The Biota of the Florentine Tondo: a biological survey and symbolism in Virgin with Child, Young St. John the Baptist and an Angel by Piero di Cosimo (1462-1522)

A Biota do Tondo Florentino: levantamento biológico e simbolismo em Virgem com o Menino, São João Batista Criança e um Anjo de Piero di Cosimo (1462-1522)

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Abstract

This paper describes and identifies the biological elements depicted in Virgin with Child, Young St. John the Baptist and an Angel by Piero di Cosimo (1462-1522) from the permanent collection of the Museu de Arte de São Paulo Assis Chateaubriand, which include a bird, an insect, a mushroom and 10 vegetables, seven of which in flowering. Starting with an analysis of the probable symbolic roles of each biological element based on individual natural and biological properties then proceeding to interpret the presence of each vis-à-vis its relation to the others, this article shows the undeniable convergence of each object’s meaning: birth, death and regeneration (or reproduction) likened to the birth, death and resurrection of Christ.

Keywords: Piero di Cosimo. Biological survey. Symbolism.

Resumo

Neste artigo, os itens biológicos representados na Virgem com o Menino, São João Batista Criança e um Anjo de Piero di Cosimo (1462-1522), do acervo do Museu de Arte de São Paulo Assis Chateaubriand, incluindo um pássaro, um inseto, um cogumelo e dez vegetais, sete deles com flores, foram descritos e identificados. A partir da discussão de seus prováveis papéis simbólicos individuais na pintura, com base nas suas propriedades naturais e biologia, a sua presença foi interpretada no nível de sua inter-relação, indicando uma forte convergência no seu discurso: nascimento, morte e regeneração (ou reprodução) são comparados com o nascimento, morte e ressureição do Cristo.

Introduction

Piero di Lorenzo di Piero d’Antonio was called Piero di Cosimo for having apprenticed under Cosimo Rosselli (1439-1507), who oversaw one of the most productive Florentine painting studios of the second half of the Quattrocento.1 Daniel Arasse considered Piero (1462-1522) the “patriarch of modern eccentricities.”2 Of the approximately 50 works that scholars unanimously attribute to Piero, 12 are tondi,3 a format commonly utilized in Renaissance Italy. In his Lives of the Most Eminent Painters, Sculptors, and Architects, Giorgio Vasari (1511-1574) stresses Piero’s eccentricity, his strong inclination to admire nature and his tendency to pursue solitude, reporting that the artist likely journeyed but once beyond the domains of Florence— to the Sistine Chapel in Rome, where he produced some of the wall frescos together with his master Cosimo Rosselli.4

Piero’s artistic lifetime was marked by a very strong relationship between art and science, a period in which visual artists came to be keen observers of nature.5 The precision of biological representations in their works demanded an increasing commitment to truly understanding such elements’ properties, manners of living and relationship to humankind, factors that in turn guided the development of often quite sophisticated symbolism. This doctrine appears to have been derived from Medieval exegesis, primarily applied to the reading of Biblical passages, in which three spiritual meanings (allegorical, tropological and anagogical)6 could be attached to a literal sense.

Thus, there was a preference for representing the real and everyday items of the physical environment in which the artists lived such that they could be easily recognized by their patrons and communities, people who shared related empirical knowledge and, by tradition, consequent symbolic attributes. It is within this context, a product of the naturalist style developed in Florence, that we analyze the subject of this article. The Flemish painter Hugo van der Goes’ (1440-1482) skill and ability to faithfully portray plants in his Portinari Triptych (housed in the Church of Saint Giles in Florence in May 1483) and to

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patently attribute religious meaning to them impressed Piero.\(^7\) In this same vein, one could argue that some of the natural oddities in Piero’s work likewise revealed the mysteries of Christian doctrine and, although he may have occasionally felt the urge to paint fantastical and extravagant beings, some of his works include numerous animals and plants that any Florentine would have noticed in everyday surroundings.

Despite its rather common iconographic theme, *Virgin with Child, Young St. John the Baptist and an Angel*, which currently belongs to the Museu de Arte de São Paulo Assis Chateaubriand (MASP) and is the subject of this article [Figure 1], is the only *Madonna col bambino* that depicts a caterpillar. The *tondo*, produced around 1505, left Italy relatively early and was registered in Vienna within Habsburg collections in 1663. It subsequently was part of a number of public and private collections before its inclusion in the MASP collection in August 1951.\(^8\)

Manuals and field guides were used to help identify the flora and fauna depicted in the foreground that can be assigned some degree of taxonomical classification.\(^9\) The elements are important, initially, to understand the painting from the point of view both of their representation and of their symbolism, and are analyzed individually in the following section. In order to facilitate future searches and references in literature, this article includes the most popular common name of each organism in Portuguese, English and Italian as well as the scientific name (genus or species; family; order), followed by the primary attributes included in the *tondo* that were used for classification, the occurrence of the element and a discussion of the likely symbolic roles in the painting based primarily on biology and properties.

