This October Gallery Cahn will be taking part in the newly founded TEFAF New York. Why did TEFAF decide to move to New York? Which factors led to this leap across the pond? TEFAF Maastricht, like ART Basel with ART Basel Miami, had long been pondering the idea of launching a second fair outside Europe. Various options were considered and the exhibitors in Maastricht consulted. It transpired that what many of them wished for was a strong, high-end art fair in the world’s number one art market, in other words in the USA.

The obvious choice was New York, a city with an exceptionally dense cluster of art collections and museums. Finding an appropriate venue in New York nevertheless proved very difficult. After long deliberations, it was decided that the best option for TEFAF was the Armory combined with dependable American partners with a long history of organising successful fairs. The Armory is a historic building with a military past. A highly ornate structure, it is currently being restored with great sensitivity by the Basel architects Herzog & De Meuron. As fascinating as its history as a heritage site is, it is not an easy venue. Nor is it especially large. TEFAF therefore decided to stage two fairs there: a fall edition for old masters and a spring edition for early modernism, twentieth-century art, contemporary art and photography – the limited space available having in fact left it with no choice. TEFAF New York thus promises to be just as illustrious as the fair in Maastricht, albeit in a slightly different form. It is also hoped that the new fair will inspire more American customers to hazard the trek to Europe, where in the more generously dimensioned premises in Maastricht they will be able to experience exciting confrontations between the most diverse genres and periods.

I personally am delighted to be participating in TEFAF New York and to have had a part in the deliberations that led to this gratifying outcome right from the start. The Classical Antiquities section will look very different from that in Maastricht and will be subject to different rules as well. Not all the dealers who exhibit in New York will be represented in Maastricht and steps have been taken to raise the percentage of American dealers in attendance so that the existing American market and its clientele are involved from the very first TEFAF New York onwards.

The Armory presents a huge challenge as a venue. Its interior is currently being subtly remodelled by Tom Postma, who is installing an inner shell that leaves the historical substance of the building untouched and can be dismantled after the show. For the first time in the history of the Armory, the whole of the second floor, and with it several magnificent period rooms from 1900 and thereabouts, is to be included. There is also to be an oyster bar on the first floor, assuring visitors of a highly promising and exclusive fair to look forward to!

But is this new departure in keeping with current trends on the art market? It most certainly is! There are simply too many medium-quality fairs, but too few of a sufficiently high calibre and exclusivity and this has led to confusion among collectors. Ultimately, it is only by concentrating top quality works in one place that we can restore clarity and show our clientele which fairs are the absolute musts for collectors like them. Only then can we simplify the decision of which fair to attend and provide opportunities for Europeans to visit New York and for Americans to visit Maastricht, or so we hope. The fairs are spaced throughout the year so
No other religion has had a more decisive influence on the history of European art than Christianity. What began shortly after the year zero as a small Jewish religious community led by one Jesus of Nazareth became, in the following three centuries, a powerful religious force that presented a great challenge to the Roman Empire a polity hitherto characterised by polytheism, religious tolerance and the cult of the Emperor. Soon the political elite felt that, in order to preserve the religious consensus amongst all inhabitants of the Empire, the activities of these troublemakers, who were termed Christians and who even extended a welcoming hand to slaves, must be curtailed. The following decades were thus marred by the persecution of Christians. In the year 311, however, the Edict of Tolerance pronounced by Galerius created a framework of acceptance within which the new monotheistic beliefs could become established. The pro-Christian stance of Emperor Constantine I and the interdiction of pagan cults by Theodosius I in 391/2 were
major steps paving the way for the triumph of Christianity, which today is the world’s most popular religion, numbering 2.26 billion adherents.

Against the backdrop of the visual omnipresence of the pagan deities and of the Roman Emperor, the nascent Christian communities were soon confronted with the question of whether they, too, should give their religious beliefs visual form. A major challenge was that presented by the need to satisfy both the Old Testament ban on pictures and the needs of everyday life. At least in theoretical discourse, for instance that of the Church Fathers,1 the prohibition of images was certainly a constant source of theological controversy, which culminated in the Second Council of Nicaea in 787.

In practice things were quite different, however. There is evidence of the existence of images with a Christian content as early as the 3rd century. Significantly, these are found in the context of burial practices, which were closely linked with everyday life and not restricted to specific social groups: Thus the walls of catacombs and sarcophagi were adorned not only with traditional but also with Christian imagery. The bucolic representations of Jonah sleeping under the gourd trellis (fig. 2), which recall those of the beautiful youth Endymion, as well as pictorial formulae related to Roman Imperial iconography, such as Christ enthroned or Christ’s Entry into Jerusalem, clearly show how intimately the development of Christian imagery and figurative types was linked to pagan visual traditions.

The famous sarcophagus of the Roman prefect Junius Bassus (fig. 3), who died in the year 359, provides a good impression of the Christian pictorial repertoire of the mid-4th century.

