This paper on Dutch engraved glass of the 17th century attempts to place those glass vessels decorated by the use of a diamond-point within the domestic, cultural and political life of the Dutch Republic at that time - a remarkable period in the history of the Republic of the Seven United Provinces which by mid-century saw the zenith of Dutch creative talent. We are all familiar with the paintings of this time, but perhaps less so with their artistic achievements in regard to the more prosaic items of their daily life, such as the drinking-vessel. Whilst Dutch paintings of the 17th century have been subject to many interpretations over the years, it should be borne in mind that every other medium upon which the artist/craftsman exercised his talents also had an iconographic or emblematic analogy in keeping with the disciplines of their predominantly Calvinist faith.

Within the grand plan of 17th century Europe, the enormously rich Republic found itself in a somewhat invidious position. The map (fig. 1) dating from the last quarter of the 17th century shows the United Provinces, each a sovereign State within the federation but with the States-General empowered to act in matters beyond its borders, with Groningen and Friesland in the north, Utrecht and Gelderland in the centre, Holland and Zeeland to the west and south. The embellishment in the top left corner shows a river-god, Justice, the arms of the Republic, Pallas Athena representing Wisdom, Mercury for Trade and two cherubs with a cornucopia; an harmonious collaboration between the gods, these images alluding to the importance of maps for commerce. To the west of the Republic lay England of the Stuarts, the Commonwealth, the Restoration and finally William and...
Mary, to the south the Spanish Netherlands under the rule of Philip II and Philip IV, whilst further south lay acquisitive and arrogant France in the guise of Louis XIV and to the east Brandenburg, not forgetting, of course, that ever-present demon for the Dutch people - the sea to the west and north. Each of these powerful countries beyond the Republic's borders eyed with envy the fabulous wealth created for the Dutch Burghers by the East and West India Companies who ruled virtually all the trading routes between Europe, the Orient and America.

The Treaty of Munster signed in 1648 finally brought to an end the Eighty Years War with Spain - a peace virtually dictated by the Dutch, only again to find themselves involved in a further struggle, this time for supremacy of the seas with its enormous financial rewards, resulting in three devastating wars with England between 1650 and 1674. Louis XIV also had ambitious designs to overcome the despised Dutch traders, invading by land in 1672. It is interesting to learn of how the Dutch viewed themselves during these long years of crisis and military involvement which, for such a small country in the normal course of events, should have been financially disastrous. Romeyn de Hoogh, the historical chronicler, in his Mirror of the State of the United Netherlands published in 1706, concluded that the Dutch Republic was 'far and away the most praiseworthy, the freest and safest state that had ever been known' - he could also have added that it was the richest as well but, in keeping with the national character, he eschewed such statements of sinful pride. He continued 'that glory in other lands lay in the outward show of flags, and honour in the free spending of money; whilst in the Republic, glory was a thrifty and modest household, and honour was having no debts'. Such pious sentiments combined with a remarkable commercial success must have been truly exasperating to those powerful states beyond the Republic's borders.

There is no doubt that the glass-vessel had its part in the cultural life of the time, playing an important role in the Still Life paintings, so aptly portrayed in the vase of flowers by Ambrosius Bosschaert the Elder (fig. 2). It is featured frequently either in a purely domestic context such as in a painting by Pieter Claesz, circa 1640, showing a roemer and berkemeyer together with a half-peeled lemon, bread and a partially consumed pie, or together with other items of obvious wealth as found in pictures by G.W. Heda and Jan Jansz den Uyl. The forms of glass-vessel shown in the Still Life paintings - the roemer together with its cousins the Nippenbecher and berkemeyer, drinking vessels produced in large quantities both in The Netherlands and Rhineland for domestic use, together with the slender wine-flute, the simple façon de venise goblet of thin soda-metal and the cylindrical beaker, though not particularly innovative in design were, by virtue of their simplicity, the perfect vehicle upon which an engraver was able to display his talents, particularly for those using a diamond-point as a method of ornamentation.

