



Not just the Shadows on the Stone: the Greek, Lycian and Roman Craft of Encaustica (ἔγκαυσις) and the Polishing (γάνωσις) of Coloured Inscriptions, that is, of Graphō (γράφω) and its Study - Epigraphy

Taş Üstündeki Gölgelerin Ötesinde: Renkli Yazıtlardaki Hellen, Lykia ve Roma Yakı Tekniği (ἔνκαυσις) ve Cilalama (γάνωσις) İşçiliği, Diğer Adıyla, Graphō (γράφω) ve İlgili Disiplin - Epigrafi

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Citation

T. M. P. Duggan, "Not just the Shadows on the Stone: the Greek, Lycian and Roman Craft of Encaustica (ἔγκαυσις) and the Polishing (γάνωσις) of Coloured Inscriptions, that is, of Graphō (γράφω) and its Study - Epigraphy". *Phaselis* II (2016) 269-283. DOI: 10.18367/Pha.16019

Received Date: 05.11.2016 | Acceptance Date: 10.12.2016 | Online Publication Date: 31.12.2016

Editing Phaselis Research Project

www.phaselis.org





Vol. II (2016) 269-283 DOI: 10.18367/Pha.16019

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T.M.P. DUGGAN*

Abstract: This paper addresses the colouring of carved inscriptions in antiquity and of the importance of colouring in conveying meaning, context and content, through the seven colours of the Messenger Goddess Iris and her rainbow, preceding and distinct from, the later Messenger God Hermes in black and white. The ancient Greeks knew the sacred texts as coloured and of the associations to be made with particular colours. Surviving examples of coloured inscriptions from Anatolia and of the support (for colour) applied within the cuttings of an inscription are given, to draw attention to the use of colour, this because a sign/ γ ppa ϕ $\dot{\eta}$ /graph $\ddot{\theta}$, conveys meaning through both its shape, and its colour, hence epigraphy is or rather should be concerned with both. It suggests that emphasis, recognition and rhetorical relationships were established through the use of certain colours and colour combinations that together formed an integral part of the reading of the text in Antiquity, in addition to colour's importance for the finished appearance and legibility of the inscription. The colour of the signs forming inscriptions were renewed, and the loss of evidence of colouring, consequent upon cleaning the stone to take an 'epigraphic' cast or squeeze, has led to the erasure of meaning, evidence of colour removed to leave shadows on the stone.

Keywords: Coloured Inscriptions · Graphō - γράφω · Epigraphy · Squeeze · Clichés · Plaster Casts · Latex - Silicone

Öz: Bu makale, antikçağda kazınmış yazıtların renklendirilmesini ve siyah-beyaz renklerdeki Haberci Tanrı Hermes'ten ayrışan öncülü Haberci Tanrıça İris ile onun gökkuşağının yedi rengi üzerinden anlam, bağlam ve içeriği karşıya iletmede renklendirmenin önemini ele almaktadır. Hellenler kutsal metinleri bunların renkli oluşlarından ve özellikle bazı renklerle yapılan birtakım ilişkilendirmelerden tanıyorlardı. Bu çalışmada, renk kullanımına dikkat çekmek amacıyla, Anadolu'dan, günümüze ulaşmış renkli yazıtlardan ve bir yazıtın kazıntıları arasında, kullanılmış boya kalıntılarından örnekler sunulmuştur. Çünkü bu hem şekil hem de renk aracılığıyla anlamı ileten bir işaret; diğer bir deyişle *graphē*'dir (γραφή); ve epigrafi hem şekil hem de renkle ilgilenmektedir – daha ziyade *ilgilenmelidir*. Bu durum gösteriyor ki, vurgulama, onaylama ve hitap ilişkileri birtakım renklerin ve renk kombinasyonlarının kullanımına dayandırılmaktadır. Yazıtın son hali ve okunabilir olması açısından boyanın önemli olmasının yanında, bu renkler ve kombinasyonlar, birlikte, antikçağda metin okumanın ayrılmaz bir parçasını oluşturmaktadırlar. Sunulan örnek yazıtları oluşturan işaretlerin renkleri yenilenmekteydi ve bir epigrafik kalıp veya estampaj almak amacıyla taşın temizlenmesi sonucunda boya kalıntılarının yok olması iletilmek istenen anlamın, taşta gölgeler bırakmak üzere temizlenen renk kanıtlarının silinmesine neden olmuştur.

