

CAVE BECK: A SEVENTEENTH-CENTURY IPSWICH SCHOOLMASTER AND HIS 'UNIVERSAL CHARACTER'

by VIVIAN SALMON, M.A.

During the seventeenth century, many scholars in Britain and the Continent – and particularly in France – were engaged in a quest for a medium of international communication which would be simpler to learn than Latin and more logical in its relationship to the objects and concepts denoted than either Latin or the various European vernaculars, none of which had yet attained the status of an international language.¹ The origins of this search for a universal language are complex, but the pursuit seems to have been initiated in Britain, at least, by some remarks made by Francis Bacon in the course of a discussion of scientific method;² and it was engaged in most assiduously by certain scholars in Oxford in the 1650's who were to become founder-members of the Royal Society. Chief among these was John Wilkins, Warden of Wadham, whose *Essay towards a Real Character, and a Philosophical Language* was published in 1668 and dedicated to the Royal Society. The most highly sophisticated attempt in this field, it provides symbols, both written and spoken, which are related in a coherent and consistent fashion to the objects denoted, and are 'iconic' in the sense that each part of the complete symbol is meaningful in itself, and denotes some property of the related object. The *Essay* is the culmination of years of endeavour by a number of scholars, the earliest productions being little more than basic vocabularies with very simple grammars. The first complete work of this kind to be published in England was *The Universal Character* (1657) by a headmaster of Ipswich School, Cave Beck, whose achievement has merited an entry in the *DNB*. So brief and inaccurate is this account that no apology is needed for a more complete biography and a fuller assessment of the merits of his work.

¹ For a full account of this movement, cf. James Knowlson, *Universal Language Schemes in England and France 1600-1800* (Toronto and Buffalo 1975).

² On Bacon and the movement in England see Vivian Salmon, *The Works of Francis Lodwick. A study of his writings in the intellectual context of the seventeenth century* (London 1972), pp. 13-15, 76-78.

Cave Beck was born in 1623 in the parish of St. James, Clerkenwell, at that time a village on the outskirts of north London.³ He was the second son of John Beck, who was described in 1638, when Beck entered university, as 'pandoxator', a mediaeval Latin term which has been variously interpreted as innkeeper, baker and brewer. Whatever his calling, John Beck seems to have prospered sufficiently to earn the title of 'Mr.' in an entry in the parish register of 1643,⁴ and to be described as 'gentleman' when his son entered Gray's Inn in 1642.⁵ There is no record of Cave Beck's baptism in the parish register, and few references to parishioners named Beck who could be members of his family. Among them are, however, records of the marriage of a man who might have been his grandfather, one John Becke, who was married to Mary Keyes on 9 August 1575; of the death of John's servant Dorothie (1586); and of someone who could have been Beck's father – one John Becke, whose daughter Cathrine was buried on 9 February 1643.⁶

Beck was educated for five years at a private school by a teacher named Braithwayte, of Leadenhall, London, who sent three pupils to St. John's, Cambridge, in the 1630's,⁷ and was probably the author of a work on musical notation which may have influenced Beck when constructing his *Universal Character* (see below, p. 297). The last of these was Beck, who entered the college as a fee-paying 'pensioner' (a status which suggests that he was not in need of financial help) on 13 June 1638, and matriculated in the following year. His tutor was John Cleveland, the cavalier poet,⁸ who supported the cause of Charles I with his witty verses.

Beck graduated B.A. in 1642 and moved to Gray's Inn, where he enrolled on 1 August of the same year.⁹ Among the Benchers and Readers were the two men whom he was to address as patrons in

³ He was said to be 15 when, on 13 June 1638, he entered St. John's, Cambridge. Cf. *Admissions to The College of St. John the Evangelist*, I, ed. J. E. B. Mayor (Cambridge 1882), pp. 42, xvi. His unusual Christian name was probably his mother's surname; cf. 'Blakerby Fairfax' son of Nathaniel Fairfax and Elizabeth Blakerby, *Proc. Suff. Inst. Arch.*, xxv (1952), pp. 288–9.

⁴ *Publications of the Harleian Society: Registers*, xvii, ed. R. Hovenden, (London 1891), St. James, Clerkenwell, Vol. iv: Burials, 1551 to 1665, p. 259 (9 February 1643).

⁵ *The Register of Admissions to Gray's Inn, 1521–1889*, ed. J. Foster (London 1889), p. 237. Beck is described here as the second son of John Beck, of St. James, Clerkenwell, 'gent'.

⁶ *Publications of the Harleian Society: Registers*, xiii, ed. R. Hovenden (London 1887), Vol. iii: Marriages, 1551 to 1754, p. 6 (9 August 1575); xvii, Vol. iv, pp. 35, 259.

⁷ Mayor, *op. cit.*, pp. 42, 33, 11.

⁸ *Ibid.*, p. 42. Cf. also John and J. A. Venn, *Alumni Cantabrigienses*, I, Pt. i (Cambridge 1922), p. 121.

