

The elephant in the room

Iconography, Iconclass and Artificial Intelligence



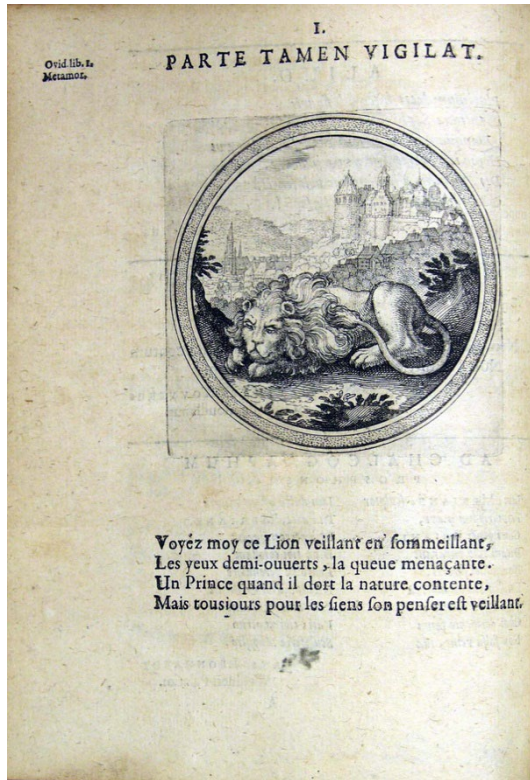
Introduction

This article is an annotated and slightly expanded version of a presentation given at the 13th International Conference of the Society for Emblem Studies (SES) in Vienna in July 2025. The presentation was my contribution to the panel session with the theme “**New Horizons, Ongoing digital humanities projects**”. The overall theme of the conference was “**Respicit et Prospicit**”, so looking back at my own past ideas about the future of emblem studies fitted both. In particular I had realized that my predictions about the role of Artificial Intelligence demanded critical re-evaluation. I had been speculating about the potential of A.I. for the research of iconography at various earlier occasions, including previous SES conferences. Recent developments in the field had forced me to change my rather sceptical opinion and I decided to share my revised views in some detail.

Testing A.I.

On 17 December 2020 I gave an online lecture for the University of Luxembourg’s Centre for Contemporary and Digital History. As a title I used the question: “*When will an algorithm identify a sleeping lion as an emblem of a vigilant ruler?*” Although intended as a rhetorical question my answer was not very difficult to guess. I knew that object detection software was quite capable of identifying the shape of a painted or drawn lion. Still, I considered it unlikely that an algorithm would soon be able to grasp when such a shape expressed a complex emblematic idea and distinguish it from the shape of a lion with a different meaning, e.g. the symbol of saint Mark, the attribute of saint Jerome, the victim of Samson, David or Hercules, or the zodiacal sign Leo. In

July 2022, at the 12th International SES Conference, in Coimbra, I even called the idea that algorithms will be able to replace the human cataloguing effort anytime soon a tragic mistake... Although I still maintain that “replacing” the human cataloguing effort is not what we are looking at, recent developments in A.I. do warrant my re-assessment of what it can do for iconography.



To begin with I tested the same emblem¹ that I used in December 2020. There is a quickly growing number of A.I. applications, but I decided to stick with the one that many consider to be the benchmark program: OpenAI’s ChatGPT². The prompt I used was “**tag with Iconclass and interpret**”, which seemed ambitious enough. ChatGPT offered the following interpretation: “*This image shows a lion resting but with half-open eyes and a tense, alert posture. The accompanying motto "PARTE TAMEN VIGILAT" translates to "In part, however, it keeps watch." Below, the French verse explains that although the lion appears to be sleeping, it is still vigilant, representing a ruler who, even in repose, watches over his subjects. The lion here serves as an allegory for a prince or ruler whose vigilance for his people never ceases, even when resting. The background with a fortified city reinforces the theme of protection and watchfulness over a domain.*” It also added a summary: “*This emblem conveys the idea of vigilance in power, using the lion as a*

metaphor for a ruler who maintains alertness and responsibility at all times.”

This response from ChatGPT seemed to answer my original rhetorical question with “2025”, as this is a correct description of the emblem. The suggested Iconclass tags, on the other hand, were all incorrect. The texts of the concept definitions looked convincing, but neither they nor the notations were actually taken from the Iconclass system, as is shown in the table below:

ChatGPT’s suggested notations and texts		real Iconclass concepts
25F4	lion (general representation)	25F4 reptiles
25F41	sleeping lion	25F41 lizards
25F412	half-sleeping, watchful lion	not existent
44A1	vigilance, watchfulness	44A1 coat of arms (as symbol of the state, etc.)
44A12	ruler's vigilance, ruler compared to a lion	not existent
11R3	emblems, devices, symbols	11R3 the course of life symbolized
41C	fortifications, castles, cities (in the background)	41C nutrition, nourishment

¹ Wilhelm Zinzgreff, *Emblematum Ethico-politicorum centuria*. [Heidelberg], De Bry, 1619. Emblem I.

² I used ChatGPT 4o in July 2025. I am aware of the many legal, political and ethical issues – copyright, water and energy resources, extremist bias, etcetera - linked to the use of A.I. applications. These will not be resolved very quickly. Moreover, new versions of the same applications are now published in sometimes quick succession. ChatGPT 5 was launched while writing this report ...

The usefulness of A.I., however, can only be assessed on a domain-by-domain basis. We need domain experts to separate the wheat from the chaff for their special field, as A.I.’s “hallucinations” may easily escape those who have no expertise in the field.

