition of literacy in Arabic among the Vai, in Scribner and Cole 1999: 52–3, 68–9, and compare the situation of the eighteenth-century Highlander mentioned above, and Olszowy-Schlanger's description of the early stages of teaching the Torah in mediaeval Jewish communities (2003: 68).

³⁰ One Vai speaker and writer commented to Goody, Cole and Scribner, 'in Africa we need Arabic to help us go to Heaven and we need English to improve our standard of living' (1977: 291).

³¹ I have, alas, no expertise whatsoever in the Tifinagh and, in what follows, I have leaned heavily on the fascinating work of L. Galand, P. Galand-Pernet, M. Aghali-Zakara, J. Drouin and N. van den Boogert, who have made comprehensive studies of the script and its uses. I am particularly grateful to Professor Lionel Galand and Professor Paulette Galand-Pernet who read a draft of this paper and made many helpful comments. Naturally, I alone am responsible for any errors in the use I have made of the information with which they kindly provided me.

They use the Tifinagh characters³² to write in the sand or to carve graffiti on the desert rocks,³³ and for very little else (Fig. 1). As Lionel Galand has written, ‘le berbère offre l’étrange particularité d’être une langue orale pourvue d’une écriture’ (1989: 344).

The Tifinagh characters are thought to be descended from letters of the Libyco-Berber script, which was used in North Africa from before the Christian era. However, the latter is still not entirely deciphered and the exact process of this descent is far from clear.³⁴ The script was traditionally written without word-division, is almost entirely consonantal and does not show strengthening of consonants.³⁵ As Galand remarks these features, ‘en raison de la morphologie berbère, font encore plus cruellement défaut que dans les écritures sémitiques’ (2002b: 411).

The Tifinagh are used very widely today in Algeria, Niger and Mali by the Tuareg, an entirely oral society in which memory and oral communication perform all the functions which reading and writing have in a literate society. Their social system is tribal³⁶ and their way-of-life is, for the most part, nomadic. The Tifinagh are used primarily for games and puzzles, short graffiti and brief messages.³⁷

³² Tafiṇāq (pl. Tifinagh) is the feminine word which designates specifically a character in the consonantal alphabet used by the Tuareg. The plural, ‘Tifinagh’, is the term most widely used by the Tuareg for this script (see Aghali-Zakara and Drouin 1973–79: 248).

³³ Although there are large numbers of rock inscriptions in the Tifinagh characters (see, for instance, the *planches* and *photos* in Reygasse 1932), Aghali-Zakara and Drouin say that these are very old and even when legible can no longer be understood by the Tuareg. Indeed the technique used to carve them seems to have been lost and they are said to have been carved ‘when the rocks were soft’. There are also some texts carved on a tree at Dafkao (Imannan, Niger), which while apparently less ancient, are not modern (Aghali-Zakara and Drouin 1973–79: 267–68; Aghali-Zakara 1993: 145, figs 2 and 3).

³⁴ See Galand 1966: 14–16; 1998: 593–94; 2002a: 10. For a comparison of some of the Libyco-Berber signs and the Tifinagh, and their respective values, see Aghali-Zakara and Drouin 1973–79: 254–55; Aghali-Zakara 2001: 5. On the origins of the Libyco-Berber script, see Galand 2001a.

³⁵ For an interesting study of the implications of this lack of means to represent strengthened consonants see Galand 1996. The Tifinagh characters represent only consonants except for a dot representing [a] at the end of a word. The signs for *w* and *y* can sometimes also be used for [u] and [i] respectively, at the end of words, but never elsewhere (Aghali-Zakara and Drouin 1973–79: 250). Today, young people who have learnt the Arabic or the Latin scripts often use word-dividers when writing in Tifinagh (ibid. 263). See below under the discussion of orthographic developments in scripts used in oral environments.

³⁶ It is, however, very different from that of the Bedouin of the Middle East, not least in having a very strong ‘caste’ hierarchy which over-arches the tribal structure. For a brief description, see Prasse 2000: 379.

³⁷ Aghali-Zakara and Drouin 1973–79: 284–90. Coninck states that the young men of the Kel-Antessar in Mali used the Tifinagh to write down their poems and songs at his request (Coninck and Galand 1957–60: 79). Galand has also identified a few words of a poem mentioned by Père de Foucauld, in a graffiti in the Tifinagh (Galand 2001b). I am most grateful to Professor

Aghali Zakara and Drouin have shown in great detail how the Tifinagh characters are learnt informally by children from each other, from older female relations (Van den Boogert 2000: 476) or from servants, but not from those adults with whom they have a relationship which requires respect on the child's part (father, grandfather, maternal uncle, etc.). Indeed, the script is so much associated with playfulness and youth that many older men consider it beneath their dignity to admit to knowing the Tifinagh, and the characters would never even be referred to in an assembly of notables or an important meeting (Aghali-Zakara and Drouin 1973–79: 280, 284–86).

The impetus to learn to read and write the Tifinagh comes entirely from the child and is not imposed in an institutional milieu, as is the study of Arabic or French in those areas where these are taught. The Tifinagh are learnt in the course of games, competitions and jokes among children. The Tuareg say 'it is not something you learn on paper'—paper and pencil being associated with the non-traditional culture—'it is not like the Qur'an which you learn step by step 'this is this, this is that' nor like French which one learns letter by letter [i.e. systematically]'. They also like to emphasize that they learn the Tifinagh more quickly than they do the Arabic letters. They say that they learn all the Tifinagh characters in a day, simply by watching others and asking them. Aghali Zakara and Drouin conclude that personal motivation is undoubtedly one of the factors which facilitates this learning process (1973–79: 281).

All individuals use the Tifinagh and there is no difference between male and female, young and old, or between social classes. The only differences are degrees of competence, and this has nothing to do with social category, but simply with aptitude and experience. Children use it in games. Young people write each other notes. The latter are often in a sign-code agreed between the two, intended to foil the inquisitive. They are also used in gatherings to which young women go, not with their husbands (if they are nobles) but with an older or younger brother or other male relative. Because these social uses of the script are particularly common among the young, people say that the Tifinagh are 'the business of the young or of children', or they are 'something which young boys use to get in touch with girls of the same age' or 'they are only a game' (Aghali-Zakara and Drouin 1973–79: 285).

Children learn first to write their name in the sand, and then the names of their relations and friends, and then words signifying common objects, etc.

Galand for this reference which I have not yet seen. However, this does not seem to have been normal practice among the Tuareg. See Aghali-Zakara and Drouin who say 'l'écriture ne transpose pas systématiquement le discours oral, en particulier les répertoires littéraires dont la vitalité se fonde sur l'oralité' (1973–79: 292). See also Galand-Pernet who emphasizes the oral nature of Berber literature, even when it is recorded and reproduced on disks, tapes or the radio. 'Dans la société touarègue où la connaissance de l'écriture est ancestrale, le texte littéraire reste purement oral, l'écriture ayant d'autres fonctions sociales que la fixation des textes' (1998: 30, and see 27–31).

Knowledge of the script is extended through competitions, each child thinks of something and writes it on the ground, and the others try to read it. If it turns out to be too difficult to read, they say ‘the words refuse you’ and the writer gives the solution, the others then laugh at the reader who failed. Thus, learning comes through play, and the prime use of the script is for amusement.³⁸

Texts are read letter by letter, each consonant being spelled out in a singing voice and combined with each of the vowels in turn until the correct sound of the syllable and the correct word is recognized *aurally*, not visually³⁹ (cf. the method of reading the Vai script, described above). This seems to be a rite of reading which is observed even when the reader immediately understands a group of characters familiar to him (Aghali-Zakara and Drouin 1973–79: 283). This again is part of the game.

The Tifinagh are occasionally used for practical purposes. Sometimes men will write short messages⁴⁰ in them when they are separated by a long distance, and in some areas a simple record of tax returns is kept in the Tifinagh. However, in the latter case the absence of any ciphers in the script means either that all numbers have to be written out in words, or else numerals from the Arabic or Latin scripts used.⁴¹ Artisans, who form a relatively despised class and therefore do not have to maintain their dignity, often use the Tifinagh to write *me fecit* inscriptions, expressed in a semi-magical formula, on objects they have made in wood, stone, or metal, particularly jewellery.⁴² In the past, the Tifinagh were used for inscriptions on

³⁸ Aghali-Zakara and Drouin 1973–79: 281–82; Aghali-Zakara 1999: 109–10.

³⁹ Coninck and Galand 1957–60: 79; Aghali-Zakara and Drouin 1973–79: 283, and Aghali-Zakara 1999: 112 where he says that this process is carried out ‘à mi-voix’.

⁴⁰ Early in the second decade of the twentieth century, some members of the Tuareg Kel-Ahaggar addressed a number of messages on scraps of paper and cloth to Père Charles de Foucauld and 33 of these have survived and have now been edited and published by L. Galand (1999). (This total of 33 includes five cases in which two separate messages were written on the same sheet, but excludes no. 27 in the edition, which is not a letter, and no. 29 which was written by Lieutenant de la Roche.) In his section of the introduction, Aghali-Zakara notes that it is extremely rare for messages such as these to be preserved since they are regarded as of no historical importance ‘car ils véhiculent un message personnel, généralement intime. C’est pour cette raison qu’ils sont détruits au fur et à mesure dans cette société à tradition orale, où la parole était encore, il y a quelques décennies, l’essentiel réceptacle des Dires. Tout message écrit est éphémère’ (Galand 1999: 113–14).

⁴¹ In some places local forms of ciphers have been developed but these do not appear to be either very old or widespread. The traditional method of showing numbers is to write them out in words and since, for example, the number ‘nineteen’ is often expressed as ‘two tens from which one is missing’, this can be somewhat cumbersome. See Aghali-Zakara 1993: 148–53.

⁴² Professor Galand has kindly drawn my attention to the fact that bracelets made from a stone which has been identified as serpentine and bearing inscriptions in the Tifinagh used to be worn by Tuareg men, see Foucauld and Calassanti-Motyliniski 1984: 70. In this case, the inscriptions in the Tifinagh were sometimes carved by women, rather than by the maker, and would read ‘Moi, une Telle déclare : j’ai ma part [d’amour] assurée auprès du possesseur de ce bracelet!’ (*ibidem*). Similarly, ‘virtually everyone engaged in a craft who knows the [Vai] script

shields and also for writing insults on the sand in the path of somebody one disliked (Aghali-Zakara and Drouin 1973–79: 288). However, as Galand points out, when a Berber wishes to write a text of greater length he turns to a foreign alphabet—and often to a foreign language—which he either writes himself, if he is literate in the foreign script and tongue, or gets someone else to write for him.⁴³

But as Aghali Zakara and Drouin make clear, by far the most frequent use of the Tifinagh is in games and amusements. Interestingly, the basic rule in these games is to make the reading as *difficult* as possible by encoding the message. The lack of signs for vowels and for strengthening of consonants, and the absence of word-division, make the script difficult enough to read. However, one game involves infixing extra consonants between the syllables of a word. Another consists in mixing up the order of the consonants. These two procedures can be used separately or together. Sometimes failure in these games carries a ‘forfeit’ such as having to drink twenty glasses of tea in succession. For the maintenance of their dignity, grandfathers, fathers, big brothers, maternal uncles, etc. do not take part in these ‘childish games played in the sand’ (Aghali-Zakara and Drouin 1973–79: 289–90). On the other hand, adults will often use the script among themselves and full competence in it is usually only gained after long practice in adulthood.⁴⁴ The pleasure in setting ever more ingenious puzzles when composing these texts does not end in childhood but becomes more complex and sophisticated.⁴⁵ The Tifinagh have remained a pastime and have made no inroads into the non-literate culture of the Tuareg,⁴⁶ as represented for instance by its rich oral literature. Indeed,

uses it for work-related purposes, even if in minimal ways’ (Scribner and Cole 1999: 82). By contrast, as we shall see below, all the Safaitic inscriptions on manufactured objects known at present are simple graffiti which make no reference to the objects on which they are carved.

⁴³ Galand 1998: 593. Galand-Pernet points out the existence of mediaeval manuscripts in the Berber language ‘entièrement rédigés en caractères arabes, avec quelques signes adaptés à la phonétique berbère’, and adds that the Arabic script is used today by contemporary authors writing secular works in Berber (1999: 106–7). It is worth noting that the majority of the messages written in the Tifinagh and sent to Père de Foucauld by members of the Tuareg Kel-Ahaggar consist of good wishes, with occasionally a simple request, and would be described by the Tuareg as *tehult* ‘salutations’ rather than as ‘letters’ (see Casajus 1999: 97–98).

⁴⁴ Thus, although most of the Tuareg who sent notes in the Tifinagh to Père Charles de Foucauld were nobles (see Galand 1999), they apparently felt at ease doing so because they were writing to a foreigner.

⁴⁵ Aghali-Zakara and Drouin 1973–79: 284–89, and see also 261 on old people and women.

⁴⁶ See Aghali-Zakara 1993: 152–53: ‘les parlers berbères, en dépit de l’usage d’une écriture originelle—perdue pour les uns et maintenue pour les autres —, n’ont vraisemblablement toujours été que des parlers non écrits. Aucun document en effet, hormis les inscriptions lapidaires réduites, ne nous est parvenu depuis l’Antiquité et la pratique touarègue contemporaine, excepté les usages modernes très récents, montre bien que cette écriture ne sert ni à la compilation ni aux digressions’.

even where Arabic and French have been taught in schools, the Tuareg still see their own culture as oral.⁴⁷ Summing up, Galand writes

C'est une graphie qui reste proche d'origines où la magie de l'écrit n'exigeait du lecteur—s'il y en avait un—que la reconnaissance de formules rituelles, et non le déchiffrement des combinaisons que la langue peut multiplier à l'infini. Aujourd'hui même, elle fonctionne plus facilement comme un aide-mémoire, permettant de capter une information plus ou moins attendue, que comme porteuse d'un message véritablement imprévu, dont la lecture s'avère toujours assez laborieuse. ... Les emplois restreints dans lesquels l'écriture berbère est généralement restée confinée expliquent sans doute qu'on ait rarement cherché à la perfectionner en séparant les mots, ainsi qu'en notant la tension consonantique et les voyelles.... (2002b: 410–11)

II

This brief description of a few forms and uses of literacy in very different circumstances suggests the following conclusions.

Literacy is not necessarily desirable, as its rejection by the Rwala Bedouin makes clear. Nor is it a homogeneous state. It can exist in many degrees and many qualities. One can be literate in one's second language but not in one's mother tongue, like those speakers of the unwritten Modern South Arabian languages who have learnt to read and write Arabic. Such people inhabit an oral environment within their own community but a literate one in the wider society of which they are also members. However, as we have seen, this can also be true even when the individual's mother-tongue has its own script, as in the case of the Tuareg and the Vai. Their scripts have not penetrated the basic functions of their own communities—which therefore remain non-literate—and are incomprehensible to the wider literate societies in which their communities are encompassed. The uses of literacy can also be restricted by an individual's or a community's way-of-life or environment, as with nomads in desert conditions.

Contrary to the assumption identified by Johansson in the passage quoted at the beginning of the previous section, reading and/or writing do not have to be learnt in a formal environment. The skills can be acquired just as effectively, and often more quickly, through play, as with the children in the West who learn to write before they can read and among the Tuareg, or they can be taught informally at home as among the Vai.⁴⁸

⁴⁷ Aghali-Zakara and Drouin 1973–79: 292. See also Aghali-Zakara 1999: 113–14, quoted in note 40.

⁴⁸ The teaching of reading at home in seventeenth and eighteenth century Sweden appears from the records to have been formal and imposed by the parents (in response to legal requirements) and so in these respects is more comparable to school-learning than to the informal acquisition dependent on the child's wish to learn, as among the Tuareg and probably among the Vai.

Again, these examples have shown that there is no foundation to the common assumption that reading and writing are simply two sides of the same coin and that if you can do one you must be able to do the other. As we have already seen, there are children who teach themselves to write and who are unable to read what they have written and—at the time—feel no need to learn. In 17th and 18th century Sweden, we have seen an example of almost universal reading-literacy imposed from above, where neither the authorities nor, apparently, the majority of the individuals concerned, felt that there was any need for writing to be learnt.⁴⁹ In Scotland too, where there *was* schooling, although all the men and women questioned at Cambuslang could read, and a sizeable percentage of men could write, only 10% of the women questioned had the latter skill. Reading in Sweden, and to a lesser extent in Scotland, was taught for a particular purpose, that is to permit every individual to memorize and understand the word of God. We shall see in the next section another example of reading taught for a very specific reason. In rural Sweden and elsewhere, the authorities felt that no purpose would be served by forcing people to learn to write, and clearly most individuals agreed with them, since in the home education programme there was nothing to stop parents teaching their children, or having them taught, to write if they so wished.⁵⁰ Reading and writing are not simply separate, and separable, skills but have quite different uses, and an individual or a community can decide that it is worth learning one but not the other.

This can be seen, for example, in mediaeval England (and many other societies) where the practical skill of writing was clearly distinguished from the art of composition. The ability to write neatly and legibly was an artisanal skill, which though very useful, did not carry much status. An intellectual would normally be *able* to write, but, unless he was a monk,⁵¹ he would use the ability only for personal purposes.⁵² Instead, he would dictate to an amanuensis.⁵³ “Reading and dictating” [*legere vel dictare*] were ordinarily

⁴⁹ See Johansson 1988: 156–60 for a discussion of this.

⁵⁰ It would appear that slightly less than 10% of the rural community did feel it was worth learning to write and presumably would have been available to teach the others. The village pastor would also have been able to teach it, had there been a demand.

⁵¹ ‘Monks [as opposed to secular clerics] wrote more of their own works because they were expected to be humble and also because some had training in a *scriptorium*’ (Clanchy 1993: 126).

⁵² For instance, Robert Grosseteste of Lincoln, ‘the most academic, conscientious, and efficient bishop of the thirteenth century’ in England (Clanchy 1993: 76), wrote notes ‘in a fast cursive script’ ‘like other university masters’ (128), on whatever material was at hand, including the margins of manuscripts (120). St Thomas Aquinas composed his earlier works in writing, in a personal shorthand comprehensible only to himself known as *littera inintelligibilis*. He would then read this to a secretary who would take it down in a legible script (Carruthers 1990: 4). Later, he dispensed with the first stage and composed in his head and dictated the works from memory (ibid. 4–6).

⁵³ The most extraordinary example of this is St Thomas Aquinas who is reported to have dictated three or even four different works to different secretaries at one sitting (see Carruthers 1990: 3).

coupled together, not “reading and writing”.⁵⁴ ‘Writing was a very necessary activity, but it was not to be done by great ladies’ (Clanchy 1993: 193) or gentlemen, for that matter. ‘The profits of literacy, in terms of both heavenly and earthly advantage, were therefore best sought in religious reading. Skill in writing (which was taught separately from reading) could be rewarding for scribes working in rich monasteries and professional ateliers ... but such men were the exceptions. Most writing involved repetitive manual labour of the type done by ... the king’s clerks’ (Clanchy 1993: 194). Thus, reading and writing are not only clearly separable skills, but they can have different social roles and status, according to the availability of materials, technologies and the needs of different societies.

In the modern West, we take the availability of writing materials and the desire to write for granted. But when literacy first becomes available to a society, or to a section of a community, which has previously managed perfectly well without it, the abundance or lack of easily available writing materials may well be the deciding factor in whether or not it is adopted, or the speed with which it comes to be used.⁵⁵ As Clanchy has shown, this was the case in mediaeval England where ‘neither for reading nor for writing were materials readily available in domestic settings’ (Clanchy 1993: 194) and ‘the habit of sending missives, conveying ephemeral information about day-to-day matters, developed slowly ... the spoken word of messengers sufficed for conveying the ordinary business of the day’.⁵⁶ Up to the reign of King John (1199–1216) ‘the spoken word was the legally valid record and was superior to any document’ (Clanchy 1993: 77), and this only changed as a result of the demands of the king’s government, not public sentiment. After all, written documents could easily be forged or altered—and elaborate precautions were taken to prevent this happening⁵⁷—whereas the word of an

⁵⁴ Clanchy 1993: 125. Indeed, as early as the Roman period this practice had become so common that, from the Augustan age onwards, the meaning of the verb *dictare* was extended to cover ‘compose, draw up’, a semantic development parallel to that which the verb *scribere* had earlier undergone (see *The Oxford Latin Dictionary* (Oxford, 1996) s.v. *dicto* and *scribo*). Indeed, at least by the twelfth century (and probably a great deal earlier) *scribere* could also include dictation, since ‘John of Salisbury remarks in a letter to Peter, abbot of Celle, in c. 1159: “While I was writing this (*scriberem*), the secretary [*notarius*] was moved to laughter by the greeting at the head of the letter”’ (Clanchy 1993: 126). By the Middle Ages, *ars dictationis* (i.e. the ability to compose in one’s head and then dictate to an amanuensis) was a branch of rhetoric (Clanchy 1993: 125–26).

⁵⁵ It is worth noting that Scribner and Cole state that ‘one reason for greater facility in reading [than in writing] among the older generation [of the Vai] was the difficulty of finding writing materials’ (1999: 68).

⁵⁶ Clanchy 1993: 89–90. Clanchy says this was because ‘Latin was too formal a medium’ for such ephemera, but it must surely also have had to do with the lack of suitable writing materials, the shortage of people who could write and the lack of any compelling need to change the traditional methods of conveying day-to-day communications.