Anahtar Sözcükler: Renkli Yazıtlar \cdot Graphō - γράφω \cdot Epigrafi \cdot Estampaj \cdot Kalıplar \cdot Alçı Kalıp \cdot Lateks - Silikon

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This paper concerns the colour applied in antiquity to the cuttings of letters and the surrounding smooth surface of the inscribed stone, exploring the inherent dualism contained in the Greek verb, $\gamma\rho\dot{\alpha}\phi\omega$ (grapho), embracing both colour and shape in the making of signs, hence epigraphy, is literally the study of coloured signs ($\gamma\rho\alpha\phi\alpha$ i), or when the colour and its support is lost, that of the vacant shadow shape left in the material surface¹. A graphē ($\gamma\rho\alpha\phi\dot{\gamma}$) or coloured sign representing something more than itself, an element of a visual code recorded in both colour and shape, as with the colours and forms comprising the Egyptian hieroglyphic script², of coloured signs understood to be both sacred and alive (coloured), hence ta hiera grammata = God's Words³.

There was through association with the use of the same colours elsewhere in the physical and literary environment of antiquity, meaning attached to the colour employed in a sign-graphē. This language of colours can be related to the colours associated with the two sacred messengers⁴, Iris, of the coloured rainbow bridge between the world and the divine, and Hermes, the messenger between Zeus and Hades -that is, respectively of the seven colours of the visible spectrum and the binary of black and white. Both winged messengers concerned with conveying instruction and with Hades, but respectively in multi-chrome and mono-chrome, Fig. 1.



Fig. 1. Attic Red-Figure Stamnos From Vulci, Etruria. c. 480-470 B.C. (Beazley No. 201979) Paris, Musée du Louvre, No. G 192. Painting of Zeus Sending Forth the Messengers Iris and Hermes, Attributed to the Berlin Painter. In Iconographic Terms, One of the Most Important of Vase Painted Scenes, Depicting a Source of the Message and Both of the Messengers. It is of Note that Zeus has Already Given Iris her Instructions, She is on her Way Airborne, Kerykeion in Hand, Fleet Feet in Space, while Zeus is Still Giving his Instructions to Hermes, the Younger of the Messengers.

This paper was first presented at the XIX Symposium on Mediterranean Archaeology held in Kemer, Antalya in 2015. The coloured slides from the symposium presentation with additions are at: https://www.acade mia.edu/18447759/19th_SOMA_12-14_Nov._2015_Kemer_Antalya_Turkey_Not_just

A more extensive paper on this subject and providing examples of the associations that can be drawn contextualising colours in antiquity is in preparation for publication.

Hdt. II. 36. 4: "They employ two kinds of writing; one is called sacred, the other demotic".

For the literal meaning of hieroglyphs = 'God's Words', e.g. Daniels 1996, 73.

⁴ For depiction of Iris holding the infant Hermes see, Antiken-sammlungen, Munich, Number J291 (source: http://www.theoi.com/Gallery/P21.4.html).

The seven colours of the rainbow, of Iris, swift-footed rainbow messenger of the gods⁵ on the multi-coloured road, daughter of Thaumas, the Wondrous One, son of Sea and Earth, and of Electra, sister of the Harpies (Hes. theog. 265), Iris of the rainbow, $\bar{l}\rho\iota\varsigma - \tau\dot{\epsilon}\rho\alpha\varsigma$ was a portent, her rainbow a sign, a marker in colours of the message – marking the messenger bringing meaning from the sacred, a survivor from the world before Hermes, "So spake he (Zeus), and stormfooted Iris hasted to bear his message, and went forth from the mountains of Ida to high Olympus"⁶. Plato remarks through Socrates, "Iris also seems to have got her name from $\epsilon\tilde{l}\rho\epsilon\nu$, because she is a messenger" (Plat. Krat. 408b), and is therefore important for our understanding of the formerly clearly understood linkage between meaning and colour, of the rainbow of colours and the message, as in the colour and the shape of letter and, perhaps above all, in the realisation of wonder $\theta\alpha\tilde{l}\mu\alpha$, and so of the sacred, as Plato relates: "Socrates:... For this feeling of wonder shows that you are a philosopher, since wonder is the only beginning of philosophy, and he who said that Iris was the child of Thaumas- $\theta\alpha\tilde{l}\mu\alpha$ made a good genealogy"⁷.

The handmaiden of wonder- $\partial\alpha\tilde{\nu}\mu\alpha^8$, colour, was certainly employed in reference to the sacred as noted above, the sacred letters were in colour, colours embodied the sacred language, coloured forms vibrating purest in this world written in an arc from the sacred to the world in "a garment of a thousand tints" the numinous rainbow. Homer used this image of the coloured arc as a portent, "As Zeus stretcheth forth for mortals a lurid rainbow from out of heaven to be a portent whether of war..." as later Josephus was to record of Yahweh speaking to the Prophet Noah, "But I will give you a sign that I have left off my anger by my bow [whereby is meant the rainbow, for they determined that the rainbow was the bow of God]. And when God had said and promised thus, he went away" 11. In the mosaic depiction in the Church of S. Vitale, Ravenna, both Emperor Justinian and Empress Theodora have a gold halo bordered by a scarlet outer and a purple inner rim, thereby embracing the spectrum of the numinous rainbow.