A biological survey of the *tondo*

Despite being one of the most commonly presented Christian iconographical themes in the 15\(^{th}\) and 16\(^{th}\) centuries, this particular presentation of the Madonna is exceedingly rich in its depiction of elements from the Mediterranean biota compared to other Italian paintings of the time and to other of

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the artist’s own paintings. Based on the detail and proportions of the elements in the painting, the animals and plants included by Piero di Cosimo were likely depicted using real specimens or faithful illustrations, compatible with the prevalent practice at the time in the Netherlands,\(^\text{10}\) making possible to identify or likely identify the model species in most cases. In principle, the artist’s choice of elements seems to have been conditioned by each organism’s individual symbolism or the symbolism established by the elements’ relationship, with a tendency to form secondary, peripheral and connected frames to reflect on the primary frame featuring the Virgin, baby Jesus and the young Saint John the Baptist. However, some elements present representational incoherencies, occasionally at the artist’s deliberate discretion and sometimes owing to probable lapses or even imperfections resulting from the rather careless successive restorations of the piece.\(^\text{11}\)

The naturalism bestowed upon the details of the *tondo* are in harmony with the landscape itself, which, being “not at all characteristic of the Tuscan [landscape] and distant from any classical reference,” reveals a “certain predilection for the panoramic landscapes of Flemish paintings.”\(^\text{12}\) Like a stage set for a play, the painting offers the viewer two fields marked by two distinct depths of view. Figuring prominently in the background, which covers approximately the middle and upper thirds of the *tondo* and stands as if a backdrop to the main characters, are two bands: the upper one vesicle-shaped and predominantly blue and white, representing the sky\(^\text{13}\) and a mountain range in the background; the middle strip, biconical in shape and stretched at the edges of the painting, with green predominating the rural landscape. There is a river that snakes along nearly parallel to the horizon, below the mountains. Four leafy trees – seemingly oaks, their trunks hidden, stand practically in a straight line on the far bank of the river closest the observer and to the extreme left of the painting. Next to them, farther in the background, we find a tower, a cupola and citadel with basic elements of construction, such as a gateway


\(^{11}\) The painting was already found to be in a very precarious state as early as the 18th century when it was housed at Ambras Castle in Innsbruck (Austria). A 1730 inventory lists the painting as “considerably damaged” (*ziemlich schadhaft*), and a 1773 inventory reports that “[the painting] is completely ruined and unusable” (*ist gänzlich ruiniert und unbrauchbar*). In the 19th century, Dollmayr criticized the various Austrian restorers who had damaged “the brightness and transparency of the colors” in the painting. DOLLMAYR, Hermann. Aus dem Vorrathe der kaiserlichen Gemäldegallerie. *Jahrbuch des Kusthistorischen Sammlungen des Allerhpchsten Kaiserhauses*. Vienna, v. 20, 1899, p. 218. The *tondo* underwent two more restorations in the first half of the 20th century as well as a disastrous restoration in the 1970. For further information, see: BARBOSA, Karen. Piero di Cosimo, a restauração. In: BARBOSA, op. cit., 2017, p. 107-123.


\(^{13}\) JACOBS, Wilhelmina; JACOBS, Vivian. The color blue: its use as metaphor and Symbol. *American Speech*, v. 33, n. 1, 1958, p. 29.
and windows, one of which includes a hanging fabric banner, considered a kind of signature of the artist.\textsuperscript{14} These are practically surrounded by a green mass of smaller trees as well as a church with a steeple lying farther off atop the mountain. Some similar crowns, compatible with the downy oak (\textit{Quercus pubescens} Willd.) can be seen on the extreme right. Two elements found vertically aligned on the left side of the central band, one on each side of the river, seem out of step with the serenity of the arrangement. Just before the mountain range that marks the horizon, there surprisingly stands a typically shaped and active volcano. In addition, an isolated tree located on the foremost bank of the river depicted with the trunk cut at the base, some lateral branches bearing leaves and the highest branch broken [Figure 2]. This background motif, which is physically closer to the foreground, seems to be the only motif in step with the arid main frame described below.

Finally, we come to the foreground of the \textit{tondo}. The lower third, a brown- and ochre-colored base, bears the same vesicle shape as the upper part of the background. In this more arid scene consisting primarily of subconically shaped rocks or the stumps of dead tree trunks resting vertically, our attention is drawn to the main characters through their vestments of deep reds and blues.\textsuperscript{15} Around them we find the depiction of 13 different biological elements, including a bird, an insect, a mushroom and 10 vegetables, seven of which are flowering.

1) \textbf{Black redstart (Pt. \textit{rabirruivo-preto / It. codirossio spazzacamino})}

Scientific name: \textit{Phoenicurus ochruros} Gmelin; Family: Muscicapidae; Order: Passeriformes

Distinguishing characteristics in painting [Figure 1, 2]: characteristically elongated passerine shape; black eyes; characteristically thin, straight, black bill; gray head and breast; dark-gray to black wing; long, dark-colored tarsus; dark gray back; belly and crissum orange-red.

Perched on the edge of the trunk or rock on the extreme left side of the painting is a female black redstart, a small insectivore passerine that measures nearly 14 cm in length.\textsuperscript{16} It is portrayed in left-facing profile, positioned next to a large caterpillar that could potentially serve as a satiating meal for either the bird or her nestlings. As one of Europe’s most abundant synanthropic bird species,\textsuperscript{17} the black redstart frequently nests in urban areas and can even be found nesting on windowsills of occupied residences, allowing humans to observe the bird with relative ease. The nestlings are rather voracious eaters, feeding

\textsuperscript{14}GERONIMUS, Dennis. Catalog, item 23. \textit{In: HIRSCHAUER; GERONIMUS, op. cit.}, 2015, p. 173.
\textsuperscript{15}JACOBS; JACOBS, op. cit., p. 29-30.
\textsuperscript{17}WEGGLER, Martin. Constraints on, and determinants of, the annual number of breeding attempts in the multi-brooded Black Redstart \textit{Phoenicurus ochruros}. \textit{Ibis}, v. 148, 2006, p. 274.
mostly on the larvae of lepidopterans and on grasshoppers, making the adult birds work hard to sustain the young until they fledge the nest.\textsuperscript{18}

This depiction was firstly recognized as a black redstart by Geronimus.\textsuperscript{19} Earlier writers had simply referred to the animal as a “bird” or “blackbird,” the latter term indicative of a likely misclassification of the animal as the omnivorous \textit{Turdus merula} Linnaeus (Turdidae).