Given the fact that the complete dataset of the Iconclass system has been available in open access for many years and has in all likelihood been scraped from the internet to help build OpenAI’s Large Language Model, this aspect of the result was somewhat surprising.

To make sure that the interpretation of the first emblem was more than a lucky guess, I uploaded a second emblem from the same book for analysis, again with a lion as protagonist. I



used the same prompt and, again, received a more than adequate “answer”:

“This image depicts a lion standing alert with its tail curled upwards, ready to strike or defend itself. The Latin motto “Parat sese accendere virtus” translates to “Virtue prepares itself to be kindled.” Below, the French verse explains that a valiant warrior does not wait to be forced into action; instead, his heart urges him from within to achieve great deeds, just as a lion, stimulated by its tail, readies itself for the fight, delivering powerful blows in combat without hesitation. Here, the lion symbolizes innate courage and readiness for battle—a natural drive toward action without external compulsion. The background of a fortified city again connects the theme of protection and martial readiness.”

Another summary was on offer: *“This emblem conveys the idea of courageous initiative. It uses the image of a lion to illustrate how valor comes from within and prepares itself naturally for heroic action,*

just as a lion readies itself to fight.”

As with the first emblem the suggested Iconclass concepts were all erroneous, but also curiously consistent in their errors.³

ChatGPT’s suggested notations and texts		real Iconclass concepts
25F4	lion (general representation)	25F4 reptiles
25F44	lion stimulated to fight, angry lion, lion ready for action	25F44 tortoises, turtles
44A3	courage, valour, bravery	44A3 flag, colours (as symbol of the state, etc.)
44A33	martial courage, warrior's bravery	non existent
11R3	emblems, devices, symbols	11R3 the course of life symbolized
41C	fortifications, castles, cities (in the background)	41C nutrition, nourishment

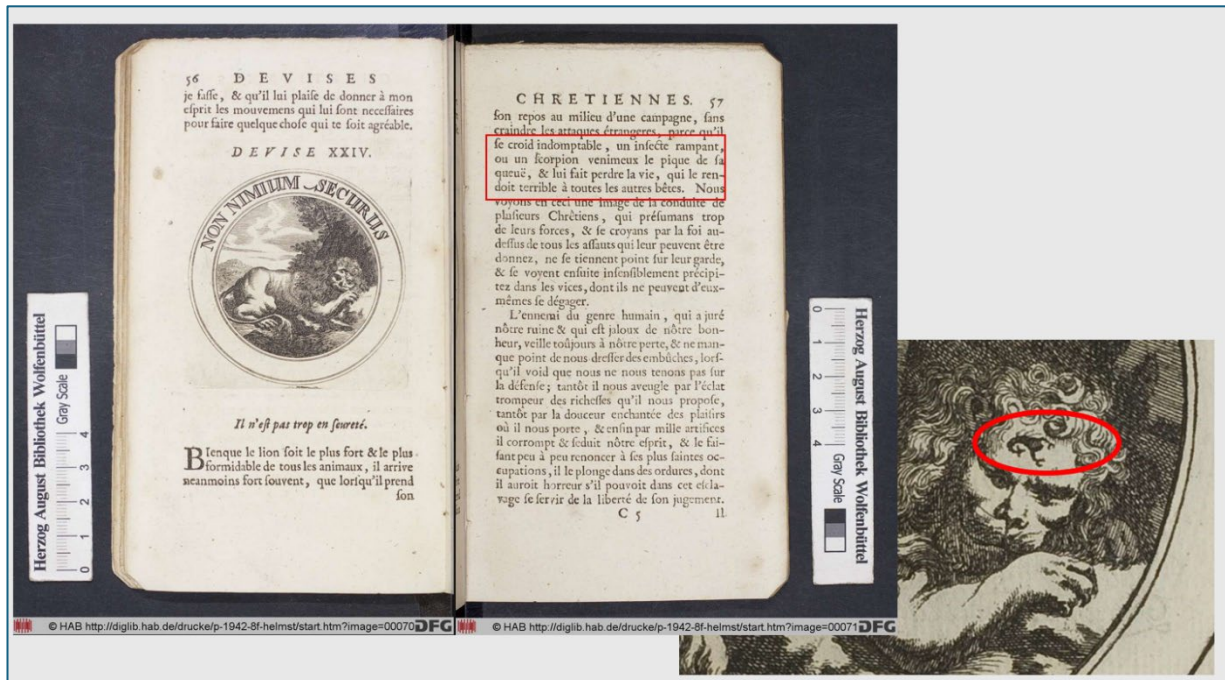
The response from ChatGPT was clearly based on both the emblem’s *picturae* and their textual elements – the mottoes and the explanatory poems. It therefore made sense to complicate matters a little further. To this end I used an emblem⁴ of which the *pictura* also shows a lion who is lying down. Here too vigilance is a theme, but with a subtly different twist. The emblem also presented an additional technical complication as its explanatory text stretched over multiple

³ As if OpenAI is using its own variant of an Iconclass system.

⁴ From: *Emblèmes Ou Devises Chrétiennes*. Utrecht, Antoine Schouten, 1697, pp 56-57

pages and an important detail was mentioned in the text only on the second page, i.e. not on the same page as the *pictura*.

Here a screenshot of the slide that illustrates these complexities.