Unlike other parts of Europe, where engravers in the 17th century turned to the wheel as a quicker method of decorating glass, the Dutch continued the art of diamond-engraving throughout the whole of the century, not so much as a profession and therefore commercial venture, but more as an elegant and indeed fashionable pastime for the patrician closely associated with the humanistic arts. It is through their writings that we are fortunate to learn rather more of their glass activities than is usual for that time; this perhaps being the dominant factor which distinguishes the Dutch engraver from his other European contemporaries. Each glass executed was destined as a present, often signed and dated and since it never formed part of a set, they should be regarded as an individual work of art in themselves.

The late 16th century saw little distinction stylistically between the Dutch engraver and his contemporaries elsewhere in Europe. The earliest known dated example of Dutch engraving is the Communion beaker of Gkozen Lyunge dated 1581 (Le Musée de Verre, Liège), a beaker of Southern Netherlands manufacture but engraved in the Northern Netherlands. To this group of late 16th century glass also belongs the 'Drinkuit' or gambling-glass
most accomplished form in the work of Anna Roemers Visscher (1585-1651) who, with her sister Maria T wellnesschade (1594-1649), was one of the best known intellectual women of her time. Another, Anna Maria van Schurman, some twenty years younger than Anna Roemers and equally celebrated for her intellectual endowments also claims merit as an excellent diamond-engraver.

The two Visscher sisters were the daughters of Roemer Pieterszoon Visscher, by profession a corn-merchant, also a noted literary figure of the early 17th century who to this day is still remembered as a poet. His Siinupoppeu, a remarkable collection of moral emblemata, was published in 1614. Prominent among the sisters' life-long friends were Pieter Corneliszoon Hooft, the humanist poet and historian and Constantijn Huygens, a Secretary of State and close advisor to the House of Orange, as well as a poet, virtuoso musician and devout Calvinist. It is through their correspondence and poems that glimpses into the lives and the glasses that these two remarkable sisters engraved have been obtained. A visitor to the Visscher household in 1612 noted 'Roemer Visscher has three remarkable daughters who are very good at making music, writing songs, at painting, cutting into glass which is also called engraving, designing emblemata and at embroidery', and he added 'moreover they can swim well!' The close-knit circle of Dutch literary and artistic talent of the 17th century is demonstrated by Anna in a poem written in 1621 where she remarked that she had been bold enough to try her hand at copying a painting by her friend Peter Paul Rubens; she added, however, that her unrefined hands were better suited to the pen and needle than a paint-brush. F.G.A.M. Smit-in his unpublished manuscript Inscriptions in Calligraphy on Glass suggests that it may have been Pieter Corneliszoon Hooft who encouraged Anna to try her hand at engraving after returning from his Grand Tour of Italy in 1601, during which he spent some months in Murano where he must have watched glass-engravers at work.

From contemporary literature Anna appears to have engraved some twenty-five glasses and her sister Maria Tesselshade about ten, though sadly only about half a dozen have survived the passage of time. The earliest extant signed and dated example of Anna's work is the 'Bella Dor' roemer of 1621, now in the Rijksmuseum, Amsterdam, with the inscription Bella Dori gentil, Nai vogli fiori Da te prediam gli honori (Beautiful and gentle Doris, we humble flowers owe you our good name) (fig. 4). The dragonfly which appears on this vessel was copied from a booklet of engravings by Nicolaes de Bruin published in 1591. A berkeneyer in the Museum für Kunst und Gewerbe, Hamburg, dated 1642 bears Anna's personal motto (a common occurrence among the educated) Gewogli is meer als veel (Enough is more than much) and

3. Silver-mounted gambling glass or 'Drinkuit', the glass last quarter of the 16th century.

(fig. 3). These examples bear the type of bold hatched Roman lettering commonly found at the time, a parallel being the so-called Verzelini vessels, and as is seen on the 'Drinkuit' the embellishments to either side of the inscription are not far removed from those of Venetian or South German origin. However, by the early 17th century a distinctive Dutch style begins to emerge changing from the arabesques and similar Renaissance motifs to more realistic forms of ornamentation in the Baroque manner as found on the Prince Maurit's roemer dated 1611 in the Boymans- van Beuningen Museum, Rotterdam, one side engraved with the Prince's arms and motto and the reverse with Orpheus surrounded by beasts and birds, these latter copied from engravings, a much used source of inspiration throughout the century for the glass engraver.