A number of meanings have been ascribed to this bird in the \textit{tondo}. Olson, taken by the fact that the bird is staring at a pupa, interprets this to mean that this is about the “soul confronting the meaning of death and the potential for resurrection in the Christ Incarnate.”\textsuperscript{20} The notion of the bird as a predator was suggested in the late 19\textsuperscript{th} century by Hermann Dollmayr\textsuperscript{21} and continues to be widely accepted.\textsuperscript{22} Geronimus\textsuperscript{23} holds that the Renaissance tradition of associating the figure of any black bird, regardless of the actual species depicted, with “evil or the devil” may apply to the painting in question, with the negativity associated with the color black predominating.\textsuperscript{24} We believe that, given the fact that the bird is a black redstart, an insect-eating bird that is rather common, easily observable in gardens and around human habitats, and active year-round throughout Mediterranean Europe, the artist was easily able to record the bird’s insect-eating habit and chose it as a model to represent the agent of the caterpillar’s death, the reaper of the caterpillar’s terrestrial life.

2) Death’s-head hawkmoth caterpillar (Pt. \textit{lagarta da mariposa caveira} / It. \textit{bruco della falena sfinge testa di morto})

Scientific name: \textit{Acherontia atropos} Linnaeus; Family: Sphingidae; Order: Lepidoptera

Distinguishing characteristics in painting [Figure 1, 2]: general shape characteristic of Sphingidae (head curved downwards and embedded in thorax, prolegs on abdominal segments 3-6 and 10; caudal horn on abdominal segment 8, verrucous; large anal plate; general whitish yellow color; dark tubercles concentrated dorsally along the length of the abdomen; black spiracles; abdominal segments 1-7 with dark, oblique, bluish-green stripes; caudal horn yellow.

\textsuperscript{18}Ibid. p. 281.
\textsuperscript{19}GERONIMUS, op. cit., 2015, p. 173.
\textsuperscript{21}DOLLIMAYR, op. cit., 1899, p. 217-219.
\textsuperscript{23}GERONIMUS, op. cit., 2015, p. 174.
The painting portrays the last larval stage of this species, which can grow up to 13 cm long. The respective adult is one of the largest and most familiar insects in Europe, known not only for the skull-shaped markings on its thorax, but also for its unusual habit of invading honeybee hives to feed on the honey and for its ability to produce humanly audible sounds when provoked. These peculiarities have given rise to a number of legends associated with the adult death’s-head hawkmoth. The larvae are polyphagous, although they prefer to feed on the above ground part of the potato plant, *Solanum tuberosum* Linnaeus, and grow quite large in their last larval stage prior to pupation. At first glance, the caterpillar in the *tondo* seems disproportional to the bird immediately next to it, but the sizes are likely perfectly correct.

Early references to the depicted creature include the generic term “caterpillar” or, as mentioned, the erroneous term “pupa.” Geronimus recently identified it as a member of the Sphingidae family, specifically a privet hawk moth larva, or *Sphinx ligustri* Linnaeus, but this does not seem to correspond to the clearly observable morphological characteristics of the caterpillar in Piero’s painting. While *A. atropos* larva [Figure 3] has dark tubercles dorsally concentrated along the length of the abdomen, black spiracles and a yellow caudal horn, as described above and as seen in the painting, *S. ligustri* has somewhat different light-colored tubercles, yellow spiracles, and a smooth, pointy-tipped caudal horn that is characteristically partially or entirely black. To reinforce the classification proposed in this article, previously presented by the authors, note that Piero’s closely located black redstart and caterpillar are depicted as approximately the same size, a reality that could only correspond to the final larval stadium of *A. atropos*, which can grow to 13 cm, together with the adult black redstart, which on average does not exceed 15 cm in length. *S. ligustri*, in turn, grows to a maximum size of 8.5 cm, a bit more than half the length of the adult black redstart depicted in the *tondo*.

As to the symbolic role of the caterpillar in the painting, the authors consulted refer to the most common iconography of the butterfly (order Lepidoptera), which takes into account the lifecycle of an

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31 Sterry; Mackay, op. cit., 2010, p. 215.
33 Ibid., p. 215.
insect that undergoes complete typical metamorphosis. The successive stages, larva (caterpillar), pupa and adult (imago) are traditionally correlated to the birth, death and resurrection of Christ and of men.\textsuperscript{34} As such, the caterpillar could represent the earthly life and the potential for spiritual rebirth.\textsuperscript{35} Dennis Geronimus\textsuperscript{36} agrees with this interpretation, but also suggests that the insect could be a reference to the Biblical plagues given the proximity to the predator in the painting.