⁵⁷ On the extensive forging of documents in mediaeval England see Clanchy 1993: 148–49,

honest man who had taken an oath on the Gospels was felt to be more reliable.⁵⁸

As we have seen with IT in the modern world, the introduction of a new technology is usually greeted with enthusiasm by a few and indifference or resistance by many, until its increasing use (particularly by institutions) pushes all but the most 'die-hard' to accept it. Clanchy's description of the spread of reading-literacy in mediaeval England could apply, *mutatis mutandis*, to the process in many other societies.

The most important consequence of the proliferation of documents was that it prepared the gentry, the country-keeping knights, for literacy. Documents had to precede widening literacy. They had to have increased by accumulation in central archives and extensive distribution over the country before understanding of them became widespread in the shires. *The gentry were not going to learn to read until documents were available and necessary.* Necessity and availability also made for easy familiarity with writing, and from familiarity stemmed confidence in literate ways of doing business. Traditionally, literate modes had been the preserve of clerics and rulers. It took time, combined with a massive increase in the number of documents, to change traditional habits (Clanchy 1993: 78 [my italics]).

This, and the examples in the previous section, also call into question the linked assumptions, again cited by Johansson, that reading and writing are inherently and universally desirable because they are of practical (and, ultimately, economic) use. There are many situations and many societies in which they are neither desirable nor serve a practical/economic purpose, as we have seen among the Rwala Bedouin. The Tuareg's use of the Tifinagh shows that there are many other reasons for learning to read and/or to write. Similarly in Sweden, the government campaign for universal reading-literacy

170–71, 297–99, 318–27. On methods of reducing the risk of interference with documents see, for instance, *ibid.* 87–88.

⁵⁸ Clanchy traces the transition of the verb 'to record', which up to the first half of the twelfth century meant 'to bear oral witness', but by the second half had come to mean 'to produce a document' (1993: 77). A similar semantic shift can be seen in the context of the early uses of the Arabic script. From pre-Islamic times well into the Umayyad period, the Arabic word *risālah* apparently meant 'the oral transmission of a message' and the change in meaning to 'written letter' is not recorded before the reign of Hishām bin 'Abd al-Malik (AD 724–743). See Arazi and Ben-Shammai 1995: 532, but note that the statement in their first paragraph that the term is 'attested at a very early stage, in the inscriptions of Arabia, with the meaning of message or mission' (532) is based on a misunderstanding of the purpose of Harding 1971, which is not a dictionary but an index of names, with Classical and Modern Arabic words given purely for comparative purposes. However, the word *rs'l* meaning 'messenger, envoy' is found, probably as a North Arabian loan-word, in Sabaic in CIH 541/90, 91 where it refers to the ambassadors of the North Arabian kings of Ghassān and al-Ḥīrah (Beeston *et al.* 1982: 117). See the interesting discussion of Ancient South Arabian words for 'a written letter' in Maraqtan 2003: 276–77.

was entirely for spiritual,⁵⁹ not economic, purposes, for which a far more selective campaign which included writing would have sufficed. In the next section, I shall discuss this in relation to some ancient examples.

As noted above, the Tuareg will occasionally use the Tifinagh to write a short letter or to keep a record of tax returns, but if they need writing for practical and economic purposes then, either personally or by proxy, they will employ the language and script of the wider literate society, i.e. Arabic or French. English serves the same purposes for the Vai. For both the Tuareg and the Vai, their own scripts do not normally have the functions which we associate with literacy, and they have in no way penetrated the basic functions of their societies, which remain fundamentally and proudly oral.

The effects of the use of a script such as the Tifinagh or Vai by an oral society are very marked. Both the Tifinagh and the Vai syllabary are defective scripts which are read slowly and with difficulty even by those brought up with them. In the next section, I shall examine in more detail the effects of this type of use on other scripts.

We have seen that the children who learn to write before they can read develop, without prompting, a 'phonetic script' which in principle, though not in every detail, is more or less universal among children writing in English. This spelling also commonly fails to represent certain sounds (notably the nasals [m] and [n] before other consonants) even though the child knows the signs for them. The Tifinagh, which are learnt informally and used principally for amusement and self-expression are also written phonetically and spellings will vary according to the Berber dialect spoken by the writer.

It is important to remember that scripts like the Tifinagh and Vai, are read *aloud*. Indeed the Tifinagh, at least, are also *written* aloud.⁶⁰ In the Tifinagh the reader pronounces each consonant aloud and tries it with different vowels until the correct combination is achieved. In Vai, he pronounces strings of syllables aloud with different vowel length and vowel tone until he finds the right ones. Thus, the recognition of a word is *aural* not visual.⁶¹ In this

⁵⁹ In Sweden, 'resistance to costly school systems was great among the rural population. Reading was primarily done as spiritual exercise during the quiet of the Sabbath, not in aid of the everyday struggle. As it had no obvious practical use, naturally it should not cost anything' (Johansson 1998: 121).

⁶⁰ 'Écrire nécessite de murmurer des mots pour ne retenir que les sons qui s'écrivent (les consonnes) sans oublier, les aligner traditionnellement sans les séparer en utilisant à bon escient les signes biconsonantiques [monogrammes] ...' (Aghali-Zakara 1999: 113). It would seem that Galand-Pernet's dictum on the importance of the voice in the composition and reception of manuscripts in the Berber language written in Arabic characters would also apply to texts in the Tifinagh, 'La voix peut précéder, dans la création, ou suivre, dans la diffusion, la mise par écrit de l'oeuvre' (1998: 79). See also note 156.

⁶¹ Scribner and Cole 1978: 456. See also note 156 below. Note that in seventeenth- and eighteenth-century Sweden, children were to be taught to read religious texts aloud until 'they shall have become fully aware of the text they are reading and heed its utterance as if they heard

method of reading there is a direct link between sound and sign and it is unlikely that non-phonetic, historical or conventional spellings would develop. This has important consequences for our interpretation of scripts used in similar circumstances in antiquity.⁶² However, as M.J. Carruthers has pointed out in her study of the use and training of memory in the Middle Ages, aural-reading (i.e. either reading aloud or sub-vocalization) was also an important tool in memorization (1990: 6–7).

In antiquity and in pre-modern Europe, literacy was the handmaid of memory, rather than its rival. 'The cultivation and training of memory was a basic aspect of the literate society of Rome, and continued to be necessary to literature and culture through the Middle Ages. This privileged cultural role of memory seems independent of 'orality' and 'literacy' as these terms have come to be defined in the social sciences.'⁶³ A well trained and highly developed memory was considered to be the most important intellectual attribute one could have.⁶⁴ Thus, the assumption that, once acquired, literacy automatically leads to a distrust and progressive disuse of memory is entirely false, at least in periods and places before mass printing and mass literacy. This is symbolized by the case of Spensithios the scribe and remembrancer of a community in Crete around 500 BC, whose duties were 'to write down and remember ... the affairs of the city, both secular and divine',⁶⁵ and by the ancient and mediaeval scholars who absorbed, classified and catalogued in

it spoken by another' (quoted in Johansson 1988: 142, my italics). Svenbro, à propos of ancient Greek writing, claims that the use of *scriptio continua* 'as experience shows, makes reading aloud a virtual necessity' (1993: 45, but see 166–68 where he modifies this). Gamble makes the important point that 'in reading aloud the written was converted into the oral. Correspondingly, in the composition of a text the oral was converted to the written. In antiquity a text could be composed either by dictating to a scribe or by writing in one's own hand. Yet when an author did write out his own text, the words were spoken as they were being written, just as scribes in copying manuscripts practiced what is called self-dictation. In either case, then, the text was an inscription of the spoken word. Because authors wrote or dictated with an ear to the words and assumed that what they wrote would be audibly read, they wrote for the ear more than the eye' (1995: 204).

⁶² This aural reading also lies at the basis of the new orthography used for 'texting' on mobile phones and in some advertisements. Phrases such as 'RU' (for 'are you') '2B E10' (for 'to be eaten'), and '2DI4' for ('to die for'), make no sense visually and can only be understood aurally. They can also reveal features of the spoken language, such as 'MENU' for 'me 'n you', rather than the Standard English 'you and I' (UNI?)

⁶³ Carruthers 1990: 11, and see 160–62 on the preference for transmitting the contents of books via a scholar's memory than by 'the ignorant, word-scattering, cloudy-headed idiots who would erase ('denigratum') or otherwise spoil the texts in transmitting them', that is 'the professional copyists and secretaries into whose charge the copying of books for university scholars had now passed' (paraphrasing Richard de Bury (1286–1345) *Philobiblion* VIII.134).

⁶⁴ Carruthers 1990: 3–7, and *passim*.

⁶⁵ Jeffery and Morpurgo-Davies 1970: 124–25 (text and translation), 131–33 and 148–51 (on ποιητικῶν δὲ [π]όλι καὶ μυαμονεῦρεν) and see the discussion in Thomas 1992: 69–71 (whose translation I have used above).

their memories the material they read and then recovered and re-ordered it when they wrote or dictated.⁶⁶

In 'literate societies' where the vast majority of people encountered literacy only at second-hand,⁶⁷ where there was no mass production of texts, and where most documents were hard for all but the highly trained to decipher, memory remained the prime means of personal record. The importance of reading, therefore, was that it made available more material to memorize.⁶⁸ This is surely one reason why so many more people learnt to read than to write in literate societies, for, as Carruthers puts it, 'reading and memorizing were taught [in the Middle Ages] as they were in antiquity, as one single activity' (1990: 101). Writing, when it was taught at all, was learnt as a separate skill.

This link between reading and memorizing is of fundamental importance. In Sweden, the purpose of learning to read was specifically the memorizing and understanding of the Scriptures and other religious texts. In Scotland and elsewhere, there were occasional accidents where memory and understanding parted company, as in the example of the Highlander mentioned above. Such problems are inevitable, however, when one is required to learn to read a foreign language before one has learnt to understand it, as seen in the example of children in West Africa learning to read and memorize the Qur'ān without knowing Arabic.

Reading which is used as an aid to memorizing requires two distinct but linked skills. These are what might be called 'sight-reading'—that is reading and understanding an unfamiliar text—and 'prompted recitation'—that is reciting a text from memory using the written form as a prompt when necessary. These are skills which are used for specific purposes in most literate environments. There is an almost exact analogy with musicians, who can sight-read a new musical score but, even when they have learnt a piece, will usually still keep the score in front of them as a prompt. Similarly, priests and regular churchgoers know the liturgy off by heart but often still keep the missal or prayer book open in front of them and turn the page at the correct

⁶⁶ See Carruthers 1990: 4–10 (summary using the example of St Thomas Aquinas), and *passim*. While Clanchy is obviously correct in saying that 'the practice of making memoranda, whether on wax or parchment, contradicts the common assumption that medieval people had such good memories that they required no notes', I would tentatively suggest that he may be overstating the case when he continues 'once they were literate, they had the same needs as a modern writer' (1993: 120).

⁶⁷ That is, public notices or official documents were read to them and, on the rare occasions when it was necessary, a scribe would write and sometimes even sign for them. See Hanson 1991 for a fascinating discussion of illiterates in Ptolemaic and Roman Egypt.

⁶⁸ For example, Rosalind Thomas notes that 'Plato's famous description of primary-school teaching, usually cited to show the teaching of literacy, actually says that the children are given poems of good poets to read and learn *by heart* (*Protagoras* 325e)' (1992: 92, her italics). See also the remarks below on the purpose of teaching reading to Jewish boys in Roman Palestine.

place. Politicians making speeches will often treat their notes in a similar way. This does not mean that any of these readers is incapable of instantaneous sight-reading, simply that that is not what the particular situation requires.

Prompted recitation is not the same as learning by heart a text spoken or read by someone else, even if the book is open in front of the learner.⁶⁹ It is dependent on the learner being able to sight-read. In an age before silent reading was general, this meant performing the direct conversion of written symbols into sounds. However, for those who have been taught to read solely to enable them to memorize a particular text and who, for whatever reason, have little opportunity to read other material, sight-reading can be a long and painful process. In antiquity—and sometimes today—this involved spelling out the words, aloud, letter by letter or syllable by syllable, as with the Tifinagh characters or the Vai syllabary, a process often not helped by the ways in which the text was presented. But this very difficulty in the initial reading, together with the act of reading it aloud, are in themselves an aid in the process of memorizing. In order to survive, those who live in societies where literacy is not used in daily life, have to have sharp and extremely powerful memories. So, one or two slow and painful sight-readings of the text would have committed not only the words to memory but—at least to some extent—their positions and relationships on the page,⁷⁰ so that the ‘book’ (like a musical score) could thereafter be used as a prompt or a ‘security blanket’. As Gamble points out, for public reading it was extremely important that the text be memorized to ensure a smooth performance and to avoid the painful letter-by-letter decipherment of sight-reading (1995: 204–5).

Finally, these examples show that the use of a script within a community does not automatically make it a literate society. As we have seen, both the Tuareg and the Vai have their own scripts but remain oral enclaves within much larger literate societies, which use different languages and scripts. Within these wider societies, Tuareg who cannot read or write Arabic or French are *illiterates*, even if they know how to use the Tifinagh, and the same is true of Vai who are not literate in English.

However, even communities which share the same language and script as the wider literate society, can remain fundamentally oral (in the sense of my initial definition). Thus, the environment of rural Sweden, in which 80% of people could read (but less than 10% write), remained a largely non-literate one, because literacy was not vital to the practical functioning of these country communities. Young children, even when they have taught

⁶⁹ This was one of the many ways of reading in mediaeval England. See Clanchy 1993: 194–95.

⁷⁰ This is an unconscious process which is different from the very deliberate mnemonic processes described by Carruthers (1990: 80–121, 221–57).

themselves to write, remain in an oral enclave within the literate society, because all communication with them is by word-of-mouth. As we have seen, most of the Tuareg and the Vai inhabit oral enclaves, which function perfectly well without the use of literacy, as they always have done, even when large numbers of people use the Tifinagh for pleasure, and small numbers use the Vai syllabary for minor practical tasks.

It will be clear that while the concepts of literate and oral societies are theoretically useful, in practice, both in antiquity and today, there is no clear division between them, let alone between the literate and oral communities of which they are made up. They co-exist and overlap and the same individual may move between them as circumstances require.⁷¹ Thus 'literacy in an oral environment'—far from being a contradiction in terms, as might appear at first sight—has been, and in some places still is, a relatively common occurrence.

In the last part of this paper I will try to apply the insights gained from the situations discussed above to some uses of literacy in oral environments in pre-Islamic Arabia.

III

It is interesting to compare the use of literacy in 17th and 18th-century Sweden with that in the Jewish communities of Roman Palestine. Undoubtedly, the radical Protestant emphasis on individual Bible study in post-Reformation Europe and America, which prompted the literacy campaign in Sweden, owes a great deal to Jewish practice. It is, after all, a religious duty for Jewish men to study the Law and to read it aloud in the Synagogue. In Roman Palestine, it seems that there were large numbers of Jewish schools attached to synagogues where boys were taught to read Hebrew⁷² in order to read the Torah.⁷³ But, as the editors of the new Schürer put it, 'this zeal in the upbringing of the young was aimed at impressing the Torah on their minds and not at providing them with a general education. Thus their first lessons were in reading and *memorizing* the scriptural text',⁷⁴

⁷¹ On this see, for instance, Graff 1986: 69–70.

⁷² It has been suggested that in the diaspora, where the Septuagint version of the Bible was used, similar instruction in reading Greek 'must have been' provided by Jewish communities to their children (Gamble 1995: 7), but as far as I know there is no evidence for this.

⁷³ See Schürer 1973–87, ii: 418–19 and see note 31 there, on the provision of different types of schools. For details of the public reading of the Scriptures in synagogues in the Roman period, see Gamble 1995: 208–11.

⁷⁴ Schürer 1973–87, ii: 419 (my italics). Josephus, extolling the virtues of Jewish religious education, wrote 'if one of us should be questioned about the laws, he would recite them all more easily than his own name' (*Contra Apionem* 2.19). Note also a letter from a mediaeval Jewish merchant of Fustāt in Egypt to his wife 'asking her to send their children to school in the

and it is unlikely that for many this skill was transferable to any other sphere. After all, the Hebrew of the Torah was not the common language of everyday life in Roman Palestine⁷⁵ and it is very doubtful whether the ability to sight-read, memorize and give prompted recitations of carefully copied manuscripts of the Torah would have translated into an ability to read day-to-day documents in non-calligraphic Aramaic, let alone those in Greek or Latin. If, in the Diaspora, ordinary Jewish boys—as opposed to those from privileged homes—were taught to read Greek in order to study the Septuagint, this may well have enabled them to read other carefully written material in Greek and, with further practice, ordinary hand-written documents. But alas, we have no evidence on this point.

In this context, it is interesting to compare the evidence for the teaching of reading and writing in the Jewish community of mediaeval Cairo, which has been analysed in a recent article (Olszowy-Schlanger 2003). Since Arabic was the spoken vernacular of the Cairene Jews in the Middle Ages, their children ‘were initiated to literacy in what was, for them, effectively a foreign language [Hebrew]’ (Olszowy-Schlanger 2003: 52). While some seem to have been taught the Arabic script,⁷⁶ this was usually for the purposes of general culture and occupational advancement.⁷⁷ The vast majority of boys learnt to read only Hebrew, and that for the sole purposes of studying the Torah and fulfilling their Sabbath duties. For most of these children, the only *language* in which they were fluent was Arabic, but (unless they had had special tuition) the only *script* they could read was the Hebrew alphabet. It is therefore not surprising that those who wished to reach the widest audience within the Jewish communities under Arab rule wrote in the Arabic language expressed in the Hebrew script.⁷⁸ For the same reasons Yiddish, a dialect of

synagogue in the morning as well as in the evening: “the only esteem we have among fellow human beings is due to what was engraved in our memory when we were children” (Olszowy-Schlanger 2003: 52–53).

⁷⁵ On this see Schürer 1973–87, ii: 20–28. See also a letter to two of Simeon ben Kosiba’s lieutenants which contains a much disputed passage which seems to say that it was written ‘in Greek as we have no one here who can write Hebrew’ (Schürer 1973–87, ii: 79, n. 279; 420, n. 33), though other interpretations are possible.

⁷⁶ See the evidence in Olszowy-Schlanger 2003: 49–51.

⁷⁷ Olszowy-Schlanger quotes the words of the great Hebrew translator of Arabic works, Yehuda ben Shaul ibn Tibbon, addressed to his son in his ethical will, ‘you know well that the great men of our nation would not have achieved their greatness and their elevated position but through their knowledge of Arabic script’ (2003: 49, 54).

⁷⁸ There is a curious and, at present apparently unique, example of a translation of the Passover Haggadah into a Berber dialect written in the vocalized Hebrew square script. It was found in a school exercise book in a Jewish village in the Atlas Mountains of Morocco. See Galand-Pernet and Zafrani 1970. Given the importance of children in the Sēder, it is customary in most Jewish communities to follow each passage of the Hebrew text of the Haggadah with a translation in the vernacular (ibid. 10–11). Berber is not an habitually written language and it is

mediaeval German used as a vehicular language by the Jews of eastern Europe, was written in the Hebrew alphabet and I would suggest that Karshuni (the writing of Arabic in the Syriac script) originated in similar circumstances among Christians living in Muslim Arab societies.

Moreover, as in Sweden, since the study of the Scriptures was the sole purpose of teaching children to read, there was no impetus to teach them to write.⁷⁹ Thus, while large numbers of Jews could read Hebrew (or possibly Greek, in the Diaspora), far fewer could read other languages, and fewer still could write.⁸⁰ Roman Palestine as a whole clearly constituted a 'literate society', not because most Jewish men could read the Torah, but because it depended on literacy for its administrative, commercial and religious functions. If I am correct, this would be a case where, for the majority of Jewish men, schooling and literacy were limited to a single sphere of life and in every other sphere these 'literates' would have inhabited an oral enclave, as did those who could read in rural Sweden in the 17th and 18th centuries, as explained above. In the case both of Sweden and of Roman Palestine, I am, of course, speaking of the majority of those who were taught to read. As in any community, a combination of ability and opportunity would have enabled exceptional individuals to extend their literacy and to take part in the functions of the wider literate society of their day.

For the most extreme examples of literacy in an oral environment in the ancient Near East, we need to look at nomadic societies in the Syro-Arabian deserts. From perhaps as early as the eighth century BC, nomads throughout the western two-thirds of the Arabian Peninsula and north into Syria not only learnt to read and write but covered the desert rocks with scores of thousands of graffiti.⁸¹ Of these, the best studied are the Safaitic inscriptions which seem to have been written between the first century BC and the fourth century AD, in the deserts east and south-east of the Ḥawrān. I have written of these many times before⁸² and so here I want only to touch on them as an example of literacy in an oral environment. The language of these nomads was an

likely that the Hebrew alphabet was the only script known to the person who wrote down this translation or to the readers for whom it was made.

⁷⁹ Gamble 1995: 7; Schürer 1973–87, ii: 420; and note that in mediaeval Cairo, 'for the overwhelming majority [of Jewish boys], learning to write in Hebrew was an aid in the all-important art of reading it. For these pupils, the prime purpose of writing was merely to be able to recognize the shape of the letters and to associate it with corresponding phonemes. Once children were able to identify the Hebrew characters, their training in writing as such all but stopped' (Olszowy-Schlanger 2003: 55, see also pp. 60–66 on the teaching methods). However, see Millard 2000: 168–72 on the extent of the ability to write in Roman Palestine.