Due to the association of message/messenger from the holy to the ruler, in both spiritual and temporal terms the purple of the messenger of the sacred became the royal-imperial colour - "raised to the purple", "born in the purple". Colour carried meaning, to be interpreted and understood, it had repeated, echoed and reinforced associations, there was a vocabulary and language(s) of colour, colour formerly was an understood language, quite as much as the signs that comprised the other half of the written sign/word, and, as colour was combined with letter, colour could talk in words, it had a voice that echoed and resonated, it could strengthen and bring emphasis to the letters and words of a text and then, indubitably, what was produced was a complete sign $\gamma \rho \dot{\alpha} \phi \omega$, colour was in and with the sign, like the colouring both within and surrounding the shape of the letter of a carved inscription in stone.

The philosopher Epicharmus (mid-6th to mid-5th c. B.C.) is said to have foretold he would have an imitator (who would be the philosopher Plato) and Epicharmus describes his own words

Hom. *Il.* XI. 185-207; Hes. *theog.* 780. Hermes-Mercury being the son of Maia and Zeus, lyre, wand and art of divining from Apollo, Zeus appointed him herald to the infernal gods. Apollod. *bibl.* III. 10. 2.

⁶ Hom. *Il.* VIII. 409; likewise, Aristoph. *Orn.* 1320.

Plat. Theaet. 155d. On this also, Aristot. Met. I. 982b.

⁸ Understood as such, e.g. Verg. Aen. IX. 13.

⁹ Ovid. Met. 11.709. For the rainbow in antiquity from Aristotle and subsequently, see Lettinck 1999, 243 ff.

Hom. *II.* XVII. 547; XI. 27. The rainbow, a portent, as later recorded by Liv. XLI. 21, 12; as likewise Ammianus Marcellinus in the 4^{th} century A.D., Rerum Gestarum (Amm. Marc. XX. 11. 25-6).

¹¹ Joseph. *loud. Arkh.* I. 99.

as then being dressed in colour by the imitator, his words would be dressed in purple:

"And as I think--for when I think anything I know it full well--that my words will someday be remembered; someone will take them and free them from the metre in which they are now set, nay, will give them instead a purple robe, embroidering it with fine phrases; and, being invincible, he will make everyone else an easy prey" 12.

Further, as Ioannes Lydus records, "In time of Peace, as Pontifex, namely 'Archpriest of the bridge', he (Ceasar) wore a purple, ankle length sacerdotal robe which was trimmed with spearheads in gold, and a pallium, likewise purple, which ended in gold flutings;" ¹³ the image of the purple clad messenger, ruler, intercessor, bridging the worlds of the sacred and the temporal, extended from Homeric times to the Orthodox and the Roman Catholic Christian Churches, symbolised by a ligature of purple between God/Gods and humankind¹⁴.

The 5th century B.C. Pre-Socratic philosopher Anaxagoras of Clazomenae regarded "colour as the object of sight" ¹⁵, and Thucydides, who possibly brought the case resulting in Anaxagoras' exile, clearly remarks upon the faded colours of letters, he read the colours as forming an integral part of the text and employed his observation of an inscription of faded colours to suggest after a century, tyranny's (the Peisistratids) fading footprint in Athens, a passage which implies the regular re-colouring of inscriptions. This inscription raised in the Pythian Precinct survives and remains readable today¹⁶, evidence that Thucydides was not remarking upon the erosion of the forms of the letters carved in the stone but of the colours forming the letters. He wrote:

"...but that (inscription) in the Pythian precinct can still be seen, **though in faded letters**, and is to the following effect:—'Pisistratus, the son of Hippias, Set up this record of his archonship in the precinct of Apollo Pythias." ¹⁷.

Then there is the slightly later inscribed record from Epidauros of ca. 400-350 B.C., '…έγκόλα- $\psi\iota\nu$ καὶ [ἕνκ]αμσιν...' concerning the cost of the carving and of the 'encaustic' colouring of the carved shapes of the letters¹⁸; an inscription which ties together both parts of a grapho, the shape (holding the colour) and the colour.

It seems evident that on occasion colour combinations identified inscriptions and that the colour of these inscriptions were renewed over time, in part from civic pride, as also presumably forming a part of the ritual of grave and temple visitation. It is likewise evident with the elevated locations and the nature of the rock surfaces that carry carved inscriptions that it was only through the colouring of both letters and the background, coloured to contrast with the letters that these inscriptions would have been legible to the person standing below.

Many coloured inscriptions were recorded in Lycia in the mid-19th century. Charles Fellows

¹² Diog. Laert. III. 17.

¹³ Ioan. Lyd. 84-85.

The connection given by the sophists, between the rainbow of seven colours, the musical notes, the known objects in the solar system, and the days of the week, in part broken by Isaac Newton's use of the word violet rather than purple in his Optiks of 1704.

¹⁵ Rudolph 2016, 41.