⁹ Foster, *op. cit.*, p. 237. It was a common practice for gentlemen's sons to spend some time at the Inns of Court as part of their general education, or as a prelude to the management of estates, without necessarily qualifying as lawyers.

his book on universal character, Nathaniel and Francis Bacon. They were the sons of Edward Bacon, of Shrubland Hall, near Ipswich, and nephews of the great lawyer and philosopher, Francis Bacon, Lord Verulam. Both brothers were to have special interests in Ipswich, being elected as M.P.'s at various times in the mid-seventeenth century. Nathaniel became Recorder of Ipswich in 1643 and Town Clerk in 1651; he lived in the parish of St. Margaret's, where he also acted as churchwarden, signing the parish register in that capacity in the early 1650's.¹⁰

It does not appear that Beck obtained legal qualifications at Gray's Inn; certainly, in common with many others at the time, he must have found his plans for the future dislocated by the outbreak of Civil War in the autumn of 1642. In November, the King and the court made their headquarters at Oxford, garrisoning the town against the rebel army and establishing the centre of government at Christ Church. Among those who joined them was John Cleveland,¹¹ Beck's tutor, and possibly Beck himself. Anthony Wood remarks that 'his majesty' recommended 'several of his faithful subjects to have degrees conferr'd upon them, tho' with this caution . . . that they should pay all or most of the fees'; and one of those on whom the degree of M.A. was conferred was Cave Beck.¹² This took place on 17 October 1643. There were other recipients of an honorary degree, and in most cases an explanation was given of the services for which it was awarded. No explanation accompanies the record of Beck's award; perhaps he had joined his old tutor, and had made himself useful about the Court.

Oxford was the Royalist headquarters until Spring 1646, when Beck was still a young man of twenty-three. If he did indeed stay there, for these three years or longer, he would have been in a milieu where the possibility of creating a universal language was a topic of discussion. As early as the mid-thirties at least, one scholar was considering the problem; this was Nathaniel Chamberlain, who claimed many years later that the idea of his own *Lingua Philosophica* was conceived in 1636 while he was an undergraduate at Pembroke, although it was not published until 1679.¹³ In 1641 a certain Mr. Flower, Fellow of Jesus, was reputed to be able to communicate in a universal character with an Irishman named

¹⁰ On Nathaniel Bacon, cf. *DNB* and N. Bacon, *The Annals of Ipswich*, ed. W. Richardson (Ipswich 1884). Cf. also W. R. Prest, *The Inns of Court under Elizabeth I and the Early Stuarts* (London 1972), p. 206. Copies of the registers of St. Margaret's are available in Ipswich Public Library.

¹¹ Cf. *The Poems of John Cleveland*, ed. J. M. Berdan (New York 1903), p. 29.

¹² *Fasti Oxonienses*, Pt. 2, in *Athenae Oxonienses*, 3rd ed., with additions by P. Bliss, iv (London 1820), p. 60.

¹³ Although this work is thought not to have survived (cf. D. Wing, *A Gallery of Ghosts* (New York 1967)) there is at least one copy extant (in Dublin).

Johnson, who had invented a language known as *Wit-spell*.¹⁴ The subject of universal language had already been treated in *Mercury* (1640) by John Wilkins; at the end of the decade an Oxford scholar, Elias Ashmole, set out explicitly the advantages of such an invention for 'saving the pains whereof to *future times*, if some general *Forms and Characters* were invented (agreeing as neer to the *natural quality*, and *conception* of the *Thing* they are to *signifie*, as might be;) that . . . should *universally express*, whatsoever we are to deliver by writing; it would be a welcome benefit to *Mankind*, and much sweeten the *Curse of Babels Confusion*, save a great expence of *Time* taken up in *Translation*, and the Undertakers merit *extraordinary encouragement*'.¹⁵ John Wilkins became Warden of Wadham in 1648; that Beck was at least slightly acquainted with him is suggested by the fact that he sent him his *Universal Character* in manuscript for criticism,¹⁶ though there is no proof that the two men actually met, in Oxford or elsewhere.

There is no further record of Beck until 1650, when he was appointed Headmaster of Ipswich School;¹⁷ but it hardly seems likely that a man of twenty-seven would have obtained such a responsible position unless he had some experience of teaching, either in a school or as a private tutor. It also seems unlikely that his Royalist sympathies were very pronounced, as he would have been unacceptable to the Bacons – strong supporters of the Puritan cause – who were to become his patrons, and were perhaps already so in the matter of the appointment. In 1657 Beck resigned, and was replaced by a former usher, Robert Woodside, who died within two years. Beck was invited to return until a successor could be found, and he remained for six months. During his term of office he kept up his link with St. John's by sending three of his pupils there, two in 1654 and one a year later.¹⁸ His book was published in 1657 in English and French, being printed in London for an Ipswich bookseller. The full title shows clearly the author's intentions: *The Universal Character, By which all the Nations in the World may understand one anothers Conceptions, Reading out of one Common Writing their own Mother Tongues. An Invention of General Use, the Practice whereof may be Attained in two Hours space, observing the Grammatical Directions. Which Character is so Contrived, that it may be Spoken*

¹⁴ On Flower, cf. the MS of Samuel Hartlib's *Ephemerides*, in Sheffield University Library: (1641 A4) 'Mr. Flower Fellow of Jesus Colledge in Oxford knowes fully how to write to Mr. Johnson in Ireland, author of Real Characters.' Cf. also Salmon, *op. cit.*, p. 16.

