

Museological representation of Flemish and Dutch Baroque metapainting: from Panofsky to CIDOC CRM

Beatriz Tarré Alonso^(a), Camila Monteiro de Barros^(b),
Renata Cardozo Padilha^(c)

a) Federal University of Santa Catarina, <https://orcid.org/0000-0003-0183-2119>

b) Federal University of Santa Catarina, <https://orcid.org/0000-0002-9207-5565>

c) Federal University of Santa Catarina, <https://orcid.org/0000-0001-9247-9087>

Contact: Beatriz Tarré Alonso, bettytarrealonso@gmail.com; Camila Monteiro de Barros, camila.c.m.b@ufsc.br;
Renata Cardozo Padilha, renata.padilha@ufsc.br

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ABSTRACT

This article examines the museological representation of Flemish and Dutch Baroque metapainting through the iconographic-iconological analysis of key works, articulated with the CIDOC CRM. The proposal is an interdisciplinary approach that connects art history, information science and museum documentation, demonstrating how deep meanings emerging in different typologies of metapainting can be formalized in semantic networks. The case studies include examples ranging from the autonomy of painting to the deconstruction of frames, highlighting the potential of the CIDOC CRM for heritage knowledge management.

KEYWORDS

Representation of museum information; Iconographic-iconological method; CIDOC CRM; Metapainting; Baroque.

1. Introduction

Flemish and Dutch metapaintings use resources such as paintings within paintings, mirrors, portraits of artists, or allegories that go beyond simple representation, transforming into discourses focused on the pictorial practice itself (Stoichiță 2015, 158). In the museum setting, they require specific documentation and mediation strategies that can articulate their multiple meanings.

Flemish and Dutch Baroque is particularly interesting for this research. In the Southern Netherlands / Flanders (present-day Belgium), under Spanish rule and with a strong Catholic tradition, religious compositions stand out, marked by intense color and theatricality. In the North, in the United Provinces (present-day Dutch Republic), Protestant and bourgeois society fueled the expansion of genres such as landscapes, still life compositions, and genre scenes. Thus, while the South preserves the tradition of grand devotional painting, the North develops secular and naturalist painting, both reflecting, to varying degrees, on the social role of art (Kitson 1919, 44–6). By examining Flemish and Dutch metapainting from these perspectives, we seek not only to understand their visual codes but also to explore ways of their museological representation.

This article proposes a dialogue between Panofsky's iconographic-iconological method (1939, 14–5) and the ontological CIDOC Conceptual Reference Model (CRM), demonstrating how the different levels of analysis –pre-iconographic, iconographic, and iconological– can be formalized as conceptual frameworks. The method proposed by German critic and historian Erwin Panofsky (Hannover, 1892 - Princeton, 1968) provides an interpretative key for linking visual forms to the semantic structures of each era (Hjørland 2017, 441). The CIDOC CRM, on the other hand, offers a vast semantic network for establishing relationships between elements of representation. The central objective is to examine the museological representation of Flemish and Dutch metapainting through the iconographic-iconological analysis of key works, articulated with the CIDOC CRM.¹ Seeking to bring the interpretative reading of works closer, the proposal assumes an interdisciplinary nature, articulating practices from art history, information science, and museum documentation. By linking the interpretative levels with the CIDOC CRM, the possibility of modeling semantic networks that preserve both the iconological meanings and the material properties of works is opened up (Carboni and Luca 2017, 7–10). In this manner, museums can integrate the critical interpretation of art history with information systems guided by international standards.

The dialogue between theory and practice aims to enrich both art history and museum documentation, bringing museums closer to the contemporary demands of interpretation, management, and communication of visual heritage.

¹ This article is based on the doctoral thesis *Representação da informação museológica de metapinturas barrocas: fundamentos teórico-metodológicos para a integração dos níveis iconográfico e iconológico no CIDOC CRM*. For a more in-depth analysis of the topic, including the research methodology and results obtained, we recommend consulting the full version of the aforementioned thesis. This study was partially funded by the Coordination for the Improvement of Higher Education Personnel - Brasil (CAPES).

2. Theoretical framework

Flemish and Dutch Baroque metapainting emerges at the intersection of late Renaissance pictorial theory and the Baroque search for illusion, spatial expansion, and self-reflexive images. Rather than tracing a long and diffuse prehistory, this article concentrates on the transition from the Renaissance paradigm of ordered representation to Baroque illusionism and metapainting in early modern Europe.

The development of linear perspective during the Renaissance established painting as a coherent visual system capable of representing space according to rational principles. During the seventeenth century, however, Baroque artists increasingly challenged these conventions through illusionistic devices that blurred the boundaries between represented and real space. Trompe-l'œil effects, fictive architecture, mirrors, framed images, and paintings within paintings became central strategies for expanding the visual field and engaging the viewer in complex acts of perception.

In the Southern Netherlands and the Dutch Republic, changing confessional, social, and market conditions encouraged new forms of artistic production and reception. Protestant iconoclasm, the growth of private collecting, the rise of the art market, and the increasing autonomy of painting as an object of aesthetic contemplation contributed to the emergence of works that reflected on their own status as images. Within this context, metapainting developed as a particularly significant artistic strategy through which artists explored the nature of representation, the act of viewing, and the cultural functions of art itself.

This narrower historical focus provides the conceptual background for understanding the visual and symbolic mechanisms analysed in the case studies and establishes the theoretical foundations for their subsequent iconographic-iconological interpretation and semantic representation.

2.1 Metapainting and iconographic-iconological interpretation

Within the visual culture of early modern Europe, metapainting emerged as one of the most distinctive forms of pictorial self-reflection. During the Baroque period, and especially in Flemish and Dutch contexts, painting increasingly turned toward its own conditions of production, circulation, and reception. This self-reflexive tendency is most clearly expressed through the device of the painting within the painting, a strategy that challenges the limits of representation by exploring illusion, framing, and the autonomy of the image (Gállego 1991, 23–47).

In the Southern Netherlands and the Dutch Republic, metapainting developed within changing confessional, social, and market conditions. Protestant iconoclasm, the growth of private collecting, the expansion of cabinet culture, and the increasing visibility of painting as an object of aesthetic contemplation all contributed to the emergence of works that staged the act of seeing, collecting, and representing. In this context, elements such as windows, mirrors, doors, frames, galleries, and self-portraits functioned not merely as compositional devices, but as instruments for questioning the relationship between image and reality, artist and viewer, interior and exterior.

Metapainting therefore cannot be reduced to a formal curiosity. In many Baroque works, the representation of paintings, collections, or reflective surfaces carries symbolic, social, and epistemological meanings that extend beyond the visible motif itself. A gallery picture may refer to practices of collecting and patronage; a mirror may suggest the instability of perception; a framed

image within the image may signal the autonomy of painting or its devotional, allegorical, or political function. These layered meanings make metapaintings especially suitable for iconographic-iconological interpretation.

In this regard, Panofsky's method (1939, 14–15) offers a particularly effective analytical framework. Building upon the iconological tradition consolidated during the Renaissance and early modern period, including the systematization of allegories and symbolic attributes described by Ripa (1593, 2), Panofsky developed an approach that moves beyond the identification of visual motifs toward the interpretation of their cultural significance. His three analytical levels—pre-iconographic description, iconographic analysis, and iconological interpretation—make it possible to progress from the identification of forms and motifs to the reconstruction of conventional meanings and, ultimately, to the interpretation of the cultural values, beliefs, and mental structures embedded in the work. Panofsky's approach is not limited to formal analysis; rather, it seeks to understand how images and motifs reflect the historical worldviews of a given period (Castiñeiras González 2007, 65). For this reason, it is especially useful for studying works in which representation, symbolism, and self-reference are closely intertwined.