When I presented ChatGPT only with the page shown on the left, it offered this interpretation:

“The emblem shows a lion resting with an alert gaze, in a natural landscape. The Latin motto “Non nimium securus” translates as “Not too confident” or “Not overly secure.” The French caption below clarifies: “Il n’est pas trop en seureté.” (“He is not too safe.”) The text below explains that even though the lion is the strongest and most formidable of all animals, it often happens that when it lets down its guard or becomes too secure, it risks danger. Here, the lion symbolizes the danger of overconfidence. Despite its strength, even the lion must remain vigilant, as lowering one’s guard can lead to downfall. It’s a warning against excessive self-confidence or false security, emphasizing constant awareness and prudence.”

Its summary reads thus:

“This emblem conveys the danger of overconfidence and the need for vigilance. It reminds rulers and individuals alike that even great power doesn’t guarantee safety if one becomes complacent.”

I then uploaded a combination of the first and second page as a single image. The second page explicitly mentions a **scorpion** as an example of a tiny animal that can seriously harm the mighty lion *“parce qu’il se croit indomptable”*.

The additional information on the second page was processed in a few seconds and resulted in this adapted interpretation:

*“This emblem shows a lion resting peacefully in a field, under the motto “Non nimium securus” (“Not too secure / Not overly confident”). The French caption says, “Il n’est pas trop en seureté.” (“He is not too safe.”) The accompanying text explains that although the lion is the strongest and most formidable of all animals, it can still be killed by small creatures like insects or **scorpions**, whose sting can be fatal if the lion sleeps too securely. The moral draws a parallel with Christians who, overconfident in their strength and faith, let down their guard. Believing themselves above temptation or spiritual danger, they risk falling into vice or sin because they are not vigilant. The enemy of*

humankind (the Devil) constantly seeks their ruin through deceit, temptations, and distractions, leading them away from their spiritual duties.”

The new summary also reflected the added information:

“This emblem warns against overconfidence and spiritual complacency. It teaches that even the strongest can fall if they grow too secure and neglect vigilance, using the lion as a metaphor for both physical and moral danger.”

The ‘pseudo’ Iconclass concepts suggested by the system on the basis of the first page alone were expanded with two more fantasy Iconclass tags – 31A3 and 49E – but, interestingly, the scorpion was not awarded separate mention.

ChatGPT’s suggested notation and text		real Iconclass concepts
25F4	lion (general representation)	25F4 reptiles
25F43	resting or lying lion	25F44 tortoises, turtles
44A1	vigilance, watchfulness	44A1 coat of arms (as symbol of the state, etc.)
44A11	overconfidence, false security	44A11 device (as symbol of the state, etc.)
11R3	emblems, devices, symbols	11R3 the course of life symbolized
31A3	dangers hidden in security	31A3 the (five) senses
49E	Christian moral allegory	49E science and technology

This analysis of complex ideas, expressed by imagery that is all but self-evident, is **not** a demonstration of advanced scholarship. OpenAI’s trade secret is not creative thinking or scholarly insight, but hauntingly brilliant organization and presentation. It offers us the “echo of a million voices” that originally were talking all at once on the internet but are now re-organized in clearer patterns. Somewhere in the pandemonium it identified the elements with which to build these patterns; it then recombined the elements and now offers them in an seductively digestible format⁵.

What is stunning is the quality of the organization, recombination and presentation of which these new A.I. applications have become capable in the past few years. The concept of a paradigm shift should not be used lightly, but it is tempting to use that phrase for this development.

However, as Aby Warburg has taught us: “*der liebe Gott steckt im Detail*”. So, before we entrust the cataloguing of complex historical sources like emblems to A.I. – with repercussions for all iconographic information provision(!) – we should look closely at the details. Looking at details obviously means looking at the quality of the suggested metadata, which was the reason I included “*tag with Iconclass*” in my original prompt. If successful, the resulting metadata would automatically become part of the standardized and widely used ecosystem of Iconclass. In addition to metadata quality we should also look at the speed with which the metadata are produced, as iconographic cataloguing is a laborious and specialist – and therefore expensive -

⁵ Although it is far beyond my expertise to reconstruct how an LLM aggregates and processes its building blocks, a straightforward Google query for the motto “**non nimium securus**” offers some glimpses. The query will find a Dutch version of the emblem on the site of the **Digitale Bibliotheek voor de Nederlandse Letteren**: *Zederyke Zinnebeelden, vertoont in konstplaten* (Amsterdam, 1712) https://www.dbnl.org/tekst/verr013zede01_01/verr013zede01_01.pdf. A Latin version is available on the **Mannheimer Texte Online** site: <https://mateo.uni-mannheim.de/desbillons/symbol/seite33.html> and the French version which I used here, is found in the **Wolfenbütteler Digitale Bibliothek**. Tagged with Iconclass notations it is found on the **Emblematica Online** site: <http://emblematica.grainger.illinois.edu/detail/emblem/E001739>

process. It would have serious consequences if we can accelerate this process with the help of A.I..