¹⁵ *Ibid.*, pp. 91–2.

¹⁶ *Ibid.*, p. 18.

¹⁷ W. E. Potter and I. E. Gray, *Ipswich School 1400–1950*, (Ipswich 1950), pp. 161, 60–61.

¹⁸ Mayor, *op. cit.*, pp. 114, 120 (and perhaps also 118).

as well as *Written*. The translation, *La Caractere Universel*, omits the prefatory verses.

It has been suggested that Beck left Ipswich School in order to devote himself to his *Universal Character*, in the preface to which he promises a further publication on the subject.¹⁹ But it is far more likely that he resigned in order to accept another post. One possibility is the living of St. Margaret's, which was a 'perpetual curacy'; he certainly held it in 1659, and he may have been appointed earlier. It has not been possible to discover the exact date of his appointment, but his signature as 'curate' and 'minister' first appears at the end of the year 1658-9 i.e. in March 1659.²⁰ A number of prefatory poems to *The Universal Character* throw some light on Beck's circle of friends in the 1650's. Among them was Nathaniel Smart, born in Ipswich in 1618, and graduating from Cambridge in the same year as Beck. Acting first as preacher at St. Mary Tower, he became incumbent of St. Nicholas, and then of St. Lawrence.²¹ Another poem was contributed by Joseph Waite, a Cambridge graduate who became Rector of Sproughton, being ejected for refusal to conform in 1662.²² Two other poems were addressed to Beck by 'Ja. Portus, A.M.' and 'Ben Gifford', neither of whom can be identified with certainty. Other names appearing in connection with *The Universal Character* are those of Beck's patrons (the book being dedicated to 'Patronis suis Colendissimis' Nathaniel and Francis Bacon) and of Beck's printer and bookseller. The bookseller, who was also the publisher, was William Weekley of Ipswich; his name appears twice in the lists of householders provided for the purposes of the Hearth Tax in 1674, one dwelling being presumably his private house, the other his shop where, as the title-page of *The Universal Character* informs buyers, the book is to be sold. One small house with only two hearths was in the parish of St. Mary Tower, the other, with three, in the parish of St. Lawrence.²³ Weekley's printer, Thomas Maxey, who had carried out several commissions for him, lived in London, at

¹⁹ Potter and Gray, *op. cit.*, p. 60. According to the preface of *The Universal Character* (f. Blr.-v.), this was to be 'a small Treatise . . . set forth with the Vulgar Language on one side, and The Character on the other'.

²⁰ Earlier in the 1650's the registers are signed only by the churchwardens. Beck's predecessor, William Geast, was sequestered in 1642. Cf. R. F. Bullen, 'Sequestrations in Suffolk', *Proc. Suff. Inst. Arch.*, xix (1927), p. 43.

²¹ On Smart cf. Venn, *op. cit.* Pt. iv (Cambridge 1927), p. 92.

²² *ibid.*, p. 311. Waite, Smart and another scholar edited the sermons of the Town Preacher, Matthew Lawrence, in *The Use and Practice of Faith* (London 1657). Waite also wrote a lengthy dialogue on the religious education of children in *The Parents Primer and the Mothers Looking-glasse*, 1681 (published by the author).

²³ Cf. Suffolk in 1674, being the *Hearth Tax Returns*, ed. S.H.A. H[ervey], Suffolk Green Books No. 11 (Woodbridge 1905), pp. 171, 172.

Bennet Paul's Wharf, Thames Street; it is possible that their association arose from the printer's links with Suffolk.²⁴ Thomas Maxey printed only the English version of *The Universal Character*; the French version was printed by 'A. Maxey'. This was Anne Maxey, his widow, who carried on the enterprise after her husband's death in January 1657.²⁵

For his appointment to the living of St. Margaret's, Beck may have been indebted to Nathaniel Bacon, who was a churchwarden, or to another patron – the owner of Christchurch Mansion, situated within the parish boundaries. The Mansion, formerly in the possession of the Withypolls, had passed on the death of Sir William Withypoll in 1649 to his daughter Elizabeth and her husband, Leicester Devereux, who had married in 1642.²⁶ Devereux was the son of Sir Walter Devereux, later 5th Viscount Hereford, whose seat was at Leigh Manor, near Worcester; and he inherited the title himself when his father died in 1649. He and his family lived at Christchurch, and also at other houses which they owned at Sudbourne and Orford. His eldest son Robert was seven in 1657, and of an age to require a tutor. Since it is known that Beck acted as tutor to younger children in the family, it is possible that he was also engaged in 1657 for the same purpose. As Robert died in October 1657, the employment could not have lasted long; but whether or not Beck was actually in the service of Viscount Hereford at that time, there is no doubt about their close association in 1660, when Beck accompanied him to Holland to bring Charles II back to the throne. Hereford was one of six peers deputed by Parliament, as Beck recalls in a letter written some years later; he explains that he 'waited upon my Lord Vicount *Hereford* into *Holland*, (who was sent by the Parliament with other Lords, to bring home King *Charles II*)'.²⁷ Beck also recalls that he himself was sent to see Dr. Earl in The Hague, to enquire about the authenticity of a book which Earl had translated and which was alleged to have been written by Charles I.