From a museological perspective, this interpretative framework also highlights the need for documentary systems capable of recording not only factual information about artworks, but also the contextual and symbolic dimensions that sustain their meaning (Smiraglia 2008, 37). Here, the CIDOC CRM emerges as a strategic tool for cultural heritage documentation. Recognized as an international standard (ISO 21127:2023), it provides a reference ontology for representing contexts, actors, symbols, and implicit relationships within semantic networks (Biagetti 2016, 46). Its structure supports the description of both material attributes and interpretative layers, thus fostering interoperability between institutions and expanding access to digital collections (Bruseker, Carboni, and Guillem 2017, 93).

This is particularly relevant in the case of Baroque metapaintings, where interpretative meaning depends on the articulation of visual evidence, historical context, and scholarly reading. On the one hand, Panofsky's method allows these works to be understood within their cultural and symbolic horizons (Gombrich 1993, 519–27). Representation of museum information involves description of essential attributes of works (authorship, provenance, materials, dimensions), but also progress towards interpretations that reveal deeper meanings. This is an area where many systems still have gaps, prioritizing factual aspects over more complex interpretations (Fortier and Ménard 2017, 485). On the other hand, CIDOC CRM makes it possible to formalize such interpretations in a structured semantic environment, preserving not only the materiality of the artwork but also the layers of meaning attached to it (Doerr, Ore, and Stead 2007, 2). The integration of metapainting, iconographic-iconological analysis, and CIDOC CRM therefore offers a productive framework for the interpretation, documentation, and semantic representation of Flemish and Dutch Baroque visual culture.

3. Methodology

This study adopts a qualitative and exploratory research design, combining iconographic-iconological analysis with semantic modeling. The methodological framework is based on the articula-

tion between Panofsky's interpretative method and the CIDOC Conceptual Reference Model (CIDOC CRM), with the aim of examining how the semantic layers identified in Flemish and Dutch Baroque metapaintings can be represented within a formal heritage documentation environment. Rather than establishing direct equivalences between Panofsky's analytical levels and specific CIDOC CRM classes and properties, the study develops an interpretative mapping that connects art-historical analysis with semantic structures. In this framework, Panofsky's method provides the epistemological basis for identifying visual, thematic, and symbolic meanings, while CIDOC CRM supplies the conceptual mechanisms required to document entities, events, relationships, provenance, and interpretative assertions. Consequently, iconological interpretations are understood as scholarly propositions grounded in historical and documentary evidence, rather than as objective or immutable facts.

The methodological procedure consisted of three stages. First, the selected metapaintings were analysed according to Panofsky's pre-iconographic, iconographic, and iconological levels. Second, the resulting interpretative elements were mapped to CIDOC CRM classes and properties through a comparative analysis of conceptual correspondences. Third, these correspondences were represented as knowledge graphs in order to evaluate their capacity to express visual, contextual, and symbolic relationships within a semantic framework.

Given the scope of the article, the implementation was carried out through knowledge graphs rather than through a complete ontological serialization. Knowledge graphs were considered particularly suitable because they allow the flexible representation of interconnected cultural heritage data while preserving the semantic structure provided by the underlying ontology. In this context, the graphs should be understood as operational instantiations of a CIDOC CRM-based conceptual model. The diagrams were prepared using the classes and properties of CIDOC CRM version 7.1.3 and following the *CIDOC CRM Diagramming Guidelines* updated by Dang and Michon (2024).

4. Types of Flemish and Dutch Baroque metapaintings

In the context of Flemish and Dutch Baroque painting, metapainting emerges as a particularly rich field for exploring how artists reflect on the nature, status, and practices of painting itself. Within this tradition, different strategies of self-reflexivity can be observed, ranging from explicit representations of the painter's studio and artistic labour to more subtle pictorial devices that question illusion, authorship, and the boundaries between image and reality. The following section proposes a typological overview of these forms, highlighting their thematic and visual diversity as well as their shared concern with the conceptual and material conditions of painting in the seventeenth century.

4.1 Autonomy of painting

The independence of the painting as an object in itself stresses the role of the frame in the perception of figurative space and the real environment. The main initial challenge for Baroque painters was learning to treat the ceiling –of places like churches and palaces, commonly divided into vaults,

squares, or other types of architectural decoration— as a spatial unit rather than separate compartments, a process that took time but revealed a tendency toward unification (Kitson 1919, 44–6).

One of the Baroque hallmarks is the notion of *trompe l'œil* (French term, “to deceive the eye”), which consists of an artistic technique capable of creating the illusion of three-dimensionality in two-dimensional surfaces, using perspective, light, and shadow to deceive the viewer’s perception (Diderot 1751-1772, 693). This approach involves using walls as a support for painted scenes, creating the impression that the surfaces either do not exist or expand dramatically.

Another challenge for artists of this era was the extension of space into depth. In the 1660s, space began to extend into infinity, allowing for effects of splendor with figures that evoked a sense of celestial grandeur.

The idea of the *rapporté* picture (French word, “transported” or “repurposed”), placed on the ceiling, designates a decorative or architectural element removed from its original context and inserted into a new structure or composition. Frequently used in historical contexts to preserve fragments of artistic or cultural value, the *rapporté* picture represented a visual form difficult to grasp due to its inclined position, a trend that began in the 17th century (10).

This system was followed by Flemish painter Peter Paul Rubens (1577-1640) with his work *The Banqueting House Ceiling* (1630-1634), located in the Historic Royal Palaces in London, where the integration of multiple scenes and illusionistic architectural effects also seeks a monumental overall effect, allowing each painting to acquire full meaning only within the context of the ceiling as a whole.

4.2 Painting captive of composition

The inclusion of the image painted as a structural element within a larger entity or composition is a recurring feature in Baroque painting. Its use is common in the geometric representation of registers and divisions in murals and retables. Although, at first glance, these elements appear independent, their true meaning is revealed only when considered in relation to the whole.

This type of composition was conceived so that the viewer would appreciate not only the central painting but also the additional details that contribute to the understanding of the scene as a whole, generating an interaction between the figurative elements and the space depicted. A notable example of this approach is *La Parabole de l'enfant prodigue* (1633) by Flemish painter Frans Francken the Younger (1581-1642), housed in the Musée du Louvre in Paris. In this work, Francken inserts a painting within the main scene, centered on the biblical narrative of the prodigal son, enriching the representation with other episodes from the parable, in a visual dialogue that broadens the understanding of the story and the moral virtues portrayed.

A shape positioned in a specific location corresponds to an idea, and the entire composition functions as a visual demonstration, as occurs in *La Passion du Christ* (1630/1635), also by Francken the Younger and part of the Musée du Louvre’s collection. Geometric registers or divisions have been widely used in decorative compositions such as floor mosaics, painted mural ornamentation, book illustrations, and stained glass (Cumming 1996, 50).

In Flemish painting of the early Baroque period, it was common practice to enrich the main composition with additional scenes inserted into the architecture, often related to conceptual series,

such as the sacraments, Works of Mercy, and the commandments. Nonetheless, painters sometimes soften the lines separating the different compartments of a composition to achieve greater naturalness without sacrificing logical order (Martínez 2023, 85).