⁸⁰ A parallel can be found in Byzantine Egypt where at least one Church Reader was apparently unable to write and even to sign his own name. See Lane Fox 1994: 144 for a brief discussion and references.

⁸¹ See Macdonald and King 2000, and Macdonald 1995a; 2000: 43–46.

⁸² See for instance Macdonald 1993; 1995a; 2000; 2004.

Ancient North Arabian tongue related to Arabic but distinct from it and the script is one of the ‘Arabian’⁸³ or ‘South Semitic’ family, of which Sabaic is the most famous ancient example and Ethiopic the only living survivor.

As I noted in the first section, literacy is of little use to nomads and might even have positive disadvantages if used as a substitute for memory. Writing materials have to be imported from the settled areas and are easily destroyed and, unlike paper in the modern age, papyrus outside Egypt is likely to have been expensive for people in a subsistence economy.⁸⁴ Pottery, which when broken seems to have provided the everyday writing support for the sedentaries in much of the ancient Near East, was of little use to nomads for the very reason that it was breakable and not easily replaced, and they preferred vessels made of stone, wood, metal and leather.⁸⁵ Thus, the only writing materials which were plentifully available to them were the rocks of the desert, but for most people these are not much use for writing lists, letters, or other everyday documents.⁸⁶

We do not know why these nomads learnt to read and write but it does not seem to have been for any practical purpose. For a start, both the language and script would have been incomprehensible to their Aramaic- and Greek-speaking settled neighbours and the script would have confused their literate nomadic neighbours further south, since they used several of the same or similar signs for different sounds.⁸⁷ So it would not have helped them in their

⁸³ For this term, which reflects the fact that use of this alphabetic tradition was confined almost entirely to the Arabian Peninsula, see Robin 1996: 1208.

⁸⁴ T.C Skeat makes the very valid point that the question of whether papyrus was cheap or expensive ‘is purely a modern one’ and is entirely absent from ancient sources (1995: 75). However, he also notes that ‘99.9% of our evidence comes from Egypt and is not necessarily applicable to the rest of the ancient world’ (1995: 76). So, we can only speculate. *Prima facie*, it would seem probable that a product which had to be imported from Egypt to inland Syria would not be sufficiently cheap to supplant the free alternatives of oral communication and memory. As Skeat himself says, ‘a writing material [or, in this case, an alternative] which costs *nothing* must always be cheaper than a writing material which costs *something*’ (1995: 78, his italics).

⁸⁵ Thus, a number of stone vessels (bowls, beakers and tripod platters) are known. These bear Safaitic graffiti of similar form to those on the rocks of the desert. See, for instance, Ryckmans G. 1951: 87–91; and see the remarks in note 42, above. I am in the course of preparing a corpus of all known examples of these inscribed vessels. It may also be significant that in the four excavated graves connected with Safaitic inscriptions where we can be virtually certain that the body is that of the person mentioned in the texts, objects in wood, leather and bronze, as well as fragments of textile and beads have been found (Harding 1953: 11, pls III/2, IV), plus other objects in metal, stone and shell (Harding 1978: 243, pl. XL/d; Clark 1981: 244–45, pl. LXIX), but not a single sherd of pottery (note that the sherds found *near* the Cairn of Sa’ad were ‘probably of mediaeval date’, Harding 1978: 243). Naturally, an argument from silence based on so small a number of excavations is not conclusive, but it may be indicative.

⁸⁶ See the discussion in the previous section of the requirements for the spread of literacy. See note 102 below for some improbable suggestions as to how the desert rocks could have been used for reference works and communication.

⁸⁷ See the script table in Macdonald 2000: 34; 2004: 496; and note 101 below.

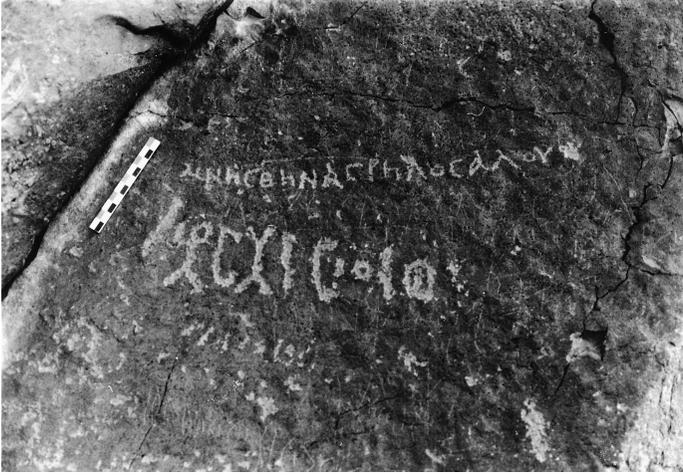


Fig. 2. A Safaitic-Greek bilingual graffito from the Wādī Rushaydah, southern Syria

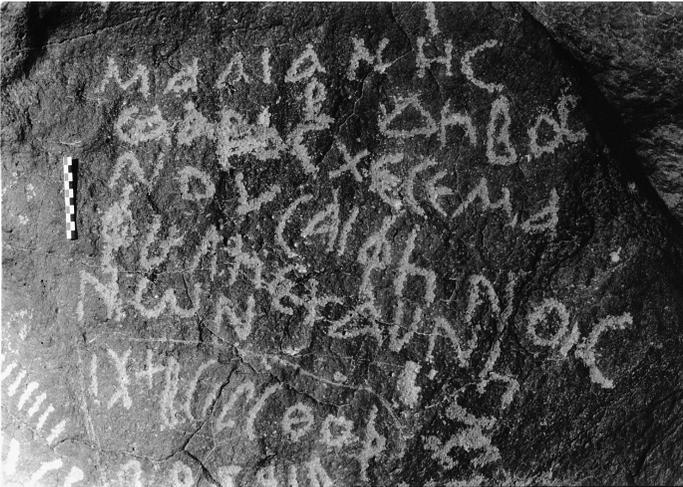


Fig. 3. Three Greek graffiti from the Wādī Rushaydah, southern Syria.

relations with neighbouring peoples. Instead, those who went to the settled areas often learnt a smattering of Greek which they showed off when they came home, in Safaitic-Greek bilingual graffiti (Fig. 2) or simply in Greek (Fig. 3). The author of the bilingual in Fig. 2⁸⁸ had been taught the Greek

⁸⁸ The text was found by the Safaitic Epigraphic Survey Project in the Wādī Rushaydah, east of Jabal al-ʿArab. It will be published in the final report which is in preparation. The Greek text reads Μνησθη Νασρηλος Αλουου and the Safaitic reads *l-nṣrʿl bn ʿlw*.

alphabet in the manuscript rather than the monumental forms. This is particularly clear in the form of his *ēta*, in which the right hand upper vertical is missing, but also in the forms of *alpha*, *lambda*, and *upsilon* which are characteristic of the script found in papyri of the first and second centuries AD.⁸⁹ On the other hand, Fig. 3 shows that this was not always the case. Of the three Greek graffiti on this rock,⁹⁰ the first is in the formal register⁹¹ (note particularly the forms of *mu* and *ēta*), while the second and third, like that on Fig. 2, are in the informal (note particularly the forms of *ēta* and *upsilon*). It may have depended on the whim of the informant which register he taught to the nomad, or in one case he may have written out the letters and in another used an inscription as an exemplar.

One of the many interesting features of these texts is the apparent ease with which their authors mastered two very different orthographic systems, Safaitic, which was entirely consonantal with no *matres lectionis*, and Greek in which the vowels were written but some Semitic consonants, such as ʾ, ʿ, ḥ, h, etc. had to be omitted. This does not seem to have caused any particular

⁸⁹ Compare for example the shapes of these letters in the Babatha papyri (Lewis, Yadin and Greenfield 1989: *passim*).

⁹⁰ These were discovered by the Safaitic Epigraphic Survey Project at the same point in Wādī Rushaydah but on the opposite side of the wadi. They will be published in the final report, though number 3 has already appeared in Macdonald, Al Muʿazzin and Nehmé 1996: 480–85. The texts read as follows (1) Μααλανης (perhaps compare *Mʿynw* in Nabatean [LPNab 27/2, JSNab 365, CIS ii 990, 3049] and the woman’s name *Mʿynʿ* in Palmyrene [Stark 1971: 34, 95–96]); (2) Δηβος (probably the name *Dʿb*); and (3) Σααρος Χεσεμανου Σααφηνος φυλῆς Χαυνηνων (S²r son of Kaḥs¹mn, Dayfite of the section of Kawnites). Another Greek graffito by the same author in which he gives his grandfather’s name (also Kaḥs¹mn) has been found in north-eastern Jordan, see Macdonald 1993: 310 and n. 47; Macdonald, Al Muʿazzin and Nehmé 1996: 483–84. The name Kaḥs¹mn has so far been found only in the Safaitic inscriptions. Kawn is known from Safaitic texts to be a section of the large tribe of Dayf, which was one of the two main tribal groupings of the (literate) nomads, east and south-east of the Ḥawrān in the Roman period.

⁹¹ Just as linguists distinguish different ‘registers’ in the spoken forms of a language, which are used according to the particular circumstances in which the speaker finds himself, so also, I would suggest, there are registers in the form of script which a person will use in different circumstances. Public announcements (such as monumental inscriptions and graffiti) are normally carved or written in a formal register, whereas personal documents are usually hand-written in an informal register. Some (or all) of the letters of an alphabet may have a different form in different registers (e.g. our capitals and lower case), and, depending on his level of competence, a literate person may have in his head a reading and (less often) a writing knowledge of most, if not all, the forms appropriate to the different registers. Thus, as Clanchy remarks, ‘the good scribe’ (in mediaeval England as in other times and places) aimed ‘to have command of a variety of scripts appropriate to different functions and occasions’ (1993: 127). Nevertheless, the notorious phrase *lapidarias litteras scio* in Petronius’ *Satyrice* (58.7), if it reflects reality, warns us that ‘public inscriptions in the Roman world provided a large-scale and abundant (if not richly amusing) reader for any child who learnt his letters informally’ (Horsfall 1991: 62) and that, if he had no reason to learn to read handwriting, it was quite possible for a person to be literate in this register alone.

problems for them, at least none are visible in the texts which have been found so far.⁹²

If a nomad, literate in Safaitic, went to the settled regions of the Ḥawrān he would have come into contact with a society literate in Aramaic and Greek. In this society, his ability to read and write Safaitic would be irrelevant and he would be an *illiterate* until he learnt enough of the local languages and scripts to read (and possibly write) them. However, it is unlikely that he would need, or want, to do so, except in a few, very specific, circumstances. It would be far more important for him to acquire a smattering of the *spoken* languages, for the vast majority of the ordinary villagers and townsmen with whom he would have had dealings are unlikely to have been able to read and write their languages either, and there would certainly have been scribes for the relatively rare occasions when literacy was needed.

Such a situation would be very similar to that of a Tuareg, literate in the Tifinagh, who today comes into contact with the wider society in North Africa, which is literate in Arabic or French, or of a Vai, who can read and write his own script, dealing with wider Liberian society which is literate in English. In all three cases, if the individual wanted to 'better himself' within the wider society, he would do well to learn this foreign language and script, but if he were content to remain in his own non-literate community he would continue to use his own language and script and remain *illiterate* in the wider society. Of course, if he was bright and curious, he might bring back from the 'literate society' a knowledge of the foreign script (without necessarily an understanding of the language),⁹³ as did those who wrote their names in Greek, or Greek and Safaitic, in the desert. In this case, he might use the foreign script to play or to impress, in the same way as he used his own script, within his non-literate society.

The alphabets used by the nomads presumably had their ultimate origin in a settled literate society and, although there is no evidence of the process, the following hypothesis seems to offer a plausible explanation, though I would emphasize that it can be no more than an hypothesis. If, for instance, a nomad in Arabia was guarding a caravan or visiting an oasis and saw someone writing a letter or doing his accounts, he may well have said 'teach me to do that', simply out of curiosity. I and others have had just this experience with Bedouins on excavations. Because the nomad comes from an oral culture he has a highly developed memory and so learns the skill very quickly. In my

⁹² They also, of course, mastered the Greek ways of showing relationships and affiliation to social groups and I know of no examples where nomads made mistakes in these constructions. This contrasts with those, relatively rare and usually later, formal texts as, at random, Negev 1981: 55, No. 57/2–3, Piccirillo and Alliata 1994: 249–50, no. 6d, 251–52, no. 8c, which use the construction 'N υιὸς N' which is much closer to the 'Semitic' formula 'N bn/br N'.

⁹³ Compare the West African school-children, mentioned above, who are taught to 'decode the sound' of Arabic letters, when learning the Qur'ān, but not to 'decode the meaning (i.e. read)' (Goody, Cole and Scribner 1977: 290–91), see note 29.

case, I wrote the unjoined forms of the letters of the Arabic alphabet on the Bedouin's hand and the next day he was writing his name and mine, still in the rather wobbly unjoined forms of the Arabic letters I had written on his palm.

This is probably how the nomads mentioned above learnt the Greek alphabet and just as most of them learnt the manuscript forms of the Greek letters so, I would suggest, the nomad who first picked up the Ancient North Arabian alphabet would probably have learnt the Ancient North Arabian letter shapes used in handwriting rather than those of the formal register which survive in the inscriptions and graffiti of settled societies.⁹⁴ These 'manuscript' forms, which had developed through writing with ink on papyrus or leather or cutting with a sharp blade on soft wood,⁹⁵ would then no doubt have undergone changes as they were carved on irregular rock surfaces. There would also, almost certainly, have been further changes as, in the transmission from one nomad to another, there were occasional lapses of memory as to which shape represented which sound, and as the phonological differences between one dialect and another rendered one letter redundant or necessitated the creation of another.⁹⁶ All these factors and many more may have produced the marked differences between the Ancient North Arabian letter-forms which survive on the one hand in the *formal* inscriptions and graffiti of a settled literate society such as that of Dedān,⁹⁷ and on the other can be found in the numerous related scripts used by the nomads.

Although there is, at present, no evidence either way, it would seem likely that once the use of writing had been acquired by one nomadic group, it was then passed on in the desert from one individual or group to another, rather than being repeatedly re-introduced by a succession of independent contacts with the sedentaries. The orthographies of the scripts used by the nomads lack any *matres lectionis* or word-division and can be written in any direction, and are thus in marked contrast to the orthography of Dadanitic, the

⁹⁴ Graffiti are normally carved or written in what I would call the formal register of a script, rather than the register used for handwriting. As the late Jacques Ryckmans pointed out (e.g. in 1993: 30), one has only to think of graffiti in our own societies which are almost always in 'capital letters', even when written with spray-paint.

⁹⁵ As was the practice for day-to-day documents both informal and official in Yemen. For a description see, for instance, Ryckmans J. 1993: 20–23; Ryckmans J., Müller and Abdallah 1994: 27–29; Maraqtan 1998: 292–93.

⁹⁶ Compare the different versions of the Tifnagh used by groups of Tuareg speaking different Berber dialects. See also Galand-Pernet 1999: 106, where her summary 'il y a une diversification scripturaire comme il y a une diversification dialectale' could equally be applied to Ancient North Arabian. Aghali-Zakara and Drouin collected ten Tifnagh 'alphabets', consisting of differing numbers of signs, from different regions (1973–79: 251). See the table of letter-forms from different areas in Aghali-Zakara 1993: 144.

⁹⁷ For the preliminary re-assessment of the complex mixture of registers and types of script used in and around ancient Dedān, see Macdonald in press a.

only Ancient North Arabian alphabet definitely to have been used by a sedentary literate society.⁹⁸

Thus, it seems probable that those who wrote the Safaitic inscriptions would have learnt the Ancient North Arabian alphabet from their neighbours further south. The nearest geographically is the Hismaic script⁹⁹ which was used by nomads in the Ḥismā desert of southern Jordan and north-west Saudi Arabia, by other nomads in the limestone desert of east-central Jordan, and also by people in central and northern Jordan (e.g. the Kerak, Madaba¹⁰⁰ and Zerqa areas, among others). There are also some ‘mixed texts’ which contain letter forms from both the Safaitic and Hismaic scripts (see Macdonald 1980: 188). On the other hand, a number of letters in the two scripts have the same form but completely different values, which perhaps reduces the likelihood that it was the source.¹⁰¹ Another possibility is that Safaitic developed from Thamudic B which was used by nomads throughout the western two-thirds of the Peninsula from Yemen to southern Syria (Macdonald 2000: 72, n. 117, Macdonald and King 2000: 438). However, these can be no more than guesses, for it is highly unlikely that it will ever be possible to trace the processes by which these desert scripts developed, since they are represented only by the handwritings of thousands of individuals for which we very rarely have any secure dating evidence. Thus, unless these circumstances change dramatically, any attempt to trace their development can be no more than sterile speculation.

⁹⁸ Whether Taymanitic was another is uncertain. The vast majority of the texts have been found outside the oasis and while they generally use word-dividers, they do not employ unidirectional writing or *matres lectionis*. Only three texts are known in the Dumaitic script, apparently used in the oasis of Dūmā (al-Jawf), and all these read from right-to-left, though, given the small numbers, this is hardly significant, especially since they are all on the same rock-face. Only one employs word-dividers (WTI 23) and the only indication of a *mater lectionis* is in the word *wddy* at the end of WTI 23, which Winnett interprets as ‘my love’. However, cf. *s^ld-n* in the same text, where if Winnett’s translation ‘help me’, is correct one would expect **-ny*. The Dispersed Oasis North Arabian inscriptions (see Macdonald 2000: 33, 42–43) are generally too short, and often too enigmatic, to provide useful evidence in this respect.

⁹⁹ The Hismaic script was formerly called ‘Thamudic E’, ‘Tabuki Thamudic’ and, misleadingly, ‘South Safaitic’; see Macdonald 2000: 35, 44–45. Geraldine King (1990b) first clearly defined the characteristics of the Hismaic script and language. More work is now needed to identify the distribution and background of the texts, as far as this is discernible. See most recently Macdonald and King 2000: 437–38.

¹⁰⁰ See, for instance, Daviau *et al.* 2000: 279–80. The presence of some of these texts on door-frames and other architectural elements of houses is not unfortunately conclusive evidence that they were written by sedentaries, since the texts are graffiti, not monumental inscriptions, have no particular function in their architectural context and contain no information indicating the way-of-life of their authors. See Macdonald, in prep.

¹⁰¹ It will be seen from the script table in Macdonald 2000: 34 that the Hismaic signs for *g*, *h*, *s²*, *t*, *ʔ* and *z* are either identical or very similar to the Safaitic signs for *ʔ*, *d*, *n*, *h*, *q* and *z* respectively. On the other hand, other signs in Hismaic, e.g. those for *d*, *q*, *g̃* and *z* are quite different from their equivalents in Safaitic.

When the nomad returned from the settlement to his tent, he would have found little to write on but rocks. It is therefore not surprising that we have no evidence that any of these nomads used the script for any practical (let alone economic) purpose within their society.¹⁰² Well over 20,000 Safaitic inscriptions are known today, and one stumbles over thousands more whenever one goes into the basalt desert. Almost as many are known in the Hismaic and Thamudic B, C and D and Southern Thamudic scripts.¹⁰³ Yet virtually all these texts are graffiti and in none of them is there any evidence that writing served a practical purpose. However, this does not necessarily mean that they were all purely frivolous. The solitary writing of graffiti in the middle of the desert, as well as passing the time, seems often to have served as an emotional outlet for these nomads, just as it can for others in other circumstances.¹⁰⁴

Nomadic life entails a great deal of hanging around, guarding the flocks while they pasture, keeping watch for enemies or for game, etc. and in most cases this is a solitary vigil. Before they learnt to read and write, these nomads used to carve their tribal marks on the rocks or make drawings, as they still do. Literacy, it seems, added an extra pastime with almost endless possibilities. The writing materials—sharp stones and rocks—were available in infinite quantities and the process of inscribing was sufficiently slow and arduous to fill hours and hours.

Thus, writing in these societies fulfilled a real need in the lives of individuals, not in the practical, material and economic spheres with which

¹⁰² Harris is incorrect in stating that ‘precisely because of the nomadic character of the peoples in question, graffiti acquired among them a surprisingly wide range of functions. Circumstances encouraged them to leave written messages in order to maintain contact with each other and to establish rights to wells and camping places’ (1989: 189–90, n.79). This unfortunately, betrays a lack of knowledge of the content and distribution of the Safaitic inscriptions. Not one of them contains a ‘message’ or a private property notice, and 98% of them are carved on stones and rocks amid millions of others in the basalt scatter on the desert floor and so would usually only be discovered by accident. This very ‘sedentary’ view of the uses of writing also betrays an ignorance of the conditions of nomadic life where the concept of personal real estate does not exist and where ‘private property’ notices would be incomprehensible and unenforceable. Similar confusions are evident in the hypotheses put forward in Robin 2001: 569–70.

¹⁰³ On these see Macdonald 2000: 33–35, 43–45; Macdonald and King 2000.