Although the caterpillar in the painting can be properly classified as \textit{A. atropos}, given that the adult version of the species figures in many a European legend and is associated with the devil, witchcraft and omens of ill portent,\textsuperscript{37} it would be impossible to claim that Piero di Cosimo knew that the infamous moth corresponds the final, adult stage of the animal he painted. Thus, the possibility for two different interpretations of the caterpillar’s symbolism: the first, more generic - the insect, not yet an adult from the Biblical point of view, represents worm-like creatures;\textsuperscript{38} while the second is a call to the peculiar morphology and behavior of the species specifically in its adult stage. The former interpretation accounts for the relationship between incarnation and insects’ way of living. Centuries prior to the Renaissance, theologians like Saint Augustine (354-430), Isidore of Seville (ca. 560-636) and Alain de Lille (1128-1202) believed that worm-like creatures, a concept that included the larval forms of insects like silkworms, emerged spontaneously, analogous to the process of the miraculous conception of Christ.\textsuperscript{39} This association doubly stresses the humble nature of materializing, of becoming flesh.\textsuperscript{40} This vulnerable caterpillar,\textsuperscript{41} depicted in such a way that is not at all natural, is stuck on a small section of little branch apparently ripped from its food source, an element that represents the caterpillar’s fragile connection to the Earth, and is resting on the flat, upper surface of the trunk or rock to the extreme left of the painting. Positioned as if on a sacrificial altar, the caterpillar appears as an offering to the insectivore bird – a kind of entomological Agnus Dei. Now, if we are to subscribe to the hypothesis that Piero knew the caterpillar would ultimately transform to the death’s-head hawkmoth, the foregoing interpretation actually changes little since the insect is to be sacrificed by the black redstart regardless of its species. Nonetheless,
the fact that the adult moth bears the sign of death further stresses the tragic fate of Christ. Thus, we can associate the caterpillar’s genetic potential to exhibit skull-like imagery in its adult stage with the Biblical doctrine that Jesus was marked for sacrifice right from his birth.

3) Downy oak (Pt. carvalho pubescente / It. quercia, roverella)
Scientific name: Quercus pubescens Willd.; Family: Fagaceae; Order: Fagales
Distinguishing characteristics in painting [Figure 1]: woody trunk; characteristically lobed leaves; acorn producing.

The oak assumes a central position in the tondo and is particularly prominent on the right side, behind the Virgin Mary and Child. As it is quite damaged and cut down in a number of places, its depiction is practically limited to the trunk and a single branch with four leaves and a pair of acorns. The diameter of its base clearly shows that the tree was once quite leafy and has experienced successive periods of death and regeneration. Note that, despite the fact that the clearly depauperated tree is rooted in an arid and rocky region, new shoots have visibly emerged from the old, split trunk.

Olson classifies the tondo’s tree as a fig tree, a view shared by Geronimus, and states that the Virgin Mary seems to be “an organic extension” of the tree. Subsequently, the same author – now identifying the tree as an oak – claims the tree is a reference to a characteristic of the Virgin and argues that there is a correlation between the oak and the Tree of Live, thus alluding to Salvation.

The symbolism of the oak in the context of the Italian Renaissance is quite broad. However, given this tree’s precarious state and the concurrent clear signs of its regeneration, its relation to the Virgin, and its considerable power of resistance, strength and hospitality, the symbolism here is one that stresses the allegory of the prosperity of life and the strength of Christian faith in the face of adversity.

4) Field rose or dog rose (Pt. rosa brava/selvagem or rosa canina/mosqueta / It. rosa selvatica commune)
Scientific name: Rosa sp.; Family: Rosaceae; Order: Rosales
Distinguishing characteristics in painting [Figure 1, 4]: shrub with long branches; alternating, compound leaves, with 3, 5 or 7 oval-shaped leaflets of dentate margins; a sharp and hooked thorn in one stem;

flowers depicted on the side, with but a few white, oblong petals and edges poorly defined; yellow stamens; typically-shaped floral buds.

To the right of the painting, a winged angel draped in red and crouching behind a rock or trunk, holds with both hands the stems of two wild roses still in the ground. Since he is holding to the plant rather carelessly – looking entirely in the opposite direction and up at the Child – the tip of his left ring finger is resting atop the thorn, curiously the only thorn depicted on the entire plant [Figure 4]. Next to the flower on the left, there is an oddly shaped stem bearing a protrusion that could be taken as a thorn but that is actually the vestige of the base of a branch that was not included in the latest restoration since the original layer of this depiction had already suffered heavy losses over time. Although there is no doubt as to the identification of this plant based on its leaf and stem morphology, the model of which could have been a model of a *Rosa arvensis* Hudson or a *Rosa canina* Linnaeus, the flowers per se demonstrate weak correspondence to the classification.

Earlier research suggested that the flower was a buttercup, a daffodil and even a “strange mixture of a buttercup and wild daisy,” plants with a morphology that is very different from that of the Rosaceae. Only Dollmayr identifies it as a “wild rose” (*Hecke Rosen* and *wilden Rosen*). The apparent conflict between the stems/leaves and the flowers is understandable when we consider that this is the part of the tondo that has changed the most over the successive restorations.

Given that most of the incorrect earlier classifications, which failed to take into consideration the morphology of the plant as a whole, a number of individual meanings were erroneously ascribed. Dollmayr writes that the angel “breaks the fence of roses with the intention of swearing fealty to the Savior of the world.”

Roses can have many different meanings in Catholic art, but, in this case, its symbolism seems tied to its close relationship with the angel. In theory, we could propose a connection between the symbolism of the rose and of the number five (with the five holy wounds of Christ and the five senses), but since the two roses are depicted somewhat laterally, it is impossible to exactly determine the number of petals they bear. We can also dismiss the obvious reference to the Virgin, which would be a thorn-less rose since the rose in the painting, though white, does bear a thorn. This element of the plant, which is the most meaningful since it is the sole thorn, seems predestined to prick the angel. Since the angel is staring at

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49 DOLLMAYR, op. cit., 1899, p. 217.
50 Ibid., p. 217.
Jesus, injury seems imminent and can be interpreted as a harbinger of Jesus’ flogging. The angel’s vestments can also represent the red blood that will eventually spill from beneath the crown of thorns.