4.3 Portrait in focus

The portrait serves as the visual and symbolic axis of the work. Framing often acts as a fundamental element, contributing to the illusion that the image belongs to a distinct space. The format of the painting can also convey specific meanings, such as glorification, associated with the circular shape, often used in religious images.

In certain cases, the portrait can symbolize authority or political presence, as in Rubens's *Henri IV Reçoit le portrait de Marie de Médicis et se laisse désarmer par l'Amour* (1600/1625), part of the Musée du Louvre's collection. The composition constitutes an allegory of the victory of love over violence and the political union solidified by marriage.

The presentation of the portrait, however, is not limited to political or glorification functions: it can also take on a sententious character, as in *vanitas* (Latin, "vanity") (833). This is a sub-genre linked to still life, emerging between the mid-15th century and the first decades of the 17th century, in which symbolic elements refer to the fleetingness of life, the uselessness of material goods, and the inevitability of death. In these works, the representation not only alludes to the vanity of existence but also seeks to convey a moral and reflective message, typical of the Baroque, promoting an ethical or religious exercise for the viewer (Casimiro 2015, 92).

In the devotional realm, portraits played an equally important role. Representations such as the *Virgenes de San Lucas* were associated with practices of veneration and spirituality, highlighting the role of portraits as a means of building faith. Several historical examples illustrate this tradition, including: *Cibeles y las Estaciones dentro de un festón de frutas* (1615-1618), by Hendrick van de Balen (1575-1632) and Jan Brueghel the Younger (c. 1601-1678), and *La Virgen y el Niño en un cuadro rodeado de flores y frutas* (1617-1620), by Jan Brueghel the Elder (1568-1625) and Rubens, both part of the Museo del Prado's collection in Madrid.

In these works, the garland of flowers and fruits surrounding the central scene takes on special significance. In one of them, the goddess of earth and agriculture appears crowned by Spring, while allegorical figures of the other seasons offer their fruits, accompanied by lovers bearing zodiacal symbols, referring to the flow of time and the vital cycles of nature. In the other compositions, the device of representing a painted image surrounded by the garland proposes a reflection on the equivalence between real and represented images.

4.4 Painting-window to observe the world

From the 16th century onward, painters faced the challenge of representing space and light in interior settings, popularizing the formula of opening a window in the back wall through which one could see the outside.

The Dutch excelled in this articulation between interior and exterior. Pieter de Hooch (1629-1684) explored the combination of intimate spaces and openings to the outside world in works

such as *A Boy Bringing Bread* (c. 1663), held in The Wallace Collection in London; *The Courtyard of a House in Delft* (c. 1658); *A Woman and her Maid in a Courtyard* (c. 1660/1), and *A Musical Party in a Courtyard* (c. 1677), the last belonging to The National Gallery's collection in London. Emmanuel de Witte (1617-1692) even partially exposed an entire house in *Interior with a Woman at the Virginal* (1665-1670), now in the Museum Boijmans Van Beuningen in Rotterdam. Johannes Vermeer (1632-1675), in turn, captured a small fragment of Delft, his hometown, in *The Little Street* (c. 1658), part of the Rijksmuseum's collection in Amsterdam.

As in Vermeer's famous interiors, his works embody qualities of intimacy and domesticity, revealing the beauty of the everyday world through female figures absorbed in their daily activities. Other notable examples include *The Eavesdropper* (c. 1657), by Nicolaes Maes (1634-1693), and *Perspectiefstuk met een lezende jongeman in een renaissancepaleis* (1662-1667), by Dutch painter Samuel Dirksz van Hoogstraten (1627-1678), currently at the Dordrechts Museum in the Netherlands. The window frame acts as a "picture within the picture," offering a distinct, albeit limited, dimension of the outside world. In certain cases, the process is reversed: it is the interior that can be observed through the windows.

In this context, the genre of *veduta* (Italian word, "view" or "panorama") stands out, defined as a painting or drawing characterized by the detailed and realistic representation of cityscape, monuments, or panoramas, very popular during the Baroque period (Baldinucci 1681, 173). This resource was widely used by Flemish painters, functioning as a suspended painting in the background of the scene, even without being delimited by a rectangular or square frame, since the exterior could be glimpsed through caves or other elements (Gállego 1991, 87).

An emblematic example is the *veduta* depicted in *La Vista y el Olfato* (c. 1620), at the Museo del Prado, created by Hendrick van Balen (1575-1632), Jan Brueghel the Younger, Frans Francken II (1581-1642), Sebastian Vrancx (1573-1647), and others. The work is a replica of two lost paintings, painted in Antwerp by Archdukes Albert and Isabella Clara Eugenia.

In the lower right of the composition, among the various paintings represented inside, a *veduta* stands out: a small painting depicting an open landscape with trees, rocks, and a natural arch. This detail serves as a visual "entrance," creating a vanishing point that leads the viewer's gaze beyond the enclosed space of the gallery depicted.

Unlike the other paintings visible in the scene, the *veduta* presents a glimpse of nature outside, opening the possibility of contemplating the world beyond the architectural confines of the space. Thus, it acts as a painting within the painting that, rather than reinforcing the enclosure of the collection, suggests the permeability between interior and exterior, art, and reality.

4.5 Reflections in the mirror

The mirror becomes an instrument of visual experimentation, emphasizing the relativity of perception and the multiplicity of meanings within the image. In interior painting, artists used it as a resource to create frames within the composition itself. Vermeer, for example, used both mirrors and windowpanes as optical devices in his works, as in *Brieflesendes Mädchen am offenen Fenster* (c. 1657-59), at the Staatlichen Kunstsammlungen in Dresden.

The mirror is also frequently associated with themes of vanity and narcissism, as illustrated in *Girl*

at the Mirror (1632), by Dutch artist Paulus Moreelse (1571-1638), and *Woman at a Mirror* (c. 1652), by Gerard ter Borch II (1617-1681), both part of the Rijksmuseum's collection. Another example of metapainting that uses this technique is the work by Dutch artist Pieter Claesz (c. 1597/98-1661), *Still Life with Violin and Glass Ball / Vanitas-Stilleben mit Selbstbildnis* (1628), at the Germanisches Nationalmuseum in Nuremberg. The mirror made it possible to represent the entirety of the space within the painting, also showing the relativity of perception depending on the angle of viewpoint. However, contemplation through the mirror does not always fulfill these functions, since plurality is inherent to painting, and the reflection can constitute an illusory appearance of the represented reality (Gállego 1991, 95).

Also in *La Vista y el Olfato* the mirror plays a significant role. The scene features an interior filled with paintings at different levels. The allegory is embodied by a woman seated at a table, contemplating herself in the mirror held by Cupid. It not only multiplies the represented space and establishes a typical game of duplication of metapainting, but also refers to the fleeting nature of perception and the illusory nature of the image. In this context, the mirror connects with the allegorical function of the senses –sight and smell– and at the same time dialogs with the universe of the princely collections depicted, reinforcing the tension between the collection materiality and the pictorial illusion.

In turn, Clara Peeters (1588-1621), also known as Clara Lamberts, recognized as one of the pioneers of the *bodegón* –or still life– in the Southern Netherlands, stood out for introducing and popularizing the practice of self-portraits hidden in objects within still life compositions, a technique later adopted by countless artists. Currently, thirty-nine works are known to be signed or reliably attributed to the painter, one of the few women to work professionally in the European artistic field during the first half of the 17th century (Vergara Sharp 2016, 68–71).