This brief overview of the religious and art historical developments of the time enables us to better understand the iconographic significance of a ring-shaped marble table-top currently on display at the Gallery Cahn (figs. 1, 4–5). This object, which at first glance seems rather unusual, belongs to a clearly defined group of artefacts which, as research by Jutta Dresken-Weiland has shown, date from the reign of Theodosius I (347–394).2 These table-tops or, more precisely, their rims, are

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1. See, for instance, the work of the Church Father Tertullian.

The current debate about the size of the illicit market in cultural property and the alleged financing of IS with looted antiquities is mainly based on wild speculation. Before taking action the authorities should look at the facts, as this could prevent the wasting of limited law enforcement resources and the introduction of ineffective but draconian legislation like the most recent German law on cultural property.

Collecting and dealing in ancient art has been under attack in the media for some time now. A crucial distinction often overlooked in this public debate is the difference between legitimate trade and illicit trade. The failure to distinguish between the two has already led to poorly framed policies and regulations by NGOs and governments as the authorities react in haste to unsubstantiated speculation, rumour and propaganda in the wider media.

The "Multibillion Dollar Business"

The wider media have quoted the most bizarre figures for the size of the illicit market. Governments and their officials take these for granted, quoting them without question. They also make little, if any, attempt to test their validity or ask where the figures come from. This “multibillion dollar business” has to be halted, officials shout from the rooftops, using the extreme exaggeration of the figures to reinforce the sense of urgency: claims of $2-3 billion have done the rounds, soon followed by $6-8 billion, with Der Spiegel going as high as $7-15 billion in August 2015, quoting UNESCO as its source, in order to give it credibility. However, when asked, UNESCO stated that it never quotes figures for the illicit market because it doesn’t know what they are, a response echoed by INTERPOL.

The truth is that nobody knows the size of the illicit market. So where did those alleged billions come from? IADAA asked Ivan Macquisten, a journalist, to find the primary source of the $2 billion claim that most seem to quote. He initially traced it back to a report from the year 2000, by Neil Brodie, Peter Watson and Jenny Dooley called “Stealing History: The Illicit Trade in Cultural Property”.

When, for instance, Constantia, half-sister of Emperor Constantine I, wrote to the church historian and Bishop of Caesarea Eusebius (ca 260-340) asking for an image of Christ, he refused her request in very harsh terms, pointing out that this would be a transgression of the second commandment of the Decalogue. (MPG 20, 1545 fl.).

Ancient objects confiscated by US authorities during the raid on IS commander Abu Sayyaf in May 2015.
newspaper, “Great sale of the century” by Geraldine Norman, dating back to 24 November 1990. It took Macquisten months to find a copy of that article and to his utter surprise, it gives no figure at all. Brodie now publicly regrets ever “quoting” the figure, but the harm is done.

So nobody knows the size of the illicit market, but what we do now know is the size of the legitimate market. IADAA conducted research into the size of the antiquities market in 2013: the combined sales figures of dealers and auction houses in the entire Western world. The result is a reliable figure of 150-200 million. So how can anyone extrapolate an illicit market worth multiple billions from that?

In the USA, the Antiquities Coalition (an opponent of the trade in ancient art) until recently quoted a figure of $7 billion as its estimate of what ISIS was raising annually from the illicit trade in antiquities. However, the cracks in this claim began to show earlier this year. Firstly, in March, Deborah Lehr, who chairs the Antiquities Coalition, was quoted in an article as admitting: “The biggest challenge in this field is that there’s no real information or statistics on the size of this illegal trade.”

Then, at a Chicago conference in May, a research project called MANTIS (Modelling the Antiquities Trade in Iraq and Syria), part funded by the Antiquities Coalition, announced some interesting initial conclusions. Dr Fiona Rose-Greenland, the post-doctoral research fellow at the University of Chicago in charge of the project, concluded: “ISIS is likely to have earned several million dollars in profit since launching its looting program... That’s a far cry from $7 billion.”

She attributed the grossly exaggerated figures in the order of billions to governments and other groups opposed to the Islamic State describing their actions in attention-grabbing terms. “It’s a lot easier to call for action against a $7 billion crime than a $4 million one,” she wrote.

Despite all the claims, so far nothing of any significance originating from the troubled region has been found or offered for sale in the traditional market centres of Europe or the USA. One expert who is not surprised by this is James McAndrew, who spent 27 years as a Senior Special Agent working at US Customs and the Department of Homeland Security, where he set up and developed the antiquities division, developing and implementing a national training programme titled “Fighting Illicit Traffic in Cultural Property at US Ports of Entry”. From him we know that in the ten or so years following the First and Second Gulf Wars, only three cases of confiscation of antiquities took place, all of them minor. “You will know when looted Syrian and Iraqi items are seized in the US,” he says, “because the authorities will go out of their way to give the seizures maximum publicity.”

Financing Terror with Junk?
It is fast becoming clear that the financing of terror with antiquities has been grossly exaggerated. On 5 December 2015 the New Yorker published a well-researched article about the raid in May 2015 on Abu Sayyaf, a high level commander of IS. The journalist Ben Taub asked Professor Rachael Goldman to appraise the confiscated antiquities. Her response: “What you are showing is sort of, like, junk,” (see illustrations). This was corroborated by a curator of ancient art from a prominent museum. Nevertheless, the FBI claimed this junk was an important haul of looted antiquities.