Dutch diamond-engraving of the first half of the 17th century is of a light transparent character and attained its
with her friend Pieter Cornelis Zoon Hooft to attribute with certainty to her hand the roemer in the Rijksmuseum inscribed A Demain les Affaires.

In the context of the Visscher sisters' work, it would seem appropriate to include a roemer signed 'V. Buil fecit' and dated 1655 (Rijksmuseum) engraved for the occasion of the opening of the New Town Hall on Dam Square. The eldest of Roemer Visscher's three daughters, Truytgen, less gifted than her two sisters, married a local Amsterdam brewer called Nicolaes van Buyl in 1609 - the surname van Buyl is relatively uncommon in the Netherlands. The New Town Hall was designed by Jacob van Campen, a grandson of Roemer Visscher's sister Geerte. F.G.A.M Smit in his paper on the Visscher sisters read to the Glass Circle a few years ago suggested that it is very plausible that the van Buil of this roemer could have been a nephew or niece, having learnt the craft from their aunts. Mr. Smit also drew attention to the fact that the lettering was not dissimilar to that which appears on Anna's glasses.

The principle characteristic of diamond-engraving during the first half of the century was its transparency; however, towards the middle and during the second half of the century this almost luminous feature all but disappeared. The engraver, perhaps influenced by the competition of wheel-engraving then introduced from Germany, sought to give a greater contrast between the dark and light parts of his illustration thereby giving a stronger but somewhat coarser effect. This new treatment is aptly shown on this flute (fig. 5) with a three-quarter length portrait of Prince Willem III of Orange, later King William III of England. The Prince is shown here aged three and was copied from a print by A. Sierdsma taken from a painting by Adrien Hanneman and the glass is signed Fr. M and dated 1657.

The second half of the century was a prolific period for the diamond-engraver and frustratingly, although a number of glasses are dated and signed with either a name or initials, almost no biographical information on the engravers themselves exists, perhaps because this elegant and fashionable pastime was now practiced by a far wider social group. Attempts at identifying an engraver have, over the years, been made only to be refuted at a later date. A good number of engravings may be ascribed fairly confidently to the hand of one, Willem Mooleyser of Rotterdam. Although Mooleyser is by no means the best of this later group of engravers, he would appear to be one of the most productive and though his work seems rather crude and careless there is an obvious force and spirit to his engravings. Two glasses by his hand and fully signed are recorded, a beaker dated 1685 in the Victoria and Albert Museum (Ex Buckley Collection) and the goblet in the Boymans-van Beuningen Museum, Rotterdam, dated 1686 (fig. 6). Fully signed glasses by

bearing in mind that this glass would hold approximately three litres, there would appear to be a certain moral overtone to the inscription. Just above the footing she has written that this glass was a token of friendship for the Honourable Lodovicus de Roemer and the date. De Roemer was probably Louis de Roemer, a rich merchant of Antwerp where Anna is known to have made two lengthy stays. The most famous of Anna Roemers's glasses is the berkner executed in 1646 (Rijksmuseum, Amsterdam) inscribed Vincens Titi. Apart from a small fly, a butterfly at rest and a violet, there is the famous cherry where she used a series of minute dots, giving lightness and shadow, to enhance the roundness of the fruit. This is the first and perhaps only occasion when stipple-engraving appears on a 17th century glass - a technique, until the 20th century, uniquely Dutch and fully developed in the 18th century by, among others, Frans Greenwood and David Wolff.

No signed example of Maria Tesselschades's work would appear to have survived; however, there is sufficient documentary evidence found in lengthy correspondence
other hands are recorded including the roemer in the Gemeentemuseum, The Hague signed De L'Hommel and dated 1661 showing a crane holding a stone in one claw lest it should fall asleep, or in other words Be Alert; a beaker in the Boymans-van Beuningen Museum signed M. van Gelder, dated 1656, with a boar-hunt and the recently published goblet signed J.W. Kaldenbach, dated 1678, with a scene from the story of Diana and Actaeon taken from Ovid's Metamorphoses (see Sheppard & Smith (1990), Engraved Glass, Masterpieces from Holland, p.12, no 3.). A wide range of emblemata were used in the decoration of those glasses dating from the second half of the century - heraldic, patriotic, subjects with an appropriate axiom or merely scenes of enjoyment in the robust earthy manner found in paintings of the same period.