Peeters appears reflected –always with slight variations in perspective– in the convex surfaces of glass goblets or metal containers, as in *Stilleben mit Blumen und Goldpokalen* (1612), housed in the Staatliche Kunsthalle in Karlsruhe, and in *Bodegón con flores, coppa de plata dorada, almendras, frutas seco, dulces, panecillos, vino y jarra de peltre* (1611), part of the Museo del Prado's collection. In these works, the abundance of signatures and reflected self-portraits can be understood as an affirmation of her presence and artistic legitimacy in a predominantly male context (Barba Gómez 2020, 66).

4.6 Self-portrait of the painter in action

The self-portrait is one of the observable trends in Baroque figurative painting, acting as a metapictorial device to reflect on the artist's figure, their social status, and the creative process. In many works, the painters portray themselves alongside another subject or even in the act of painting, possibly hinting at the canvas they are working on or simply showing the back of the canvas, hiding the subject. A significant example of this practice is *La visita del Archiduque Leopoldo Guillermo a su gabinete* (1651-1653), by David Teniers II, housed in the Lázaro Galdiano Museum in Madrid. The painting depicts the cabinet of Archduke Leopoldo Guillermo, a central figure in 17th-century European collecting. In such painting, Teniers and the Archduke contemplate the works on display, a gesture that symbolizes the closeness between the collector and his artistic advisor. The scene highlights the breadth of the collection, composed primarily of Flemish works,

but also creations by great masters such as Jan Brueghel the Elder, disciples of Rubens, and contemporary Italian artists. The paintings are carefully arranged, covering almost the entire walls of the room and creating a space dedicated to admiration and study of art.

Teniers's presence in his own work is significant: the painter presents himself not only as an artist, but also as a connoisseur and specialist within the gallery he himself organized. In effect, the work functions as a visual catalog of the paintings of his protector and patron.

Among the themes related to this practice are also portraits of artists by other painters. A notable example is *Apelles Painting Campaspe* (1630), by Flemish artist Willem van Haecht (1593-1637), housed in the Mauritshuis in The Hague (Gállego 1991, 113). It is not a self-portrait of Van Haecht, but rather a historical recreation with a strong allegorical meaning, given that the central scene presents the painter Apelles in the act of creation. In self-portraits in which the painter appears before the easel, their inclusion in the scene not only documents the creative process but also challenges the viewer, engaging them in a visual reflection on the relationship between the artist, the work, and the external gaze. This resource adds an additional layer of meaning and complexity to the painting, converting it into an exercise in metapainting. Ultimately, such works question the status of the image and the artist's place in society (Portús 2016, 251).

4.7 Painting as a cultural artifact

Paintings are valued both as aesthetic objects and as cultural symbols, often found in collectible contexts, such as cabinets of curiosities or chamber of wonders. The aesthetic appeal of a painting lies in its ability to function as a means of artistic representation, as a sign within a language system, and as a cultural object whose value lies in its intrinsic beauty, independent of the message it conveys.

In addition to the aforementioned work by Teniers, housed in the Lázaro Galdiano Museum, other paintings by him exemplify this approach: *El archiduque Leopoldo Guillermo en su galería de pinturas en Bruselas* (1647-1651), housed in the Museo Nacional del Prado, and *Erzherzog Leopold Wilhelm in seiner Gemäldegalerie* (c. 1650), part of the Kunsthistorisches Museum's collection in Vienna. Although these works display stylistic and compositional diversity, they all share the same purpose: to bear witness to Leopoldo Guillermo's commitment to art and his desire to present his collection to his contemporaries, while also celebrating his role as an enlightened patron in the Baroque context. Each version expresses admiration for the refinement of the Flemish painting and also the Archduke's interest in a broader vision of European art.

This type of painting, known as *chamber of wonders*, *wonder rooms*, or *cabinets of curiosities*, emerged during the Renaissance and gained prominence in the 16th and 17th centuries, marking the beginning of metapainting, which peaked in the Baroque period (Cumming 1996, 56–58). These spaces were used by European nobles and bourgeoisie to collect and display luxury objects, reflecting the economic, cultural, and social standing of those commissioning the portraits. Examples of this are shown in Tenier's *Aartshertog Leopold Willem van Oostenrijk in zijn galerij Italiaanse schilderijen* (1651), housed in the Koninklijke Musea voor Schone Kunsten van België, and by Cornelis de Baellieur (1607-1671), in *Intérieur d'une galerie de tableaux et d'objets d'art* (1637), part of the Musée du Louvre's collection.

In 17th-century Dutch painting, domestic interiors often displayed one or more well-framed paintings on the walls, breaking the monotony of the enclosed space and enlivening it, similar to vedutas, as seen in *Musical Company* (1626), by Rembrandt van Rijn (1606-1669), and *Zittende vrouw in het geel met bladmuziek in de hand, naast haar een luit op de tafel* (1667), by Flemish artist Aleijda Wolfsen (1648-1692), at the Rijksmuseum.

This practice was also adopted in England as a way to illustrate the social status of the characters portrayed and the events depicted (Gállego 1991, 142). Some notable examples are the following: *Fiestas del Ommegang en Bruselas: procesión de Nuestra Señora de Sablón* (1616) and *Fiestas del Ommegang en Bruselas: procesión de grêmios* (1616), at the Museo del Prado; *The Ommegang in Brussels on 31 May 1615: The Senior Guilds* (1615), housed in the Victoria and Albert Museum in London, by Flemish painter Denis van Alsloot (1570-1628), and *Les Pantoufles* (1650/1675), by Samuel van Hoogstraten, part of the Musée du Louvre's collection.

In that way, the themes and styles of the most prominent painters of the era were often reproduced in miniature within the paintings themselves. It also became common to depict still life compositions that included paintings, prints, and books, accompanied by fruit, guitars, sheet music, glasses, bottles, and other aesthetic objects on the canvas.

4.8 Hidden key in allegorical painting

The representation of a painting within another painting, when it becomes a central element in a cultural context, gained relevance as artists began to explore conceptualism. This approach is clearly manifested in works such as *La Vista* (1617), housed in the Museo Nacional del Prado, by Flemish painters Jan Brueghel the Elder and Peter Paul Rubens, part of the series *Los Cinco Sentidos*, commissioned by The Netherlands' governors, Isabel Clara Eugenia and Albert of Austria. In this work, the paintings depicted on the walls not only decorate the space but also have symbolic value.

The Flemish Baroque series consists of a set of five allegories, painted on boards using the oil technique, in collaboration with Rubens, responsible for the figures, and Brueghel, responsible for the landscapes and objects. In *La Vista*, the metapaintings that cover the walls of the rooms and galleries take on an educational value, unlike Teniers's *El archiduque Leopoldo Guillermo en su galería de pinturas en Bruselas* (1647-1651) (1647-1651), which merely depicts a collection of cultural objects. In Brueghel, the painting becomes a sign as symbolic as the flowers, fountains, coins, and jewels represented in these allegories.

Similarly, in the Museo del Prado, it is possible to find *El Gusto, el Oído y el Tacto* (c. 1620) by Jan Brueghel the Elder. This work, along with *La Vista y el Olfato*, is closely related to the earlier series created by Brueghel and Rubens in 1618, then in the Alcázar of Madrid. The similarities are evident in the allegories of *La Vista* (1617), *El Oído* (1617-1618), *El Olfato* (1617-1618), *El Gusto* (1618), and *El Tacto* (1618), from the first series. Following the previous model, the five senses are represented by five women in different attitudes, and the setting is an interior filled with objects such as paintings, goldsmithery, musical instruments, sculptures, and tapestries, suggesting rich and varied collections, possibly belonging to the archdukes themselves, whose family emblem is manifested in the double-headed eagle on the lamp. In this case, the senses appear combined

in a single painting, unlike the previous series, which consisted of five panels (Díaz Padrón and Royo-Villanova 1992, 114).