Vincent Geerling began collecting ancient art 40 years ago. In 1995, he decided to change his career and turned his hobby into his profession by founding Archea Ancient Art in Amsterdam. He has been a board member of the International Association of Dealers in Ancient Art (IADAA) for many years and its Chairman since 2013.

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A LARGE ARYBALLOS. H. 10.9 cm. Faience. A round-bodied vessel with wide rim and strap handle. Decorated in relief with radiating tongues on broad upper surface of mouth, on shoulder and on underside of base; a net pattern of lozenges on edge of rim and on the body. All surfaces coated with a blue glaze. Reassembled from fragments. Formerly Coll. B. Kröber, Ascona, ca. 1970-1974. Rhodian, ca. 575-550 B.C. CHF 16,000

BLACK-GLAZED TRIPOD-PYXIS (TYPE A). H. 15 cm. Clay. Cylindrical body with elegantly convex sides, carefully balanced above and below by edge of lid and by offset moulding of base. Set on a tripartite foot with reserved concave edge, its join to the flat underside of the pyxis is masked by a thick glazed fillet. Underside of lid unglazed. Reassembled from fragments, and essentially complete save for lid’s restored knob. Formerly Coll. M. Rohde, Basle. “L.185/660” penned on a label affixed to the vase’s underside. Attic, ca. 525-500 B.C. CHF 9,800

A LARGE BLACK-GLAZED KANTHAROS. H. 14.5 cm. Clay, black and brown glaze. Almost cylindrical drinking vessel with lavishly moulded wall that widens slightly towards the wide mouth. Two pointed handles with finger supports on opposite sides. Recessed base painted with brownish glaze and with two black-glazed rings. Some wear on the rim and on the inside. Formerly Swiss priv. coll., prior to 2000. Greek, Boeotian, 5th cent. B.C. CHF 13,800

A WHITE-GROUND SKYPHOS, ATTRIBUTED TO THE HAIMON GROUP. H. 8 cm. D. 9.5 cm. Clay, cream slip, dark brown and black glaze. In shape, this lipless skyphos with narrow base and mastoid body (“footed mastos”) belongs to Ure’s Pistias Class N. The scene on both the obverse and reverse, executed in silhouette, depicts Peleus wrestling with the Nereid Thetis. Below, a series of bands alternately black and brown. Outside edge of lip and exterior of handles glazed. Flanking each handle, upright palmettes in black. Offset foot; on reserved underside, two finely drawn concentric circles about central glazed depression. Complete; reassembled from fragments with breaks retouched. Formerly JDC, Götter, Menschen, Wesen, Cat. 14, 2002, no. 22 with ill. Attic, ca. 480 B.C. CHF 8,500

A FRAGMENT OF AN UNUSUALLY MONUMENTAL OIL LAMP. L. 21 cm. Bronze. This impressive fragment is formed like an independent lamp. However, it originally belonged to an enormous bronze lamp with an interior diameter of ca. 1 m. The disc is adorned by a comedian’s mask, whose open mouth serves as air hole. The angular snout has a large round hole for the wick. The end of the lamp is formed by an element resembling a handle with two semicircular cut-outs at the sides. On the top of the lamp there is a small, cube-like element, which is attached by means of a small iron rod. A dolphin’s snout rises up from it. The dolphin would probably have had a curling tail which rose upwards, and to which chains could have been attached for suspension. Due to its unusually large dimensions, this lamp probably came from a sacred context. Reverse open. Hollow cast. Tip of snout slightly worn. Formerly Baidun Coll., Jerusalem, since 1976. Roman, 1st-2nd cent. A.D. CHF 18,000


A BLACK-GLAZED TREFOIL-MOUTHED OINOCHOE. Clay, black glaze. Bulbous jug that tapers away towards the bottom with pronounced shoulder, short, drawn-in neck and trefoil mouth. Glazed all over except on the underside. Fine ring offsetting the slightly concave base which is coated in a reddish milto. Priv. coll. Basel. Attic, 5th cent. B.C. CHF 6,600


AN ENGRAVED MIRROR WITH INSCRIPTION. H. 19.4 cm. Bronze. Flat, slightly oval disk with tang for the original handle, which would have been made of a different material (wood, bone or ivory). The front was once polished smooth for use as a mirror. The reverse with slightly turned-up rim is finely engraved with Hermes (Turms) facing left, sitting on a sketchily drawn rock. In his right hand he holds his characteristic kerykeion, while his left hand appears to be resting on a shield standing on the ground; to the right of it a writhing snake (?). The messenger of the gods has turned to face the slightly hunched figure of Herakles (Hercle) standing before him, readily identifiable by the lion’s scalp and cudgel. The scene is framed by two trailing ivy tendrils, which at the top are tied together in a Hercules knot and at the transition to the tang converge in an upright palmette atop a volute lyre. The ornament is repeated in the same place on the smooth reflecting surface. The inscription running left is the name of the mirror’s former owner: Poplia Thraktonia, whose etymology can be traced back to the Chiusi region. Tang for the handle preserved only in part. Surface slightly corroded in places. Two cracks sealed. Herakles was the Etruscans’ favourite hero and hence occurs frequently on mirror scenes in which he is often shown in conversation with his companion Iolaos (Vile). Formerly Galleria Serodine, Ascona, Switzerland. Priv. coll. Switzerland. Etruscan, 4th cent. B.C. CHF 8,800