As with stipple-engraving of the 18th century, the art of calligraphy by use of a diamond on glass was a uniquely Dutch phenomenon and is perhaps their most important contribution to the history of glass decoration. The art of calligraphy in The Netherlands reached its peak during the 17th century with the growth of trade and industry - the mannerist painter Carel van Mander equated it with painting, whilst both Constantijn Huygens and Jacob Cats praised the art in their poems - the calligraphers immigrating to the Dutch Republic from the South Netherlands after the fall of Antwerp in 1585 and mostly finding work there as writing-masters in the French Schools, those schools intended for the children of the better-off which with their studies in French and other languages, arithmetic, history and geography offered an education more attuned to the needs of commerce than did the Latin Schools.

This decorative form was characterised by point-engraving inscriptions in perfect lettering, either script, Roman and very occasionally Gothic, usually embellished with scroll-work and flourishes. The perfect vehicles on which to show off what must have been an extraordinary diffi-
cult task was the serving-bottle in clear, green, blue or amethyst glass, with its globular body and slender slightly flared neck and the simple *fason de venise* goblet with its large deep bowl supported on a baluster knop set between mereses above a wide folded foot. As well, *neuers, berkemeyers*, large dishes, jugs and vases were used by these masters upon which to practise their art.

With the art of calligraphy on glass one is able to turn once more to the literary and scholastic circles of 17th century Dutch life with its more detailed biographical data. Already during the first half of the century this decorative form was practiced to perfection by those two remarkable women, the Visscher sisters. The third celebrated intellectual with a reputation for engraving on glass, Anna Maria van Schurman (1607-1678) spent much of her life in the town of Utrecht where she was admitted to the St. Lucas Guild enrolling as a painter, sculptress and engraver. From contemporary literature Anna Maria appears to have been an infant prodigy becoming fluent in Latin, Greek, Hebrew and various Middle Eastern languages, even writing an Ethiopian grammar. Jacob Cats in 1637, among a long list of her achievements noted her ‘ability of writing daintily on glass’. It is possible that an acquaintanceship with Anna Roemers, who praised Anna Maria in a poem, inspired the latter to try her hand at writing on glass. Only one vessel appears to have survived bearing the signature A. M. à Schurman, now in Rijksmuseum, Amsterdam. This, a large green beaker, although undated was probably engraved in about 1640 and is inscribed *Vigilus Zuichemus* and with the further legend *Al scyn ik dyuster, de Naemgefi huyster* (Although I shine darkly, the name glorifies).

The best known and most prolific of these calligraphic engravers on glass from the second half of the century was Willem van Heemskerk (1613-1692), a cloth merchant from Leiden, at that time the most important town in Europe for the textile industry, who in his leisure hours was not only a calligrapher but a poet as well. The sentences he wrote on his glasses were often accompanied by an explanation written in small characters under the foot of the glass or on the base of the bottle, together with his signature and date, sometimes his age as well. The bowl of the goblet illustrated (fig. 7) is inscribed *Tel don, tel Douweur* (Like gift, like giver), whilst the foot bears the legend *Does Stoffe, wacht de Kunst, toch niet nauwkeurig zift, Den Bies is als het Werk, Den Gaver als de Gift* (This material, like art, does not exactly separate one thing from another, the workman is like his work, the giver like his gift) and signed *Willem van Heemskerk AEs 73, 1686*. It should be noted that Anna Roemers Visscher spent the years between 1646 and 1650 in Leiden whilst her two sons studied there at the university and it is more than likely that van Heemskerk with his literary aspirations would have made Anna’s acquaintance, in all probability learning from her the art of calligraphy on glass; indeed his two earliest glasses date from 1648, although the majority of his work appears to date from 1672 onwards.

It would also seem highly probable that Willem van Heemskerk influenced or even taught this art of writing on glass to François Crama (1657-1718) and Mathieu Petit (c.1655-1721), both school-masters in Leiden. Bastian Boers (1650–1713), a master in a French school at Warnmond some four kilometres north of Leiden may also have known of the work of van Heemskerk.