The use of the painting in the background constitutes an indirect reference. Unlike Teniers' galleries, which depict collections of cultural objects, in Brueghel the painting becomes a symbol. Various allegories are used to identify themes such as faith, charity, and abundance, among others, as exemplified in *The Archdukes Albert and Isabella Visiting the Collection of Pierre Roose* (c. 1621-1623), by Hieronymus Francken II (1578-1623) and Jan Brueghel the Elder, part of The Walters Art Museum's collection in Baltimore.

This practice also appears in the interiors of Dutch paintings, such as *Woman Writing a Letter, with her Maid* (c. 1670), at the National Gallery of Ireland; *The Love Letter* (c. 1669-1670), *A Young Woman Standing at a Virginal* (c. 1670-1672) and *A Young Woman Seated at a Virginal* (c. 1670-1672) by Vermeer, and *Woman Playing the Virginal* (c. 1637), by Jan Miense Molenaer (c. 1610-1668), exhibited at the Rijksmuseum in Amsterdam and at The National Gallery in London.

4.9 Deconstruction of frames

The subversion of the frame as a rigid limit of the painting occurs through pictorial strategies that blur the line between the work and the viewer's space. To escape these conventions, artists vary styles, causing the painting to "step outside the frame," as seen in the works of Samuel van Hoogstraten, a student of Rembrandt: *Old Man at the Window* (1653), in the Kunsthistorisches Museum's collection in Vienna; *Augenbetrüger-Stilleben* (1626), in the Staatliche Kunsthalle's and Karlsruhe's collections, and *Young Woman at an Open Half-Door* (1645), attributed to Rembrandt and his studio by the Art Institute of Chicago, indicating that the master supervised the production.

The concept of painted frames is also evident in *Christ on the Cross* (c. 1630-1632) by Flemish painter Anton van Dyck (1599-1641), part of The Courtauld Gallery's collection in London.

On the other hand, the models painted by Rubens for the series of tapestries on the theme of the Eucharist, dated approximately 1625 and commissioned by Archduchess Isabella Clara Eugenia, are examples of metapainting in the form of deconstruction of frames. The works, conceived as triumphal parades and simulating canvases hung in Baroque architecture, provoked a striking ambiguity between reality and artistic image.

The fictional painting that painters draw on their canvas is not intended to be a space, but rather a boundary, a separation. It possesses no spatial entity, but only volume, seeking to ensure continuity between one space and another (Gállego 1991, 186).

The painted frame allows, for example, the sitter to rest their hand on it. By including fragments of facades, such as windows or garlands, the artists break with the conception of the painting as a space limited by four lines. An example can be seen in *Guirnalda con la Virgen y el Niño* (c. 1621), by Balen and Brueghel the Elder.

Other similar examples include *Self-Portrait* and *Boy Looking through the Window*, painted in the late 1640s by Samuel van Hoogstraten, considered a pioneer of illusionism –dubbed the "3D artist" of his time– currently in the State Hermitage Museum's collection in St. Petersburg; Rembrandt's *Girl in a Picture Frame* (1641), in the Royal Castle in Warsaw; *Festoon of Fruit and Flowers* (1660-1670), by Jan Davidsz de Heem (1606-c. 1683), at the Rijksmuseum, and *Guirnalda con paisaje* (1680-1700), by Catharina Ykens II (1659-c. 1737), at the Museo del Prado.

Among the ways in which art transcends traditional boundaries, integrating elements that challenge conventional perception, Dutch works such as *Trompe-l'oeil Ceiling Piece with Birds* (c. 1670), by Abraham Busschop (1670–1729), housed in the Dordrechts Museum in the Netherlands, stand out. Other works that illustrate how physical and symbolic framing can be challenged and reinterpreted include Rembrandt's *Die Heilige Familie mit dem Vorhang* (c. 1646), at the Museumslandschaft Hessen in Kassel, and *The Merry Fiddler* (1623), by Gerard van Honthorst (1592-1656), at the Rijksmuseum.

5. Erwin Panofsky's method

The interpretative model proposed by Erwin Panofsky organizes the analysis of the work of art as a cultural symptom and symbolic structure, bringing together heterogeneous knowledge, necessary to understand a composition inserted in a specific historical moment (Panofsky 1930, 166). This tradition, known as iconology, understands the work not only as a formal object, but also as a point of intersection between form, content, and historical context (Réau 2022, 67–8). Panofsky systematizes this movement by offering a three-level method that has been widely adopted by art historians and that serves as a reference for reading Baroque works and, in this case, the Flemish and Dutch metapaintings studied throughout this work.

Panofsky's classic contribution consists of shifting the investigation from a purely formal perspective to a historically informed interpretation: the work is seen as an entity whose threads connect to the beliefs, ideas, and historical situations of the men who created it (Lafuente Ferrari 2012, XII). Space and time –date and place– only acquire full meaning when articulated: by itself, a date without geographic or institutional context does not explain the position of a work within a tradition or school (XV). Likewise, Panofsky emphasizes that form, content and context constitute a unity that must be approached in an integrated manner, something particularly productive for analyzing paintings that operate on metapictorial levels, pictures that represent paintings, that deconstruct frames, or that function as symbolic keys to allegories.

The Panofskyan method is organized into three clearly differentiated but interdependent analytical levels. Level I –pre-iconographic description (primary or natural theme)– corresponds to the immediate apprehension of forms: identification of figures, objects, and factual relationships perceived sensorially in the work. This involves recognizing the artistic motifs that present themselves to the eye (Panofsky 1939, 14–5). In the viewer's immediate reading, in *The Banqueting House Ceiling*, mythological figures distributed across a painted ceiling, gradations of light, feigned architecture, and a sequence of scenes are identified; in *La Parabole de l'enfant prodigue*, characters, gestures, and central narrative elements are recognized, and in *El archiduque Leopoldo Guillermo en su pinacoteca*, rows of paintings, sculptures, and collectibles are observed. This first visual stage provides the empirical foundation upon which the following levels rest.

Level II – iconographic analysis (secondary or conventional theme)– requires a cultural repertoire: here, recognized motifs are combined and interpreted in light of narratives, literary sources and iconographic traditions that transform motifs into images, stories, and allegories. This is the domain of thematic identification –religious, mythological, historical – and the investigation of the sources that legitimize these interpretations (14–15). Identifying a painting as “vanitas,” “cabinet of curiosi-

ties,” or “sacred scene” implies connecting the pictorial motif to a universe of extra-visual references (texts, collections, collecting practices) that contextualize it. For example, the paintings within *La Vista y el Olfato* are not simply painting-objects, given that they combine motifs (instruments, mirrors, sensory objects) that refer explicitly to the allegory of the Five Senses, through stories and allegories codified by the iconographic tradition. Similarly, in the painting-gallery *La visita del Archiduque Leopoldo Guillermo a su gabinete*, the juxtaposition of certain types of works, as well as the multiplicity of objects in the scene, indicates the motif of the cabinet of curiosities and evokes a narrative of collecting and scholarship, recognizable by its familiarity with literary sources. Finally, in *Guirnalda con la Virgen y el Niño*, the presence of garlands and sacred insignia situates the work within a specific devotional iconographic tradition. Identifying these themes requires consulting sources and iconographic repertoires to transform visual motifs into recognizable stories and allegories.