²⁴ Among Beck's near contemporaries at St. John's was a William Maxey, son of a draper at East Bergholt (Mayor, *op. cit.*, p. 40). The name is unusual enough to suggest that Maxey's association with Weekley, for whom he printed several works, was due to a local connection.

²⁵ On Thomas and Anne Maxey cf. *A Dictionary of the Booksellers and Printers who were at work in England, Scotland and Ireland from 1641-1667*, ed. H. R. Plomer (London 1907), pp. 124-5. The name of John Rothwell (1633-1660) who sold books at the Fountain and Bear in Goldsmith's Row, Cheapside, appears on the engraved title-page of the *Universal Character* (though not on the printed title page). He presumably acted on Weekley's behalf in London. Cf. Plomer, *op. cit.*, pp. 157-8.

²⁶ On the history of the Hereford family in Ipswich, cf. G. C. Moore Smith (revised by P. H. Reaney), 'The family of Withypoll', *Walthamstow Antiquarian Society: Official Publication* 34 (London 1936).

²⁷ Richard Hollingworth, *The Character of King Charles I*, (London 1692), p. 28.

On his return, Beck received what was perhaps a recognition of his services – the living of St. Mary Witton, a parish just outside Droitwich and only a few miles from Leigh Manor. In view of Hereford's association with the neighbourhood, and of the fact that the advowson of St. Mary's was held by the Crown, it is more than likely that Beck's appointment was due to his patron in Christchurch Mansion. It is doubtful whether Beck ever resided there since the church had been destroyed in the Civil War. In 1662 it was decided to unite the parish with that of St. Andrew, Droitwich, but Beck continued to draw all except £10 of the revenues for life.²⁸ In the same year he received a further mark of royal favour (no doubt through Hereford's influence) when the King appointed him to the living of St. Helen's, Ipswich. It was the royal privilege to bestow benefices when the patronage had lapsed, as it had in this case, the former patron, Robert Dunkon, being a Puritan.²⁹ One further living came his way; in 1674 he was appointed to that of Monk Soham, perhaps once again through the influence of the Hereford family.³⁰

For many years he also combined with his ecclesiastical duties those of tutor to the young children of Viscount Hereford.³¹ The first Viscountess Hereford died in 1670, and her widower was married again in the same year, to Priscilla Catchpole. They had four children, the two boys being born in 1673 and 1675. Leicester, the elder, became 7th Viscount Hereford on the death of his father in 1676; when his mother also died, in 1681, she left her family in the care of guardians, among whom was Cave Beck, and asked that the latter should continue to act as their tutor. It was stipulated that he should reside in Christchurch Mansion during their minority. The 7th Viscount died in 1683 and was succeeded by his brother Edward, who retained the services of Beck as his chaplain when he no longer required him as his tutor. He left him a legacy of £10 when he made his will on 26 July 1700, dying soon afterwards as the result of a duel.

In spite of his pastoral and teaching duties, Beck found time to take an active interest in the affairs of the newly-founded Royal Society. Among the early associates (though he was not a Fellow) was Nathaniel Fairfax, son-in-law of Nathaniel Bacon. As a Puritan, he was ejected from his living of Willisham in 1662 and, taking his

²⁸ Cf. J. W. Willis-Bund and W. Page, *The Victoria History of the County of Worcester*, II (London 1906), pp. 80–81; III (London 1913), p. 88.

²⁹ Cf. *DNB* (Beck) and Joseph Wood, *Historical and other Notes regarding the Church and Parish of St. Helen, Ipswich* (MS, Ipswich Public Library) p. 5.

³⁰ Potter and Gray, *op. cit.*, pp. 60–1.

³¹ Cf. L. J. Redstone, *Ipswich through the Ages* (Ipswich 1948), p. 133. For the Hereford family, cf. Moore Smith, *op. cit.*

M.D. at Leyden, began practising as a physician at Woodbridge.³² On 29 January 1668 Fairfax wrote to the secretary of the Royal Society, Henry Oldenburg, suggesting Beck as a correspondent who could report on matters of scientific interest occurring in Suffolk. Fairfax describes Beck as 'a Divine of stedly reasonings, shrewd reaches, narrow searchings, Mathematically given'.³³ Receiving no reply to this, he wrote again, with a further recommendation, adding that Beck was 'of stedly & wary reasonings, shrewd fetches, of a genius made for new works'.³⁴ To this letter, of 26 April, Oldenburg must have replied, since on 17 July Fairfax wrote again, reporting that 'Mr Beck has ingaged me to return yu his hearty service with acknowledgments of your obliging remembrance of him'.³⁵ Oldenburg had obviously enquired about Beck's *Universal Character*, of which Fairfax gives some account. Finally, Beck himself wrote a report to Oldenburg on 15 August 1668.³⁶ Unfortunately, it is of no scientific interest, dealing as it does with 'monsters', of which the worst, says Beck, are witches. He gives four incidents concerning witchcraft in Suffolk, at Cookley, Ipswich and Woolpit. The most interesting part of this letter consists of Beck's account of *The Universal Character*, and a comparison of it with the work of Wilkins. Beck kept up at least a desultory correspondence with the Society, evidence of which is a further letter written in early 1676.³⁷ This is a most unusual missive, addressed to the scientist Robert Hooke, and written in Wilkins's universal character, partly in the ideographic script, partly in the phonetic. At this period a group of friends, chiefly Hooke, Andrew Paschal (a Somerset clergyman), Thomas Pigott, of Wadham College, John Aubrey, the biographer, and Francis Lodwick, author of several works on universal character, were engaged in revising Wilkins's scheme, and it is likely that Beck's letter was a contribution to their efforts.³⁸ One other contribution made by Beck to the Royal Society was an account of his art