5) Mushroom (Pt. cogumelo / It. Fungo)

Scientific name: *Leucoagaricus sericifer* (Locq.) Vellinga; Family: Agaricaceae; Order: Agaricales

Distinguishing characteristics in painting [Figure 1, 5]: Characteristic shape, with uniform, white coloring; hemispherical cap; straight, rather long stipe; clearly defined, erect, ring located on the upper half of the stipe.

Mushrooms and other fungi are infrequent in Renaissance iconography. The few examples of this botanical class in Italian art include *The Hunt in the Forest* by Paolo Uccello (Ashmolean Museum, Oxford), *Saint Jerome* by Bartolomeo di Giovanni (Accademia Gallery, Florence), *Saint Jerome* by Filippino Lippi (Uffizi, Gallery, Florence), and the *Myth of Prometheus* also by Piero di Cosimo (Old Pinacotheca, Munich).

The right side of the *tondo* includes a small group of three mushrooms emerging directly from the ground at the base of the rock. They are partially shadowed by the Virgin. Unlike flowering plants, iconographic representations of fungi are morphologically quite simple, making it difficult to identify the exact model that was likely used. Whatever the exact model, the *L. sericifer*, which is widely distributed throughout Europe, is perfectly compatible with the species depicted in the painting. Early references listed the element generically as “mushrooms” or “fungi.”

According to Levi D’Ancona, the three mushrooms may be “an allusion to the life of Saint John the Baptist as a hermit in the desert.” Complementing this opinion, Forlani Tempesti & Capretti claim that the mushrooms are “emblems of the education through which one achieves virtue, emphasizing the education of the Baptist, the hermit, who lives a life of penitence and fasting.” Olson merely states that the mushrooms represent “the children of God since they do not grown from seed.” Finally, Geronimus believes the mushrooms are an omen of death.

Since the species of the mushrooms depicted in the *tondo* do not morphologically correspond to any of the most characteristic European species of psychoactive or edible mushrooms, we believe a more generic meaning applies. From the highly varied symbolism that has been ascribed to the mushrooms,
some of which we have already related, it behooves us to consider at least two very different overarching interpretations. The first interpretation stresses adverse symbolism – the mushroom’s association with death, as introduced by Isidore of Seville (ca. 560-636), since some types of mushroom in the Renaissance were considered representative of the devil. The second interpretation is based on the association by Porfírio (ca. 234-305) of mushrooms’ miraculous production, their ability to grow without seed, a condition that symbolically likens them to Christ.\[57\]

6) German chamomile (Pt. camomila / It. camomilla)
Scientific name: Matricaria recutita Linnaeus or Matricaria chamomilla Linnaeus; Family: Asteraceae; Order: Asterales
Distinguishing characteristics in painting [Figure 1, 5]: herbaceous plant; erect stacks, alternating, pointy leaves; inflorescences (capitular flowers) with disc yellow florets and white ligulate ray florets; some inflorescences show signs of weakness, with the florets on the edges bending towards the base.

The flower is located to the right of the Virgin Mary and below the angel, spreading out from below an oval-shaped rock. The diversity in terms of position and shape of the inflorescences corresponds to the different stages of development, exactly as the plant appears in nature. Chamomile is one of the most widely used medicinal herbs in Western culture.\[58\] It has been used since antiquity, and prominent personalities like Hippocrates, Galen and Asclepius referred to the plant, stressing its calming, carminative and anti-inflammatory properties.\[59\]

7) Betony (Pt. betônia / It. betonica)
Scientific name: Stachys officinalis (Linn.) Trevisan; Family: Lamiaceae; Order: Lamiales
Distinguishing characteristics in painting [Figure 1, 5]: herbaceous plant; erect stem; elliptical leaves, opposite decussate, with crenate edges; fusiform, apical, magenta-colored inflorescence.

This herb is found to the right of the Virgin Mary’s feet, just below the angel, in front of the oval-shaped rock and next to the mushrooms. This is the first time this plant appears in the tondo. Betony is a known medicinal plant, valued as an anti-inflammatory, as an antibacterial and for its restorative

properties for disorders of the nervous system. In the 15th and 16th centuries, its extracts were commonly used to treat polyarthritis, gout, hip pain and weakness in the limbs.  

8) Unidentifiable or unclassifiable plant

Distinguishing characteristics in painting (Figure 1, 5): small herbaceous plant; simple, erect stem (or leaf); short leaves (or leaflets) of ambiguous shape, larger at the apex, of opposite phyllotaxy; apex rather ambiguous.

These are small plants located between the probable betony and the mushrooms, just in front of the oval-shaped rock. They are the least defined elements of the tondo, partially on account of their diminutive size, and may be interpreted as different, individual plants grouped together or as the leaves of just two or three plants. Given the ambiguity, Piero may have used an herb or even pteridophyte, such as a fern of the Asplenium genus, as his model. There is no reference to these in literature.

9) Common dandelion (Pt. dente de leão / It. tarassaco commune)

Scientific name: Taraxacum officinale Weber ex F.H. Wigg.; Family: Asteraceae; Order: Asterales

Distinguishing characteristics in painting (Figure 1): herbaceous plants with the base of the leaves partially covered; long, lobed leaves; semispherical, white-grey, composite flower head (infructescence) located on the apex of a long, curved stem; long, downward curving bracts.