ChatGPT produced the descriptions of the three emblem examples I showed above in circa 15 seconds per item. For my next test⁶ I asked it to interpret and describe a small batch of emblems in one go. I selected a group of eight emblems from Rollenhagen's *Nucleus Emblematum* and stored them as a single image. All members of the group had been tagged in earlier projects with the Iconclass concept **54A4 Calmness, Equanimity, Imperturbability**⁷ or one of its hierarchical "children". To see whether ChatGPT would group them in a similar way I prompted it to not just describe and interpret the emblems but also to find a common denominator for them. I left out the invitation to produce Iconclass tags because of the implicit bias I used to select them in the first place. Here is a screenshot of the slide in my presentation. The Rollenhagen copy I used is the one that is part of Glasgow's Stirling Maxwell collection⁸:



This is the response ChatGPT produced in circa 15 seconds⁹ for this batch of emblems:

Top Row (Left to Right):

- **"Patientia duris gaudet"** (Patience rejoices in hardship)
Image: A farmer sowing seeds with a cheerful look, despite barren land or toil.
Moral: Patience yields comfort in adversity; true reward often grows from difficulty.
- **"Furor fit saepe patiens"** (Too much patience becomes rage)
Image: A boy provoking a ram that is about to charge.

⁶ It is important to note that the outcome of a test is dependent on many factors, most of which are hidden from our view in ChatGPT 4o. Repeating a test can therefore easily lead to results that are different in their details. ChatGPT 5 now includes a functionality that makes the process of searching and "reasoning" visible, but it would be "historically" incorrect to include that information in this report.

⁷ See: <https://iconclass.org/54A4>

⁸ Glasgow University Library, Stirling Maxwell 919.1 and 919.2. This choice of a copy is relevant because the emblems in these volumes are enriched with Stirling Maxwell's handwritten annotations.

⁹ Needless to say that this is a rough, not an exact measurement. It does not take into account factors like the speed of the internet connection, the server load at ChatGPT's end, etcetera. But "circa 15 seconds" is very fast ...

Moral: Excessive patience can lead to a dangerous breaking point — don't provoke the gentle.

- **"Noli altum sapere"** (Do not be wise in your own conceit)

Image: A philosopher trying to pluck unreachable fruit from a tall tree.

Moral: Moderation in wisdom; overreaching knowledge or pride can bring ruin.

- **"Ne quid nimis"** (Nothing in excess)

Image: A woman pouring liquid carefully from a jug.

Moral: Avoid excess in all things — even virtue becomes vice when taken too far.

Bottom Row (Left to Right):

- **"Qui me alit extinguit"** (He who feeds me extinguishes me)

Image: A flaming torch being extinguished by a cloud, possibly breathed out by a face.

Moral: Love, like fire, may be destroyed by the same force that feeds it. Nourishment and destruction are close.

- **"Moderamen servare"** (Preserve self-control)

Image: A woman with reins and a bridle.

Moral: Self-restraint is noble — emotions and desires must be guided like a horse with reins.

- **"Patientia superat omnia"** (Patience overcomes all things)

Image: A crowned serpent shaped into a cross, biting itself (ouroboros), symbolizing eternity.

Moral: Patience is a virtue that leads to eventual reward and triumph, even over time itself.

- **"Virtus invicta"** (Virtue unconquered)

Image: A hammer striking an anvil that doesn't break.

Moral: True virtue is unbreakable. Like an anvil, it withstands every blow without cracking.

In those 15 seconds it also "answered" my request to offer a **Common Denominator** for this set of emblems - as follows:

*The overarching theme of these emblems is **Stoic and Christian moral philosophy**, especially virtues such as:*

- **Patience** (emphasized in multiple emblems)
- **Temperance / Moderation**
- **Self-control**
- **Wisdom (tempered with humility)**
- **Endurance in adversity**
- **The paradox of strength through restraint**

*They teach that **virtue lies in balance** — neither rashness nor passivity, but guided strength.*

The use of allegory (animals, elements, tools, classical figures) turns abstract ethics into vivid visual maxims for contemplation and behavior.

*Let me know if you'd like a modernized interpretation or to explore the source (e.g., *Nucleus Emblematum* or *Rollenhagen's Emblemata*).*

At first sight the descriptions of the individual emblems and the general assessment of their meaning are quite convincing. Still, it warrants to look very closely at the details. I thus compared the generated descriptions and interpretations with the information found in some established sources of emblem scholarship. In the hybrid world of humanities information that can mean: printed books... So I turned to two books that both deal with *Rollenhagen's* emblems: Henkel-Schöne's *Emblemata*¹⁰ and Warncke's *Gabriel Rollenhagen Sinn-Bilder*¹¹ and supplemented these with my own observations.

¹⁰ A. Henkel & A. Schöne, *Emblemata. Handbuch zur Sinnbildkunst des XVI. und XVII. Jahrhunderts*. Stuttgart – Weimar, 1996



¹¹ C.-P. Warncke, *Gabriel Rollenhagen Sinn-Bilder. Ein Tugendspiegel*. Dortmund, 1983

The mottoes as identified by ChatGPT offer a first warning. Compare them with the actual mottoes:

Henkel-Schöne & Warncke	ChatGPT
Gaudet patientia duris	Patientia duris gaudet
Furor fit laesa saepius patientia	Furor fit saepe patiens
Noli altum sapere	Noli altum sapere
Ne quid nimis	Ne quid nimis
Qui me alit me extinguit	Qui me alit extinguit
Serva modum	Moderamen servare
Superat cruce coronor	Patientia superat omnia
Virtus inexpugnabilis	Virtus invicta

Although a mixed image arises from the comparison, the differences are clear. The first motto simply has another word order; the second one omits the word “laesa” and reads “patiens” instead of “patientia”. The third and fourth are identical to Henkel-Schöne’s reading. The fifth merely omits the second “me”, but the sixth, seventh and eighth seriously differ from the actual mottoes printed around the *picturae*.