³² Cf. *DNB* (Fairfax). He wrote a curious work, *A Treatise of the Bulk and Selvedge of the World* (London 1674) from which he excluded all vocabulary of classical origin—no doubt inspired by the Royal Society's desire to find a suitable, non-ambiguous language for the recording of scientific experiments. The prefatory matter contains a number of complimentary references to the Society. On Fairfax, cf. also L. Dow 'A Suffolk Heraldic Manuscript', *Proc. Suff. Inst. Arch.*, xxv (1952), pp. 288–296.

³³ Henry Oldenburg, *Correspondence*, ed. and trans. A. R. and M. B. Hall, iv (Madison, Milwaukee and London 1967) pp. 125–6.

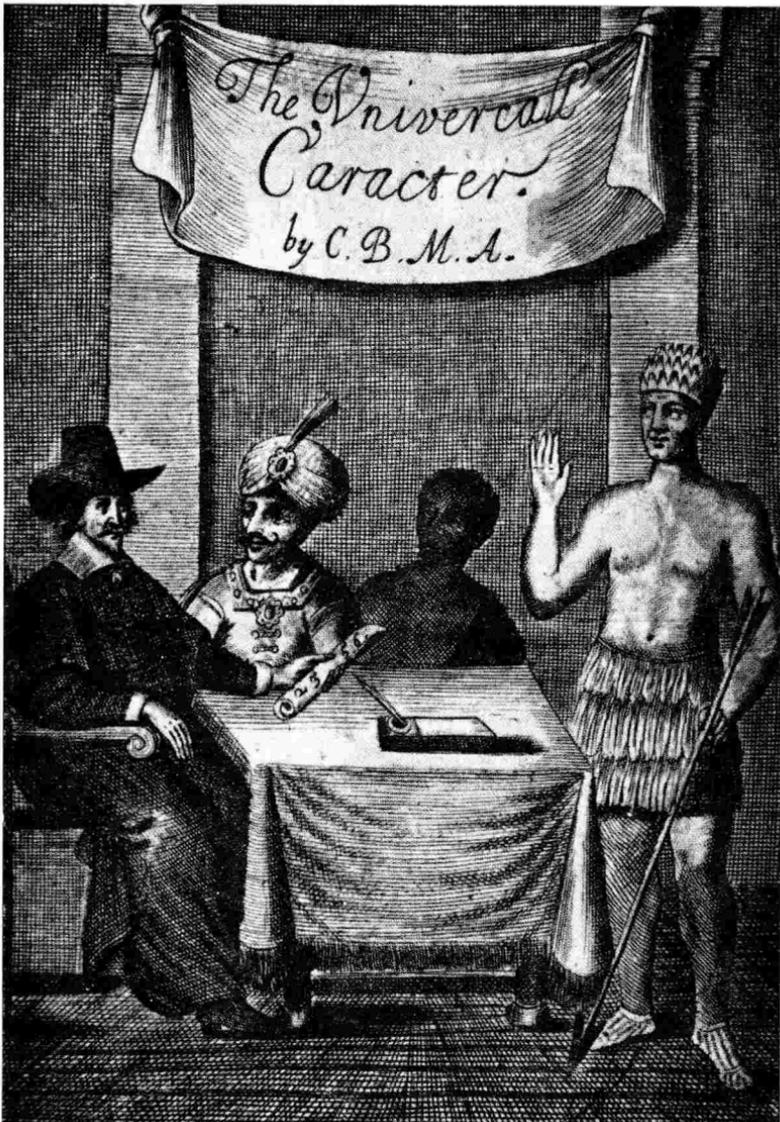
³⁴ *ibid.*, p. 337.

³⁵ *ibid.*, p. 555.

³⁶ *ibid.*, v (1968), pp. 14–17.

³⁷ R.S. MSS, Classified Papers 16, no. 1.

³⁸ On the history of this project, cf. V. Salmon, 'John Wilkins' *Essay*: critics and continuators', *Historiographia Linguistica*, 1 (1974), pp. 147–163.



Sold by J. Rothwell att y^e Fontaine in Cheapside.