[&]quot;The inscription on the altar of Apollo survives (ML 11, translated Fornara 37); its lettering is not particularly faint, but probably it was enhanced with paint which had worn away by Thucyidides' time". Fornara 1983, no. 37; Hammond 2009, 594.

¹⁷ Thuk. VI. 54. 7.

¹⁸ *IG* IV². 1. 102, face B. col. II. 195, Epidauros.

records at Tlos, 'many of the letters of the inscriptions retain their varied colouring." ¹⁹, at Pinara, "The letters of the inscriptions in this city, cut into the rock, I find have generally been coloured red, yellow, green or light blue, the letters varying with two colours." 20, while William Müller records in 1844, "Pinare is not so dry as at Thebes, yet whatever the means, colour exists on the tombs. The letters in the Lycian inscriptions are painted in blue and red"21. Charles Fellows at Myra records, "The letters of the inscription were painted alternately blue and red." ²²; at Limyra he recorded: "the Lycian (inscriptions) were cut deeply in the stone, and many richly coloured; the letters being alternately red and blue²³, or in others green, yellow, or red."²⁴, alternating letters²⁵ and lines²⁶ in green and red, while on another, a bilingual inscription, the Phoenician characters coloured blue, the Greek characters coloured red²⁷, different colours marking the two languages on this bilingual, the two contrasting colours employed for these two languages represent the poles of Empedocles theory of colour, fire-red and water-blue28. "In time, the art distinguished itself and discovered light and shadow, with the alteration of contrasting colours intensifying the effect of one against the other." ²⁹, emphasis added. It is noteworthy that Daniel Sharpe FRS (1806-1856) wrote Appendix B on the Lycian language in Charles Fellows' volume, 30 and he neither addresses nor suggests any reasons for the colours of Lycian inscriptions while attempting to explicate the meaning of these texts. Spratt and Forbes record the letters carved on the Lycian rock-cut tombs at Limyra, "all had been coloured red, green or blue'31; and a Lycian inscription at Kandyba, "their (letters) cavities filled with a soft coloured pigment, alternately red and blue, and as fresh as if painted but a few hours."32. For the 19th century record of the practice of taking a plaster cast of an inscription, E. Slatter writes, "One of the chief purposes of the Second Xanthian Expedition (1843-1844) was to make casts of inscriptions...to bring to England"33. M. Schmidt records the plaster-casts of inscriptions³⁴ taken by Augustus Schöenborn (1801–1857), with the paper squeezes described as "paper-casts", distinct from 'cast' (plaster) and 'copy' (drawing by pen), only the last method of recording does no damage to any colour remaining in an inscription. Today, as a direct consequence of taking 'epigraphic' casts/squeezes of these inscriptions, the letter forms have been almost entirely emptied of both visible colour and of the former support for this colour work (Fig. 2).

¹⁹ Fellows 1841, 133.

²⁰ Fellows 1841, 146.

²¹ Solly 1875, 350.

²² Fellows 1841, 198; appendix B, no. 13, 468.

²³ Fellows 1841, 198; Appendix B, 468, no. 2; as Schmidt 1867, cat. no. 12 (= Fellows no. 2). *After a cast. Above the inscription a bas-relief. The letters alternately blue and red.*'.

²⁴ Fellows 1841, 206.

²⁵ Fellows (1841, appendix B, no. 4, 468), as, Schmidt (1867, cat. no. 24 (= Fellows no. 4) *letters green and red.*".

For alternating lines of coloured letters, Schmidt 1867, cat. no. 22 (= Fellows n. 7), *The first line showed a green the second a red colour.'*; Fellows 1841, 477, Pl. XXXVI.

²⁷ Fellows 1841, appendix B, 209, 468, pl. XXXVI, no.1.

²⁸ Rudolph 2016, 46.

²⁹ Pliny, cited, Rudolph 2016, 58.

³⁰ Fellows 1841, 468-519.

³¹ Spratt – Forbes 1847, vol. 1. 149. Likewise Schmidt 1867, cat. no. 11 (= Daniell no. 32). The letters were coloured in red.

³² Spratt – Forbes 1847, vol. 1. 94.

³³ Slatter 1994, 276.

³⁴ Likewise e.g. Schmidt 1867, Limyra, cat. no. 3, 5, 10, 12, 13, 16, Xanthos, cat. no. 2, 3, 4, 5, 9.



Fig. 2. An Inscription at Tlos in Lycian that Remained Coloured into the Mid-19th Century but Which Today Lies Emptied of all Visible Colour due to the Taking of So-Called Epigraphic Squeezes, to Supposedly Preserve the Epigraphic Record.