¹⁰⁴ It is interesting to compare the open tone of the Ancient North Arabian graffiti, and the frankness with which their authors express emotions such as grief, fear and occasionally lust, with the poetic mediaeval Arabic graffiti collected (and only occasionally invented!) by the author of the *Udabāʾ al-ḡurabāʾ* (or *Kitāb al-ḡurabāʾ*) ‘The Book of Strangers’ (Crone and Moreh 2000). As the translators say of the content of these texts, ‘educated men were trained to be reticent about themselves, but they speak with relative freedom in their informal graffiti. Some positively pour out their hearts to unknown passers-by ... clearly feeling free to do so because they would never meet the readers. Passers-by would often add responses even though the original writer was unlikely ever to see them....’ (ibid. 9). It was commonplace for a passer-by to add a note to a Safaitic graffiti, saying that he had found it and (usually) was saddened. Often he weaves his text in amongst the letters of the first.

we are accustomed to associate it, but as a creative antidote to hours of solitary boredom. The use of the Tifinagh by the Tuareg serves a similar purpose, as well as having an important additional social function, in play. It should be clear from many of the examples discussed above that these are not merely perfectly valid functions for literacy, but are regarded as entirely sufficient in societies where either the materials and/or the social conditions and/or the external pressures do not exist for the written word to take on a wider range of functions.¹⁰⁵ We need to rid ourselves of the deterministic prejudice that all societies, once they have discovered literacy, will move inexorably towards modern Western concepts of its uses.

The content of these graffiti, when it is more than purely personal names, is concerned exclusively with nomadic life and 98% of them have been found in the desert and almost nowhere else. There is, therefore, no doubt that the vast majority of them were carved by nomads rather than by settled people. This raises the interesting question of why this should be. There is no apparent reason why the Safaitic script should not have been used in towns and villages, just as Greek was occasionally used in the desert.¹⁰⁶ Indeed, there is an unpublished Safaitic inscription, unfortunately of unknown provenance, whose author claims affiliation to the people of the town of Salkhad (Macdonald 1993: 348–49), and my friend and colleague Hussein Zeinaddin has recently discovered 400 Safaitic inscriptions among the villages on the eastern slopes of Jabal al-ʿArab/Jabal al-Druze, overlooking the desert.¹⁰⁷

However, it is significant that virtually all of the latter were found in areas *between* the villages, and in the upper reaches of the wadis which run down into the desert, in places where animals are taken out to pasture. Thus, the shepherds or herdsmen who, if modern practice is a guide, may often have been nomads hired for their herding skills, would be in the same circumstances as those in the desert and in need of something to relieve boredom.

¹⁰⁵ This does not mean, of course, that, in such societies, writing is not occasionally used for more practical purposes. As mentioned in the previous section, short notes or simple tax returns are sometimes written in the Tifinagh, and Safaitic can be used to inscribe 'markers' identifying the person buried under a cairn. But these exceptions do not alter the principal function of writing in these societies, anymore than the occasional humorous graffiti alters the fundamentally practical function of writing in modern Western societies.

¹⁰⁶ See the inscriptions mentioned above. There are, of course, a few graffiti in the desert carved by Greek-speakers from the settled regions. Perhaps the most poignant was found by F.V. Winnett and G. Lankester Harding at Jathūm, in the desert of north-eastern Jordan. It reads, 'Life is [worth] nothing. Diomedes the lyrist and Abchoros the barber, both went out into the desert with the commander of hoplites and were stationed near a place called *Siou* [i.e. the cairn of] *Abgar*' (Mowry 1953, with the reading of the penultimate word corrected by Schwabe 1954; SEG XVI, no. 819; for commentary see Macdonald 1993: 349–50).

¹⁰⁷ Zeinaddin 2000. These account for most of the 2% of Safaitic inscriptions *not* found in the desert as such, though see the next paragraph and Macdonald in press b.

These circumstances were not a normal part of agricultural or urban life, which does not normally require—or indeed allow—long hours of solitary idleness out in the open, and so provides neither the opportunity nor the necessity of carving graffiti on rocks as a pastime.

We have virtually no evidence for the extent of literacy in the countryside, or among the general population of the towns, of southern Syria in the Roman period.¹⁰⁸ Arguments can rage back and forth over the *probability* of whether individual literacy was necessary, desirable or generally achievable for these sectors of the population, but for the moment the debate is sterile since we lack the vital facts. Our ignorance is such that we cannot even be certain what language was in popular use in the towns and rural areas of the Ḥawrān at this time. It is usually assumed to have been Aramaic, though in fact there is little or no evidence one way or the other. The occasional Aramaic, and more frequent Greek, monumental inscriptions set up in the towns and villages of southern Syria are not evidence for the general use of these languages, let alone for general literacy in them, any more than Latin memorials in English country churches are evidence that Latin was widely spoken, or even read, in rural England at the times they were erected.¹⁰⁹

Regardless of how widespread literacy may have been in southern Syria, these settled populations would have lacked the means and the opportunity to leave large numbers of personal inscriptions on durable materials in places where they would be undisturbed by future generations. So, even if there had been mass literacy in these areas at this period, we would be unlikely to find much evidence of it. The most we have are the signatures of sculptors on statues, reliefs and monumental inscriptions, which represent a handful of names but no other information beyond their professions.¹¹⁰ Even in these

¹⁰⁸ Horsfall provides a salutary counter to Harris's too dismissive attitude to rural literacy in the Roman empire (Horsfall 1991: 65–66; cf. Harris 1989: 17 ['rural patterns of living are inimical to the spread of literacy'] and 191).

¹⁰⁹ There are innumerable examples from most literate cultures of cases where the symbolic value of monumental inscriptions is clearly more important than accessibility or legibility. The most famous of these is perhaps the great trilingual inscription of Darius the Great at Bisutūn/Behistun in western Iran, on which see Tuplin in this volume. It was carved, with enormous labour, in Old Persian, Akkadian and Elamite, all cuneiform scripts not easily read at the best of times by the average passer-by. But this gigantic inscription was positioned so high that the text appears as no more than a blur when seen from the road below. Darius had, however, sent copies of the text (in various languages, including Aramaic) to all parts of his empire, so the content was broadcast, but not by the inscription. Henry Rawlinson was probably the first person to read the inscription itself in the two and a half thousand years since it was carved, when in 1835 he made his first descent on a rope from the top of the cliff to copy the texts. A different form of inaccessibility is represented by mediaeval Arabic monumental inscriptions in which the letters are woven into ever more complex calligraphic patterns until it becomes extremely difficult to disentangle the sense from the decoration.

¹¹⁰ Thus, for instance, on a fragment of a statue base we read 'Shudū the mason' (Musée du Louvre AO 4491, Lyon no. 60/Brussels no. 81), while the base of a sculpture of an eagle bears

cases, we cannot be sure that these inscriptions were composed by the sculptors themselves rather than copied from a text provided by a scribe.

By contrast, the evidence for widespread literacy in the deserts east and south-east of the Ḥawrān and throughout western Arabia is abundant, and has survived because it is on durable surfaces in areas where, until very recently, there has been little subsequent disturbance. It is this, and the complete absence of even indirect evidence that these scripts were habitually used for writing on other materials, that makes them a peculiar exception to Alan Millard's very sensible warning quoted at the beginning of this paper. In these particular cases, one could almost say that the proportions are reversed and we are seeing the iceberg from below, that is, the vast majority of documents which were written in these societies have probably survived and only a relatively small percentage have been lost. At least, this seems to me the most reasonable conclusion to draw from the available evidence, but naturally it is only one possible interpretation and it may well be disproved by future discoveries.

Among these nomads, as with the Tuareg, writing seems to have been used for a very restricted range of purposes, though it will be clear that the particular forms of diversion afforded by the Tifinagh and by the Safaitic script differ. The Tifinagh seems very often to be used for communal amusement such as puzzles and competitions, or for brief messages and billets-doux, and, in the past at least, for solitary graffiti. On the other hand, virtually all the Safaitic inscriptions so far found are graffiti, and we have only a very little evidence that they were sometimes carved in company,¹¹¹

the text carved in relief 'this is the eagle which Rabbū son of Ḥanīpū, the mason, made' (Musée de Suweidā inv. 196, see Teixidor in Dentzer and Dentzer-Feydy 1991: 148 and pl. 24). The pedestal of a statue with a six-line honorific inscription, has the artist's signature along the bottom 'An'am son of 'Aṣbū the sculptor. Peace!' (LPNab 101, Musée de Suweidah no. 158), while on the arch of a niche another artist has signed his work in a crude *tabula ansata*, this time in Greek: Ταυῆλος Ραββου τοῦ Σοχερου ἐπ[οίησεν] 'Tauēlos son of Rabbos son of Socheros made [it]' (Musée du Louvre AO 11079. Lyon no. 43/Brussels no. 71). On the lintel of a mausoleum inscribed in Greek and Nabataean (LPNab 105) the mason's 'signature' is as prominent as the name of the deceased, 'For Ṭaninū son of Ḥann'el [is] the funerary monument. Ḥūrū son of 'Ubayshat [was] the mason.' See Macdonald 2003: 45.

¹¹¹ See, for instance, LP 325 (Macdonald, Al Mu'azzin and Nehmé 1996: 467–72) where the author records that his father drew the picture for him while they were waiting, together with his brother, for the rest of the tribe to return from the annual migration. There are also occasions when two brothers each carved his name + *bn* but 'shared' their father's name, which they carved only once (e.g. WH 1754+1755, and in Hismaic KJC 716+716a). There are also the so-called 'joint texts', on which see Winnett and Harding 1978: 17. On a number of occasions, members of the same family have written their names and genealogies one below the other on the same stone. A remarkable example of this is a stone (at present unpublished) from WH Cairn 21 on which a father, his seven sons and his slave have written their inscriptions one below the other and separated by horizontal lines. Each says that he was involved in 'kidding' the goats (*scil.* helping them to give birth) in the same year. WH 1673, 1698 and 1725b (from the same cairn) are by three of these brothers and record the same activity, and the latter two are dated to the same year.

and none for the script being used to write messages.¹¹² However, the use of the scripts as pastimes is common to both cultures, as—it would appear—is the failure of literacy to penetrate the vital functions of the respective oral societies in which they were employed.

The habitual, informal use of these scripts is also suggested by the ways in which they were/are learnt. As we have seen in the first part of this paper, writing is of little practical use within nomadic societies, and even less if the script is incomprehensible in the world beyond the desert. As the example of the Rwala suggests, if literacy is of no practical use, there is clearly no point in organizing the formal teaching of it. Conventional letter orders, whose original principles of organization (if any) have been lost in the mists of time, and which simply have to be learnt by rote, are typical of school-taught literacy. Because the order is transmitted systematically and universally in formal teaching, it can then be used as a numbering system, either by giving the letters numerical values as in the Greek and in many Semitic alphabets, or by using the letters as a fixed sequence in lists, as we do with the Roman alphabet.

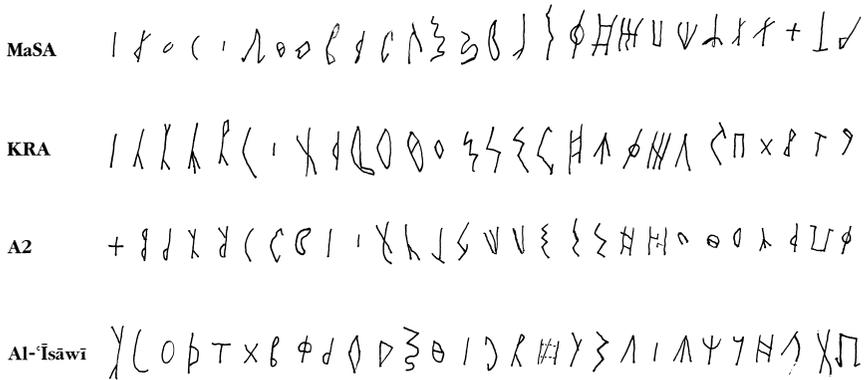
We know, from ethnographic observations, that the Tifinagh are spread via children's games,¹¹³ and we suspect that Safaitic was spread in an equally informal way. There is no conventional letter order for either script, a pretty clear indication of the lack of formal teaching. The Tuareg are proud of this and say 'all the signs are equal' and so one can say them in whatever order one wishes,¹¹⁴ and, as mentioned above, children tend to pick them up piecemeal in games. However, in two areas, a mnemonic technique for remembering them has been reported. This consists of a formula which contains almost all the letters, those which are missing being learnt later one by one. In Ahaggar the formula is: 'This is I, Fadimata daughter of Ourenis who say: Fadimata, one doesn't touch her hips; her dowry is sixteen horses'. The first phrase contains the formula which normally marks the beginning of a text in the Tifinagh *awa nāk ...*, 'It is I, N', which also plays the vital role of indicating the direction of the writing.¹¹⁵ The mnemonic technique here is similar to that of the phrase 'the quick brown fox jumped over the lazy dog', traditionally used to display all the letters of the English alphabet.

¹¹² Of course, this does not mean that it never happened, simply that, if it did, such messages have not survived, presumably because they were written on perishable surfaces rather than rocks. We also have no references, either in the graffiti or in external sources, to the script being used in this way.

¹¹³ See above and Aghali-Zakara and Drouin 1973–79: 280–84.

¹¹⁴ Aghali-Zakara and Drouin 1973–79: 251. There is apparently one exception, in the Dinnig, where the order is said to be fixed, according to a legendary tradition, though Aghali-Zakara and Drouin suspect it is based on a number of different mnemonic techniques (1973–79: 252).

¹¹⁵ Aghali-Zakara and Drouin 1973–79: 282–83; Aghali-Zakara 1999: 109–10; and, on the opening formula, see Aghali-Zakara and Drouin 1973–79: 261–62 and Drouin 2003.



cf. KSA
[Hismaic]

MaSA:

l s ' b n z w g t d r k s² f m h g̃ q d t s¹ h d ' h t z y

KRA:

l h ' d s̃ b n h̃ d m g w ' s² g̃ f r d h q t s¹ k z t t z y

A2:

t t y ' s̃ b r m l n h̃ h z k h s¹ s² g̃ f d t ' w g d d z q

Al-'Īsāwī:

' b {g} d z t t q y m {s} s² w l r s̃ t h f s¹ n h̃ d g̃ d k h z

KSA [Hismaic]

l b g d h w z h t̃ . y k m n s r ' f q s¹ t g̃ d d t ' z s² h̃

Fig. 4. Four different ways of setting out the letters of the Safaitic alphabet according to the shapes of the letters. At the bottom, the Hismaic alphabet in an attempt at the abjad order.¹¹⁶

We now have four examples of the Safaitic alphabet written out,¹¹⁷ in each of which the letters have been arranged in a different order, none of them a conventional *abjad* or *hlhm* (Fig. 4).¹¹⁸ In each, the letters have been grouped according to the similarities which the particular writer perceived in

¹¹⁶ In order to maintain comparable sizes, the letters have been copied free-hand from photographs of the inscriptions and so give an impression, rather than a precise reproduction, of their exact shapes (for which see the published photographs). The stances of the letters have been reproduced as they appear in the original, allowing for the fact that only A2 was carved in a straight line. The position on the stone of the last three letters of KRA means that they could equally well be read in the order *y z t* or *t z y* (as in King 1990a: 62, 76) or *t z y* (as here).

¹¹⁷ These are MaSA (in Macdonald 1986: 101–5); KRA (in King 1990a: 62–63, 74, 76); A2 (in Macdonald, Al Mu'azzin and Nehmé 1996: 439–43); 'al-'Īsāwī' (one found by the Safaitic Epigraphic Survey Programme at al-'Īsāwī the publication of which is in preparation).

¹¹⁸ The *abjad* is (the Arabic form of) the name of the traditional order of the Phoenico-Aramaic alphabet, from which we get our 'ABC'. For a discussion of the Ancient North Arabian letter-orders see Macdonald 1986 (supplemented by 1992) and, more recently, Macdonald, Al Mu'azzin and Nehmé 1996: 439–43. The *hlhm* is the traditional order of the 'Arabian' or 'South Semitic' alphabet, now known from several examples in the Ancient South Arabian script, and traces of which are

their shapes.¹¹⁹ It is interesting that, of these four, two begin with the letter *l*, the introductory particle (the *lām auctoris*) which marks the beginning of 99% of all Safaitic inscriptions, with the letters *b-n* (which spell *bn* ‘son of’ and form the commonest combination of letters in these texts) following shortly after, i.e. in imitation of a graffito. The *b* is usually open in the direction the text is running and, like the initial identifying formula in texts in the Tifinagh, serves to indicate the direction of the inscription.¹²⁰

By contrast, the only known Ancient North Arabian alphabetic letter order in a script habitually used by a settled, literate society, follows the *hlhm* order.¹²¹ There is a very interesting example of a hybrid letter order in the Hismaic script, the errors and anomalies in which suggest that it was a joint effort between someone familiar with the *abjad* letter order but not the script and someone who knew the script but not the letter order. This begins with *l*, instead of *ʿ*, and then continues *b-g-d-h-w-z* etc.¹²² Similarly, among the Tuareg, we find that when a person literate in French or Arabic lists the Tifinagh letters, he generally follows the conventional order of the foreign alphabet in which he is literate, with modifications for letters which do not correspond (Aghali-Zakara and Drouin 1973–79: 252). The Hismaic *abjad* provides a close parallel to this.¹²³

A lack of formal teaching would suggest that there were also no conventional or historical spellings and that the authors of these texts wrote phonetically, as they spoke (see section II, above). This is certainly the case with texts in the Tifinagh characters which reflect the different Berber dialects of their authors (Aghali-Zakara and Drouin 1973–79: 253–55). It is also noticeable in a more subtle way in what Aghali Zakara and Drouin call ‘bi-

visible in the traditional order of the Ethiopic syllabary, or vocalized alphabet. See Ryckmans J. 1988; 1992: 316–19, and, for an excellent summary description, see Robin 1996: 1208–11.

¹¹⁹ This is less true of the alphabet from al-ʿĪsāwī, which interestingly begins *ʿ-b-ʿgʿ-d*, possibly reflecting a memory of contact with the *abjad* order, if the third letter is indeed *g* not *ʿ*. If this was the case, the memory was apparently very faint since after *d*, there are no further sequences from the conventional order.

¹²⁰ Occasionally the *b* is turned at 90° in a decorative form of the script, and very rarely at 180° at the whim of the writer, and so does not perform this function.

¹²¹ This is in the Dadanitic script (formerly called Lihyanite, see Macdonald 2000: 33). It was first identified in the inscription JSLih 158 by W.W. Müller (1980: 70) and was discussed in more detail in Macdonald 1986: 112–15 (where fig. 5 has been printed upside-down!).

¹²² KSA from Khirbat al-Samrāʾ in north-eastern Jordan. It was first published in Knauf 1985, see the discussion in Macdonald 1986: 107–12, and 1992.

¹²³ Thus, the letter *ṣ* is in the place of *samekh* (see Macdonald 1992 for an explanation of this) and, very curiously, this is followed by *r*. *Sʿ* is in the place of *šm*, as is to be expected (see Macdonald 1986: 110; 2000: 45–6, Fig. 5; 2004: 498–500). At the end of the *abjad*, after *t*, come the letters *ḡ d d t ʿ z s² h* which had been omitted, either by accident (in the case of *ʿ*) or because there was no traditional place for them in the *abjad* (see Macdonald 1986: 111–12, and 1992).

consonnes’, or what might perhaps be better termed ‘monograms’.¹²⁴ These are not ligatures in the typographical sense, but are representations of two or three consonants by a single sign which is distinct from each of the signs of which it is composed. Only certain consonant clusters are susceptible to being represented in this way and only when the consonants represented are in a *phonetic juxtaposition* rather than simply adjacent in the *scriptio continua* which is normally employed in these texts (see below).¹²⁵ Thus, only consonants which, in speech, are not separated by a vowel, are treated in this way, and, given this condition, a monogram can cross morphemic boundaries, for instance joining the last and first consonants of two successive pronominal suffixes on a verb, see the examples in Aghali-Zakara and Drouin 1973–79: 264–67. This shows very clearly the primacy of speech in the use of writing in this society. To repeat Galand’s telling description ‘le berbère offre l’étrange particularité d’être une langue orale pourvue d’une écriture’ (1989: 344), a statement which would hold equally well for the languages of the nomads who wrote the Ancient North Arabian inscriptions.

That those who wrote the Safaitic inscriptions wrote ‘phonetically’ is neatly illustrated by a text recently discovered in southern Syria¹²⁶ in which the author betrays a very different accent from that of the others who wrote these graffiti. He spells the word which elsewhere in Safaitic universally occurs as *q-y-z* (meaning ‘he spent the dry season’) as *ʔ-y-d* (i.e. with *hamza* for /q/ and *ḍād* for /z/) which is how it would be pronounced today in Damascus, Beirut or Jerusalem. As far as I know, this spelling is by far the

¹²⁴ Aghali-Zakara and Drouin 1973–79: 255–59, 262–63, 264–67. Galand understandably prefers the term ‘ligature’ (« caractère représentant plusieurs lettres en un seul signe graphique ») ‘pour prévenir la confusion, trop fréquente, entre la terminologie de l’écriture et celle de la phonétique’ (2002a: 8 and note 5). Unfortunately, however, in English typography the term ‘ligature’ is used of signs such as æ, œ, fi and fl which are composed simply by removing the space between the two letters, whereas the Tifinagh ‘monogram’ is a new sign, sometimes consisting of a simple combination of the two characters it represents (e.g. a circle [= /r/] and three dots [= /k/] become three dots within a circle [= /rk/]), but often being formed by the removal of an element from one of the signs (e.g. /j/ is represented by two vertical lines crossed by two horizontals, /nj/ is represented by two verticals crossed by *one* horizontal), or by turning it at 90° (e.g. /b/ is represented by a circle crossed by a vertical line, /mb/ is represented by a circle crossed by a horizontal line). For other examples, see Aghali-Zakara and Drouin 1973–79: 258–59, 262–63. I have therefore, *faute de mieux*, used the not entirely satisfactory term ‘monogram’ for these composite signs.