Frontispiece to *The Universal Character* (1657).

of memory, which is still preserved among the archives.³⁹ In the 17th century memory was regarded as the 'mother of method', offering a means for the discovery, arrangement and 'fixing' of truths. Bacon described it as one of the great intellectual arts, and a part of the 'custody of knowledge' which required improvement.⁴⁰ Many practitioners of the art used visual images, usually of a house divided into rooms, to each of which a certain amount of material to be memorized was mentally assigned. Beck's scheme was of this type, as Fairfax reports to Oldenburg: 'I have also procurd of him a short accot. of his helps for memory wch yu will find inclosed, he contrives it so as to carry as many depending or independent notions as may occur in a days space by reading or hearing'.⁴¹ In an earlier letter, he had drawn Oldenburg's attention to this 'ingenious artificiall memory, commended by his own practise', reporting that Beck 'for severall years made use of it in his preaching, couching all yt he writes in a pair of uncuth verses.' He was also 'one of surprising sleights at Cryptick writing'.⁴²

Beck lived to enjoy his plurality of benefices for many years, making his last will on 30 August 1706. He left everything to his wife, Sarah, including three houses in the parish of St. Nicholas, Ipswich, said to be tenanted by Bazill Breame, Robert Cooke and — Martin.⁴³ There are no other legacies at all. The three executors bear names which are too common for their owners to be identified — Thomas and John Sherman, and Elizabeth Allen. Although the will was not proved until July 1707, Beck's death must have occurred in 1706, when he was succeeded by Justine Aylmer at St. Helen's and William Ray at Monk Soham. Some small compensation for the meagreness of personal records may be found in the fact that Beck's portrait is thought to survive; he may be the European in the frontispiece of *The Universal Character*, shown conversing with an Indian, an African and an American Indian

³⁹ R.S. MSS, Classified Papers 16, no. 2.

⁴⁰ Cf. Salmon, *op. cit.* in note 2 above, pp. 110–114. On the art of memory in general, cf. Frances Yates, *The Art of Memory* (London 1966).

⁴¹ Oldenburg, *Correspondence*, iv, p. 555.

⁴² *ibid.*, p. 126.

⁴³ Norwich Record Office, 6 Allexander. Two of Beck's houses, at least, seem to have been of substantial size, with 6 hearths in each, if they are to be identified with the houses in St. Nicholas parish occupied in 1674 by Edward Martin and Edward Cooke (*Suffolk Green Books, op. cit.*, p. 174). At this date the tenant of the third, 'Bazill Breame' lived in a small house in the parish of St. Mary Key (*ibid.*, p. 177). It is possible that 'Sarah' was Beck's second wife, though it has not been possible to trace the marriage. A 'Mrs. Sarah Becke' died in the Plague Year in St. Margaret's parish, and was buried on 30 September.

(Plate XXIV).⁴⁴

Although Beck is a figure of local interest in the history of Ipswich, he also merits a more general regard because of his authorship of *The Universal Character*; before any account of it is given, comments by Fairfax and by Beck himself should be noted. Fairfax reports to Oldenburg that it was 'designd as a Mechanicall help for ye unlearn'd or such as convers wth unlearned strangers. if it might give any assistance to yt of ye Worthily Eminent Dr. Wilkins he should conceive a very great happynes in it.'⁴⁵ Beck, who had been asked by Oldenburg to give an assessment of Wilkins's design replied that 'the Critical & Philological part is incomparably performed and if ye Royal Society undertake ye perfecting of ye character, I doubt not it will be ye most Complete that hath or can be offered to ye world. Yet I feare the Capacities of Ye Vulgar will not be able to afford natural Logick or Metaphysick enough to manage it at least in our age'. This was a shrewd criticism, and is some justification of Beck's simpler scheme, on which he now remarks: 'Sr if yu have considered my different designe (for I thought it neither possible nor necessary to depose the Latin tongue from being ye Universal Learned language) I therfore provided a Mechanical helpe for such as know only their Mother tongue or Converse with such. I suppose therfore it can be no hindrance to yt Philosophical Character nor no burden to ye world if mine were recommended as a Pocket Mercury to Travaylors as my preface advises'.⁴⁶ While Wilkins's scheme was ambitious, intended as it was to assist scientific enquiry by providing a language consisting of unambiguous, iconic symbols, all Beck aimed at was to help travellers and merchants in practical affairs; Beck was more generous to Wilkins than Wilkins was to him, since Wilkins had tried to dissuade him from publishing his work, so low was his opinion of its merits.⁴⁷

In *The Universal Character* Beck refers to three predecessors who had suggested the possibility of a universally comprehensible system of writing, Matthew Ricci, Francis Bacon and John Wilkins (f. A7v.). Ricci, a Jesuit missionary in China, had written an account in his journal of Chinese ideographs, showing how they were comprehensible to speakers of many different dialects in

⁴⁴ J. Granger, *A Supplement . . . to a Biographical History of England* (London 1774), p. 284. The frontispiece, like those of many 17th-century books, is allegorical, and is explained in a prefatory verse entitled 'The Mind of the Frontispiece' (signed here by 'E.K.'). Cf. A. F. Johnson, *A Catalogue of Engraved and Etched English Title-pages* (Oxford 1934), pp. viii-ix.

⁴⁵ Oldenburg, *Correspondence*, iv, p. 555.