Level III – iconological interpretation (intrinsic meaning or content) – is the final horizon of the method: it seeks to elucidate the cultural and mental principles that underlie the set of images, that is, the attitudes, values, and worldviews condensed in the work. This level requires a “synthetic intuition” supported by extensive historical and cultural knowledge: it is here that one discovers the symbolic values that Cassirer called “expressions of *weltanschauung*” (German word, “cosmopolitanism” or “worldview”) (Cassirer 1953-1957, 73; 1996, 223). The formal similarity of a motif over time does not guarantee the constancy of its meaning; social and cultural conditions will change, and therefore iconological interpretation must be supported by visual and textual documentation (Panofsky 1939, 14-5). In iconological interpretation, works transcend the visual statement: *The Banqueting House Ceiling* can be interpreted as an affirmation of the autonomy of painting and of a political-ceremonial program that articulates image and power; *La Vista y el Olfato* and *La visita del Archiduque Leopoldo Guillermo a su gabinete* reflect practices of aristocratic patronage, models of erudition, and social uses of collecting, that is, they express a Baroque cosmology where knowledge, power, and prestige are intertwined. In turn, *Guirnalda con la Virgen y el Niño* indicates how decorative and devotional devices (frames, garlands, emblems) function as signs of religious identity and public display of faith. A cabinet of curiosities, or *vanitas*, can also express moral, political (dynastic self-affirmation), or epistemological (valuing encyclopedic knowledge) attitudes. These profound meanings only emerge when formal and iconographic data are intertwined with the documentary, institutional, and social context of the work (Panofsky 1939, 14-5).

This explanatory framework becomes especially relevant when working with metapainting: the “picture within the picture” often functions simultaneously on pre-iconographic (what we see), iconographic (what history or allegory the motif evokes), and iconological (what values, collecting practices, patronage, or ideologies it encapsulates) levels. The strategies of subverting frames and the representations of galleries or cabinets of curiosities analyzed in the previous sections require precisely this triple reading (14-5).

In museum practice, the application of the Panofskyan method faces both challenges and opportunities: on the one hand, it exposes the need for robust iconographic and iconological metadata to describe and retrieve the symbolic content of works; on the other, it highlights the risks of cultural bias when large repositories underrepresent certain traditions (Zhitomirsky-Geffet, Kizhner, and Minster 2023, 323). Research that combines meticulous Panofskyan analysis with digital representation tools, for example, semantic models and ontologies applied to iconographic and iconological descriptions, can reduce gaps and enable richer analyses (Sartini, Erp, and Gangemi 2021, 201-08).

In short, Panofsky's method offers an essential methodological guide for those investigating Baroque metapainting: it provides clear categories (pre-iconography, iconography, iconology) and an integrating principle (form + content + context) that engages directly with contemporary museological problems, from cataloging to semantic representation, and serves as a bridge between traditional humanistic reading and the needs of data modeling for cultural representation, as will be discussed in the proposed integration with CIDOC CRM in the following sections.

6. CIDOC Conceptual Reference Model

The ongoing concern of science with developing tools and systems capable of managing cultural heritage knowledge drives the application of controlled languages and semantic technologies, which are constantly evolving and adapting to diverse contexts. The integration of new approaches and technologies aims to improve the accessibility, preservation, and interpretation of cultural collections. In this context, representation of information reinforces its theoretical foundations through metadata standards, conceptual models, ontologies, and technological tools aimed at describing resources.

The conceptual models produced in the field of information science are based on the premise of facilitating data interoperability on the Web, promoting the integration of content between different institutions (Llanes Padrón and Moro Cabero 2017, 661–62). This decentralized semantic interoperability requires controlled vocabularies and formal structures that ensure that diverse institutions can share and understand heritage descriptions mutually.

In this institutional context, the International Council of Museums (ICOM) was the driving force behind the development of the first conceptual model specifically for describing museum objects: the Conceptual Reference Model (CRM), created in 1996. The pioneering CRM was designed to standardize the description of cultural objects and has evolved continuously ever since. With an initial hierarchy of 86 classes and 137 attributes, it allowed for the description of a wide variety of real-world objects; the most recent official version of the model mentioned above has 99 classes and 198 properties (ICOM 2022b, 1–9).

The International Committee for Documentation's CRM provides definitions and a formal framework for the concepts and relationships used in cultural heritage documentation. It aims to promote a shared understanding of information by offering an extensible semantic framework: a common language for experts and developers and a guide to best practices for conceptual modeling (1–9). Thus, the CIDOC CRM serves as a semantic link between heterogeneous information sources, enabling data integration and exchange (Doerr, Ore, and Stead 2007, 2).

The general scope of the CIDOC CRM can be summarized as “museum knowledge”: its central function is to enable the exchange and integration of heterogeneous sources related to works of art and cultural heritage in a broad sense. The process of consolidation of such model progressed from an initial design centered on relationships between entities to the adoption, starting in the mid-1990s, of object-oriented methodologies that culminated in the first CRM version (CIDOC CRM) in 1998. The standardization process began in 2000, culminating in its acceptance as ISO 21127 in 2006, renewed in 2014 and again in 2023 (ICOM 2022a, 1). By adopting a formal semantics, the CIDOC CRM has emerged as a reference standard for Web initiatives.

The CIDOC CRM is organized around fundamental concepts – classes, properties, relationships, and hierarchies – designed to represent cultural heritage knowledge in a semantic and interoperable manner. Classes (identified by codes such as *E1 Entity*) typify entities, each possessing properties (e.g., *P1 is identified by*) that capture descriptive attributes, while relationships (such as the link between *P4 has time-span* and *E7 Activity*) articulate connections between entities. Its hierarchical structure of super- and sub-classes clarifies conceptual domains, and the explicit treatment of events and activities, temporal and spatial aspects, allows for modeling historicity and location. The CRM offers a flexible and scalable foundation for indexing, exchanging, and integrating large semantic heritage databases in museum, archival, and bibliographic contexts. In this way, it serves as a basis for archiving, exchanging, and integrating data, contributing to the establishment of a global network of information about cultural heritage.

7. Harmonization of the CIDOC CRM with the iconographic-iconological levels

The application of the CIDOC CRM to the representation of visual heritage has been discussed in research focused on iconographic and visual objects (Carboni and Luca 2017, 7–10). These methodologies emphasize the importance of articulating knowledge of art history and iconography with formal modeling structures, which, in turn, promotes interoperability and semantic retrieval. Despite the potential, online access and full adoption of frameworks like the CIDOC CRM remain challenges for many museums (Fortier and Ménard 2017, 485). Studies demonstrate disparities in how institutions organize and present metadata, as well as internal semantic inconsistencies (490). The complexity of the CIDOC CRM and the need for specialized training explain in part the heterogeneous adoption; however, mapping and inventory projects show that it is possible to extract and display useful metadata, expanding the representation of collections. Assessing and improving the quality of iconographic and iconological data remain essential tasks to ensure the effective reuse of these resources.

In the CIDOC CRM, appellations play a central role: they are the names assigned to entities (work titles, toponyms) and constitute relevant historical facts for tracing provenance and uses (Meghini and Doerr 2018, 133). Appellations are instances of the *E41 Appellation* class, which has sub-classes for specific types of names.