When we turn to the short descriptions of the *picturae*, a similar image emerges. Some elements are identified correctly, some are mis-interpreted and some are overlooked. The table below shows ChatGPT’s descriptions in bold with my iconographical comments in italics:

	<p>A farmer sowing seeds with a cheerful look, despite barren land or toil.</p> <p><i>Comment: This man is not sowing seeds but gripping a thistle and pointing upwards. He does not have a cheerful look but a quite serious one. Saint Christopher crossing the river with the Christ-child on his shoulders is not included in the short description, nor is the hermit holding a lantern.</i></p>
	<p>A boy provoking a ram that is about to charge.</p> <p><i>Comment: This is an adequate and correct caption for this pictura.</i></p>



A philosopher trying to pluck unreachable fruit from a tall tree.

Comment: A man wearing a scholar's robe is pointing at a tree that is damaged by a storm that also endangers a ship at sea. On the left a couple, standing in front of a building, is looking up at the stars. In front of the man a gourd is lying on the ground. The stormwind is symbolized by a face with rounded cheeks.



A woman pouring liquid carefully from a jug.

Comment: A woman pours liquid from a jug onto a dish. Not doing it carefully, she causes the dish to overflow. In the background at the right a soldier and a scholar seem to be debating. The soldier appears to point at the army camp in the background on the left; the scholar points upwards, possibly at the castle in the background on the right.



A flaming torch being extinguished by a cloud, possibly breathed out by a face.

Comment: A face with rounded cheeks, symbolizing the wind, blows on a torch. In the background Cupid takes aim at two couples. Beneath the torch Cupid – in the guise of Death – takes aim at another couple. A dog crosses a stream.



A woman with reins and a bridle.

Comment: A woman holding reins in her right hand and a square in her left. In the background on the left men are training a horse; on the right men are practicing with crossbow and arrow.

Top: "Since overmuch will overfill, Pour out enough, but do not spill."

Bottom: "What we waste, will to our account be laid, And what we wisely spend, will be repaid."

The emblem encourages prudence and measured behavior — not only in material things (like money or food), but also in speech, ambition, emotion, and time. Anything "overpoured" is lost or becomes harmful. The idea is grounded in both classical Stoic and Christian ethics.

The second test of this emblem produced roughly the same result as the first one. The description correctly "sees" this as a metaphor for moderation, but as I said above, the woman expresses this concept by **not** being careful as she causes the dish to overflow. The military camp and buildings with a tower in the background is described with what you could call "strategic vagueness".



This emblem (No. 13) presents a strong caution against overreaching in knowledge or ambition, a common theme in Renaissance moral philosophy rooted in classical and Christian thought.

Visual Description:

- A man in a scholar's robe is attempting to pluck fruit from the top of a tree, but the fruit is high, possibly out of reach.
- A cloud with a face (divine or celestial) shines or speaks down from above — possibly symbolizing divine reason, limit, or fate.
- The landscape includes classical ruins and nature, reinforcing themes of mortal limitation.

Interpretation:

Motto (Around the Emblem):

"NOLI ALTVM SAPERE."

(Do not be wise in lofty things or Do not think too

highly of yourself)

Latin Verse Below:

"Noli altum sapere, et plus quam mortalia fas est,

Pectora. Nam Sapere, non nimium Sapere est."

(Do not aim to know more than is allowed for mortals,

For to be wise is not to be excessively wise.)

English Annotations:

Top : "Above thy knowledge, do not rise; But with sobriety be wise."

Bottom: "And he that will beyond his bounds be wise, Becomes an Idiot before he dies."

This emblem illustrates the danger of intellectual hubris, echoing classical warnings like those in Ovid and Christian scriptures (e.g., Romans 12:3 or Ecclesiastes). The handwritten lines reinforce that true wisdom lies in knowing one's limits, and that striving beyond human capacity leads to folly or ruin.

Here too, the second test run produced by and large the same result. The description is consistent in "seeing" the man trying to pluck fruit, which he does not. It also misinterprets the face with rounded cheeks which is a standard way to represent wind or storm and has no specific divine or celestial meaning. It misses the gourd and here too it uses some "strategic vagueness" when describing the landscape.

A new element in this second testrun is the presence of handwritten annotations on both pages. My initial assumption was that these annotations were read and interpreted in real time by ChatGPT. I was aware that the software that can read handwriting, has evolved far beyond traditional OCR. However, the situation became a little more complex than I originally assumed when I realized that Stirling Maxwell's manuscript notes are citations from one of the other emblem books from his collection. They clearly are quotes from George Wither's *A collection of Emblemes, ancient and moderne*, published in London in 1635. A complete transcription of this book has been online for many years,¹² so in all probability it was used as training material for language models such as OpenAI's.

As may be expected of handwritten annotations, there are some small changes in the interpunction and in the spelling of a few words. More significantly, and harder to explain, they use some words that differ from Wither's text: **waste** (for **marre**) and **idiot** (for **a very foole**). So, ChatGPT's version still makes you guess what exactly happened here.

Here my transcription of the annotations (**S-M**), ChatGPT's (**Cha**) and the original text of Wither (**Whi**):

Ne quid nimis

S-M: Since overmuch, will overfill, Pour out enough, but do not spill.

Cha: Since overmuch will overfill, Pour out enough, but do not spill.

Whi: Since overmuch, will over-fill, Powre out enough; but doe not spill.

S-M: What we waste will to our account be lay'd, And what we wisely spend, will be repay'd.