⁴⁶ *ibid.*, v, pp. 16-17.

⁴⁷ V. Salmon, 'The evolution of Dalgarno's *Ars Signorum*', *Studies in Language and Literature in Honour of Margaret Schlauch*, ed. I. Dobrzycka et al. (Warsaw 1966), p. 357.

China.⁴⁸ Bacon had also been impressed by the potential value of ideographs as a medium of international communication, describing them as 'real' characters, which expressed not words, but 'things' (i.e. *res*).⁴⁹ Wilkins had also discussed them in *Mercury* as one potential form of universal character, and had referred to similar possibilities with Arabic numerals and astrological and other (pseudo-) scientific symbols.⁵⁰ It was undoubtedly Bacon, however, who had first mooted the idea of a 'universal character' among English scholars, and it was not only as a compliment to Beck's patrons that Joseph Waite, in one of the commendatory verses, pointed out that Bacon had 'found the Plat' (i.e. plot) but Beck had provided the 'Husbandrie' (f. A6r.). Waite was acknowledging Bacon's proposal that, since the 'Notes of Things and cogitations in general' had received only inadequate discussion, they deserved a 'better enquiry'.⁵¹ Bacon had raised the issue; Beck was now offering a solution to the problem.

Beck introduces *The Universal Character* by explaining its purpose. It was to prevent the ambiguity inherent in natural languages about which men had been complaining, and for which they had been seeking a solution, for the previous century; but in particular, it was to assist men in their 'civil commerce' by, for example, preventing mistranslations by interpreters, as well as saving their charges. Secondly, it was to act as a secret means of communication; thirdly, to propagate all kinds of learning; and fourthly, to assist in spreading the Gospel. He cites the analogies of hieroglyphics (f. A8r.), which he thought hard to learn, and Chinese ideographs equally difficult, and lacking, he argued, any proportion or method in their form (f. A8v.). Arithmetical symbols, however, were well known, and the thought of adapting them for a universal character had, he claimed, for 'many years struggled within me' (f. B2r.). His abilities as a mathematician were apparently noteworthy; in his commendatory poem, 'Ja. Portus' claims that Beck was far superior to the distinguished mathematician John Pell (f. A4v.) whose *Idea of Mathematics* had been published in 1650; and Fairfax drew attention to Beck's mathematical gifts when recommending him to Oldenburg.⁵² It was not therefore surprising that he hit upon the idea of inventing a universal character based on numerals.

⁴⁸ M. Ricci, *China in the Sixteenth Century: the Journals of Matthew Ricci: 1583-1610*, trans. L. J. Gallagher (New York 1953), pp. 26-29.

⁴⁹ Francis Bacon, *The Philosophical Works*, ed. J. M. Robertson, with translations by R. Ellis and J. Spedding (London 1905), pp. 121-2.

⁵⁰ John Wilkins, *Mercury, or the Secret and Swift Messenger* (London 1641), Ch. XIII.

⁵¹ F. Bacon, *op. cit.*, p. 122.

⁵² Oldenburg, *Correspondence*, iv, p. 126.

Beck's aim and his achievement were both modest, since he was not attempting to create a new language based on a 'philosophical' (i.e. scientific) classification of objects and concepts, but merely a written notation which could be 'read off' in any language. 'Universal character' and 'philosophical language' were two distinct concepts, the former evolving into the latter as men realised its limitations. Beck's *Character* does, however, represent the summit of achievement in this direction in the 17th century in England. Beck provides a lexicon of important words, each of which is assigned a number, and a grammar based on Latin, in which inflections are regularly marked by one or more letters. His dictionary contains 3,996 items, two or more synonyms being denoted by a single number. The grammar, as was normal at the time, consists of four parts, *orthography*, *etymology*, *syntax* and *prosody*. The first deals with the method of characterisation; the basic form is a number (assigned in the dictionary according to the alphabetical order of the English word), with affixed letters or syllables denoting case, number, gender, person, tense. *Etymology* distinguishes seven 'parts of speech': noun, pronoun, verb, participle, adverb (including interjection), conjunction and preposition. Nouns are substantives and adjectives, the former being subdivided into concrete and abstract; they are further distinguished into nouns personal, male or female, real, and active. Taking, for example, the concept of *abate*, Beck provides a number (3) and letters representing inflections for 'agent' noun (*abater*), 'real' noun (*abatement*) and 'active' noun (*abating*). Cases are marked by prefixed vowels, and number by affixed *s*. All other parts of speech are denoted by appropriate affixed letters, even where no single corresponding form exists in English, e.g. *abatingly* is represented by *t3*, *t* being the adverb marker. Like nouns, verbs are subdivided on semantic grounds: they are classified, in accordance with a long-standing Latin tradition, as desiderative, imitative, inceptive, negative, factive (pp. 29-30). 'To cause to abate', for example, is expressed by *nu3*. Prepositions are listed (pp. 27-29) in their English and Latin forms and retained in the *Character* as they are. Syntax is based on the Latin system of concord and government, but Beck warns (p. 30) that however the words are placed in an English sentence for 'elegancy' or idiom, they must be transposed into a 'grammatical order' in the *Character*. In the final section, *prosody*, Beck provides for articulation of the symbols. To each number is assigned a monosyllable which is an abbreviated form of the English name, avoiding one sound difficult for foreigners to pronounce i.e. [θ]. The number 3 is therefore to be pronounced *tre*, not 'three', while 1 is *on*, 4 is *for*, 5 is *fi*. Rules for stress are prescribed, and an example given of the fifth commandment written in the *Character*:

Honour thy Father and thy Mother

Write leb 2314 p2477 and pf 2477

Speak leb torednfo, pee tofosénsen, & pif tofosensen

Honour = 2314, parent = 2477, p = agent noun, pf = agent noun female. *leb* denotes imperative plural.