On the bottommost part of the tondo, on the ground below the Virgin Mary’s feet, we find a small, lone dandelion with three leaves. This plant, traditionally used both for medicinal purposes and as food, appears with a very mature composite flower head ready to let the wind disperse the seed-bearing blowballs.

There is no disagreement as to the identification of this plant in the literature. Most scholars contend that the plant is symbolic of the Passion of Christ, and we see it in many paintings of the Virgin and Child as well as scenes of the last supper, the Crucifixion, the Descent from the Cross and Pietà. Since it is depicted in its seed-dispersion stage, it is likely that the dandelion in the painting is yet another reference to the natural processes of death and rebirth.

10) Genet, Spanish broom, weaver’s broom (Pt. gesta, esparto / It. giesta)
Scientific name: *Spartium junceum* Linnaeus; Family Fabaceae; Order: Fabales

Distinguishing characteristics in painting [Figure 1]: grouped inflorescence of the raceme type, characteristically with alternating flowers lateral to the pedicel; large, yellow pea flowers with rounded, apiculate banner.

The young Saint John the Batista shows off the flowers of the weaver’s broom in his left hand, perhaps as an offering to the Virgin and Baby Jesus. This Mediterranean plant is primarily cultivated for fiber used in cords and twine as well as for ornamental and medicinal uses. It is typically found in barren surroundings.

There is no disagreement among scholars as far as identification of the plant. It is generally considered a symbol of the Incarnation but may also be associated with the hermitic lifestyle that Saint John the Baptist eventually pursues.

11) European common reed (Pt. *caniço* / It. *cannuccia di palude*)

Scientific name: *Phragmites australis* (Cav.) Steud.; Family: Poaceae; Order: Poales

Distinguishing characteristics in painting [Figure 1]: two dry sections of stem, one with five nodes and four internodes and the other with a single internode and no branches.

This is the material used to fashion the cross-shaped staff that is often depicted as accompanying Saint John the Baptist, such as what he is holding in his right hand in the *tondo*. Here the cross has been fashioned by simply tying two reed stems together. This cross-shaped staff is more frequently depicted in wood or metal in other paintings, but Piero di Cosimo, like few Italian Renaissance painters, opted for the much simpler, reed version.

Levi D’Ancona is the only other scholar to make mention of this plant.

12) Buttercup, rannunculus (Pt. *ranúnculo* / It. *ranuncolo*)

Scientific name: *Ranunculus* sp.; Family: Ranunculaceae; Order: Ranunculales

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66 Ibidem, p. 327.
Distinguishing characteristics in painting [Figure 1, 6]: herbaceous plant, erect, undulating, non-branching stem; long, alternate lance-shaped leaves; flower curving downwards with a few light-colored petals; characteristic floral bud depicted in front of the flower.

This plant appears on the extreme left side of the painting at the base of the trunk or rock next to the sweet woodruff. During the Renaissance, this plant “symbolized death because of its poisonous properties,” and is depicted in scenes of both Christ the Child and the Crucifixion.\(^67\) The morphology is consistent with *Ranunculus lingua* Linnaeus, a common species among the Italian flora.

13) Sweet woodruff, sweetscented bedstraw (Pt. *aspérla-odorífera* / It. *stellina odorosa, asperula*)

Scientific name: *Asperula odorata* Linnaeus; Family: Rubiaceae; Order: Gentianales

Distinguishing characteristics in painting [Figure 1, 6]: herbaceous plant, erect, unbranched stem, bent; small, poorly defined leaves whorled, grouped in rings that decrease in size towards the apex; leaves at the base apparently lobed, forming an opposite leaf pattern, and not clearly attached to the stem (they may pertain to another fern-like pteridophyte).

This plant appears on the extreme left of the *tondo*, next to the buttercup. Given the morphological similarity with another species of the same genus, *Asperula mollugo* Linnaeus (lady’s bedstraw), which was associated in Renaissance times with “affliction and tribulation because of its dry and rough appearance,” the sweetscented bedstraw may hold the same symbolic meaning. Legend says that Mary mixed the plant with others to fashion Jesus’ manger, and Piero similarly included this species in *The Adoration of the Child* housed at the Toledo Museum of Art, Ohio.\(^68\)

**Discussion**

The Italian medieval tradition of associating the Virgin and Child with an oak\(^69\) began to flourish in the first half of the 15th century following reports of the Virgin Mary appearing over an oak tree along a road in Viterbo (Lazio region). Legend has it that the most important of the untold prodigious miracles occurred in the summer of 1467, when nearly 30,000 people gathered in a procession to the famous tree to beseech Our Lady to intervene in an outbreak of the plague that had befallen the region. It is said that the epidemic abated within a week. In light of such proof, the devout decided to seal their pact of

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\(^{67}\) Ibid., p. 325 – 326.