Cha: What we waste, will to our account be laid, And what we wisely spend, will be repaid.

Whi: For, what we **marre**, shall to account be layd, And, what wee wisely spend, shall be repayd.

Noli altum sapere

S-M: Above thy knowledge, do not rise But with sobriety, be wise

Cha: Above thy knowledge, do not rise; But with sobriety be wise

Whi: Above thy Knowledge, doe not rise, But, with Sobrietie, be wise

S-M: And he that will beyond his bounds be wise Becomes an Idiot before he dies.

Cha: And he that will beyond his bounds be wise, Becomes an Idiot before he dies.

Whi: And, he that will, beyond his bounds, be wise, Becomes **a very Foole**, before he dies.

Human supervision and domain-specific, transparent organization

These test results led me to the conclusion that an A.I. application like ChatGPT can be an extremely useful assistant. Although the application does not "see" anything, it can act like a "second pair of eyes" to the researcher of visual information. It also takes the intermingling of a researcher's personal memory with the internet's artificial memory to a whole new level. However, precisely because of the subtle infiltration of web-based iconographic information into the researcher's mindset, human supervision and critical evaluation remain indispensable. First of all we need to realize that the Humanities biotope is a very hybrid one. It includes many sources like books and articles that are not available in digital open access format but still rest

¹² A complete transcription of the text of Wither's book has been available for a long time on the website of the University of Virginia Library and the Project Gutenberg: <https://www.gutenberg.org/ebooks/50143>

on the shelves of libraries. More importantly and obviously, it encompasses an endless array of objects – from manuscripts and paintings to palaces and churches - of which the physical properties are an important aspect. And these are by definition outside of A.I.'s direct field of vision as it cannot replicate the human experience of handling a medieval manuscript, the confrontation with a Vermeer, or the magic of light falling through the stained glass of the Sainte Chapelle in Paris.

A second reason is that A.I. software does not make completely new, original observations. Yes, it has an uncanny capacity for finding, retrieving, organizing and recombining information already available on the internet. However, since it is impossible to reconstruct exactly how it digests the material it is trained on, it may *appear* to create new connections of its own, but, as the Stirling-Maxwell case strongly suggests, human observations still seem to be at the root of those connections.

The eight emblems from *Nucleus Emblematum* that I selected were part of a group of twelve of Rollenhagen's emblems that had been tagged in earlier projects with Iconclass concepts of the class **54A4 Calmness, Equanimity, Imperturbability**.

The subclasses that were actually used for these twelve emblems are printed in bold in this small clip from the Iconclass system:

- **54A4 Calmness, Equanimity, Imperturbability**
 - 54A41 · Continenze; 'Continenza', 'Continenza militare' (Ripa)
 - 54A42 · Restraint
 - **54A43 · Temperance, Moderation; 'Misura' (Ripa)**
 - **54A44 · Patience; 'Patienza' (Ripa)**
 - **54A45 · Peaceableness**
 - **54A46 · Rest; 'Quiete' (Ripa)**
 - 54A47 · Peace of Mind, 'Aequitas'

For the study of iconography and visual information, the comparison of images and pictorial details is a key instrument of discovery. So, whatever helps us to compare images, may help us to discover information. Grouping images by classifying their content often gets us on our way, and that is exactly what Iconclass does. By connecting images on the basis of their content, it acts as a point of departure for further discovery.

It is therefore useful to compare the grouping that results from tagging images with Iconclass, with the grouping that results from ChatGPT's identification of a common denominator – as cited below:

Common Denominator:

*The overarching theme of these emblems is **Stoic and Christian moral philosophy**, especially virtues such as:*

- **Patience (emphasized in multiple emblems)**
- **Temperance / Moderation**
- **Self-control**
- **Wisdom (tempered with humility)**
- **Endurance in adversity**
- **The paradox of strength through restraint**

Of course, just how the concept **54A4 Calmness, Equanimity, Imperturbability** is subdivided in Iconclass, is to some extent arbitrary, as any subdivision of an abstract concept would be. In a similar way, selecting these particular virtues as manifestations of a **Stoic and Christian moral philosophy** is also debatable. But what is relevant here is not the exact content of those listings, but the fact that they represent two very different types of knowledge organization.

A detailed comparison of the two approaches is impossible, for the simple reason that OpenAI's process of information aggregation and organization is one of the company's trade secrets. It is also unlikely that any human could trace the exact steps by which the algorithms of its neural

network connected the virtues mentioned above, to the “overarching theme” of Stoic and Christian moral philosophy. Moreover, the opacity of its processes also make it highly improbable that ChatGPT would produce the same results if prompted by another user at another location and another time.

Iconclass, on the other hand, was created as an open and transparent standard to be applied by a community of researchers and cataloguers. It was designed by Henri van de Waal as a universal system for iconography, that ...

“... in order to deal with the innumerable possibilities, **should be consistent** (i.e., that it should represent the structure of the whole rather than enumerate the details).”¹³

To accomplish that, he constructed a classification that groups concepts hierarchically, with the help of a notational system that is consistent and can indeed deal with the structure of the whole. In practical terms: if one of the **subdivisions of 54A4 Calmness, Equanimity, Imperturbability** does not neatly fit an image, the image could simply be tagged with the broader concept itself and then would still be discoverable as a member of the group.

While it does cover a very wide spectrum of subjects, Iconclass was built with concepts that are particularly relevant to the domain of the Arts and the Humanities. Its most general categories¹⁴ are complemented by detailed and well-structured listings of specific subjects that have been represented in western iconography from classical Antiquity¹⁵ onward.