¹²⁵ Aghali-Zakara and Drouin 1973–79: 256. ‘il s’agit, pour les Kel Tamasheq [the Touraeg name for themselves], et dans l’utilisation de ces signes, de “lier le sens” et d’ “associer des sons”’. Galand makes the interesting observation that ‘on ne connaît aucun exemple de ligature [i.e. monogram] associant deux consonnes identiques, ce qui tendrait à montrer que les consonnes tendues ne sont pas senties comme des géménées’ (1996). See further Galand 1997.

¹²⁶ The inscription was found by the Safaitic Epigraphic Survey Programme in 2000 and will be published in the project’s final report which is in preparation. For another very interesting case, this time in a Hismaic inscription from southern Jordan, see Macdonald in press c.

earliest evidence we have for this pronunciation, which is found in some early Arabic papyri and is nowadays typical of urban Arabic dialects.¹²⁷ Another example of writing ‘as one speaks’ can be seen in the frequent, but unsystematic, assimilation of [n] in the Safaitic inscriptions, a feature also common in texts written by English-speaking children who learn to write before they can read.¹²⁸

In Safaitic, there is no set direction of writing and texts can run left-to-right, right-to-left, boustrophedon, up, down, round and round in circles or in a coil, etc. The same is true for the Tifinagh, though in practice there are not as many variations. The Tuareg say that the deciding factor is the comfort of the writer, and it seems likely that the same was true for those who carved the Safaitic inscriptions. There are, of course, differences. Most Safaitic inscriptions are carved on basalt rocks or boulders with irregular and twisted shapes. A text could therefore be carved in whatever direction was most convenient to the author but it tended to be continuous, either boustrophedon or meandering over one or more faces of the rock according to the whim of the writer and the space available.¹²⁹ The Tuareg most often sit or recline on the ground and write with their fingers in the sand, though they also carve on rocks.¹³⁰ Since the determining factor is the writer’s comfort, the distance a text can extend from his body is limited by the reach of his arm while in the position in which he is sitting or reclining. Traditionally, texts have been written from bottom-to-top either horizontally on the ground (i.e. going away from the writer’s body) or (in the past) on a vertical rock-face. Because the writing is a slow process, by the time his arm has reached its furthest extent it is tired and so boustrophedon, which would require it to remain out-

¹²⁷ In his collection of early Arabic dialect features preserved in the works of the Arab grammarians and lexicographers, Kofler notes that the evidence for /q/ > /p/ in the early Arabic dialects is ‘nur sehr dürftig und dazu anonym’ (1940: 115–16). I cannot find any reference to this feature in Hopkins 1984 or Blau 1966–67. The only reference to /z/ > /d/ which I can find in Kofler’s collection is the dialectal pronunciation of the word *baḡr* as *baḡr* which is mentioned in passing in *Lisān al-‘Arab* (Kofler 1940: 95). Hopkins notes that the earliest certain occurrence of this feature in the early Arabic papyri dates from 101 A.H (1984: 38–40 § 39) and Blau gives some slightly later examples from Christian texts in southern Palestine (1966–67: 113–14). For these features in the modern dialects see Holes 1995: 56–59.

¹²⁸ See note 7.

¹²⁹ Compare the effects of the shape of the surface and the space available on the lay-out of texts carved on rocks in the Tifinagh (Drouin 1998). It is interesting to note that Jewish children in mediaeval Cairo seem to have learnt to read Hebrew from any angle. Since ‘books were expensive and not always available for elementary teaching ... several children sat around a single book, and this effectively meant that they learnt to read it also sideways and even upside-down. This practice is well attested in Geniza fragments: in a letter by the dayyan R. Yehiel ben R. Elyakim, for example, children are said to learn to read the book from its four sides’ (Olszowy-Schlanger 2003: 56).

¹³⁰ Coninck and Galand report that the Tifinagh are used for ‘les graffiti amoureux que l’on trouve sur les parois des rochers ou les murs de terre des maisons de Tombouctou’ (1957–60: 79).

stretched, is rarely used. Instead, the author brings his arm back close to the body and begins another line parallel with the first either to its right or its left.¹³¹ This is the traditional way of writing the Tifinagh, as used by old people and women (who are generally not in contact with other scripts). However, it can also be written horizontally, from left to right by those who have been educated in French, and from right to left by those educated in Arabic.¹³² Texts in the Tifinagh are normally only written in a circle or in spirals, in games.¹³³

This lack of any fixed direction is another feature of a script used primarily for carving informal texts on stone or writing them in the sand, since habitual writing in ink tends to be the impetus to unidirectional writing, as a means of saving space and to avoid smudging what has just been written.¹³⁴ Neither the Safaitic script nor the Tifinagh developed ligatures between letters, since ‘joined-up’ writing is only helpful to someone habitually writing in ink, while for those who only carve on stone, or write slowly with their fingers in the sand, joining letters just makes more work.

Safaitic is written continuously without spaces or dividers between words. Word-division is a feature which provides clarity for the reader.¹³⁵ But if a script is used only for self-expression rather than for communication, for passing the time by carving one’s thoughts on a rock among millions of

¹³¹ Aghali-Zakara and Drouin 1973–79: 259–60. However, for some examples of graffiti in horizontal boustrophedon see Drouin 1996: 2.

¹³² Some Libyco-Berber inscriptions were also written horizontally, perhaps under the influence of Latin or Punic (see, for instance, Galand 2000a: 5).

¹³³ Aghali-Zakara and Drouin 1973–79: 260–61. However, see line 4 of Lettre 14(a) in Galand 1999: 176ff., which begins in the middle of the page running left-to-right, then, when it nears the edge of the page, runs downwards before turning back to run right-to-left. This lay-out is mirrored in Lettre 17.

¹³⁴ It is interesting that, of the thirty-three extant messages written in the Tifinagh which Père de Foucauld received from members of the Tuareg Kel-Ahaggar, twenty are set out in parallel lines from right-to-left, almost as if the act of writing with ink encouraged this arrangement. On the other hand, it is clear that this lay-out was by no means habitual with these authors, since characters occasionally spill over the ends of lines and run boustrophedon or vertically (top-to-bottom and bottom-to-top), rather than being placed at the beginning of the next line (e.g. Lettres 12/10, 13/11, 16/2, etc.), though it is possible that this was done to avoid breaking an aural or semantic unit made up of words and particles (?). Moreover, the same authors who used this lay-out also wrote whole messages in vertical or horizontal boustrophedon or other arrangements. Compare, for instance, Lettres 1(a), 2, 3(a) and 4 (all written right to left in parallel lines) by Chikat ag Mokhammed, with Lettre 6 by the same person, which is written boustrophedon. See also the messages by Akhamouk agg Ihema, of which Lettre 10b is in horizontal boustrophedon, 15 is in vertical boustrophedon, and 16 is in parallel lines from right to left (apart from the last four characters of line 2).

¹³⁵ On the origins of word division in the Hebrew and Aramaic scripts see Millard 1970; and 1982: 147. Word division was a feature of the South Arabian formal (monumental) and informal (minuscule) scripts from earliest times and of the Ancient North Arabian scripts used by settled peoples (Dadanitic and possibly Taymantic). See note 98 above.

others in the desert, with no expectation that anyone will read it, the need for clarity, and hence word-division, does not arise.¹³⁶ Traditionally, word-dividers were also not used when writing in the Tifinagh,¹³⁷ possibly for similar reasons, though *scriptio continua* is also useful in writing games where the object is to hide the meaning from the reader, rather than to clarify it. The Safaitic alphabet is also entirely consonantal and does not show strengthened or doubled consonants and for the most part this is also true of the Tifinagh. Like word division, *matres lectionis* assist the reader more than the writer and so if a script is used more or less entirely for self-expression rather than for communication, there is little impetus to develop them. After all, the writer knows what he means and without *matres lectionis* he needs to carve fewer characters.

In view of all these features, I would suggest that these are scripts and orthographies whose development has been conditioned by the limited and very particular circumstances in which they were used, and this applies equally to the Himaic, Thamudic B, C and D and Southern Thamudic alphabets, none of which seem to have been the scripts of literate societies. In this, they are in stark contrast with Dadanitic which makes a systematic, if minimal, use of *matres lectionis*.¹³⁸

In modern times, attempts have been made to print Christian religious texts and, in Niger, government publications, in the Tifinagh characters (Fig. 5). But it is significant that once the script began to be used for 'literate' purposes, its shortcomings were widely felt. Various schemes for showing vowels were developed,¹³⁹ the direction of writing was stabilized, letter forms were stan-

¹³⁶ Of course, in other circumstances, there are other reasons for employing *scriptio continua*, as in Classical Greek inscriptions and manuscripts. Some of the earliest Greek inscriptions employ word-dividers and punctuation, but these were later abandoned both in handwriting and in inscriptions (Thomas 1992: 87–88). Ann Hanson, discussing scribes writing Greek in Roman Egypt, gives a description of the process, which would apply to most Greek documentary papyri of the period: 'professional scribes that worked in the government bureaux produced a cursive writing that flowed swiftly and smoothly over the papyrus; individual letters seldom received full articulation, and the scribe's nubbed pen remained in contact with the surface of the papyrus, producing a chain of letters joined together in ligature The scribe continued to write on until a shortage of ink impelled him to lift his pen and refill' (1991: 173). Thus, the use of *scriptio continua* would not, by itself, be an argument that the Safaitic script or the Tifinagh were used more for writing than reading. However, taken with the content of the texts, with the features of the scripts already mentioned, and with what we know of the uses of the Tifinagh, it fits very well into the working hypothesis I have presented.

¹³⁷ Nowadays, young people who have learnt Arabic and/or French at school tend to import the concept of word-division from these scripts when they write the Tifinagh (Aghali-Zakara and Drouin: 1973–79: 263).

¹³⁸ See Drewes 1985 and Macdonald 2004: 495. On the possible use of *matres lectionis* in Sabaic see Robin 2001: 570–77.

¹³⁹ See, for instance, Coninck and Galand 1957–60 on the use by the Kel Antessar (an Arabized tribe in the region of Timbuktu, Mali) of the Arabic signs *fathah*, *kasrah*, and *damma*

Ŷ+EI ... +||CE O EO! +||:C

aytedən akh təlmaad as dasən-təlaakkəm.

EJLO +:O:Et + E+|||O+ +I CE:

dəffər təkərakif ta əd-təfəllist ten əmmədu

'ICE :O E::|| +CE+ I+ :O IC:

igməd, wər-d-iqqel təmidit net har fəw.



Fig. 5. A page from a brochure issued about 1970 by the Service de l'alphabétisation et Education des adultes, Niger. Text in modified Tifinagh characters with a transcription into Roman letters. (Reproduced from Galand 1989: 339, by kind permission of Professor L. Galand and the publishers Helmut Buske Verlag, Hamburg).

dardized, and even a 'cursive version' was developed (see Aghali-Zakara 1993: 147).

It is important to remember that the people using the Safaitic alphabet and the Tifinagh characters, even if fully literate in these scripts (and sometimes others), lived in non-literate societies in which, as far as we can see, literacy had taken over none of the functions of memory and oral communication. In the case of Safaitic, in one or two respects, writing was used to enhance existing customs, such as the practice of burying beloved or respected individuals under large cairns to which each of the mourners brought a stone.

on the Tifinagh characters to show both long and short vowels, as well as *sukūn* and *šaddah*. compare the uses of the Vai script in urban contexts, described in note 26.

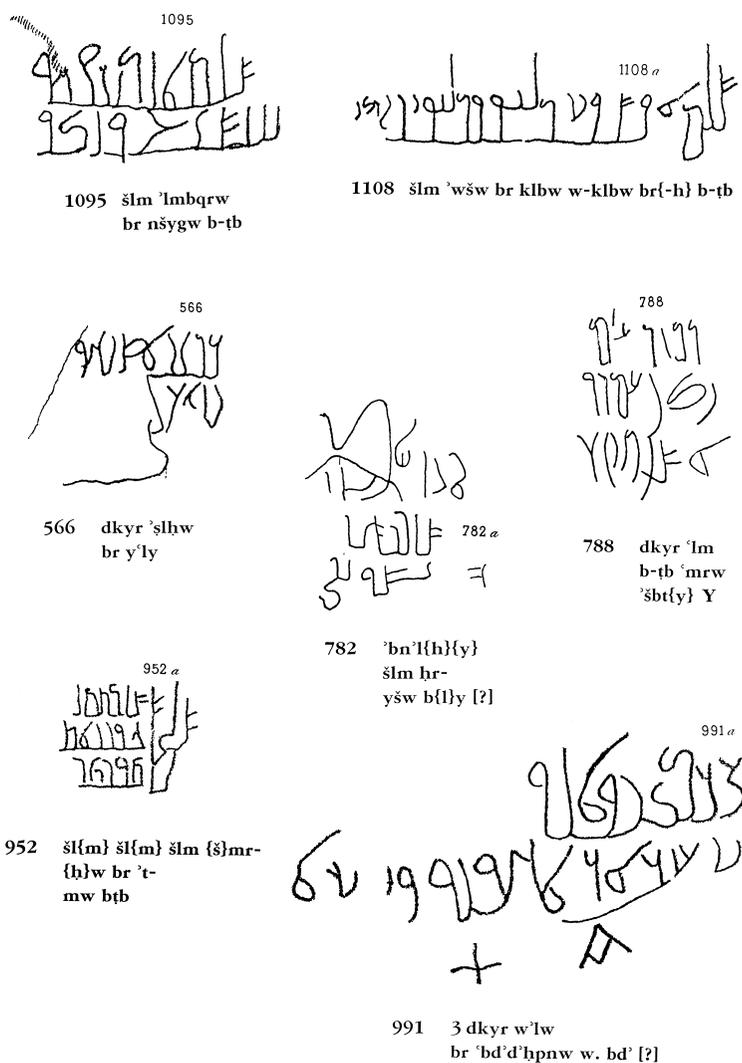


Fig. 6. Examples of Nabataean graffiti from Sinai (from CIS ii). See note 142.

With the advent of literacy, some mourners inscribed the stones they placed on the cairn, giving their name and the name of the deceased and sometimes their relationship to him or her, but this is an enhancement of, not a great departure from, previous practice.¹⁴⁰

¹⁴⁰ See Harding 1953: 8; and the discussion in Macdonald in press b. See also Lancaster W. and Lancaster F. 1993 for an interesting study of modern burials of a similar kind, though with possibly significant differences.

I would suggest that another example of writing used for play can be found in the 'Nabataean' graffiti in Sinai. These provide an interesting example of the use of an alphabet and orthography which had developed as the script of a literate society, being used predominantly by members of what was probably an oral one.¹⁴¹ Nabataean is a ligatured script and, as I have said, this is more of a nuisance than an advantage to those who write only on stone. So, one might have expected that the population of Sinai would have adapted it by dropping the ligatures and writing each letter separately. Some did, but others went to the opposite extreme and, if anything, increased the number of ligatures and played with the letter-shapes and the joins between them with an extraordinary exuberance (Fig. 6).¹⁴² This playful attitude to writing is of course an occasional feature of graffiti everywhere. There are examples of mirror-writing,¹⁴³ names made into drawings,¹⁴⁴ etc.¹⁴⁵ An interesting example can be seen in the Safaitic text from Jordan on Fig. 7 where the letter *'ayn* (literally 'eye') has been given a pupil and the letter *yôd* (literally 'forearm', 'hand') has been given fingers.¹⁴⁶ This suggests that, despite there being no evidence for formal teaching of writing, this author at least was aware of the traditional names of the letters. Some letters have different names in the Phoenico-Aramaic and the Arabian alphabetic

¹⁴¹ I say 'predominantly' because while most of the Nabataean texts in Sinai seem to have been carved by local herdsman and others, a significant number were almost certainly the work of pilgrims and travellers who are likely to have had quite different attitudes to writing.

¹⁴² Thus, for instance, on Fig. 6 in nos 1095, 1108 and lines 2 and 3 of 952 a line has been drawn along the bases of the letters regardless of whether or not they 'should' be joined. In 1108, certain letters contrast with the rest by being joined at their tops. In 566, the *l* of the last name (*'ly*) is joined at its top to the line linking the first four letters in the line above, and at its base to the final *y*, producing a sort of reversed 'Z' (or perhaps an enormous final *y*?). In 782 the joins are used to form bizarre patterns, whereas in 788 they have been all but eliminated. The *l* of the second *šlm* in 952 is simply an extension of the stem of the *š* and it shares its *m* with the first *šlm*, etc.

¹⁴³ See, at random, Euting 1885: 10, fig. 6 'Kufi 1' (Arabic) on which now see al-Moraekhi 2002: 123–25, and the excellent photograph in Deputy Ministry of Antiquities and Museums of Saudi Arabia 2003, vii: 115. For another such Arabic inscription, see Moraekhi 2002: 125–128. A Greek example can be seen below CIS ii 969 (CIS ii.1.3.Pl. LXXVII).

¹⁴⁴ At random, CIL.IV, nos 4742 and 4755 (Latin from Pompeii, on which see Franklin 1991: 94), Moritz 1908: 407, no. 4, where the *s^l* of the name *B^{s^l}* has been turned into a drawing of a man in the Thamudic B inscription *l b^{s^l}* *h- rgl* 'the man is by B^{s^l'.}

¹⁴⁵ Sometimes 'playing' with letters could apparently be for serious purposes as in Greek curse tablets of the fifth and fourth centuries BC (Thomas 1992: 80).

¹⁴⁶ This text (Wādī Irenbeh 1) reads *l s^lk^c bn 's²ym* 'By S^lk^c son of 's²ym'. The inscription along the right edge of the stone (Wādī Irenbeh 2) reads *l ḥrkn bn s²kr* 'By Ḥrkn son of S²kr' and the third text (Wādī Irenbeh 3) reads *l yf^c bn rbn* 'By Yth^c son of Rbn'. All the names are attested except the first in text 1. Cf. Arabic *sāki^c* 'aimless wanderer, sleep-walker, intruder, stranger'.



Fig. 7. A Safaitic inscription from Wādī Irenbeh in north-eastern Jordan.

traditions, but *ʿayn* is the same in both and *y* is called *yôd* ('forearm', 'hand') in the former and *yaman* ('right hand')¹⁴⁷ in the latter.¹⁴⁸

The Safaitic graffiti often contain considerably more information than those of other literate nomads such as the Tuareg, or those who wrote the Hismaic graffiti in southern Jordan and northern Saudi Arabia, or the Thamudic B, C and D and Southern Thamudic graffiti in various parts of the Peninsula. Although the majority of Safaitic texts consist of the author's name and part of his genealogy, a large minority of authors go on to say what they were doing or feeling and to date their texts by events of importance in the desert or in the wider world, about both of which they were generally well-informed. A large number end with prayers, mostly for security, often for rain or a change of circumstances, and very often invoking curses on those who vandalize the inscription and blessings on those who leave it alone. It is clear that this was a necessary precaution, since vandalising other people's inscriptions (often in subtle and mischievous ways) seems to have been a pastime second only in popularity to writing one's own!

It is also important to remember that these literate nomads almost certainly coexisted with other nomads and with sedentaries who either spoke

¹⁴⁷ If one assumes the 'hand' in the inscription is facing palm outwards, it would be a *right* hand. But, of course, there is no way of knowing this.

¹⁴⁸ On the letter names in the Arabian ('South Semitic') alphabetic tradition see Ryckmans J. 1988: 225–27. There appear to be no traditional names for the Tifinagh letters and in the Hoggar 'the letters have names which are formed by prefixing *yā* to the represented consonants, e.g. *yāb* "letter b"' (van den Boogert 2000: 476) whereas in other regions the names are formed with pre-fixed and suffixed vowels e.g. *amma* (= m) (Aghali-Zakara and Drouin 1973–79: 249).

unwritten languages, such as Arabic,¹⁴⁹ or who spoke, but were illiterate in, such written languages as Aramaic, Greek or Sabaic.

Many of those who speak unwritten languages live in non-literate societies and so exist entirely without writing. But this is not always the case. Although their immediate community may remain non-literate, it may exist within a larger literate society, as is the case today in Oman and Yemen with speakers of the Modern South Arabian languages (Jibbālī, Mahri, etc.). If a speaker of an unwritten language needs to write something down he has two choices. He can write, or commission, a text in a written language. Or, alternatively, he can try to write down what he wants to say in his spoken tongue using a script normally associated with another language. Thus, if a speaker of, say, Jibbālī in Dhofar wants to put something in writing, he would either have to write (or have something written for him) in Arabic, or—if he was able to—he could write his spoken language in Arabic letters, as has occasionally been done. Normally, it would only be worth doing the second for personal satisfaction, or to make a political point, or if he was in a society where relatively large numbers of people both understood his spoken language and could read the script. This is how Old Arabic¹⁵⁰ came to be written occasionally in the Sabaic, Dadanitic, Nabataean and other scripts. It was probably also how the Nabataean alphabet, as it came to be used more and more to transcribe spoken Arabic, gradually came to be thought of as the ‘Arabic script’.¹⁵¹

An example of how easy it is for this to happen occurred at the site of Lachish in Palestine. When the Lachish letters were discovered during the excavations there in 1935 (see Torczyner *et al.* 1938), Gerald Lankester Harding, as a joke, taught the ancient Hebrew script of the letters to his Bedouin workmen, who were completely illiterate in Arabic. They picked it up immediately and began to write their spoken Arabic dialect in the ancient Hebrew script. Of course, they were writing only simple notes to Gerald Harding and to each other and were doing so just for fun, but this story illustrates how easy it is for someone with a well-trained memory to pick up not merely the letter-forms, but the concept of dividing units of sense (that is words) into sounds, and expressing each of these by a particular sign. Indeed, in this case the process was even more complicated since they were having to express the approximately 28 consonants of their spoken Arabic dialect by the mere 22 letters of the Hebrew alphabet. So they had to learn which sounds to omit and which letters had to do duty for more than one sound. Yet they

¹⁴⁹ See below.