Modeling of symbolic meanings also finds its place in the CRM. The class explicitly dedicated to symbols is *E90 Symbolic Object*, essential for representing objects that convey ideas or non-material meanings (emblems, shields, insignia). In addition, other classes can be used to document conceptual content: *E41 Appellation* (names of symbols or titles), *E89 Propositional Object* (intellectual concepts, critical interpretations), and *E28 Conceptual Object* (conceptual products of human thought). Thus, the CRM allows modeling not only the materiality of museum objects, but also the ideas, categories, and interpretations associated with them (133).

The *E55 Type* class is also useful for representing abstract categories or concepts (e.g., religious categories), offering flexibility to accommodate diverse cultural and contextual interpretations.

The relationships involving *E90 Symbolic Object* and related classes (e.g., *P106 is composed of*, *P128 carries*, *P142 used constituent*, *P165 incorporates*, *P190 has symbolic content*) allow us to describe the

material composition, influences, use, and symbolic content of objects, creating a rich framework for analyzing layers of meaning that unite materiality, use, and interpretation.

By exploring the multiple dimensions that painting has assumed over the centuries, it becomes clear that this artistic medium goes far beyond mere visual representation. From its autonomy as an object to its function as a cultural artifact, each typology analyzed highlights the conceptual and symbolic complexity that painting encompasses. Modalities such as the painting captive of composition or the deconstruction of the frame not only enrich the pictorial language but also challenge the viewer's perceptive and narrative conventions. In this sense, the painting not only reflects the societies and cultures of its time, but also acts as a field of visual and intellectual experimentation that continually expands the limits of human creativity.

The proposed harmonization combines Panofsky's method with the CRM to offer a deeper and more structured reading of Baroque metapaintings: starting with theoretical understanding (pre-iconographic description, iconographic analysis, and iconological interpretation) and the semantic structuring of the CIDOC (entities, properties, and relationships), conceptual mapping between Panofskyan levels and the CRM classes/properties is performed, and convergences and divergences are analyzed to adjust the model. Next, an integrated structure (entities, hierarchies, and relevant relationships) is defined and the CIDOC adaptations are implemented to capture the specificities of metapainting, validating the model through case studies that demonstrate the representation of formal, thematic, and symbolic layers. Finally, modeling procedures and examples are documented, an implementation guide is created, and a continuous cycle of evaluation, refinement, and expansion is established to make the methodology replicable, interoperable, and applicable to other contexts and collections.

The analysis of the different typologies of Flemish and Dutch metapainting reveals a complex structure of meanings that goes beyond the merely visual. The formalization of these meanings in the CIDOC CRM not only preserves the semantic richness of the works but also establishes links between distinct pieces, historical contexts, and cultural practices.

In *La Vista y el Olfato*, level I (pre-iconographic description) corresponds to the *E24 Physical Man-Made Thing* and *E36 Visual Item* entities, documented by the *P65 shows visual item* and *P62 depicts* properties, which record the sensory objects and the paintings represented. At level II (iconographic analysis), *E55 Type* and *E90 Symbolic Object*, linked by *P2 has type* and *P129 is about*, are used to identify the allegory of the Senses. At level III (iconological analysis), *E7 Activity* and *E12 Production* come into play, as well as *E89 Propositional Object* and *E28 Conceptual Object*, linked by *P4 has time-span*, *P14 carried out by*, and *P7 took place at*, to highlight collecting practices and implicit epistemological values.

In *El archiduque Leopoldo Guillermo en su pinacoteca*, level I addresses the main work and the works cited as *E24 Physical Man-Made Thing* and *E36 Visual Item*, linked by *P65 shows visual item* and *P62 depicts*. At level II, the *kunstkamer* motif is modeled by *E55 Type* and *E41 Appellation*, through *P2 has type* and *P3 has note*. At level III, commissioning, collection formation, and social meanings are described by *E12 Production*, *E7 Activity*, and *E89 Propositional Object*, interconnected with properties such as *P14 carried out by*, *P53 has former or current location*, and *P4 has time-span*.

In general, the visual inventory of the pre-iconographic level, the thematic identification of the iconographic level, and the iconological interpretation translate into entities linked to temporal,

spatial, and authorial properties. Thus, the interpretative discourse gains a semantic formalization that preserves the richness of meta-paintings. This process also highlighted the need for critical and updated readings, since the meanings of the works are not fixed (Urquizar Herrera and García Melero 2012, 11), but rather transform according to the historical, social, and interpretative contexts in which they are revisited.

The methodology proposed in this study is based on the integration of Erwin Panofsky's iconographic–iconological method with the CIDOC CRM, aiming to provide a more structured and in-depth analysis of artworks, with particular emphasis on Baroque metapaintings. First, the research draws on Panofsky's framework, which combines iconographic analysis, focused on the identification and description of visual elements, with iconological interpretation, addressing deeper symbolic meanings within their historical and cultural context. This approach is complemented by the CIDOC CRM, a conceptual model designed to represent cultural heritage information through interconnected entities and relationships, enabling semantic consistency and interoperability.

The methodology then establishes conceptual correspondences between both systems by mapping iconographic and iconological categories onto CIDOC CRM classes and properties. This alignment is synthesized in Table 1, which presents the correspondence between Panofsky's analytical levels and the CIDOC CRM structures. This process allows for the translation of visual and symbolic layers into a structured semantic framework, while also identifying convergences and divergences between the two approaches.

Panofsky levels	Iconographic-iconological elements	CIDOC CRM classes	CIDOC CRM properties
I. Pre-iconographic description	Form, line, color, space, texture, artistic motifs, style, techniques, and materials	<i>E22 Man-Made Object; E36 Visual Item; E57 Material; E55 Type</i>	<i>P2 has type; P45 consists of; P56 bears feature; P65 shows visual item</i>
II. Iconographic analysis	Genre, attributes, symbols, themes and subjects, historical and cultural context	<i>E28 Conceptual Object; E39 Actor; E90 Symbolic Object; E5 Event; E55 Type</i>	<i>P67 refers to; P62 depicts; P12 occurred in the presence of; P2 has type</i>
III. Iconological interpretation	Intrinsic meaning, symbolic values, mentality of the period, artistic trends and movements	<i>E89 Propositional Object; E55 Type; E7 Activity</i>	<i>P67 refers to; P2 has type; P4 has time-span; P9 consists of</i>

Table 1. Mapping of Panofsky's Levels with some classes and properties of CIDOC CRM.

Based on this mapping, an integrated model is developed, defining key entities, relationships, and hierarchies tailored to the analysis of Baroque metapaintings. Validation is carried out through the application of the model to selected case studies, enabling the assessment of its capacity to represent complex museological information and subtle layers of meaning.

The following simplified graph illustrates how a single case study can be represented at the iconographic level and, in a reduced form, at the iconological level within a CIDOC CRM-aligned knowledge model. The example is intentionally concise, as the aim of this section is to make explicit the logic of semantic modeling rather than to provide a full technical encoding of the artwork.



Level II – iconographic reading: The Allegory of Sight (*La Vista*) can be modelled as an *E24 Physical Man-Made Thing* that embodies a complex visual configuration expressed through an *E36 Visual Item*. At this level, the scene is structured as a multi-layered allegory of vision in which Venus, traditionally associated with beauty and love, is reinterpreted as a personification of Sight. In this specific composition, following Rubens' adaptation, the conventional mirror is replaced by the painting *La curación del ciego*, thereby shifting the epistemic emphasis from self-reflection to revelation through divine healing.