The notational system also makes it easy to **cite**¹⁶ the online Iconclass classification. Even though it was designed decades before the World Wide Web came into being, the Iconclass notations could be turned into Persistent Identifiers (PURL's) with relative ease. So, when citations became hyperlinks, Iconclass was ready for that change.

Iconclass could never have become a standard for general use in an academic and cultural heritage context, if it had not been transparent. In Iconclass it is crystal clear which concepts are included in its schedules and how they are related to each other. Moreover, it is an open, shared data standard and its contents and structure can be corrected and modified by the community of its users¹⁷.

This combination of consistency, citability and openness enables the Iconclass^{plus} Browser to act as a hub for information in iconography and the history of culture. To illustrate this I used the example of the concept **Temperance**. This particular concept is actually included twice in Iconclass: once as one of the **Four Cardinal Virtues**, a specifically Christian concept, and once

as the more neutral abstract idea that I quoted earlier. The two concepts are cross-linked in the online system, so it only takes one click to jump from the one to the other.



¹³ In French he used a slightly different term: 1) Le système doit être **cohérent et couvrir tout le domaine**. Cette cohérence est beaucoup plus important qu'une élaboration détaillé. In: *Proposition pour une méthode générale de classification iconographique*. Unpubilshed lecture, 1960, p. 1. (typescript available at: https://iconclass.org/read/1960_CIP_Florence_Propositions.pdf)

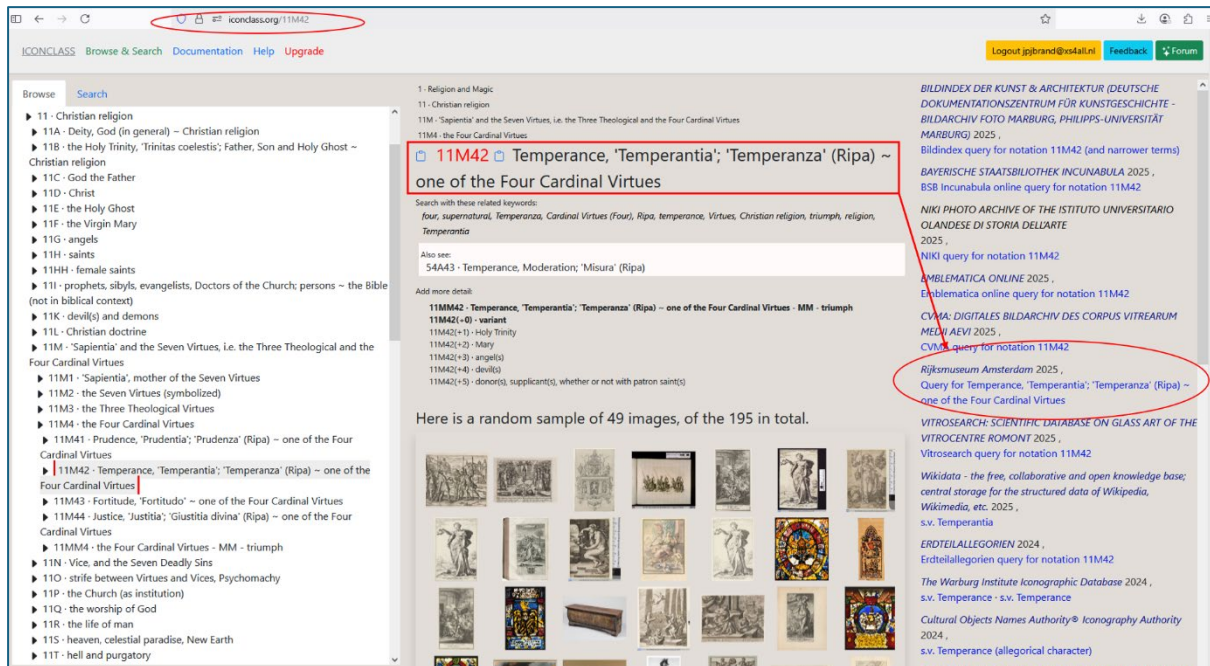
¹⁴ 1 Religion and Magic, 2 Nature, 3 Human Being, Man in General, 4 Society, Civilization, Culture, 5 Abstract Ideas and Concepts

¹⁵ 6 History, 7 Bible, 8 Literature, 9 Classical Mythology and Ancient History

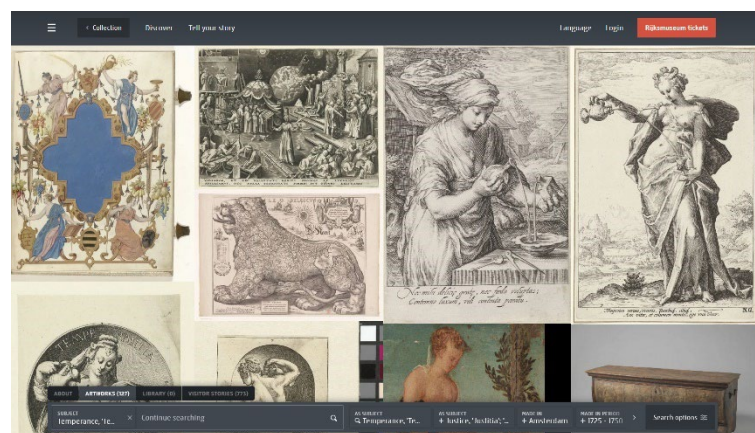
¹⁶ Les numéros de référence doivent être clairs et faciles à citer. *op.cit.*, p. 1

¹⁷ The raw data and source code of the Iconclass system are deposited in Github, at: <https://github.com/iconclass>

The notations themselves are stable and persistent access points. This screenshot from the Iconclass^{plus} Browser shows what that means. Sample illustrations and links to a series of websites come together at notation **11M42**, at this PURL: <https://iconclass.org/11M42>. Highlighted in the column on the right is the link to the website of the Rijksmuseum.