¹⁵⁰ That is Arabic from the pre-Islamic period as it has been preserved independently of the Arab grammarians and lexicographers of the early Islamic period. For more details see Macdonald 2000: 36–37, 48–54, 61; and in press d.

¹⁵¹ See Macdonald 2000: 57–60. See also, Kropp 1997–98: 93 on the general point of spoken languages written in ‘borrowed’ scripts.

had no problem in picking up both the principle and the practice, just as the ancient nomads learnt the different orthographic rules for writing Greek and Safaitic.

Could this be a clue to a famous incident in the early history of the Nabataeans, when they were still nomadic? As is well known, in 312 BC Antigonos the One-eyed sent an army to pillage the Nabataeans (Diodorus Siculus: 19.94.1–19.100.3). The latter, after giving chase, punished his army ‘manfully’ (as Diodorus puts it), recovered the booty and *wrote him a letter*. This in itself would be an unusual thing for nomads to do at any time, but the story is made more curious by Diodorus’ description of the letter as being ‘in Syrian [i.e. Aramaic] characters’.¹⁵² There is not enough evidence to be sure what language the Nabataeans spoke at this time, but if they had written the letter in the Aramaic language, one might have expected Diodorus to have said so, rather than specifying that it was in Aramaic *letters*. It therefore seems to me possible that if the Nabataeans at this time spoke Arabic, for instance, they might have dictated the text of the letter in that language and the scribe could have written it in the Aramaic alphabet, there being, of course, no Arabic script at the time.

If the story of the letter has any historical basis, one has also to think of the practical implications. The letter would have had to be delivered to Antigonos by the most august ambassador the Nabataean nomads could find. He would almost certainly have recited the contents of the letter in his own language, say Arabic or Aramaic—or possibly using Aramaic as a vehicular language—and an interpreter would have translated it into Greek for Antigonos. In none of this would the written text of the letter have been necessary, since the ambassador would have had to have had his piece by heart. Moreover, if the letter was not in the Aramaic language but in another tongue set down in Aramaic letters, it would probably have been more or less incomprehensible to Antigonos’ chancellery, even if it still contained Aramaicophone clerks. The letter, therefore, would simply have been a theatrical prop, to add dignity to the Nabataeans’ embassy. If so, it would be a rather unexpected, but by no means unique, use of literacy by members of a non-literate society in contact with a literate one. Of course, we are unlikely ever to know whether the letter actually existed or whether Diodorus, or his source, simply invented the story, so this must remain pure speculation.

I would like to end by proposing hypotheses on the origins of three ancient documents, which, I would suggest, can be better understood in the light of the discussion in this paper, and each of which may illustrate a different aspect of the interplay of literate and non-literate communities. I emphasize that these are speculations—alas, the evidence is too fragmentary

¹⁵² ἐπιστολὴν γράψαντες Συρίοις γράμμασι (Diodorus 19.96.1).

¹⁵³ See Macdonald 2000: 36–37, 48–54, and in press d, Robin 2001: 564–65, and on the Jabal SAYS graffito Robin and Gorea 2002.

for anything else—but, as long as this is recognized, these hypotheses may, I hope, be of some interest.

Arabic, apparently, remained a mainly spoken language until the sixth century AD, when the first documents in the ‘Arabic script’ appear.¹⁵³ Thus, before that time, many Arabic-speakers would have been in the position of Jibbālī or Mahrī speakers today: that is inhabiting an ‘oral enclave’ within a society which was literate in a different language. I have described elsewhere some of the different ways in which individuals coped with this interface between orality and literacy and the hybrid texts which resulted (Macdonald 2000: 48–60).

There is no doubt that the settled Nabataean kingdom was a literate society, in the sense of my initial definition. Yet I think it may be possible to identify an oral enclave at its very heart. In the fourth century AD, Epiphanius reports that the Nabataeans sang hymns to their deities in Arabic.¹⁵⁴ Since Arabic was still at that time an unwritten language, this suggests that the liturgies, possibly of great antiquity, would have been passed by word of mouth from one generation of priests to the next and that habitual worshippers may have had at least parts of them off by heart. In the Negev, within sight of the cult centre of the deified Nabataean king Obodas, lies a rock on which a six-line inscription has been carved in the Nabataean alphabet.¹⁵⁵ The author, a certain Garmallahi son of Taymallahi, records that he dedicated a statue to Obodas the god and he follows this statement with two lines of Arabic, written in ‘Aramaic letters’, which look as if they might come from the liturgy in praise of Obodas. If this is so, and it can be no more than an hypothesis, Garmallahi may have wanted to quote what was for him a particularly appropriate section of the liturgy and so transcribed this passage into Nabataean letters. Interestingly, the inscription opens with blessings on whoever reads (and therefore inevitably recites)¹⁵⁶ the text.

¹⁵⁴ Ἀραβικῆ διαλέκτῳ ἄξιμνοῦσι. Epiphanius of Eleutheropolis [Beit Jibrīn], Bishop of Salamis (AD 315–403), *Panarion* 51.22.11.

¹⁵⁵ See Negev, Naveh and Shaked 1986. The text has been treated by a considerable number of authors. For one of the most recent discussions and an extensive bibliography see Lacerenza 2000. Elsewhere, I have compared this text with the inscription at Qāniya in Yemen which is in the Sabaic script but apparently in the (normally unwritten) Himyaritic language (Macdonald 1998: 181). For a careful and extremely interesting assessment of current thinking on this text see Robin 2001: 516–22, and for a summary of recent work on the Himyaritic language *ibid.* 522–28.

¹⁵⁶ The verb used is *qr'*. Unfortunately, direct evidence from the ancient Near East for reading silently or aloud seems to be extremely thin, but the dual meanings in East and many Central Semitic languages of the verb *qr'* (i.e. ‘to read’ and ‘to say something out loud [recite, call, shout, invoke, summon, name]’) suggest that reading aloud may have been the norm. See, for instance, Koehler and Baumgartner 1994–2000, iii: 1128–31 for a convenient brief summary of the different meanings in different languages. Professor Galand has kindly informed me that in Berber, particularly in the dialects used in southern Morocco, ‘le même verbe *gr* ... est employé à la fois pour “appeler”, “crier” et “lire”. Il s’agit, me semble-t-il d’un héritage commun plutôt que

For it should be remembered that silent reading was a relatively rare accomplishment before the late Middle Ages, and thus the distinction between reading and recitation was far less clear-cut than it is today.¹⁵⁷ This is exemplified in the Arabic verb *qaraʿa* (and its Aramaic cognate used in this text) which, from pre-Islamic times to the present today has meant both ‘to read’ and ‘to recite’. The habit of reading aloud had profound influence on the form and nature of writing in public places and was one of the principal ways in which illiterates in a literate society received information displayed in writing. It needed only one person actually to read the inscription and the crowd around him would automatically receive its content. It has been suggested that in Archaic Greece the custom of expressing tomb-inscriptions in the first person may have developed so that when a passer-by read the inscription he would speak the name of the deceased.¹⁵⁸ One such tomb-inscription even thanks the passer-by for ‘lending his voice’ in this way (Thomas 1992: 64). This is paralleled by a Himaic inscription from central Jordan which invokes a blessing on a particular individual and ‘every true friend’ and extends this blessing to ‘anyone who reads [i.e. recites] this our inscription’, presumably because by so doing the reader will have invoked the blessing, out loud, once more.¹⁵⁹ Mediaeval Arabic graffiti containing prayers will also often extend the prayer to cover whoever reads the text, and so recites, the prayer.¹⁶⁰

d’un emprunt au sémitique *qrʿ*. Toutefois une interférence avec l’arabe n’est pas exclue, surtout au sens de “lire”’ (personal communication). Texts in the Berber language written in Arabic letters are also read aloud. Indeed, ‘les manuscrits chleuhs en écriture arabe font souvent mention d’une lecture à haute voix, souhaitée explicitement, pour son propre bénéfice spirituel, par l’auteur ou le copiste ; le maître dans la zaouia lit devant ses auditeurs. Dans les témoignages que donnent les manuscrits sur l’enseignement dans les zaouias, quand il a recours à la lecture comme base, les termes employés évoquent bien la voix, c’est-à-dire, en même temps qu’une perception visuelle pour le lecteur, une perception auditive du texte pour le lecteur comme pour les destinataires’ (Galand-Pernet 1998: 29). ‘La voix peut précéder, dans la création, ou suivre, dans la diffusion, la mise par écrit de l’oeuvre’ (ibid. 79). Svenbro argues that the Greek verbs for ‘to read’ imply ‘to read aloud’ (1993: 35–36, note 47, and chapters 3, 6 and 9). For a slightly different explanation of the purpose of reading aloud this inscription see Kropp 1997–98: 112–13.

¹⁵⁷ It is generally agreed, that in the Greek and Roman worlds (for which we have most evidence), most readers read most material aloud. As B.M.W. Knox puts it ‘ancient books were normally read aloud, but there is nothing to show that silent reading of books was anything extraordinary’ (1965: 435). Svenbro compares the approach of ancient Greek readers to the written word with our attitude to musical notation: ‘not everyone can read music in silence, and the most common way to read it is by playing it on an instrument or singing it out loud to hear what it sounds like’ (1993: 18; and see also 44–63, 160–68; and Thomas 1992: 13).

¹⁵⁸ For the psychological and anthropological complexities of this, see Svenbro 1993: *passim*.

¹⁵⁹ Mīlik 1958–59: 349, no. 6 ...w *dkrt lt N w kll ‘s²r šdq w kll mn yqry wq-n ḏ’* ... and may Lt be mindful of N and of every true friend and of everyone who reads/recites this our inscription’. Note that the final letter, read as *h* in the edition, is clearly ‘ on the photograph.

¹⁶⁰ See, at random, LPArab nos 5, 93; Abbadi 1986: 261, no. 8 (and several more unpublished from the same site), as well as the references in Hoyland 1997: 80, n. 14. This point is also made explicitly by F. Imbert (2000: 388).

There is another type of transcription, made for a very different purpose, which neatly illustrates a member of an oral society being introduced to literacy for a specific purpose. This is a fragmentary document consisting of four sides of parchment, which was found at the end of the 19th century during clearance of Qubbat al-Khaznah in the Umayyad mosque in Damascus. It was published in 1901¹⁶¹ and has apparently since disappeared. The text consists of part of the Septuagint version of Psalm 78 (LXX, 77) in a column on the left, with an Arabic translation written in Greek letters in a parallel column on the right (Fig. 8). It is important to note that the Arabic is not an idiomatic translation, but a gloss to the Greek text, that is it gives an Arabic equivalent for each Greek word, following the word order of the Greek text word by word, regardless of how this distorts the Arabic syntax.¹⁶² In the West, such glosses were usually placed above or below the original text but here they are in parallel columns, with very short lines in which the text and the gloss are almost always on the same line. It is interesting to compare this parchment with the large number of fragments of Arabic translations of the Torah, written in Hebrew letters, which have been preserved in the Cairo Geniza. Olszowy-Schlanger concludes that ‘the common structure of these manuscripts, as interlinear or parallel columns in which a Hebrew verse is followed by the Arabic one, may also indicate their use for teaching purposes’.¹⁶³ According to Violet’s description, the Greek manuscript is not a tidy one and it is important to remember this, for his published transcription (Fig. 8) gives the impression of a much neater production. Thus, on the original, only the verso of the second leaf is ruled, the separation of the columns is very irregular and is sometimes only marked by a dot. He described the script of the left column (the Greek text of the psalm) as ‘griechische Unciale’ and that of the gloss as ‘griechische Majuskel’. It is difficult to know if he intended to make a distinction or was simply describing the same type of script by two synonymous terms. While the left column (the Greek text) has accents and breathings, in the right column (the gloss) there are dots in the middle of words, as well as accents and ‘Häkchen’ which Violet was unable to interpret (1901: 386). This then is not a carefully copied manuscript of the psalm, and indeed may not be a fragment of a psalter, but something much humbler and possibly more personal.

¹⁶¹ Violet 1901. Violet announced that he hoped to publish photographs of the fragment at a later date (1901: 429, n. 1), but apparently did so only in a *Berichtigter Sonderabzug* of his article, published in the same year, which is now extremely rare. I have so far been unable to find a copy of this.

¹⁶² As noted by Violet (1901: 430) and well illustrated on cols 387–402 where he has placed his transcription of the original columns on the left page and opposite them a transliteration of the Arabic gloss into an Arabic font, with below each line the equivalent line from the traditional Arabic translation of the psalm.

¹⁶³ Olszowy-Schlanger 2003: 68. On the use of the Hebrew script to write Arabic in mediaeval Jewish communities see above at the beginning of Section III.

Job. 1^o.

<p>ΠΕΤΡΑΝ·ΚΑΙ ΕΡΡΥ- ΗΣΑΝ ΥΔΑΤΑ· ΚΑΙ ΧΕΙΜΑΡΡΟΙΚΑ ΤΕΚΛΥΣΘΗΣΑΝ· 5. ΜΗ ΚΑΙ ΑΡΤΟΝ ΔΥΝΑΤΑΙ ΔΟΥΝΑΙ Η ΑΙΤΟΙΜΑΣΑΙ ΤΡΑ- ΠΕΖΑΝ ΤΩ ΛΑΩ ΑΥΤΟΥ· 10. ΔΙΑ ΤΟΥ ΤΟΝ ΗΘΟΥ ΣΕΝΗΣ ΚΑΙ ΑΝΕ- ΒΑΛΕΤΟ· ΚΑΙ ΠΥΡΑΝ ΗΨΘΗ ΕΠΙ ΤΟΝ ΙΑΚΩΒ· 15. ΚΑΙ ΟΡΓΗ ΑΝΕΒΗ ΕΠΙ ΤΟΝ ΙΗΛ· ΟΤΙ ΟΥΚ ΕΠΙΣΤΕΥ- ΣΑΝ ΕΝ ΤΩ ΘΩ ΟΥΔ Ε ΗΛΠΙΣΑΝ Ε- ΠΙ ΤΟ ΣΤΡΙΟΝ ΑΥΤΟΥ· 20. ΚΑΙ ΕΝΕΤΕΙΛΑΤΟ· ΝΕΦΕΛΑΣ ΥΠΕΡ ΑΙΝΩΘΕΝ· ΚΑΙ ΟΥΡΑΣ ΟΥΝ * * * * * 25. ΑΝΕΩΞΕΝ· ΚΑΙ ΕΒΡΕΞΕΝ * * * * * ΤΟΙΣ ΜΑΝΝΑ ΚΡΑΓΕΙΝ· ΚΑΙ ΑΡΤΟΝ ΟΥΝ * * * * * 30. ΕΔΩΚΕΝ ΑΥΤΟΙΣ ΑΡΤΟΝ ΑΓΓΕΛΩΝ ΕΨΑΓΕΝ ΑΝΘΟΣ ΕΨΙΣΤΙΣΜΟΝ Α</p>	<p>САХР·У·ΦΑΣΕ ЛЕТ·МАЈАУ· ΟΕΛΕΥΔΙΕΥ·ΦΑ· ΔΑΤ· ΛΕΓΑΛ·ΟΑΧΟΥΒΖ ΙΕΚΑΙΡ·ΙΟΥΓ·Τ· ΕΥ·ΙΟΥ·ΥΕΙΕΙ· ΜΑΙΔΕΥ·ΛΙΧ· ΧΕΙΓ·ΒΥΓ· ΛΙΔΕΛΙΚ·ΣΕΜΙΓ· ΕΛΡΑΒ·ΦΑΑΜ ΤΩΝΑΓ· ΟΕΛΝΑΡ·ΕΧΤΕΓΑ ЛЕТ·ΦΗ·ΙΑΓ·ΝΟΥΒ ΟΑ·ΡΥΓΖ·САР· * * * * * ГАЛА·ΙΣΡΑΗΛ ΛΙΕΝ * * * * * Μ ΙΣΟΥΜΙ * * * * * ΒΙΛΛΑΥ ΟΑ·Λ * * * * * ΚΕΛΟΥ ГАЛА·ΧΑΛΑΕУ· ΟΑ·ΑΜ·ΤΑΡ·ΕΛΣΙΧΕВ ΜΙΝ·ΦΡΑΥΚ· ΟΑ·ΑΒΟ·Α·Β·ΕΛΣΕ· САМА·ΦΡΑΤΕΧ· ΟΑ·ΑΜ·ΤΑΡ·ΛΕΥ·Μ· * * * * * Α·ΛΙΑ * * * * * Υ· * * * * * Ζ·ΜΙΝ·ΕΛ * * * * * ΑΡ·ΤΑ·Υ·Μ· * * * * * Ζ·ΕΛΕΛΕ·ΙΚΕ * * * * * ΕΛ·ΙΝ·ΣΕΝ * * * * * ΒΑ·ΒΑ·ΓΑ·Θ</p>
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Die linke obere Ecke ist sehr un-
 deutlich, unten nach der Mitte ein
 ein etwas lock.

1) X zweifelt. 2) Γ oder Γ? 3) zwei-
 nächtes lock. 4) B oder E? 5) frag-
 lich. 6) M von ~~un~~ anzunehmen.

Fig. 8. B. Violet's transcription of part of the Psalmfragment, with the Septuagint text of Psalm 78 (left) and an Arabic gloss in Greek letters (right).

We know nothing about this text beyond the description given by its first editor and, as far as I know, it is unique.¹⁶⁴ Thus, any explanation of how it came to be written can be no more than an hypothesis. I would suggest that it was intended to help an Arabic speaker, with only limited Greek, to

¹⁶⁴ The nearest comparable document is perhaps a fragment of an Arabic version of part of the *Vita eremitarum* transcribed in Coptic letters (Casanova 1901). However, this is a simple transcription, of unknown date, rather than a Coptic text with Arabic gloss.

understand the Greek text of this psalm, and in the process to improve his knowledge of the language. We know that there were Arabic-speaking Christians in Syria by at least the sixth century and their presence both in the north and the south is beautifully demonstrated by two of the earliest inscriptions in the Arabic script: those at Zebed south-east of Aleppo (AD 512) and Ḥarrān in the Lejā (AD 568), both of which were on the lintels of churches. While at Zebed the Arabic inscription simply records a prayer for a number of persons—the principle foundation texts being in Greek and Syriac—the inscription is clearly part of the original epigraphic scheme and these persons must presumably have been benefactors of the church. At Ḥarrān, the Arabic is the principal text, with a Greek translation, and records—in the first person—the foundation of the martyrion by a certain Sharāḥil son of Zalmu.¹⁶⁵ This suggests that Arabic-speakers may have formed a significant element of the Christian population of Syria, at least in these areas and it is likely that some would have come forward as candidates for the priesthood. These would have needed to learn Greek in order to study the Scriptures, perform the liturgy and understand the commands of their superiors. It seems possible that this parchment with its Septuagint text and Arabic gloss was produced as an aid to such training. Unfortunately, there is no objective evidence by which it can be dated.¹⁶⁶ However, it seems to me inconceivable that this Arabic gloss would not have been written in the Arabic script, had the latter been in use in Christian circles in Syria, as we know it was from at least the early sixth century onwards.¹⁶⁷ I would therefore suggest that it dates from a

¹⁶⁵ See Robin in press for the most recent discussion and re-readings of these texts.

¹⁶⁶ Violet dates the manuscript to the end of the eighth or beginning of the ninth centuries AD on the grounds of (a) his ascription of the Greek uncial script in which it is written to this period, though he gives no reasons for dating it so late (1901: 386), and (b) his assumption that no translation into Arabic would have been necessary before the Islamic conquest in the mid-seventh century, but that, at any time much later than that, a translation would have been written in the Arabic script (1901: 429). The second assumption we now know to be invalid. Arabic was spoken in Syria centuries before the Islamic conquest and was occasionally transcribed in the Nabataean alphabet (the Namārah inscription) and from the sixth century onwards written in the Arabic script (the Zebed, Harran and Jabal Usays inscriptions). It is much more difficult to judge Violet's palaeographical argument. Nowhere does he state his reasons for dating the script to the late eighth century and one cannot help feeling that in doing so he may have been influenced by his assumption that Arabic would not have been used in Syria before the Islamic conquest. The Greek uncial is, as he admits, extremely difficult to date and was in use from the mid-fourth century AD until it was superseded by the minuscule in the course of the ninth. I am most grateful to Professor Cyril Mango for this information. Naturally, I alone am responsible for any errors in its transmission. Thus, in the absence of any evidence to the contrary, a pre-Islamic date for this manuscript must be regarded as just as likely as a post-conquest one, if not more so.

¹⁶⁷ The argument that after the Islamic conquest the Arabic script was too closely associated with Islam for Christians to want to use it, does not seem to me very cogent in this case. In Syria, Arabic-speaking Christians had been using the Arabic script for at least 120 years before the Islamic conquest, a situation quite different from that of say Coptic-speaking Christians in Egypt, where written Arabic appears to have been introduced with Islam. The analogy drawn

period before Arabic was habitually written in Syria, that is some time before the sixth century AD.