Within the same visual field, Cupid functions as an additional allegorical agent of desire, reinforcing the affective dimension of perception. The coexistence of Venus and Cupid in a domestic interior populated by paintings, such as *La curación del ciego* and *Guirnalda con la Virgen y el Niño*, can be modelled as interrelated *E90 Symbolic Object* elements, each carrying layered symbolic meanings that combine pagan and Christian iconographies. The presence of the magnifying glass near one of the paintings further supports an interpretation of close observation and epistemic attention, reinforcing the sensory and cognitive dimensions of sight as both physical and intellectual perception.

Level III – iconological reading: At the iconological level, the interpretation can be modelled as an *E89 Propositional Object* that articulates the broader cultural meaning of the composition. The scene is understood as a Baroque synthesis of sensory allegory, devotional imagery, and intellectual reflection, in which sight becomes a privileged site for negotiating between empirical perception and spiritual insight. The tension between Venus Celestial and Venus Vulgaris, as well as the juxtaposition of mythological figures with Christian narratives, can be interpreted as a visual expression of Neoplatonic thought and Counter-Reformation visual culture. In this reading, the work operates not only as a representation of vision, but as a conceptual statement on the hierarchy of loves, the epistemology of seeing, and the moral framing of perception within seventeenth-century pictorial culture.

The model is implemented by aligning Panofsky's analytical categories with CIDOC CRM structures and introducing necessary adaptations to capture symbolic nuances. The overall methodological workflow is summarized in Figure 2.

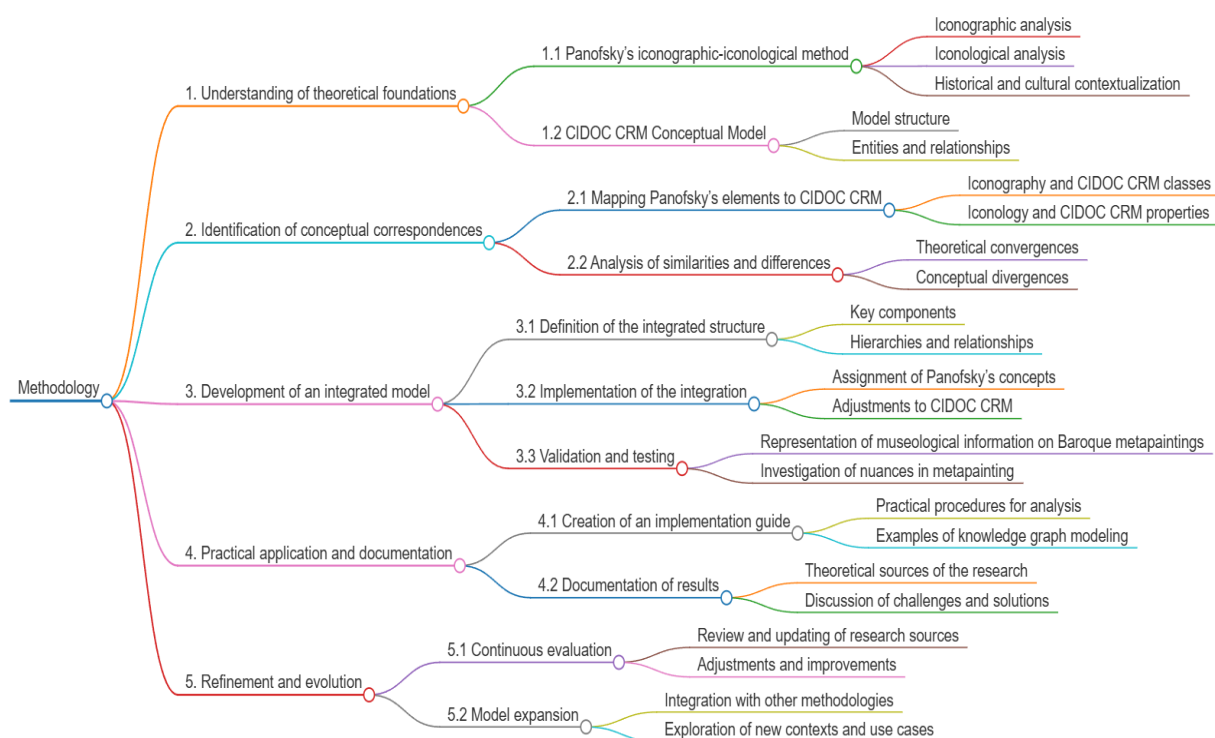


Figure 2. Methodological framework for integrating Erwin Panofsky's iconographic-iconological method with CIDOC CRM.

Overall, this integrative approach provides a robust framework for the analysis and semantic representation of Baroque metapaintings, combining art-historical interpretation with knowledge modeling. It also supports ongoing refinement and expansion, allowing the model to adapt to new research contexts and methodological developments.

To further strengthen the methodological structure, particular attention is given to the role of controlled vocabularies and authority files in ensuring terminological consistency across both iconographic interpretation and semantic modeling. The use of standardized references not only enhances data interoperability but also supports alignment with broader Linked Open Data ecosystems in the cultural heritage domain. Furthermore, the model is conceived as adaptable, enabling its application to other artistic periods and typologies beyond Baroque metapainting. This ensures that the proposed approach is not limited to a specific corpus but can evolve as a flexible tool for interdisciplinary research, bridging art history, museology and information science.

Conclusion

The analysis undertaken in this article demonstrates that the integration between Panofsky's iconographic-iconological method and the CIDOC CRM can be considered a productive but methodologically complex approach for the museological representation of Flemish and Dutch Baroque metapainting. While this articulation enables a structured description of the visual, thematic, and contextual layers of the works, its application also reveals important tensions between interpretive art history and formal ontological modeling.

In particular, the translation of Panofsky's iconological level into CIDOC CRM constructs requires careful methodological qualification. Iconological interpretation operates within a domain of scholarly inference, cultural contingency, and historical change, whereas formal ontology necessarily stabilizes meaning into discrete, identifiable units. This tension implies that any mapping of iconology into a knowledge graph should not be understood as a direct formalization of cultural "truth," but rather as a representation of documented interpretive statements, each situated within a specific scholarly context.

The integration nevertheless highlights the value of knowledge graphs as tools for making interpretive structures explicit, traceable, and interoperable across systems. However, rather than resolving ambiguity, these systems inevitably preserve it in a structured form. They render visible the plurality of possible readings while requiring that each interpretation be anchored in provenance, scholarly attribution, and curatorial responsibility. In this sense, expert curation and controlled vocabularies remain essential components for any practical implementation in museum information systems.

In practical terms, the harmonization developed paves the way for replicable methodologies capable of strengthening art history, information science, and museology. Ultimately, while the proposed framework offers a promising pathway for connecting art-historical interpretation, museum documentation, and semantic technologies, its applicability must be framed within clear methodological limits. The model should not be understood as a definitive or exhaustive representation of iconological meaning, but as a dynamic and revisable structure that supports comparative analysis and interdisciplinary dialogue. Its strength lies less in producing fixed interpretations than in enabling their explicit documentation, comparison, and critical reassessment within digital heritage environments. More than a conclusion, this research points to a horizon of continuity, where the study of metapaintings can continue to expand the scope of museum research and digital humanities, in constant dialogue with the contemporary challenges of preserving and interpreting cultural heritage.

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