\(^{68}\) Ibid., p. 199 – 201.

adoration by building near the prodigious oak the great Renaissance sanctuary of the Basilica of Santa Maria della Quercia that still stands today.\(^{70}\)

We can say of the Piero di Cosimo tondo in question that it is one of the first examples of the pictorial tradition of representing the Virgin and Child beside an oak tree, a symbol of strength and of divine materialization for Germanic and Celtic peoples, and a symbol equally associated with the summer solstice,\(^{71}\) the season clearly represented in the painting. This relationship seems to encompass some alchemical connection whereby the tree leaves correspond to the Virgin and the “golden fruits” to Christ, symbolizing the Tree of Life itself.\(^{72}\) According to Tertullian (ca. 160-220), the Tree of Life was dying, but a new branch then emerged that was “tremendous in size, and whence was fashioned the cross of Christ.”\(^{73}\)

The severed condition of the oak that we see in the foreground as well as the broken tree on the banks of the river in the background express the physical suffering that would befall Jesus, just like the new shoots indicate his Resurrection. A few subsequent Italian paintings portray a similar motif, such as Madonna of the Oak by Girolamo dai Libri (1474-1555), ca. 1533 (Castelvecchio Museum, Verona), in which the Virgin and Child appear in a vision, enthroned among clouds in the sky, while new foliage-filled branches emerge from the severed trunk of an oak tree on the ground behind Saint Peter. On the other hand, the majority of these Madonna paintings, such as The Holy Family with an Oak Tree by Giulio Romano (ca. 1499-1546), ca. 1518-1520 (Museo del Prado, Madrid), and Madonna and Child with Saints Catherine and Thomas by Lorenzo Lotto (ca. 1480-1556), ca. 1528-1530 (Kunsthistorisches Museum, Vienna), the oak tree is portrayed as dense and thriving behind the Virgin,\(^{74}\) stressing her strength and hospitality.

Most of Piero di Cosimo’s paintings show an overwhelming preference as to how elements are placed within two very distinct foreground and background depths of field, and he nearly always prefers outdoor scenes and settings. Some works boast a verdant background, pulling the viewer’s vista towards a mountainous backdrop and blue and white sky, and concomitantly a more arid, yellow-toned main scene in the foreground. This form of pictorial spatial organization is most evident in The Building of a Palace (Ringling Museum of Art, Sarasota (Florida), The Misfortunes of Silenus (Fogg Art Museum, Cambridge, Massachusetts), The Nativity with the Infant Saint John (National Gallery of Art, Washington), and the presently studied tondo Virgin with Child, Young St. John the Baptist and an Angel.

Interspersed with the Biblical characters in the foreground of the painting stand four imposing, predominantly brown, blocks of dubious appearance. They lie in a nearly straight line and make up a kind

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\(^{70}\) ZANCHI, op. cit., 2005, p. 5.

\(^{71}\) Ibid., p. 6.

\(^{72}\) IMPELLUSO, op. cit., 2004, p. 62.

\(^{73}\) LEVI D’ANCONA, op. cit., 1977, p. 250.

\(^{74}\) IMPELLUSO, op. cit., 2004, p. 62, 64.
of dividing line at the back edge of the barren foreground. In the sparse literature concerning the *tondo*, these elements have been entirely ignored despite their occupying considerable space within the painting. At first glance, they can be interpreted as representations of dead tree trunks in an upright position or alternatively as subconically sectioned rocks with a flat dorsal surface. Piero had a penchant for trying to confound the observer with the elements in his paintings. However, if we consider that the painter used a model in nature to paint these trunks/rocks, he may have actually used fossil tree trunks in his attempt to encompass both possibilities and possibly have painted the fossilized wood from his own observations, as certainly occurred with all the above described biological elements portrayed in the *tondo*. Indeed, of the few places where fossilized trunks can be found in Italy is the fossil forest of Dunarobba (commune of Avigliano, province of Terni, Umbria region), which lies about 65 km from Viterbo, the pilgrimage destination for the Virgin of the Oak, the most likely basis for the artist's renderings. Somewhat sui generis when compared to other petrified forests on Earth, the Dunarobba contains partially mineralized trunks of *Taxodioxylon gypsaceum* (Göppert) Kräusel, a fossil species related to current sequoias, that have maintained their upright positions since the end of the Pliocene Epoch, two million years ago. Although this particular deposit was revealed only in 1980, when a mining company excavated the clayey soil around the trunks, Federico Cesi (1585-1630), the founder of the first scientific academy in Europe in 1603 (Accademia dei Lincei), which included members such as Galileo Galilei (1564-1642), registered and collected fossilized wood between 1611 and 1630 in the Umbria region at various sites between Todi and Acquasparta, including Dunarobba. This then raises the possibility that fossilized tree trunks from this deposit might have already been exposed above the clayey soil nearly a century prior to Cesi's excursion and that Piero, a great observer of nature, decided to register them in his painting in order to narrate earthly life, death and rebirth.