A SIMPULUM WITH WOLF’S HEAD APPLIQUE. L. 19.8 cm. Bronze. Deep bowl, flat strap handle with forked end a wolf’s head between the prongs. Pointed snout, slender, upright ears, ring punches for the eyes. The transition from the handle to the bowl is adorned by a half volute on either side. One ear slightly worn, one of the volutes partially missing. Used to ladle wine during feasts and sacrifices. Simpulum Type 3 after Castoldi-Feugère. Previously Coll. F. Antonovich. Formerly Christie’s London, South Kensington, auction 5.10.2000, no. 76. Publ.: F. Antonovich, Les métamorphoses divines d’Alexandre (Paris, 1996) 178 and 380. Late Hellenistic-Roman, Late Republic, 1st cent. B.C.-1st half of 1st cent. A.D. CHF 2,800


A RIBBED SPRINKLER. H. 9.5 cm. Greenish glass. The spherical body is decorated with spiral ribs running from the top left to the bottom right. Small, off-set base. The flaring neck is constricted at the base. The lip of the broad, horizontal mouth is folded inwards. Slightly iridescent. Deposits in the interior. Intact. Formerly Coll. Mildred (Miriam) Devor, Jerusalem, 1960s-1970s. Roman, Eastern Mediterranean, 4th-5th cent. A.D. CHF 1,400


A GROTESQUE HEAD FROM AN OFFERING VESSEL. H. 9.2 cm. Grey-brown clay. Top of an offering vessel shaped as the grotesque head of a man with curly hair, a large, pointed nose that curves to the left, full lips, slightly protruding ears, knotty eyebrows, large eyes and drilled pupils. A round spout with high rim emerges from the crown of the head. Part of the vessel’s body is preserved; traces of the handle visible at the nape of the neck. Formerly MM AG, Basle. Schweizerische Kunst- und Antiquitätenmesse Basel, 14.–22.06.1980 no. 184 [copy of original purchase contract accompanies this lot]. Old label on base with the inscription “1.2.27 CSS VAS 41” in ink. Roman Egypt, Alexandria (?) 2nd-3rd cent. A.D. CHF 2’800

A BLACK-FIGURE BAND-CUP WITH MALE DANCERS. H. 12.5 cm. Clay. Between the handles a zone of figures rendered in silhouette. A/B: A row of male dancers (seven on A, six on B) moving to right, all represented in the same slightly crouched posture. A curved row of dots in front of the seventh dancer on side A. Palmettes flank the handles. Reserved bands below the figured zone. Glaze on lower part of cup, together with foot, misfired bright orange. Complete, reassembled from fragments. Formerly Coll. H. Voigt, Essen, Germany. Thereafter priv. coll. Basle, acquired from Cahn Auktionen AG, Basle, Auction 4, 18.9.2009, lot 150. Attic, ca. 500 B.C. CHF 12,000

A GOLD PLAQUE WITH THE PORTRAIT OF A ROMAN LADY. H. 1.6 cm. Gold. Fine oval plaque made of raised gold sheet showing the bust of a lady in right profile. Her hair is parted down the middle, drawn back in overlapping rows of wavy tresses and tied at the back of the head in a longish knot. This hairstyle was made fashionable by the Roman Empress Julia Domna (d. 217 A.D.). The lady could be a portrait of the empress herself. Undamaged. Presumably a decorative inlay. Formerly priv. coll. Schellingerhout, The Netherlands, acquired ca. 1980. Roman, late 2nd-1st quarter of 3rd cent. A.D. CHF 3,800

A PAIR OF EARRINGS. L. 4.4 cm. Gold, emerald, green glass. An ornate disc in the shape of a shield boss is attached to the front of the hanger by means of a loop. The disc’s rim is adorned by fine, granulated beads and its concave centre by a glass bead affixed to a small gold pin whose head is a cluster of gold beads. Below it, a pyramidal element made of sheet gold with a double volute at the top and an emerald head framed by two granulated cuffs, is suspended from the hanger. Excellent condition. Clip fastener modern. Formerly Frank Sternberg, Zurich, prior to 2000. Roman, 2nd-3rd cent. A.D. CHF 6,200

A PAIR OF DOLPHIN EARRINGS. L. 8.5 cm. Gold. The creole earrings are made of partially coiled gold wire; one end is bent to form a loop around which a fine wire with volute-shaped ends is coiled. The other end of the loop is hooked into the loop. A dolphin pendant made of sheet gold is suspended from the creole. Its tail forms two loops from which one pearl each is suspended. Hook-shaped hanger. Pearls modern. Formerly priv. coll., Israel. Roman, 1st-3rd cent. A.D. CHF 5,500
Europe is faced with major challenges in the coming years! The transition to a post-industrial knowledge and service economy, rapid globalisation, virtually unimpeded means of communication, financial crises and speculative bubbles, ecological depletion and new dimensions of terror have marked the past decades. Terror, conflicts and wars remind and warn us how fragile the world we live in is. The current migration flows which bring people from Africa and the Middle East to Europe are both an expression and a consequence of these uncertainties.