François Crama, the son of a Leiden textile-worker, was appointed writing-master at the Latin School in 1683. It appears that he did not confine himself only to the pen and diamond-point in exercising his craft, as there still exists today a facade-stone over a gate dated 1685 cut by him which shows him to have been a highly skilled letterer in stone as well. The bottle illustrated (fig. 8) engraved by Crama in 1687 remains to all intents unsigned, though bears on the base the inscription *Fidelité Constante Anna 1687*. The bottle was originally in the possession of Jacob Dagefros whose marriage to Marguerite de Vivier took place that year. Throughout the 17th century the genealogy of both the Dagefros and
8. Calligraphic bottle engraved by François Crana, 1687.

Crama families show they were closely interwoven through marriage, profession and the Church and bearing in mind the inscriptions on the body of the bottle Het wereldd goet is eb en vloed (World's Fortunes ebb and flow) and that on the base, these would imply that this serving-bottle was intended as a wedding gift, and in view of the close family relationship, rather than sign his name the first letter of each word on the base represented his initials.

By setting out the story of 17th century Dutch diamond-engraved glass in chronological sequence and including where possible biographical details on the craftsmen themselves we see a thread, starting with Anna Roemers Visscher and continuing for almost a hundred years linking these engravers, one to the other, either through marriage and family connections, literary interests or by profession. It is this inter-relationship, unique in the history of decorated glass, between several generations of a highly cultured and educated group of amateur artists that sets apart the 17th century Dutch diamond-engraved vessels from other parts of contemporary Europe, remembering also that these decorated glass vessels were untainted by the ugly word 'commerce', being executed for the sheer love of the art-form itself and esteem in which the recipient was held. Interestingly this thread continues through into the 18th century linking the name of François Crana with Frans Greenwood, perhaps the most celebrated exponent of the art of stipple-engraving.

François Crana would undoubtedly have met Frans Greenwood when the latter attended his brother Charles's marriage to Maria Hosteyn in 1708 which took place at the Walloon Church in Leiden. Crana was a catechist at this church as well as having close family ties with the bride's family. Whilst François Crana's engraving on glass was mainly calligraphic, he may well have taught Greenwood the principles of diamond-engraving. Frans Greenwood's earliest extant glass dated 1722 depicting a galloping horse (Rijksmuseum, Amsterdam) shows both the mane and tail executed in line-work and on some other glasses he used limited calligraphy (see F.G.A.M. Smit, Frans Greenwood, 1680-1763 Dutch Poet and Glass engraver).

We are fortunate that many of these 17th century engraved vessels have survived, though it is probably only a small portion of the number originally executed by these extraordinarily gifted amateur engravers so well versed in all manner of the arts. The 18th century saw the Republic broadening its attitudes towards a wider Europe and with a subsequent change in fashion and taste there seemed to be very little appreciation for those glass engravings of the previous century. It has been noted that at auction in 1775 glasses with calligraphy by Willem van Heemskerk fetched anything from 2½ to 10 stuivers a piece, in other words as few as two and as many as eight for one guilder. That same year the price of a new knopped-stem goblet was 1½ to 2 guilders and in March 1775 the sum of 54 guilders was paid for one goblet stipple-engraved by David Wolff. This disdain will surely have contributed to the disappearance of a large number of the 17th century engraved pieces. The economics of taste are always of interest and in this context it is worth recording that at auction in 1989 a goblet engraved by Willem van Heemskerk, similar to fig.7, realised in the region of £80,000 (299,000 guilders) whilst a stipple-engraved glass by David Wolff may be acquired today for as little as £6,000 - how the wheels of fashion turn!

I am deeply indebted to Mr. F.G.A.M. Smit whose painstaking researches over many years, recently compiled in two unpublished manuscripts under the titles Anna Roemers & Maria Tesselschade and Their Engravings on Glass (1990) and Uniquely Dutch 17th Century calligraphy on Glass (1989), have provided so much of the information contained in this paper. Other sources used are F.W. Ferrand Hudig, An Essay on Dutch Glass Engravers (see Wilfred Buckley, European Glass, 1926), W.B. Honey, Glass, P.C. Ritsema van Eck, 'Bastiaan Boers en Mathieu Petit, schildersmeesters, schoonschrijvers en glasgraveurs', Bulletin Rijksmuseum, 1982 and Simon Schama, The Embarrassment of Riches. An Interpretation of Dutch Culture in the Golden Age, 1987.