The nature of the problem facing epigraphers today is that over the past 200 years, with the European led systematic taking of impressions-clichés: paper squeezes, plaster casts, latex or silicone moulds/squeezes etc., and the education of Turkish trained epigraphers in these same methods, the surface of the inscription is most thoroughly cleaned to obtain the clearest possible impression of the cutting made for the inscription. In consequence any remaining *in situ* traces of colour of the inscription, visible or invisible to the human eye, together with the support for this colouring, are often unwittingly destroyed, to obtain a so-called copy of the text, but which is rather to be understood as being an exact copy of a colourless text e.g. Fig. 2. There is no standard titled section in the publication of an inscription to record the remains of pigment, visible to the eye or to instruments such as spectroscopes; nor for record of any remaining areas of any preparatory surfacing applied to the letters of an inscription, thereby indicating the former presence of colouring and sealant, Figs. 3 and 5.

A noteworthy passage concerning cleaning the inscribed surface to take an 'epigraphic' squeeze was provided in the epigraphic textbook written by A. E. Gordon published in 1983:

"...one cleans the inscribed surface with a small cleaning brush, with or without water, so as to remove all dirt, incrustations of lichens, etc., and (modern) paint without damaging the surface or removing any ancient minium that may still be present,..."³⁵.

This passage expects the epigrapher in the field faced with colour on a newly discovered-excavated Latin inscription to recognised and remove '(modern) paint' while leaving the 'ancient minium', the red colouring, intact. The implication being that only ancient minium was employed on Roman inscriptions, to be preserved, any other colour is almost certainly '(modern)', to be removed! No chance of any traces of in situ pigment other than ancient minium surviving those educated in this squeeze taking process.

A clear warning concerning the danger in taking a squeeze was publicised by Sir W. M. F. Petrie 111 years ago in his, Methods and Aims in Archaeology: "But on all coloured work and any kind of tender stone, wet squeezing is a crime, as it destroys the original. Fatuous tourists and brazen students have wrecked innumerable monuments by wet squeezing, and it is now necessarily prohibited in (British administered) Egypt unless special permission is obtained to do

³⁵ Gordon 1983, 31.

some object which cannot be injured by it"³⁶. Likewise R. A. Caminos in his 1979 paper wrote: "Warning: Paper squeezes are harmful and latex ones fatal to friable surfaces and paint"³⁷. Wet squeezes are not made of Egyptian coloured epigraphic material, rather tracing, drawing over photographs, photogrammetry and related techniques are employed³⁸.

Serious warning concerning latex squeezes was given by the epigrapher J. Reynolds in 1986 in a review of two books on epigraphy:

"Some warnings should be attached to the instructions for making latex squeezes: not only is there the risk of peeling off a friable surface with the rubber, but latex undergoes a chemical change at certain temperatures, frequently reached under the midday sun in Mediterranean countries, as a result of which the squeeze may be ruined and the stone on which it is placed may suffer irreparable damage,.." 39.

The fact that the latex squeeze can strip off any in situ traces of pigment and support left on the inscription is not mentioned, it is the stone itself which was, and remains the focus of attention, not

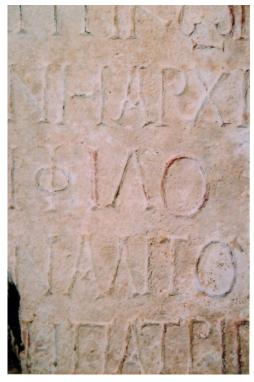


Fig. 3. An Illegally Excavated Coloured Inscription from by the West Gate Rhodiapolis. Retaining Evidence of Colouring and Evidence of the Preparatory Surfacing.

the surfacing, pigment and sealant. In 2011 S. M. Sullivan recorded: "Due to concerns of causing damage to the stele (the Drakon Stele of 409/8 B.C.), further cleaning of its surface is no longer allowed and the creation of new squeezes is not permitted" ⁴⁰.

Meanwhile in Turkey official permission to take epigraphic squeezes remains forthcoming for both Turkish and foreign epigraphers, of newly discovered inscriptions brought to Turkish museums, published in RECAM, ⁴¹ at Halikarnassos in silicone in 1996, at Zeugma, in latex in 2000 and paper squeezes in 2000 and 2002, three impressions made of the same inscription in the space of three years, etc. etc.

First, all remaining traces of sealant and colouring, then the support for it are lost from the stone, then the surface of the stone itself suffers damage from the cleaning, pounding and chemical reactions the epigraphic surface undergoes, in order to provide copies of vacant shadows cast onto the paper of an epigraphic squeeze; while in obtaining a latex or silicone cast, if friable, the surface of the stone can peel off, or stain the stone, or 'cook' onto the epigraphic surface (Fig. 4), yet none of these epigraphic documents had been checked for any remaining

³⁶ Petrie 1904, 61-2.

³⁷ Caminos – Fischer 1979, 16.

³⁸ Malek 1988, 5.

³⁹ Reynolds 1986, 356.

⁴⁰ Sullivan 2011, VI.

⁴¹ Source: http://biaa.ac.uk/research/item/name/regional-epigraphic-catalogues-of-asia-minor-recam-project

microscopic traces of colour or of surfacing through employing scientific instruments such as a Raman or other spectroscope before these squeezes were taken.