It remains to be seen in which ways we can learn from history. However, a knowledge of history and the study of the material evidence of the past can serve as a manifold mirror for our everyday lives, if we are able to learn how to recognise and name common features and differences. The visual language and the literary legacy of the Greeks and Romans are a virtually inexhaustible source which pays particular attention to the relationship between the Self and the Other. This is even more interesting when one considers that our present day ethical canon is to a large degree based on the philosophical concepts of the ancient Greeks.

How did the Greeks define themselves? Put simply, it was above all their common language – in contrast to the bárbaroi – as well as their religion and myths that created a sense of identity. Examples for this include, for instance, the Catalogue of Ships in the Iliad, which is not just a list of troop contingents, but also describes the mechanisms of social cohesion and the power structures in place at the time of the poem’s composition, and the Panhellenic hero Herakles. The closer his adventures take him to the limits of the world known to the Greeks, the stranger his opponents become. In the outermost West, for example, he meets the three-bodied Geryoneus. Until ca. 700 B.C. the Greek world lay at the periphery of the great civilisations of the Ancient Near East and of Egypt, and at first took up their ideas, techniques, products, motifs and iconographical elements and adapted them to suit their own needs and notions. At the end of the 6th century B.C. the situation changed radically. In the wake of the military confrontation and the victory over the Persians, the Greeks of the Classical Period became increasingly conscious of their common cultural identity and began to distance themselves from other cultural groups. Vices such as excessive luxury, effeminacy, lack of self-control and despotic behaviour were ascribed to the Non-Greeks.

An important testimony to this development is the Eurymedon Vase that has been on display to the public for the past 35 years in the Museum für Kunst und Gewerbe Hamburg. The scene represented on it is probably
Recent Research Findings

Reading the Invisible

X-Ray Phase-Contrast Imaging Reveals Letters in Carbonized Papyri

By Gerburg Ludwig

Black letters on a black background – how can that be legible? Physicists, chemists, computer analysts and papyrologists from Italy, France and Belgium have made the seemingly impossible a reality. In recent years they have examined completely carbonized, still rolled-up papyrus scrolls by means of high-energy X-rays with the aim of deciphering the collection of texts – a unique cultural treasure – unearthed in 1752-1754 in the Villa dei Papiri in Herculaneum.

How had these papyri been reduced to such a state? The cause was the eruption of Vesuvius around noon on 24 August in the year 79 A.D. Pliny the Younger, who witnessed the cataclysm from the safety of Misenum, in the north-west of the Gulf of Naples later described it in two letters addressed to Tacitus (Pliny the Younger, *Epistulae*, VI.16; VI.20).

In the year 465 B.C. the Greek fleet and army under the command of the Athenian strategist Cimon defeated the Persians by the Eurymedon River in Asia Minor – a final victory in a protracted conflict. This victory is represented in a brutal and humiliating manner: The Greek man is seeking to abuse the Persian sexually. But is this how a victory should be depicted? Hardly! Cimon’s mother’s family was Thracian, so he was not a pure Greek. The Other serves to justify his deed and at the same time reveals him to be ruthless. When does a caricature turn into a prejudice? Cimon was later ostracised from Athens and forced to leave the city.
were not opened did not reveal their secrets; they remained compact, black clumps.

How was this writing material actually made? The stalks of the papyrus plant were cut into thin strips, placed on top of each other crosswise and then pressed so that they stuck together. The resulting sheets were then smoothed and bleached. The sheets were pasted together forming rolls that were over 15 metres long. The ink was made of carbon residues and also contained a considerable portion of lead, as was recently discovered. The ink was not absorbed by the papyrus sheets which is why the letters stand out in slight relief, a phenomenon frequently observed using the microscope. The enormous heat of the pyroclastic waves and the pressure of the volcanic deposits distorted the rolls and their internal spiral structure. The papyrus and the ink merged into a single mass with carbons of a similar density. Thus, conventional low-energy X-rays could not be used to examine the rolls as this technique only works with materials of different density.

The scientists had a brilliant idea: why not intensify the radiation? For this reason, they carefully transported two carbonized papyrus scrolls – formerly presented as a gift to Napoléon Bonaparte by King Ferdinand IV of Naples – from the collection of the Institut de France in Paris to the European Synchrotron (ESRF) in Grenoble, one of the largest particle accelerators in Europe. The high-energy X-rays generated there were used by the scientists for the three-dimensional data capture of the papyrus layers by means of phase-contrast tomography.