At the time of writing this, the museum's database had used the concept **11M42 Temperance, 'Temperantia'; 'Temperanza' (Ripa) ~ one of the Four Cardinal Virtues** as a descriptor for 127 of the artworks in its collection. I pasted the notation **11M42** – encircled here – into this screenshot. The Rijksmuseum site only shows the text of Iconclass's concept definitions and hides the notations from view.



As this screenshot of the first few items of this collection shows, the visualization of Temperance and Moderation as the pouring of a liquid from one vessel into another – carefully or not – is a frequently used symbol. There are many instances of this visual metaphor in the Rijksmuseum's collection.

It is easy to follow how the Iconclass cross-links refer the user from Temperance as one of the four Cardinal Virtues, to Temperance as a general human quality.

At this second location - **54A43 Temperance, Moderation; 'Misura' (Ripa)** – a similar dataset of sample images and links to external databases will be shown. Thanks to the way Iconclass organizes information, the narrower term **54A431 the Golden Mean; 'Mediocrità' (Ripa)** will be offered automatically.

5 - Abstract Ideas and Concepts
54 - Process of Action
54A - State of Being while Doing
54A4 - Calmness, Equanimity, Imperturbability

54A43 Temperance, Moderation; 'Misura' (Ripa)

search with these related keywords:
temperance, Misura, calmness, abstract idea, allegory, Ripa, idea, personification, imperturbability, equanimity

Also see:
11M42 - Temperance, 'Temperantia'; 'Temperanza' (Ripa) ~ one of the Four Cardinal Virtues
31B59 - sobriety: 'Sobrietà', 'Astinenza' (Ripa)
57A73 - Indulgence, Clemency; 'Clemenza', 'Clemenza & Moderatione', 'Indulgenza' (Ripa)

Add more detail:
54A431 - the Golden Mean; 'Mediocrità' (Ripa)
54A43(+0) - variant
54A43(+1) - personification
54A43(+2) - allegorical scene, i.e. two or more personifications involved in an action
54A43(+3) - symbolical representation of concept
54A43(+4) - emblematical representation of concept
54A43(+5) - 'exemplum', representation of exemplary (historical) event
54A43(+6) - situation or event (especially in genre-painting) with symbolical connotation

Here is a random sample of 49 images, of the 143 in total.

*BILDINDEX DER KUNST & ARCHITEKTUR (DEUTSCHE DOKUMENTATIONSZENTRUM FÜR KUNSTGESCHICHTE - BILDARCHIV FOTO MARBURG, PHILIPPS-UNIVERSITÄT MARBURG) 2025 ,
Bildindex query for notation 54A43 (and narrower terms)*

*NIKI PHOTO ARCHIVE OF THE ISTITUTO UNIVERSITARIO OLANDESE DI STORIA DELL'ARTE 2025 ,
NIKI query for notation 54A43*

*EMBLEMATICA ONLINE 2025 ,
Emblematica online query for notation 54A43*

*Portail Biblissima: ensemble de données numériques sur l'histoire de la transmission des textes produits de l'Antiquité à la Renaissance en Orient comme en Occident 2025 ,
s.v. Modération*

*Rijksmuseum Amsterdam 2025 ,
Query for Temperance, Moderation; 'Misura' (Ripa)*

*The Warburg Institute Iconographic Database 2024 ,
s.v. Temperance · s.v. Temperance*

*Cultural Objects Names Authority® Iconography Authority 2024 ,
s.v. Temperance (allegorical character)*

*E-ILLUSTRACE DATABASE OF EARLY MODERN CZECH BOOK ILLUSTRATION 2024 ,
e-illustrace query for notation 54A43*

Andrea Alciato Emblem Emblematum libellus (edition Christian

Both concepts will also be connected to emblems with this subject at, for example, the Emblematica Online website of the university of Illinois. The citability of the Iconclass notations will ensure that anyone with full access to the Iconclass site will see the same stable links, which is important in a research context, as in organized knowledge citations should be controllable.

Conclusions

A first conclusion is that it would be a mistake to attempt to predict the future of A.I. in the field of emblem studies, iconography or visual information. A second conclusion is that A.I. applications cannot comfortably cope with the physical properties of many of the objects that are an important part of the hybrid domain of the Arts and Humanities. A third conclusion would be that even though the progress is spectacular, there is room for improvement in the details. Most obviously, an application like ChatGPT should not “hallucinate” when suggesting which Iconclass concepts to use for tagging. Embedding extended A.I. functionality in the Iconclass^{plus} Browser software can go a long way in solving this issue, as some promising experiments – for technical reasons not shared at the conference - have already shown.

A final conclusion might be that cleaner data will in the long run benefit the quality of A.I. tools. It should be easier to recognize patterns in standardized, less chaotic metadata, which could lead to better tagging suggestions. If that would be the case, subject metadata generated by A.I. will benefit from the application of systems like Iconclass rather than make them obsolete.

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