If one takes the trouble to think about this matter it is surely evident that the taking of any form of epigraphic squeeze before the epigraphic surface is scientifically checked for any visible or detectable traces of colour is quite simply an act of vandalism, equivalent of washing the coloured text from an illuminated vellum page. It is the destruction of one half of the meaning of the word graphō by people who have been trained in the study of epigraphō, epigraphers.



Fig. 4. Left Behind by Austrian Epigraphers at Tlos Decades Ago in Their Attempt to Take Away Another Copy of the Empty Shadows of an Already Squeezed and Published Inscription, The Latex has 'Cooked' into the Epigraphic Surface of the Inscription and Removal without the Destruction of the Surfacing and Surface of the Stone Seems Impossible.

The vast collections of squeezes assembled in both European and American institutions since the start of the 19^{th} century record only the shadows on the stone, and they also indicate the truly enormous loss of evidence of surfacing and the stripping off of any remaining traces of colouring that has been consequent upon the collecting of in excess of 140,000 epigraphic squeezes. It is most fortunately the case that so few academic disciplines have seriously and with vigour over the course of the past two centuries, first with paper, then latex beginning 70 years ago, today with silicone, destroyed so much of the physical evidence required to fully address their own discipline, a discipline which certainly concerns the binary content of these inscriptions, both the colour and forms employed. Any remaining evidence of the colour content of the glyphs of the text is destroyed, one part of the content put there in antiquity to convey meaning, is typically unthinkingly cleaned away, traces brushed, scraped, scrubbed and washed away -often by the person studying only half of the meaning embodied in the word $\gamma \rho \dot{\alpha} \phi \omega$, graphō, the empty shape of the letters -rather like someone trying to read the name lo, who had "traced in dust the letters of her name with cloven hoof; and thus her sad estate was

known..." 42, one trained to read only the empty shadows in the dust.

There is no mention of colour, of colour codes, of hierarchies and associations, of providing textual emphasis, reinforcing legibility through colour; nor that the scientific discipline of epigraphy denoted by the word-stem $graph\bar{o}$ also includes: to colour, draw, sketch, hence $Z\omega\gamma\rho\alpha\varphi\sigma$ painter, and the words, $\sigma\kappa\eta\nu\sigma\rho\alpha\varphi\alpha$, Agatharchus's perspectival scene-painting for the staging of a tragedy by Aeschylus, 43 and $\sigma\kappa\iota\alpha\gamma\rho\alpha\varphi\alpha$, Apollodorus's shadow-painting, 44 from the end of the 6^{th} - 5^{th} century B.C., 45 as well as to write, incise or carve. Nor yet that in the 5^{th} century B.C. Thucydides understood the letters of an inscription to be coloured – for Thucydides, letter was colour and coloured was the word 46 . This combination - the dual content of the word grapho- $\gamma\rho\alpha\varphi\omega$, was simply understood in the 5^{th} century B.C. - if not apparently by many epigraphers today. In consequence, there is the on-going loss of evidence of colouring from newly discovered inscriptions, continuing the course and practice established by European epigraphers over the past 200 years, sometimes in the mistaken belief that the bright colours on the stone must be modern 47 . Stripped of coloured markers, of emphasis, of meaning within its coloured context, the empty shadow letters of an epigraphic squeeze or of a black and white published text, are quite different things from the living coloured text.

This understood equivalence in purveying meaning between the shape of the letter-word and its colour, as between text and painting extended through antiquity as Plutarch records:

"Even though artists with colour and design, and writers with words and phrases, represent the same subjects, they differ in the material and the manner of their imitation; and yet the underlying end and aim of both is one and the same; the most effective historian is he who, by a vivid representation of emotions and characters, makes his narration like a painting" 48.

And this remained the case right through the medieval and into the Early Modern Period, that colour and design, as words and phrases and vice versa were combined to convey meaning. J. Simpson writes of the poem Anticlaudianus by Alan of Lille (c. 1116/1117 – 1202/1203), that, "For Alan, then, the art of writing and painting are equivalent." ⁴⁹. A painting was like a coloured text, as a coloured text was like a painting, as is clearly visible to anyone looking at an illuminated manuscript, Islamic, Christian, Jewish or other, and, at times the letters were not just vividly coloured but were inhabited by plants, people and creatures, the word was no dead letter, no monotone, no vacant empty shadow word, but alive and represented as such, an integral part of a living coloured text.

⁴² Ovid. *Met.* I. 649.

⁴³ Rudolph 2016, 50 and fn. 66.

⁴⁴ Rudolph 2016, 47-48.

⁴⁵ Rudolph 2016, 37 and fn. 3; Plin. *nat.* XXXV. 60.

⁴⁶ Thuk. VI. 54. 7.