The team was particularly interested in the scroll PHerc.Paris 4. The scroll was positioned at one of the 49 beamlines of the electron storage ring, allowing it to rotate. An optical instrument (monochromator) was placed in front of it in order to isolate the required electromagnetic radiation. As the radiation passes through the layers of papyrus, the waves undergo a phase shift – they are, so to speak, thrown out of sync. When they pass through a layer of ink the wave pattern undergoes further change. A sensitive digital camera records these varying shifts and a computer translates the data into an image on the screen: the ink relief appears an image on the screen: the ink relief appears. The process of deciphering the letters! At regular intervals the team publishes its results in the renowned scientific journals PNAS and Nature. Work on the papyrus scrolls continues and the researchers are sure that with the optimisation and refinement of phase-contrast tomography it will in future require only a few hours of Synchrotron-Beamtime to read

The papyrologist Daniel Delattre, a proven authority on the papyri from Herculaneum checked and compared the shapes of the letters and individual embellishments. He was also able to recognize letters that were deformed by heat or the adhesion of the layers. By means of comparison, he consulted passages of a dated and deciphered scroll from the National Library in Naples containing a work by the Epicurean philosopher Philodemus. Delat- tre discerned significant parallels between the two manuscripts, for not only the handwriting but also the letter shapes were very similar. Both the style of writing and the letter shapes are documented for a whole group of papyri from Herculaneum which can be dated to the 2nd quarter of the 1st century B.C.

An extremely tedious procedure, one may think. Nonetheless, this new method of examining the papyri greatly accelerates the process of deciphering the letters! At regular intervals the team publishes its results in the renowned scientific journals PNAS and Nature. Work on the papyrus scrolls continues and the researchers are sure that with the optimisation and refinement of phase-contrast tomography it will in future require only a few hours of Synchrotron-Beamtime to read
“Inanna, let me stroll with you ...” the sun-god Utu suggests to his twin sister, the goddess of love. Utu has to broach a difficult topic and possibly he hopes that it might be easier outdoors. The proposal he makes once they are amidst the fields and pastures, however, is met with extreme displeasure: “I am a woman and I won’t do that, I won’t! I am a star [...] and I won’t! I won’t be the wife of a shepherd!” Utu tries to convince Inanna: “My sister, let the shepherd marry you! Maiden Inanna, why are you unwilling? His butter is good, his milk is good. All the work of the shepherd’s hands is splendid. Inanna, let Dumuzi marry you.” But his sister remains adamant: “The shepherd shall not marry me! [...] His new wool will not influence me. Let the farmer marry me, the maiden.”

At this point Dumuzi himself intervenes. “In what is the farmer superior to me?” he would like to know. For every commodity produced by the farmer, he offers a superior one, out-doing the farmer’s “best beer”, “fine beer”, “brewed beer”, “beer shandy”, “best filtered beer”, “best bread”, “little beans” and “large beans” with “yellow milk”, “soured milk [ie. yoghurt]”, “whipped milk [ie. butter]”, “curds”, “small cheeses” and “large cheeses”. Whilst the prospect of new wool had left Inanna indifferent, it seems that she could not resist such a rich offering of dairy products, for shortly afterwards we read that the shepherd “was cheerful, he was cheerful at the edge of the riverbank [where he was] pasturing the sheep.” (ETCSL 4.08.33)

The shepherd and the farmer vying for Inanna’s favour reflects a basic structure of Mesopotamian society, whose prosperity depended largely on crop cultivation on the one hand and pastoralism on the other. The question which of these two branches of agriculture was to be given precedence is also discussed in the Sumerian creation myth The Debate between Sheep and Grain, but in this instance, the god Enki decrees that “of the two [sisters] Grain shall be the greater. Let Sheep fall on her knees before Grain.” (ETCSL 5.3.2)

That Grain comes first in the creation myth corresponds to actual developments in Neolithic agriculture, for the techniques of crop cultivation were mastered prior to those of animal husbandry. The archaeological record reveals that the inhabitants of the Fertile Crescent had already succeeded in domesticking plants as early as the 9th millennium B.C. The cultivation of field crops appears to have attracted wild goats and sheep indigenous to the more mountainous regions. There is evidence for their domestication as of ca. 8500 B.C. in south-west Anatolia and the Zagros Mountains, and as of ca. 7000 B.C. cattle breeding makes a first appearance in Asia Minor and Mesopotamia. The age and sex distribution of bone finds show that animals were first kept for their meat and other carcass products. Only gradually did people realise that the living animals themselves were extremely useful. Not only could their milk and wool be harvested but their muscle power could also be used for traction and transport (“Secondary Products Revolution”).