In the introduction (f.B1r.-v.) Beck announces a further treatise which will enable even a child of ten to learn the whole system in four months, memorising five sentences a day from that book. No such work seems to have appeared; in writing to Oldenburg in July 1668 Fairfax encloses an 'exemplar' of Beck's book, which suggests that only one such work was printed.⁵³

In his letter to Oldenburg Beck asks what 'Beckerus' and 'Kircher' have done with respect to a numerical character, which, he says, Wilkins mentions in the *Essay* (p. 454), implying that they were 'following' Beck.⁵⁴ These attempts have little in common with Beck's except for their use of numbered entries in dictionaries.⁵⁵ More immediately related to his work is that of George Dalgarno, a Scot teaching in a school at Oxford in the 1650's. Dalgarno published a 'philosophical' language, *Ars Signorum*, in 1661; but previously he had been experimenting with a universal character, having already read Beck's work in manuscript.⁵⁶ There is so little resemblance between the schemes of the two scholars that it is clear that Dalgarno worked independently of Beck, just as, in all likelihood, Beck worked independently of Lodwick, who had published an outline of a universal character. Certain features which are common to both, such as the semantic classification of nouns (e.g. as 'actor', 'act') and verbs (e.g. as 'imitative', 'inceptive') could be derived independently from traditional Latin grammar, or from first principles.

Neither in his grammar, nor in his choice of numerals as a form of universal character, was Beck particularly original; in the former, he accepted conventional views on the 'parts of speech' except for his classification of interjections as adverbs, presumably on the grounds that both can stand as sentence-equivalents. They had already been so classified in Charles Butler's English grammar of 1633, which Beck might well have seen.⁵⁷

In using numerals as linguistic symbols, Beck may have been influenced by his old schoolmaster, William Braithwayte. On

⁵³ *ibid.*, p. 555.

⁵⁴ *ibid.*, v, p. 17.

⁵⁵ J. Becher, *Character, pro Notitia Linguarum Universalis* (Frankfurt 1661); A. Kircher, *Polygraphia nova et universalis* (Rome 1663).

⁵⁶ Cf. Salmon, *op. cit.* in note 47 above, p. 357.

⁵⁷ *The English Grammar, or the institution of letters, syllables, and words in the English tongue* (Oxford 1633).

18 August 1635 William Braithwayte, 'Preacher and School-master', was granted a patent for 'an easy method to facilitate Musick'.⁵⁸ The grant explains that 'he singeth seven usual numeral Monosyllables . . . and expresseth them by seven Arithmetical Figures.' This was, as already noted, Beck's method of assigning a spoken and written form to each of the concepts listed in his lexicon. The possible application to language as well as music is suggested by Braithwayte's own linguistic interests; the patent also refers to the method he had devised for indicating length in Greek and Latin vowels. There was a long-standing association between language and musical notation, dating at least from Erasmus, in his *De recta latini graecique pronuntiatione*,⁵⁹ but Cave Beck would no doubt have learnt of it first from his teacher. Braithwayte's book was published in 1639 by the London printer John Norton and entitled *Methodus nova docendi discendique veterem (ut ita dicam) musicam, cujus novitatem facilitas, facilitatem jucunditas, jucunditatem utilitas superabit*. This work did not find great favour with Marin Mersenne, the scholar best qualified, by his own experience, to judge it,⁶⁰ but it deserves at least a reference in view of its influence on Beck.

Though Beck's originality as a linguist cannot be rated highly, he should certainly be remembered as the creator of the first complete 'Universal Character' to be printed, not only in Britain but, in all likelihood, in the whole of Europe.

⁵⁸ It is almost certain that this man was Beck's teacher. Since the latter is known to have sent a number of pupils on to St. John's, there is a fair likelihood that he was himself a graduate of the College. A William Braithwaite took his B.A. from St. John's in 1589 and M.A. in 1602, becoming a Fellow in 1601. He was ordained in London in 1619 and became a curate at St. Olave's, Southwark. (Venn, *op. cit.*, Pt. i, p. 207). The patent is printed in Thomas Rymer's *Foedera*, VIII (1743), Part iv, p. 142 (Reprint Farnborough 1967).

⁵⁹ M. Mersenne, *Correspondance*, ed. P. Tannery and C. de Waard, x (Paris 1967), p. 42, footnote 2.

⁶⁰ *ibid.*, p. 43; XI (Paris 1970), pp. 412-3.