⁴⁷ See above Gordon 1983, 31. Likewise the traces of sky blue background to the red letters of a Lycaonian inscription, (Alkan 2014, 53), Fig. 5 here, were initially thought to be modern paint, being so bright, and so should be cleaned off, my thanks to Yrd. Doc. Dr. M. Alkan for this information.

⁴⁸ Plut. glor. Ath. III. Likewise Trans. F. C. Babbitt: "Though indeed Simonides calls painting silent poetry, and poetry speaking painting. For those actions which painters set forth as they were doing, those history relates when they were done. And what the one sets forth in colors and figures, the other relates in words and sentences; only they differ in the materials and manner of imitation".

⁴⁹ Simpson 2005, 241. See for examples of this, idem 230-48.

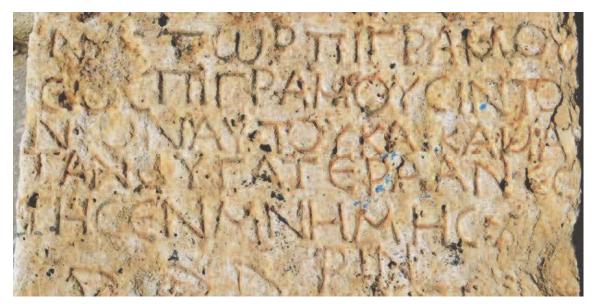


Fig. 5. Remaining In Situ Traces of the Sky Blue Background Surface to the Red Coloured Letters, the Sky Blue Colour Applied over a White Support/Ground-Coat Given to the Limestone, on a Roman Imperial Period Inscription from Lycaonia, from Akarköy by Karaman, Recording: "Pigramos' son Nestor, (Grandson) of Sis, Son of Pigramos, Erected (This Stele) in Memory of his Son Sis and (his) Daughter Kamata" 50.

The colour/shape binary has been severed in epigraphic study - only shape/form counts and this today can be recorded by RTI without taking either a cast or squeeze. Yet with Spectral Imaging 1, UV and Raman spectroscopy etc. minute traces of colouring are now detectable on newly excavated inscriptions, even if invisible to the naked eye. It seems vital to ensure for all newly discovered inscriptions that modern non-invasive spectroscopes are used by responsible epigraphers and archaeologists, together with recording any *in situ* evidence of the support for colouring, before any more evidence of colour, implicit in the carving of the form of the letters of an inscription and visible or invisible to the naked eye is removed, evidence lost preventing the better understanding of the text, simply put, vandalism.

With the evidence of colour and surfacing thus acquired, the language of colours employed in antiquity can, at least in part, be recovered, giving a better idea of the full semiotic-visual-linguistic content of these inscriptions; not only reading the shapes of the letters of the text⁵² but also 'reading' the colour coded content and context, and thereby approaching the way these inscriptions were 'read' in antiquity. The final step being to establish and to relate the context of colour and sign within which the individual epigraphic document was placed and to attempt to describe how a public document, often itself amongst other coloured public documents and structures, was understood by both the literate and illiterate, including the probable recognition of the epigraphic document as belonging to a particular colour coded type etc.

⁵⁰ Alkan 2014, 53.

⁵¹ See: http://palimpsest.stmarytx.edu/integrating/

In this respect it is noteworthy that a paper, latex or silicone squeeze would fail to show the painted palmula and folium designs, "[where one would expect a vacat] there is no gap, but a palmula is painted in between the two sentences", on the Gortynian Law Code of c. 480-460 B.C., Clark 2011, 40-41, the reading this text in antiquity as today was facilitated by the painted signs, signs that were not cut into the stone and so would not be shown on any epigraphic squeeze.



Fig. 6. Detail of the Remaining Colour on the Inscription of the Edict of Emperor Anastasius from Perge, Pamphylia. The Painted White Horizontal Lines Defined the Limits of the Bands of Background Colour that Contrasted with the Colour of the Letters of the Line of Text. It Seems Probable that Roman Imperial Rescripts and Related Imperial Decrees were Colour Coded, Banded in White and Yellow, with Respectively Red and Probably Dark Blue/Purple, rather than Black, Lines of Text, Making them Clearly Recognisable as Imperial Documents within the Rich Meaningful Colour Coded Environment of Antiquity.

The lack of sustained academic endeavour to understand the relationship between colour and sign in epigraphic documents and the way the reading and meaning of the text is altered by colour loss, as indicated by Thucydides, is not only because so much colour has been lost over time, and erased in quantity from the 19th century onwards to provide a so-called 'scientific', colourless record of the shapes of an inscription; but also because 'bold' colouring remains a controversial matter, associated in the trained European Enlightenment neo-classical mind with Catholicism and Medievalism, bad taste and vulgarity, associating bold colours with non-white colouring. This prejudice was in some considerable part due to the influential writings of the Prussian founder of Art History and of scientific Archaeology, the neo-classicist, emphasis upon the word 'neo' - Johann J. Winckelmann (1717-68), whose early exposure to the sculpture of antiquity came from black and white engravings, medals and gypsum casts of largely Roman works. He held the "belief that the material of an art work detracts from our perception of its beauty, representing but a phase through which the beauty must pass before it becomes pure" 53. He wrote:

"Color, however, should have but little share in our consideration of beauty, because the essence of beauty consists, not in color, but in shape, and on this enlightened minds will at once agree, as white is the color that reflects the greatest number of rays of light, and consequently it's the most easily perceived, a beautiful body

⁵³ Leppmann 1971, 166.

will, accordingly, be the more beautiful the whiter it is, just as we see that all figures in gypsum, when freshly formed, strike us as larger than the statues from which they were made"⁵⁴.