Presumably, those for whom this manuscript was intended had already achieved the level of the West African children, mentioned above,¹⁶⁸ who were taught the approximate pronunciation of the Arabic letters in order to read the text of the Qurʾān, without understanding the meaning of the individual words; a translation of the whole passage being recited to them later. In Byzantine Syria, the Arabic-speaking novices, whom I envisage would already have learnt how to pronounce the Greek letters (almost certainly out loud), would now be using this ‘crib’ to obtain an understanding of the meaning of the Greek words which they would previously have been reading parrot-fashion, as the West African children read Arabic.

If I am correct in this analysis, this document would present not only a fascinating instance of ancient language teaching, but an interesting example of the interplay of literacy and non-literacy. For here, an unwritten language, Arabic, would have been recorded in the Greek script in order to help novices who spoke Arabic but were not literate in it (because as yet it had no script), to learn Greek, which they could read but could not yet understand! It would represent a bridge between the oral environment of the speakers of Old Arabic and the literate society of Greek. Alas, until the manuscript or a clear photograph of it can be found, all this must remain a tantalizing hypothesis.

For a final example of a use of literacy in an oral environment, I would turn to Rawwāfah, an isolated site in the desert of north-west Arabia, where, between AD 166¹⁶⁹ and 169, two successive governors of the Province of Arabia oversaw the building of a small temple probably for the worship of

with Karshūnī and Judaeo-Arabic is also, I would suggest, a false one. These came into use long after the Islamic conquest, when Arabic had become the everyday language of the whole population, including the Christian and Jewish communities in which, as I have explained at the beginning of Section III, reading for most people was restricted to the scriptures which were written, respectively, in the Syriac and Hebrew scripts. However, it is unlikely that the Greek alphabet would have had a similar significance for Arabic-speaking orthodox Christians in Syria, who had been using the Arabic script for religious inscriptions since the early sixth century, even if only two are known so far! On the contrary, I would suggest that these Christians (many of whom regarded the Arab conquerors as liberators) would have regarded the Arabic alphabet as *their* script, which marked them off from the (often oppressive) Greek-speaking and Greek-writing Byzantine authorities. In these circumstances, the fact that the Arabic script had also come to be used by the Muslims, would surely not have made it ‘foreign’.

¹⁶⁸ See note 29.

¹⁶⁹ Bowersock (1975: 516–17, and 1994: 432*), followed by Sartre (1982: 84), has shown that Modestus could not have become governor of the Province of Arabia until AD 167, because he was preceded in the post by Q. Antistius Adventus Postumius Aquilinus, who was governor in AD 166–167, and who is also mentioned in the inscription.

the local god ʾlh.¹⁷⁰ The external walls were adorned with a long and beautifully carved Greek-Nabataean bilingual inscription ‘for the perpetuity/safety/victory and perpetuity’¹⁷¹ of the Roman emperors Marcus Aurelius and Lucius Verus. The nominal founder of the temple and ‘author’ of the inscription was, I have argued, an auxiliary unit (ἔθνος in the Greek text, *šrkt* in the Nabataean)¹⁷² levied by the Roman army from the famous tribe of Thamūd.¹⁷³

As is well known, the Thamūd first appear in the Assyrian annals of the eighth century BC, and are mentioned by several Classical writers and probably two Safaitic inscriptions. According to the Qurʾān they were finally destroyed for rejecting the word of God brought to them by the Prophet Šāliḥ.¹⁷⁴ We have no evidence at all as to whether the Thamūd at this time were nomadic or settled, wholly or in part. The position of the temple at Rawwāfah, far from any visible remains of settlement, might suggest that at least those involved in its construction were nomadic, but this is far from conclusive. Although, again, there is no evidence attributable to this period, it is probable that the members of this tribe spoke an Ancient North Arabian

¹⁷⁰ The reference to the deity is not in the main, bilingual, inscription, but in the Nabataean inscription from the same site to which Milik gave the siglum CIS ii no. 3642a (1971: 57–58). See the excellent photograph in Anon 1975: 92. This is a text of five surviving lines carved within a *tabula ansata* recording that ‘Šdt the priest of ʾl[h]’ built the temple for ʾlh[?] the god’ The text is badly damaged but at the end of line 4 the word *hgmwn* (‘governor’) is clear, though unfortunately Milik’s reading (from Philby’s copies and rubbing rather than from photographs, which only became available later) of the word at the end of line 3 as *b-hfyt* (‘grâce au zèle de’) does not seem to be possible on the photograph.

¹⁷¹ In text A it is ‘Υπερ αιωνιου διαμονης, in text B it is ʿl *šlm*’, and in text C it is ‘Επι νεικη και αιωνιο διαμονη.

¹⁷² See Macdonald 1995b: 99, where I argue that ἔθνος is the Greek equivalent of Latin *natio*, the technical term for such a unit used in Pseudo-Hyginus (*De munitionibus castrorum* 29, 43) which, according to Speidel, can now be assigned ‘unequivocally to the years A.D. 170–175’ (1975: 206), and is therefore almost exactly contemporary with the Rawwāfah inscription.

¹⁷³ Macdonald 1995b: 98–100, where I point out that the word *šrkt* (an Arabic loan-word in the Nabataean inscription) has the sense of an association into which one enters *voluntarily*, not one into which one is born. Hence, the word *šarikah* is never used in Arabic of a tribe, or tribal confederation, the structures which define your *congenital* identity. Arabic *šarikah* therefore covers much of the same semantic field as English ‘company’ (though, it has to be admitted, not the military sense!) and it is used today as the normal Arabic word for a commercial ‘company’. There is a nice comparison of which I was unaware when I wrote the 1995 paper, which is that the word *Κομπη* (a loan-word from English ‘company’, just as Nabataean *šrkt* was a loan from the Arabic word of similar meaning) ‘is a term widely used for a ‘voluntary’ or non-kinship association in West Africa’ (Goody, Cole and Scribner 1977: 300, n. 3 [my italics], who refer to this in the context of its use for a religious association, *ibid.* 290).

¹⁷⁴ For all references, except the Safaitic, see the excellent treatment in Beaucamp 1979: 1469–71. The Safaitic texts are WH 3792 a (*s¹nt ḥrb gs²m ʾl tmd*) and 3792 c (*s¹nt ḥrb gs²m tmd*) ‘the year of the war between Gs²m and (ʿl) Tmd’. There is, of course, no proof that *tmd* here refers to the tribe of Thamūd, though it seems likely.

tongue or a dialect of Old Arabic and it would seem unlikely that they spoke, or read, Nabataean Aramaic or Greek. To the best of my knowledge, there is not a single inscription, graffito or other document in Nabataean or Greek which could be said to be by (or even commissioned by) a member of the tribe of Thamūd, apart from the Rawwāfah inscription. Indeed, there is precious little evidence of literacy in any script, at any time, in this tribe.¹⁷⁵ Of course, these are all *argumenta e silentio*, but, alas, silence is all we have in this case. So the argument must remain simply an hypothesis.

So, why should two successive Roman governors have ordered this very elegant inscription for the perpetuity of their emperors' reign to be placed on this temple in the desert of north-west Arabia, in languages and scripts which the nominal dedicators, and most other passers-by, were unlikely to have been able to read? This is not the equivalent of a monumental inscription set up in a city where, even when carved in *stoichedon*, its author(s) could expect it to be read aloud and its message communicated. On a miniature scale, Rawwāfah is an Arabian Bisutūn, an inscription whose content is important, set up in a place where no one is likely to be able to read it: a text only for the eyes of the gods and of history.

I would suggest that a Roman temple presumably to a local deity, built in the name of the Thamūd, for the well-being of the emperors, must have been intended as a symbol of the tribe's entry into the Roman military and administrative system, and as a powerful reminder of where its loyalties should now lie.¹⁷⁶ However, since few but the Thamūd were likely to see this temple, and they were unlikely to have been able to read the texts, it would seem that, as so often with monumental inscriptions, symbolism was more important than comprehension. The two languages and two scripts—the Nabataean sandwiched between the Greek, its swirls and curves in marked contrast to the straight lines and sharp angles of the Greek—represented the two sides to the agreement. Greek for the Romans and the only available local written language for the tribesmen. The temple and its inscriptions were

¹⁷⁵ There are two Ancient North Arabian texts in which it seems fairly certain that the author is claiming membership of the tribe (JSTham 280 *N h-tmd(y)*, 300 *IN h-tmd*), two in which he may or may not be (Dgthy 51/2 *s^lt h-tmd ...*, HU 172 *h 'lh tmd ...*) and two others where either the reading or the interpretation is uncertain (JSTham 339, HU 453). This is not necessarily conclusive, however, since the Ancient North Arabian graffiti from the areas of Arabia which the Thamūd are thought to have inhabited are generally very brief and only rarely give the author's affiliation to a social group. Moreover, if the Thamūd were a large tribe, or even a confederation, its members would be more likely to give their affiliation to one of the smaller sub-groups within it since this would be more specific and would anyway carry the implication of being part of the larger tribe.

¹⁷⁶ Macdonald 1995b: 98–101. Speidel quotes a Latin inscription set up by a unit of the *Mauri Mic(ienses)* in Dacia Apulensis in AD 204 (1975: 209). This, like the Rawwāfah inscription, is of course framed as a dedication for the safety of the emperors (and the imperial family), and records the restoration by the unit and its prefect of a *templum deorum patriorum*, i.e. of the ancestral gods of the Mauri.

surely intended to stand as a symbol and as a reminder to the Thamūd, as they prayed to their god, of the loyalty they now owed to the literate Roman state and that they should turn their backs on the oral society from which they came. Thus, it also symbolized the tribesmen's transition from being non-literate in their own oral culture to being *illiterate* in literate Roman society. Some 230 years later there were auxiliary units named after the Thamūd in the Roman army,¹⁷⁷ but whether these had anything to do with the tribesmen of the Rawwāfah inscription is unknown, for alas the Thamūd have left us no texts of their own.

By contrast, the *literate* nomads who used the Ancient North Arabian scripts have provided our only first-hand evidence, at any period, for life in the Syro-Arabian desert. Their texts suggest that, despite their widespread literacy, their society remained entirely non-literate, and writing never usurped the functions of memory and oral communication. Ironically, thanks to their literate pastimes and the writing materials they used, we know far more about the daily life, social structure, religion and personal feelings of these nomads than we do about those of any of their contemporary neighbours, who lived in settled societies where literacy had key functions, but from which few if any personal documents have survived.

SIGLA

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| A2 | A Safaitic alphabet published in Macdonald, Al Mu'azzin and Nehmé 1996: 439–43. |
| Brussels | <i>Inoubliable Pétra. Le royaume nabatéen aux confins du désert.</i> Catalogue of an exhibition at the Musées Royaux d'Art et d'Histoire, Bruxelles 1980, edited by D. Homès-Fredericq. Bruxelles: Musées Royaux d'Art et d'Histoire, 1980. [This was the same exhibition as that at Lyon, see below]. |
| CIH | Inscriptions in <i>Corpus Inscriptionum Semiticarum</i> . Pars IV. <i>Inscriptiones himyariticas et sabaeas continens</i> . Paris: Reipublicae Typographeo, 1889–1932. |
| CIL. IV | Latin inscriptions in <i>Corpus Inscriptionum Latinarum</i> . IV. <i>Inscriptiones parietariae pompeianae herculanenses stabianae</i> Berlin, 1873. |
| CIS ii | Aramaic inscriptions in <i>Corpus inscriptionum semiticarum</i> . Pars II. <i>Inscriptiones aramaicas continens</i> . Paris, 1889–1954. |
| Dghty 51/2 | Thamudic B inscription copied by Doughty. See van den Branden 1950: 233. |

¹⁷⁷ In the *Notitia Dignitatum*, see Seeck 1876: 59 (*Equites Saraceni Thamudeni*), and 73 (*Equites Thamudeni Illyriciani*).

- HU Thamudic B, C and D, Taymanitic and Hismaic inscriptions copied by C. Huber and republished with a new numeration in van den Branden 1950.
- JSLih Dadanitic inscriptions in Jaussen and Savignac 1909–22.
- JSNab Nabataean inscriptions in Jaussen and Savignac 1909–22.
- JSTham Taymanitic, Hismaic and Thamudic B, C and D inscriptions in Jaussen and Savignac 1909–22.
- KRA A Safaitic alphabet published in King 1990a: 62–63, Fig. 2, pl. IIb.
- KSA A Hismaic alphabet from Khirbat al-Samrā', Jordan, originally published in Knauf 1985, but see Macdonald 1986: 105–12.
- KJC Hismaic inscriptions in King 1990b.
- LP Safaitic inscriptions in Littmann 1943.
- LPArab Arabic inscriptions in Littmann 1949.
- LPNab Nabataean inscriptions in Littmann 1914.
- Lyon *Un royaume aux confins du désert. Petra et la Nabatène*. Catalogue of an exhibition at the Muséum de Lyon, 18 November 1978 to 28 February 1979. Lyon: Muséum de Lyon, 1978. [This was the same exhibition as that at Brussels, see above.]
- MaSA A Safaitic alphabet published in Macdonald 1986: 101–5.
- SEG XVI *Supplementum Epigraphicum Graecum*. Volumen XVI. Lugduni Batavorum: Sijthoff, 1959.
- WH Safaitic inscriptions in Winnett and Harding 1978.
- WTI 23 Dumaitic inscription in Winnett and Reed 1970.

BIBLIOGRAPHY

- Abbadi, S.
1986 An Archaeological Survey of Ġabal Qurma. *Archiv für Orientforschung* 33: 259–62.
- Aghali-Zakara, M.
1993 Les lettres et les chiffres. Écrire en berbère. Pages 141–55 in J. Drouin and A. Roth (eds), *À la croisée des études libyco-berbères. Mélanges offerts à Paulette Galand-Pernet et Lionel Galand*. (Comptes Rendus du Groupe Linguistique d'Études Chamito-Sémitiques. Supplément, 15; Paris: Geuthner).
- 1999 L'écriture touarègue. Pages 109–17 in L. Galand (ed.) 1999.
- 2001 Unité et diversité des libyco-berbères. *Epigraphie Libyco-Berbère. La Lettre du RILB Répertoire des Inscriptions Libyco-Berbère* 7: 4–6.
- Aghali-Zakara, M., and J. Drouin
1973–79 Recherches sur les Tifinagh. *Comptes rendus du Groupe linguistique d'études chamito-sémitiques* 18–23: 245–72, 279–92.
- Anon
1975 *An Introduction to Saudi Arabian Antiquities*. (Riyadh: Department of Antiquities and Museums).

- Arazi, A., and H. Ben-Shammy
 1995 Risāla 1. Pages 532–39 in *The Encyclopaedia of Islam*. 8 (Leiden: Brill).
- Beaucamp, J.
 Rawwafa (et les Thamoudéens). Cols 1467–75 in L. Pirot, A. Robert, *et al.* (eds), *Supplément au Dictionnaire de la Bible*. 9 (Paris: Letouzey).
- Beeston, A.F.L., M.A. al-Ghul, W.W. Müller and J. Ryckmans
 1982 *Sabaic Dictionary (English-French-Arabic)*. (Publication of the University of Sanaa, YAR; Louvain-la-Neuve: Peeters/Beyrouth: Librairie du Liban).
- Blau, J.
 1966–67 *A Grammar of Christian Arabic Based Mainly on South-Palestinian Texts from the First Millennium*. (3 volumes). (Corpus Scriptorum Christianorum Orientalium. Subsidia, 267/27, 276/28, 279/29; Louvain: Secrétariat du Corpus SCO).
- Bowersock, G.W.
 1975 The Greek-Nabataean Bilingual Inscription at Ruwāfa, Saudi Arabia. Pages 513–22 in J. Bingen, G. Cambrier, G. Nachtergaele (eds), *Hommages à Claire Préaux*. (Le Monde Grec 52; Bruxelles: Université Libre de Bruxelles faculté de Philosophie et de Lettres). [Reprinted with addenda as pp. 203*–12*, 432* in Bowersock 1994].
 1994 *Studies on the Eastern Roman Empire. Social, Economic and Administrative History, Religion and Historiography*. (Bibliotheca eruditorum, 9; Goldbach: Keip).
- Carruthers, M.J.
 1990 *The Book of Memory. A Study of Memory in Medieval Culture*. (Cambridge: Cambridge University Press).
- Casajus, D.
 1999 La vie saharienne et les « Vies » de Charles de Foucauld. Pages 47–100 in L. Galand (ed.) 1999.
- Casanova, M.P.
 1901 Un texte arabe transcrit en caractères coptes. *Bulletin de l'Institut français d'archéologie orientale* 1: 1–20.
- Chomsky, C.
 1971 Invented Spelling in the Open Classroom. *Word* 27: 499–518.
- Clanchy, M.T.
 1993 *From memory to Written Word. England 1066–1307*. (Second edition; Oxford: Blackwell).
- Clark, V.A.
 1981 Archaeological Investigations at Two Burial Cairns in the Ḥarra Region of Jordan. With contributions from B. MacDonald and with a report on the skeletal remains by S.L. Rolston. *Annual of the Department of Antiquities of Jordan* 25: 235–65.

- Coninck, I.P. de, and L. Galand
 1957–60 Un essai des Kel-Antessar pour améliorer l'écriture touarègue. *Comptes rendus du Groupe linguistique d'études chamito-sémitiques* 8: 78–83.
- Crone, P., and S. Moreh (transl.)
 2000 *The Book of Strangers. Mediaeval Arabic Graffiti on the Theme of Nostalgia. Attributed to Abū ʿl-Faraġ al-Isfahānī* (Princeton Series on the Middle East; Princeton, NJ: Wiener).
- Daviau, P.M., N. Mulder-Hymans, L. Foley and C.J. Simpson
 2000 Preliminary Report of Excavations at Khirbat al-Mudayna on Wādī ath-Thamad (1996–1999). The Nabataean Buildings. *Annual of the Department of Antiquities of Jordan* 44: 271–82.
- Dentzer, J.-M., and J. Dentzer-Feydy (eds)
 1991 *Le djebel al-ʿArab. Histoire et Patrimoine au Musée de Suweidāʿ* (Paris: ERC).
- Deputy Ministry of Antiquities and Museums of Saudi Arabia
 2003 *Silsilat āṭār al-mamlakat al-ʿarabīyat al-suʿūdīyat*. (13 volumes). (Riyāḍ: Wakālat al-āṭār wa-ʿl-matāḥif).
- Diodorus Siculus
 1954 *Library of History*. Books XIX.66–XX. ed. and transl. R.M. Geer (Loeb Classical library; London: Heinemann/Cambridge. MA: Harvard University Press).
- Drewes, A.J.
 1985 The Phonemes of Liḥyanite. Pages 165–73 in C. Robin (ed.), *Mélanges linguistiques offerts à Maxime Rodinson par ses élèves, ses collègues et ses amis* (Comptes Rendus du Groupe Linguistique d'Études Chamito-Sémitiques. Supplément, 12; Paris: Geuthner).
- Drouin, J.
 1996 Déchiffrer n'est pas traduire. *Epigraphie Libyco-Berbère. La Lettre du RILB Répertoire des Inscriptions Libyco-Berbère* 2: 2–3.
 1998 Espace et orientations graphiques. *Epigraphie Libyco-Berbère. La Lettre du RILB Répertoire des Inscriptions Libyco-Berbère* 4: 3.
 2003 Les *incipit* dans les inscriptions rupestres. *Epigraphie Libyco-Berbère. La Lettre du RILB Répertoire des Inscriptions Libyco-Berbère* 9: 2–3.
- Durkan, J.
 2001 Schools and schooling. I. To 1696. Pages 561–63 in M. Lynch (ed.), *The Oxford Companion to Scottish History* (Oxford: Oxford University Press).
- Epiphanius of Salamis (ed. K. Holl)
 1980 *Epiphanius II. Panarion haer. 34–64*. (2. bearbeitete Auflage herausgegeben von J. Dummer). (Die griechischen christlichen Schriftsteller der ersten Jahrhunderte; Berlin: Akademie-Verlag).