A substantial shift towards dairying can be observed as of ca. 6500 B.C. However, it appears that in certain populations, notably in the northern Balkan peninsula and central Europe, lactase persistence only became widespread from ca. 5500 B.C. onwards. Even today, roughly three-quarters of the adult population world-wide suffers from lactose intolerance. Thus, it is probable that only a small proportion of the milk was drunk fresh and that most of it was processed into dairy products such as yoghurt, butter and cheese, which have a lower lactose content. These products have the additional advantage that they keep longer than unprocessed milk. The first occurrences of pottery sieves, some with traces of milk protein, in a given region are usually roughly contemporaneous with the transition to dairying, indicating that the two cultural techniques of milk production and milk processing developed hand in hand.

At the apogee of Mesopotamian civilisation the dairy industry was highly developed and systematised, with state-employed herdsmen who were entrusted with a certain number of animals delivering specified amounts of milk products at regular intervals. The administrative texts from Ur, Drehem and Umma dating from the Third Dynasty of Ur (ca. 2112-2004 B.C.) disclose that for each adult cow, the cowherd was expected to deliver 5 sīla (ca. 5 litres) l-nun [ghee] and 7.5 sīla [ca. 7.5 litres] ga-ār [dried cheese] per year. In addition to these two products aimed at maximum durability, Mesopotamian herdsmen made a great many more milk products, some
of which Dumuzi lists in his bid for Inanna. The Nippur Forerunner of Tablet 24 of the ḤAR-ra=hubullu, a comprehensive list of the foods known at the time, mentions seventeen different dairy products in addition to milk itself, and in the section on fats it lists three different forms of ghee. (MSL XI, 121-122). The types of cheese that can be translated with some degree of certainty include fresh cheese, cheese flavoured with gazi, honey cheese, mustard cheese, creamy cheese, spicy cheese, round cheese and white cheese as well as the small and large cheeses mentioned by Dumuzi. Thus, we have some idea of the taste and texture of Mesopotamian cheeses – but how were they made?

The simplest method to preserve milk, which was probably already employed in Neolithic times and is still commonly used by Mongolian nomads today, entails nothing more than to let the milk stand. The beneficial bacteria naturally present in raw milk transform the lactose into lactic acid. The increased acidity of the milk prevents pathogenic bacteria from multiplying, and thus the milk does not spoil. This sour milk, properly termed clabber, can be drunk or used for cooking. If it is left to stand somewhat longer, the proteins are denatured by the lactic acid and the curds separate from the whey. In order to obtain fresh cheese, the curds, to which some salt can be added, are hung in a cheesecloth, sieve or woven basket to let the whey drain off. The cheese can be preserved by submerging it in oil or brine, or by drying it. Different flavours can be obtained by fermenting the milk into yoghurt or kefir before it is hung.

There is no unequivocal evidence that rennet was used to make cheese in ancient Mesopotamia. Rennet contains the enzymes chymosin and pepsin, which support the digestion of milk and occur naturally in the fourth stomach (abomasum) of young, suckling ruminants. Rennet splits the milk protein casein and thus enables the milk to thicken without turning sour. It also permits the production of firmer and larger cheeses. Possibly the “large cheeses” that are mentioned in various Mesopotamian texts were, therefore, rennet coagulated. Rennet is first mentioned in Hittite texts in ca. 1400 B.C. and it can be assumed that at the latest from this point in time onwards the technique of rennet coagulation was used in cheese making. It is, however, highly likely that the abomasum’s ability to coagulate milk was discovered much earlier, as both hunters and herdsmen had ample opportunity to observe that the stomachs of certain young animals that had been slaughtered contained coagulated milk. Thus cheeses made from sweet milk were also included on the “Mesopotamian” cheese platter for the Gallery.

Dumuzi’s Large Cheeses (ga-år-gal)
Large cheeses can be made when rennet is used to coagulate the still sweet milk. Soak ¼ cm² dried abomasum per litre of milk in whey, as above. Warm the raw milk slightly (32 °C), add 15 ml kefir per litre of milk and let it rest for 1 hour. Add the abomasum and liquid and let the mixture rest for a further hour, during which the curd

Dumuzi’s Small Ewe’s Milk Cheeses (ga-û)
Delicious small cheeses can be made from ewe’s milk using a technique with which Inanna’s future husband might have been familiar and that combines lactic acid and rennet coagulation.

The day before making the cheese, attach ¼ cm² dried abomasum per litre of milk to a thread, so as to be able to remove it from the curds more easily later on. Soak it overnight in 15 ml whey or water.

Cut the curds into cubes. Stir them every couple of minutes during the next 30-60 minutes until they feel slightly rubbery.

Fill the curds into perforated moulds, flip after a couple of hours. Remove from the moulds after 24 hours, rub the surfaces with salt and leave to dry for a day. Once the surfaces are dry, store the cheeses in a cool place.

Warm the raw ewe’s milk slightly (32 °C), add 15 ml befer per litre of milk as well as the abomasum together with the liquid in which it was steeped. Leave to stand at room temperature for ca. 2 days. Fill the curds which should have a yoghurt-like consistency into perforated moulds and leave to drain for 24 hours. Flip them once.