Hence, marbles should be clean. In respect to the surviving works of antiquity he was concerned with "edle Einfalt und stille Größe" - noble simplicity and quiet grandeur, the neo-classical ideal, the rich colours employed in antiquity came as a shock, to be removed, as subsequently with the Parthenon-Elgin marbles, the last visible traces of colour removed in 'cleaning' in 1938⁵⁵. Through prejudice the ancient colouring was largely ignored in popularising 'classical ideals' thrust upon antiquity by the neo-classical view, founded upon selected literary sources and influential plaster-cast collections. Winckelmann's preference for male over female form, Hermes over Isis, for form over colour, for male over female was perhaps not particularly surprising given his personal life of homosexuality⁵⁶.

The two-tone Hermes has triumphed over the iridescent Iris, shape over colour, the $\gamma p \alpha \phi \eta / g$ graphē, the binary of colour + shape, reduced to shape alone, studied by what can be described as *Epigraphos monophthalmos*, the one-eyed epigrapher, trained to read the empty shape of the sign and who aims to fully understand and publish 'the text', empty of colour, to be read and 'understood' empty of colour by the reader. It has remained the case for the past two centuries that the form of the letters and words has had absolute priority over any traces of the colour remaining beneath the dirt of centuries, and so today only shadow remains, where colour once was, but, under modern scientific investigation some traces of colour or of its support can still be detected on already cleaned, published inscriptions, through the employment of ultra-violet light spectrometry, Raman spectroscopy and raking light photography etc.

Conclusions

Adding to the content, visibility and legibility, the coloured line(s) of letters-signs, contrasting with the surrounding coloured background, provided the visual aspect of the text. The vocabulary of colours employed served as an identifier from a distance for certain types of inscriptions and a reminder of a lived reality; colour on statues, walls, columns, textiles and inscriptions, through the associations made with different colours, which formed a visible reminder of the reality of the sacred - the rainbow of seven colours of the messenger goddess and the black and white of the messenger god - and thereby of human proximity via these coloured signs in this world to the Alive of the non-temporal realm. The colours associated with these two messengers formed a bridge of associations between worlds, articulating meaning in the signs of inscriptions, making the text alive - resonating in the world. Colour was read as an integral part of the letters and words on the prepared smoothed epigraphic coloured surface, which can today be searched for, recovered and understood, thereby breathing life again into the dead and empty forms of the letters. At a fundamental level the use of colour in ancient texts means that the black and white publication of ancient texts today does not transmit the same vocabulary of meanings as were conveyed to the reader of the coloured text in antiquity – this is simple to understand. Remove the colour from the sign and you will have changed or abolished its mean-

⁵⁴ Wincklemann 1850, vol. II. 38.

[&]quot;the methods employed have in fact succeeded in removing the entire patina of the marble and the last remaining traces of the ancient colour,"; (London) Sunday Times, 21 May, 1939. A parliamentary question raised by Robert Byron, cited Knox 2003, 412.

⁵⁶ Leppmann 1971, 209-12.

ing. Print a coloured text in black and white and the content and meaning of the signs are changed, the text is understood differently and epigraphy, the study of coloured signs, surely requires that the language embodied in the colour of the sign be as well understood as the language embodied in the form of the sign. We would then be wearing bifocals, rather than continuing to read the texts of antiquity through a 'corrective' colour-blind neo-classical monocle.

Figure Sources

- Fig. 1: https://commons.wikimedia.org/wiki/Category:Zeus_in_ancient_Greek_pottery#/media/File:Zeus_sending_forth_Hermes_and_Iris.JPG
- Fig. 2: Photograph Tlos 2015, by permission of T. Korkut, Tlos Excavation Archive.
- Fig. 3: Photograph 2006, by permission of N. Çevik.
- Fig. 4: Photograph Tlos 2015, by permission of T. Korkut, Tlos Excavation Archive.
- Fig. 5: Photograph 2013, by permission of Yrd. Doç. Dr. M. Alkan.
- Fig. 6: By permission of Doç. Dr. F. Onur.

Post Note

Unless otherwise stated all abbreviated titles (Greek & Latin) are the versions available at: http://www.perseus.tufts.edu/hopper/collection?collection=Perseus:collection:Greco-Roman

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