- Euting, J.
1885 *Nabatäische Inschriften aus Arabien* (Berlin: Reimer).
- Foucauld, C. de, and A. de Calassanti-Motyliniski
1984 *Textes touaregus en prose de Charles de Foucauld et A. de Calassanti-Motyliniski*. Édition critique avec traduction par S. Chaker, H. Claudot, M. Gast (Aix-en-Provence: Edisud).
- Franklin, J.L.
1991 Literacy and the parietal inscriptions of Pompeii. Pages 77–98 in Humphrey 1991.
- Galand, L.
1966 Inscriptions libyques. Pages 1–79 in L. Galand, J. Février and G. Vajda, *Inscriptions antiques du Maroc* (Paris: Éditions du CNRS).
1989 Les langues berbères. Pages 330–53 in I. Fodor and C. Hagège (eds), *Language Reform. History and Future* (Hamburg: Busken).
1996 Le piège des consonnes tendues. *Epigraphie Libyco-Berbère. La Lettre du RILB Répertoire des Inscriptions Libyco-Berbère* 2: 1.
1997 Graphie et phonie. Les caractères à valeur biconsonantique. *Epigraphie Libyco-Berbère. La Lettre du RILB Répertoire des Inscriptions Libyco-Berbère* 3: 1–2.
1998 L'écriture libyco-berbère. *Comptes rendus des séances de l'Académie des Inscriptions & Belles-Lettres*: 593–601.
1999 (ed.) *Lettres au Marabout. Messages touaregs au Père de Foucauld* (Paris: Belin).
2001a Un vieux débat : l'origine de l'écriture libyco-berbère. *Epigraphie Libyco-Berbère. La Lettre du RILB Répertoire des Inscriptions Libyco-Berbère* 7: 1–3.
2001b Note sur des inscriptions de Libye. *Les Cahiers de l'AARS, Bulletin de l'Association des amis de l'art rupestre saharien* 6 (mai 2001): 3–5.
2002a Du berbère au libyque: une remontée difficile. Pages 3–28 in L. Galand, *Études de linguistique berbère* (Société de linguistique de Paris. Collection Linguistique, 83; Louvain/Paris: Peeters). [Originally published as: pages 77–98 in *LALIES, Actes des sessions de linguistiques et de littérature*, 16 (Carthage, 21 août–2 septembre 1995; Paris: Presses de l'E.N.S. 1996)].
2002b La notion d'écriture dans les parlers berbères. Pages 409–13 in L. Galand, *Études de linguistique berbère* (Société de linguistique de Paris. Collection Linguistique, 83; Louvain/Paris: Peeters). [Originally published in *Almogaren* (Hallein) 5–6, 1974–75: 93–97].
- Galand-Pernet, P.
1998 *Littératures berbères. Des voix. Des lettres* (Paris: Presses Universitaires de France).
1999 Écrire le berbère. Pages 105–8 in L. Galand (ed.) 1999.
- Galand-Pernet, P., and H. Zafrani
1970 *Une version berbère de la Haggadah de Pesah. Texte de Tinrhir*

- du Todrha (Maroc)*. (2 volumes). (Supplément 1 aux *Comptes rendus du Groupe linguistique d'études chamito-sémitiques*; Paris: Geuthner).
- Gamble, H.Y.
1995 *Books and Readers in the Early Church. A History of Early Christian Texts* (New Haven, CT: Yale University Press).
- Goody, J., M. Cole and S. Scribner
1977 Writing and Formal Operations: A Case Study among the Vai. *Africa* 47: 289–304.
- Graff, H.J.
1986 The legacies of literacy: continuity and contradictions in western society and culture. Pages 61–86 in S. De Castell, A. Luke, K. Egan (eds), *Literacy, society, and schooling. A reader* (Cambridge: Cambridge University Press).
- Hanson, A.E.
1991 Ancient illiteracy. Pages 159–98 in Humphrey 1991.
- Harding, G. Lankester
1953 The Cairn of Hani?. *Annual of the Department of Antiquities of Jordan* 2: 8–56.
1978 The Cairn of Sa'd. Pages 242–49 in P.R.S. Moorey and P.J. Parr (eds), *Archaeology in the Levant: Essays for Kathleen Kenyon* (Warminster: Aris and Phillips).
1971 *An Index and Concordance of Pre-Islamic Arabian Names and Inscriptions* (Near and Middle East Series, 8; Toronto: University of Toronto Press).
- Harris, W.V.
1989 *Ancient Literacy* (Cambridge, MA: Harvard University Press).
- Holdaway, D.
1979 *The Foundations of Literacy* (Sydney: Ashton).
- Holes, C.
1995 *Modern Arabic. Structures, Functions and Varieties* (Longman Linguistics Library; London: Longman).
- Hopkins, S.
1984 *Studies in the Grammar of Early Arabic. Based upon papyri datable to before A.H. 300/A.D. 912* (London Oriental Series, 37; Oxford: Oxford University Press).
- Horsfall, N.
1991 Statistics or states of mind? Pages 59–76 in Humphrey 1991.
- Hoyland, R.G.
1997 The Content and Context of Early Arabic Inscriptions. *Jerusalem Studies in Arabic and Islam* 21: 77–102.
- Humphrey, J.H. (ed.)
1991 *Literacy in the Roman World* (Journal of Roman Archaeology: Supplementary Series 3; Ann Arbor, MI: Journal of Roman Archaeology).

- Imbert, F.
2000 Le Coran dans les graffiti des deux premiers siècles de l'Hégire. *Arabica* 47: 381–90.
- Jaussen, A., and M.R. Savignac
1909–22 *Mission archéologique en Arabie* (6 volumes). (Paris: Leroux/Geuthner). [Reprinted Cairo: Institut Français d'Archéologie Orientale, 1997].
- Jeffery, L.H., and A. Morpurgo-Davies
1970 *ΠΟΙΝΙΚΑΣΤΑΣ* and *ΠΟΙΝΙΚΑΖΕΝ*: BM 1969. 4-2.1, a new archaic inscription from Crete. *Kadmos* 9: 118–54.
- Johansson, E.
1977 *The History of Literacy in Sweden, in comparison with some other countries* (Educational reports, Umeå, 12; Umeå: Umeå University and School of Education).
1988 Literacy Campaigns in Sweden. *Interchange* [The Ontario Institute for Studies in Education] 19/3–4: 135–62.
1998 *Alphabeta Varia. Orality, Reading and Writing in the History of Literacy. Festschrift in honour of Egil Johansson on the occasion of his 65th birthday March 24, 1998*. Edited by D. Lindmark (Album Religionum Umense, 1; Umeå: Department of Religious Studies, Umeå University).
- King, G.M.H.
1990a The Basalt Desert Rescue Survey and Some Preliminary Remarks on the Safaitic Inscriptions and Rock Drawings. *Proceedings of the Seminar for Arabian Studies* 20: 55–78.
1990b *Early North Arabian Thamudic E. Preliminary Description Based on a New Corpus of Inscriptions from the Ḥismā Desert of Southern Jordan and Published Material*. PhD thesis, School of Oriental and African Studies, University of London. [Unpublished].
- Knauf, E.A.
1985 A South Safaitic Alphabet from Khirbet es-Samrā'. *Levant* 17: 204–6.
- Knox, B.M.W.
1965 Silent Reading in Antiquity. *Greek, Roman, and Byzantine Studies* 9: 421–35.
- Koehler, L., and W. Baumgartner
1994–2000 *The Hebrew and Aramaic Lexicon of the Old Testament*. Subsequently revised by W. Baumgartner and J.J. Stamm with assistance from B. Hartmann, Z. Ben-Hayyim, E.Y. Kutscher and P. Reymond. Translated and edited under the supervision of M.E.J. Richardson in collaboration with G.J. Jongeling-Vos and L.J. De Regt (5 volumes) (Leiden: Brill).
- Kofler, H.
1940 Reste altarabischer Dialekte [I]. *Wiener Zeitschrift für die Kunde des Morgenlandes* 47: 61–130, 232–62.

- Kropp, M.
1997–98 Iatromagie und der Beginn der arabischen Schriftsprache: die nabatäisch-arabische Inschrift von 'Ayn 'Abada. *Mélanges de l'Université Saint-Joseph* 55: 91–117.
- Lacerenza, G.
2000 Appunti sull'iscrizione nabateo-araba di 'Ayn 'Avdat. *Studi Epigrafici e Linguistici sul Vicino Oriente Antico* 17: 105–14.
- Lancaster, W.
1981 *The Rwala Bedouin Today* (Cambridge: Cambridge University Press).
- Lancaster, W., and F. Lancaster
1993 Graves and Funerary Monuments of the Ahl al-Ğabal, Jordan. *Arabian Archaeology and Epigraphy* 4: 151–69.
- Lane Fox, R.
1994 Literacy and power in early Christianity. Pages 126–48 in A.K. Bowman and G. Woolf (eds), *Literacy and power in the ancient world* (Cambridge: Cambridge University Press).
- Lewis, N., Y. Yadin and J.C. Greenfield
1989 *The Documents from the Bar Kokhba Period in the Cave of Letters: Greek Papyri. Aramaic and Nabatean Signatures and Subscriptions* edited by Y. Yadin and J.C. Greenfield. (Judaean Desert Studies, 2; Jerusalem: Israel Exploration Society).
- Littmann, E.
1914 *Nabataean Inscriptions from the Southern Haurân*. (Publications of the Princeton University Archaeological Expeditions to Syria in 1904–1905 and 1909. Division IV. Section A). Leyden: Brill.
1943 *Safaitic Inscriptions*. (Syria. Publications of the Princeton University Archaeological Expeditions to Syria in 1904–1905 and 1909. Division IV. Section C; Leden: Brill).
1949 *Arabic Inscriptions*. (Syria: Publications of the Princeton University Archaeological, Expeditions to Syria in 1904–1905 and 1909; Division IV. Section D; Leden: Brill).
- Macdonald, M.C.A.
1980 Safaitic Inscriptions in the Amman Museum and Other Collections II. *Annual of the Department of Antiquities of Jordan* 24: 185–208.
1986 ABCs and Letter Order in Ancient North Arabian. *Proceedings of the Seminar for Arabian Studies* 16: 101–68.
1992 On the Placing of *Ṣ* in the Maghribi *abjad* and the Khirbet Al-Samrā' ABC. *Journal of Semitic Studies* 37: 155–66.
1993 Nomads and the Ḥawrān in the Late Hellenistic and Roman Periods: A Reassessment of the Epigraphic Evidence. *Syria* 70: 303–413.
1995a Ṣafaitic. Pages 760–62 in *The Encyclopaedia of Islam*. 8 (Leiden: Brill).

- 1995b Quelques réflexions sur les Saracènes, l'inscription de Rawwāfa et l'armée romaine. Pages 93–101 in H. Lozachmeur (ed.), *Présence arabe dans le Croissant fertile avant l'Hégire*. Actes de la Table ronde internationale organisée par l'Unité de recherche associé 1062 du CNRS, Études sémitiques, au Collège de France, le 13 novembre 1993 (Paris: Éditions Recherche sur les Civilisations).
- 1998 Some Reflections on Epigraphy and Ethnicity in the Roman Near East. Pages 177–90 in G. Clarke and D. Harrison (eds), *Identities in the Eastern Mediterranean in Antiquity*. Proceedings of a Conference held at the Humanities Research Centre in Canberra 10–12 November, 1997. *Mediterranean Archaeology* 11.
- 2000 Reflections on the linguistic map of pre-Islamic Arabia. *Arabian archaeology and epigraphy* 11: 28–79.
- 2003 Languages, Scripts, and the Uses of Writing among the Nabataeans. Pages 36–56, 264–66 [notes], 274–82 [references] in G. Markoe (ed), *Petra Rediscovered: Lost City of the Nabataeans*. (New York: Abrams/Cincinnati, OH: Cincinnati Art Museum).
- 2004 Ancient North Arabian. Pages 488–533 in R.D. Woodard (ed), *The Cambridge Encyclopedia of the World's Ancient Languages* (Cambridge: Cambridge University Press).
- in press a Towards a re-assessment of the Ancient North Arabian alphabets used in the oasis of al-'Ulā. In S. Weninger (ed), *Epigraphik und Archäologie des antiken Südarabien* (Wiesbaden: Harrossowitz).
- in press b Burial between the desert and the sown. Cave-tombs and inscriptions near Dayr al-Kahf in Jordan. *Damaszener Mitteilungen* 15.
- in press c From Dadan to Iram in four Ancient North Arabian inscriptions, in D.F. Graf and S.G. Schmid (eds), *Fawzi Zayadine Festschrift* (Annual of the Department of Antiquities, Supplement 1; Amman: Department of Antiquities of Jordan).
- in press d Old Arabic (epigraphic), in K. Versteegh (ed), *Encyclopedia of Arabic Language and Linguistics* (Leiden: Brill).
- in prep The Hismaic inscriptions from the Madaba region of Jordan.
- Macdonald, M.C.A., and G.M.H. King
2000 Thamudic. Pages 436–38 in *The Encyclopaedia of Islam*. 10 (Leiden: Brill).
- Macdonald, M.C.A., M. Al Mu'azzin and L. Nehmé
1996 Les inscriptions safaitiques de Syrie, cent quarante ans après leur découverte. *Comptes rendus des séances de l'Académie des Inscriptions & Belles-Lettres*: 435–94.
- Maraqten, M.
1998 Writing Materials in Pre-Islamic Arabia. *Journal of Semitic Studies* 43: 287–310.
2003 Some notes on Sabaic epistolography. *Proceedings of the Seminar for Arabian Studies* 33: 273–86.

- Meek, D.
2001 Religious Life. 8. Highlands since the Reformation. Pages 517–22 in M. Lynch (ed.), *The Oxford Companion to Scottish History* (Oxford: Oxford University Press).
- Milik, J.T.
1958–59 Nouvelles inscriptions sémitiques et grecques du pays de Moab. *Liber Annuus* 9: 330–58.
1971 Inscriptions grecques et nabatéennes de Rawwafah. Pages 54–58, pls 26–31 in P.J. Parr, G.L. Harding, J.E. Dayton, Preliminary Survey in N.W. Arabia, 1968, Part II: Epigraphy. *Bulletin of the Institute of Archaeology, University of London* 10: 36–61, pls 17, 19–31.
- Millard, A.R.
1970 *Scriptio Continua* in Early Hebrew: Ancient Practice or Modern Surmise? *Journal of Semitic Studies* 15: 2–15.
1982 In praise of ancient scribes. *Biblical Archaeologist* 45: 143–53.
1991 The Uses of the Early Alphabets. Pages 101–14 in C. Baurain, C. Bonnet, and V. Krings (eds), *Phoinikeia Grammata. Lire et écrire en Méditerranée*. Actes du Colloque de Liège, 15–18 novembre 1989 (Collection d'Études Classiques 6; Namur: Société des Études Classiques).
2000 *Reading and Writing in the Time of Jesus* (Sheffield: Sheffield Academic Press).
- al-Moraekhi, M.
2002 A New Perspective on the Phenomenon of Mirror-Image Writing in Arabic Calligraphy. Pages 123–33 in J.F. Healey and V. Porter (eds), *Studies on Arabia in honour of Professor G. Rex Smith*. (Journal of Semitic Studies Supplement, 14; Oxford University Press on behalf of the University of Manchester).
- Moritz, B.
1908 Ausflüge in der Arabia Petraea. *Mélanges de la Faculté orientale de l'Université Saint Joseph* 3: 387–436.
- Mowry, L.
1953 A Greek Inscription at Jathum in Transjordan. *Bulletin of the American Schools of Oriental Research* 132: 34–41.
- Müller, W.W.
1980 Some Remarks on the Safaitic Inscriptions. *Proceedings of the Seminar for Arabian Studies* 10: 67–74.
- Negev, A.
1981 *The Greek Inscriptions from the Negev*. (Studium Biblicum Franciscanum Collectio Minor, 25; Jerusalem: Franciscan Printing Press).
- Negev, A., J. Naveh and S. Shaked
1986 Obodas the God. *Israel Exploration Journal* 36: 56–60.

- Olszowy-Schlanger, J.
2003 Learning to read and write in medieval Egypt: children's exercise books from the Cairo Geniza. *Journal of Semitic Studies* 48: 47–69.
- Piccirillo, M., and E. Alliata
1994 *Umm al-Rasas Mayfa'ah I. Gli scavi del complesso di Santo Stefano*. (Studium Biblicum Franciscanum Collectio Maior, 28; Jerusalem: Studium Biblicum Franciscanum).
- Prasse, K.-G.
2000 Ṭawāriḫ. Pages 379–81 in *The Encyclopaedia of Islam* 10 (Leiden: Brill).
- Pseudo-Hyginus (ed. and transl. M. Lenoir)
1979 *Pseudo-Hygin. Des fortifications du camp*. (Collection des Universitaires de France; Paris: Société d'édition « Les Belles Lettres »).
- Ray, J.
1994 Literacy and language in Egypt in the Late and Persian Periods. Pages 51–66 in A.K. Bowman and G. Woolf (eds), *Literacy and power in the ancient world* (Cambridge: Cambridge University Press).
- Reygasse, M.
1932 Contribution à l'étude des Gravures Rupestres et Inscriptions Tifinar' du Sahara Central. Pages 437–534 in *Cinquantenaire de la Faculté des Lettres d'Alger (1881–1931). Articles publiés par les professeurs de la faculté par les soins de la Société Historique Algérienne* (Alger: Société Historique Algérienne).
- Robin, C.J.
1996 Sheba. 2. Dans les inscriptions d'Arabie du Sud. Col. 1047–1254 in J. Brend, E. Cothenet, H. Cazelles, A. Feuillet (eds), *Supplément au Dictionnaire de la Bible*. 12 (fasc. 70) (Paris: Letouzey).
2001 Les inscriptions de l'Arabie antique et les études arabes. *Arabica* 48: 509–77.
in press La réforme de l'écriture arabe, à l'époque du califat médinois, in F. Déroche (ed), *Proceedings of the International Conference on Manuscripts of the Qur'ān*. Università di Bologna, Centro Interdipartimentale di Scienze del' Islam, 28–29 September 2002. *Mélanges de l'Université St Joseph*.
- Robin, C.J., and M. Gora
2002 Un réexamen de l'inscription arabe préislamique du Ġabal Usays (528–529 è. chr.). *Arabica* 49: 505–10.
- Ryckmans, G.
1951 Inscriptions ṣafaïtiques au British Museum et au Musée de Damas. *Le Muséon* 64: 83–91.
- Ryckmans, J.
1988 Données nouvelles sur l'histoire ancienne de l'alphabet. *Bulletin des séances de l'Académie Royale des Sciences d'Outre-Mer* 34: 219–31.

- 1992 Récentes découvertes épigraphiques et archéologiques en Arabie du Sud antique. *Acta Orientalia Belgica* 7: 315–23.
- 1993 Pétioles de palmes et bâtonnets inscrits : un type nouveau de documents du Yémen antique. *Bulletin de la classe des lettres et des sciences morales et politiques de l'Académie royale de Belgique* 4: 15–32.
- Ryckmans, J., W.W. Müller and Y.M. Abdallah
1994 *Textes du Yémen antique inscrits sur bois*. (With an English summary). Avant-Propos de J.-F. Breton. (Publications de l'Institut Orientaliste de Louvain, 43; Louvain-La-Neuve: Institut Orientaliste).
- Sartre, M.
1982 *Trois études sur l'Arabie romaine et byzantine*. (Collection Latomus, 178; Bruxelles: Latomus).
- Schürer, E.
1973–87 *The History of the Jewish People in the Age of Jesus Christ (175 B.C.–A.D. 135)*. A new English version revised and edited by G. Vermes, F. Millar, M. Black and M. Goodman (4 volumes) (Edinburgh: Clark).
- Schwabe, M.
1954 Note on the Jathum Inscription. *Bulletin of the American Schools of Oriental Research* 135: 38.
- Scribner, S., and M. Cole
1978 Literacy without schooling: Testing for intellectual effects. *Harvard Educational Review* 48: 448–61.
1999 *The Psychology of Literacy* (Cambridge, MA: Harvard University Press).
- Seeck, O.
1876 *Notitia Dignitatum accedunt Notitia Urbis Constantinopolitanae et Laterculi Prouinciarum* (Berlin: Weidmann).
- Skeat, T.C.
1995 Was papyrus regarded as “cheap” or “expensive” in the ancient world? *Aegyptus* 75: 75–93.
- Smout, T.C.
1982 Born again at Cambuslang: new evidence on popular religion and literacy in eighteenth century Scotland. *Past and Present* 97: 114–27.
- Speidel, M.P.
1975 The Rise of Ethnic Units in the Roman Imperial Army. Pages 202–31 in H. Temporini (ed.), *Aufstieg und Niedergang der Römischen Welt*. 3 Principat, 2/3 (Berlin: De Gruyter).
- Stark, J.K.
1971 *Personal Names in the Palmyrene Inscriptions* (Oxford: Clarendon).
- Svenbro, J.
1993 *Phrasikleia. An Anthropology of Reading in Ancient Greece*.

- Translated by J. Lloyd (Ithaca, NY/London: Cornell University Press).
- Thomas, R.
1992 *Literacy and Orality in Ancient Greece*. (Key Themes in Ancient History; Cambridge: Cambridge University Press).
- Torczyner, H., G. Lankester Harding, A. Lewis and J.L. Starkey
1938 *Lachish I (Tell ed Duweir). The Lachish Letters*. (The Wellcome Archaeological Research Expedition to the Near East; London: Oxford University Press).
- van den Boogert, N.
2000 Tifinagh. Pages 476–78 in *The Encyclopaedia of Islam*. 10 (Leiden: Brill).
- van den Branden, A.
1950 *Les inscriptions thamoudéennes*. (Bibliothèque du Muséon, 25 Louvain: Institut Orientaliste de l'Université de Louvain).
- Violet, B.
1901 Ein zweisprachiges Psalmfragment aus Damascus. *Orientalistische LiteraturZeitung* 4: col. 384–403, 425–41, 475–88.
- Winnett, F.V., and G. Lankester Harding
1978 *Inscriptions from Fifty Safaitic Cairns*. (Near and Middle East Series, 9; Toronto: University of Toronto Press).
- Winnett, F.V., and W.L. Reed
1970 *Ancient Records from North Arabia*. With contributions by J.T. Milik and J. Starcky. (Near and Middle East Series, 6; Toronto: University of Toronto Press).
- Youtie, H.C.
1966 Pétaus, fils de Pétaus, ou le scribe qui ne savait pas écrire. *Chronique d'Égypte* 41: 127–43.
- Zeinaddin, H.
2000 Safaitische Inschriften aus dem Ġabal al-‘Arab. *Damaszener Mitteilungen* 12: 265–89.