Remove the cheeses from their moulds and rub their surfaces with salt. Leave to dry at room temperature for 1 day, flipping them several times. Mature them for 7-10 days in a fairly cool (10-20 °C), humid place, flipping them daily.

Dry the cheese for several days. In contrast to my specimen, ga-år was usually formed into balls.

Pour the curds into a cheesecloth and suspend it to let the whey drain. After 24 hours, add 5 ml salt per litre of milk and let the curds drain for another couple of hours.

There are enough references to cheese in Neo-Sumerian texts in ca. 1400 B.C. and it can be assumed that at the latest from this point in time onwards the technique of rennet coagulation was used in cheese making. It is, however, highly likely that the abomasum’s ability to coagulate milk was discovered much earlier, as both hunters and herdsmen had ample opportunity to observe that the stomachs of certain young animals that had been slaughtered contained coagulated milk. Thus cheeses made from sweet milk were also included on the “Mesopotamian” cheese platter for the Gallery.

Dingirshaga’s Dried Cheese (ga-år)
In the seventh year of the reign of Ibbi-Sin, the King of Ur (2021 B.C.) the state-employed cowherd Dingirshaga was responsible for four cows. Together with his fellow cowherds Inimshaga, Buudu, Luutu and Guzana he belonged to a group caring for a total of twenty cows led by the foreman Lugalkuli. In this year, he was expected to deliver 30 sîla ga-år. UET IX (1976) 1103. Possibly Dingirshaga made his dried cheese from clabber:

Let the raw milk stand for 2-3 days at room temperature until the curds separate from the whey.

Soak ¼ cm² dried abomasum per litre of milk in whey, as above. Warm the raw milk slightly (32 °C), add 15 ml befer per litre of milk and let it rest for 1 hour. Add the abomasum and liquid and let the mixture rest for a further hour, during which the curd

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The Last Attalid
A Masterpiece of Hellenistic Portrait Art Uncovered

By Martin Flashar

There are certain artefacts – most of them major finds – that cannot be fully understood in a matter of days. Some archaeologists spend years researching them. But the busy art trade rarely has time for this. Occasionally, therefore, it finds itself faced with a dilemma, torn between the desire to present a recently discovered work and the awareness that the research is anything but complete. It is just such a case that we wish to describe to you today.

Only recently did this splendid marble head come into the possession of Jean-David-Cahn AG. It seemed to us to be such a major find that we could not bear to keep you in suspense a single day longer. Until just recently it was still at the conservator’s, whose task, as is so often the case, was not to restore it but rather to remove former restorations. In the Early Modern Period the head was mounted on a bust and the missing nose restored in a way that blurred its true identity. The current photograph, therefore, shows you the object once again in its “pure” state, as it was in Antiquity.

The initial assessment was relatively swift. It is without a doubt a portrait, the likeness of a specific, once living person with individual features: a male without a beard, not especially advanced in age – forty at the most. A fillet, whose ends were wound together at the nape of the neck, provides the insignia of royalty. The dating was similarly straightforward, the Hellenistic features being impossible to overlook. But then came questions that proved much more difficult to answer: How should the head be dated? And if it is a (later) copy or variant of an (older) work, in which period could the original portrait have been made? To which of the Hellenistic ruling dynasties does it belong? Might it even be possible to identify who, exactly, is portrayed?

From the addition of a bust, now removed, we do at least know that: 1) The bust itself was old and could well date from the 17th century. Further research might therefore provide pointers to the past of this important head. 2) Restorers of statuary are often sculptors in their own right, or at any rate people with a fine feeling for sculpture. So whoever attached the bust must have felt that it was an especially good match – indicating that the head might well have been mounted in much the same way in Antiquity. 3) While the modern addition laid the groundwork for an incorrect identification of the subject as Philetairos, the first king of the Pergamenes (r. 282–263 B.C.), known to us from an Imperial Period copy in the form of a bust, there are neither physiognomic nor stylistic connections between the two.

An examination of the piece from the art-historical perspective has now revealed a sculpture which, although still bound by the baroque forms of Pergamenean High Hellenism, is already moving on; hence the reduced pathos and tension. The dating arrived at is not before 150 B.C. The keyword Pergamon provides a clear pointer to the ruling dynasty to which this portrait belongs. All the other evidence, including the relevant coins of the period and what few portrait sculptures in the round there are, support the conclusion that we are looking here at a Pergamenean! The details of the hair show an astonishing similarity and conformity with a portrait fragment, which in volume seven of the “Altertümer von Pergamon” of 1908 was identified by the first scholar to study it as Attalos III. Who was this king? He was certainly a maverick who, aware that his dynasty was drawing to an end, bequeathed his empire to the Roman Senate. He reigned from 138 and died in 133 B.C.

Bernard Andreae, an expert in Pergamenean art, wrote to me two days ago: “If you count the curls and if you look at the furrow in the forehead and the fleshy, falling-away chin, you have the impression that it really could be Attalos III. I believe that this is an outstanding discovery!”

So this is the finding, now rather more than a working hypothesis, with which I commend to you for further contemplation the last of the Attalids.