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76 According to Geronimus, “Piero often played with the ambiguity between inert and organic matter” (GERONIMUS, op. cit., 2015, p. 26). Piero also plays with this ambiguity in *Portrait of Simonetta Vespucci as Cleopatra* (Musée Condé), in which the texture of the gold necklace is rather like a snake; in the *Pala Pugliese* (Saint Louis Art Museum), in which the cross that Saint John the Baptist carries seems to merge with the tree on the right; in the panel of the Museo degli Innocenti, in which the marble angel at the top of the work seems to be as alive as the “real” angels beside it; and in the *Building of a Palace* (John and Mable Ringling Museum of Art), in which the foreground on the left seems to show an abandoned, naked body on the ground, but, when following the perspective upwards, we actually see that there are workers carrying a very similar body to the palace, meaning that the abandoned body is actually just a statue. This tendency to confound the viewer may explain the difficulty in identifying the objects as rocks or tree trunks.
78 Ibid., p. 111.
79 SCOTT, Andrew C. Federico Cesi and his field studies on the origin of fossils between 1610 and 1630. *Endeavour*, v. 25, n. 3, 2001, p. 95. Coincidence or not, a dome and tower of the church in the city of Todi, which neighbors Dunarobba, as well the distance relative to the Tiber are very similar to those painted by Piero in the *tondo* in question. The anonymous landscape of the 17th century entitled “Vista de Todi, Umbria” (The Walters Art Museum, Baltimore) actually demonstrates this similarity.
The _tondo_’s likeness to central Italy from both a thematic point of view (Virgin with an oak tree) and a representational point of view (fossilized tree trunks) may initially seem inappropriate given the fact that Piero likely travelled very little in his lifetime. He is considered a strictly local Florentine artist,\(^{80}\) having made no documented trips outside the country or to more distant Italian cities. Even Piero’s travels to Rome that Vasari relates in the “Lives” have been questioned on purely technical grounds.\(^{81}\) Despite recent defense of the evidence that Piero aided in the _Moses Receiving the Tables of the Law_ fresco,\(^{82}\) we can conclude that “whether or not he aided Cosimo Rosselli in painting the Sistine Chapel, it can be surely said that Piero had little interest in traveling”\(^{83}\) and that his artistic style was not decisively influenced by the Roman art scene. Given that Piero did, at the very least, undertake the documented trip, depending on the route taken, he may have indeed spotted the landscapes of both Umbria and Lazio and may have even visited or spent the night in neighboring cities. It is possible he was left with impressions from these encounters, even if mere memories, and that he later used such in his paintings. Regardless, we do know of the commercial movements and cultural exchanges between Florence and Umbria during the artist’s lifetime involving works by Florentine painters, Piero included. The panel entitled _Pieta with Saints John the Evangelist, Mary Magdalene, and Martin_, ca. 1510 (National Gallery of Umbria, Perugia), comes from the small city of Abeto di Preci, where it once decorated the chapels of the Church of Saint Martin, and was likely commissioned of Piero in Florence by the Lucci family, the chapel’s patrons.\(^{84}\)

In the _tondo_, whose circular shape per se evokes the idea of a cycle,\(^{85}\) the concepts of death and rebirth at different levels of observations, analogous to the doctrines of macrocosm and microcosm,\(^{86}\) and it is clear that secondary scenes comprising plants and small animals reinforce and add to the content of the main scene.\(^{87}\) In these secondary groupings, determined by the actions that relate closely placed items, individual symbolisms contribute to the meaning of the overall set of elements, and at the same time restrict possible plural symbolisms of some particular items. Thus, we find seven groupings of biological elements, with the two lateral groupings considered the most important supports to the main scene, in addition to the central oak, whose physical state in the _tondo_ expresses the duality between death and rebirth.

\(^{82}\) HIRSCHAUER, op. cit., 2015, p. 7.
The group on the left, consisting of the black redstart and the caterpillar on the severed tree or petrified dead trunk refers to the sacrificial lamb regardless of whether Piero was aware to the moth into which the caterpillar would metamorphose. In Christian chromatic symbolism, black represents sadness for earthly death and grey represents the Final Judgement - the predominant colors of the bird, while the white as the base color of the caterpillar is the color of the Resurrection,\(^{88}\) composing a spectrum of achromatic colors.\(^{89}\) The trunk purposely placed just above the black redstart on the nearby river bank [Figure 2] reinforces the meaning of this secondary scene, repeating the motif of the oak, since new leafy branches are emerging from the base of the severed trunk. As for the creeping plants on the left-hand corner just below the “sacrificial altar,” the grouping of the sweet woodruff with the buttercup seems to refer to the destiny of the caterpillar-Christ since the elements respectively correspond to bitterness and death. Given the bird’s proportionally large size, we can imply that the bird will need to sever the caterpillar so that it can indeed consume it or feed it to its nestlings, symbolism that is consonant with the symbolism of harshness ascribed to the sweet woodruff.\(^{90}\)

In contrast, the group on the right consisting of the rose and the bird-winged angel is quite peculiar for its rather unrealistic elements given that the morphology of the flower does not exactly correspond to real species and also only bears a single thorn. The figure of a lone angel draped in red, collecting flowers while one of his fingers touches the tip of the sole thorn, staring up at the center of the composition, is the only element in the painting that apparently refers to the martyrdom of Christ without mention of his rebirth. Nevertheless, note that the finger that is touching the thorn is precisely the angel’s ring finger, also known as the *digitus medicinalis* (medicinal finger) since it was once believed to be the finger associated with healing.\(^{91}\) Isidore of Seville (560-636) wrote that apothecaries used to prefer using their ring finger both to mix potions and to rub ointments on their patients’ skin. Scholars suspect that the use of the ring finger for medicinal and magical purposes was based on superstitions concerning the potential impurity of the other four fingers.\(^{92}\) This detail thus confers the character of duality to this grouping as well: injury and healing, death and rebirth. As for the lower right corner, the set consisting of mushrooms and healing herbs located among the rocks seems to reinforce these same messages. The mushroom, traditionally associated with death, is confronted with the chamomile and betony, plants

\(^{88}\) Heller, op. cit., 2012, p. 130.

\(^{89}\) This same tonal duality can be found in the *tondo* in Toledo. In the tree on the left, we see two black birds perched below a white bird, which has been interpreted as the triumph of Christ over death. Brilliant, op. cit., 2015, p. 127.


known for their ability to heal countless diseases and, in the case in question, plants that connote salvation and resurrection. The other creeping plants in this area of the painting can be understood as references to new life emerging from the barren soil.

The two botanical items related to the Baptist, the reed cross and the genet, as well as his leather (animal-skin) shawl can be interpreted based on their pictorial characteristic, with the genet a possible indication of Saint John the Baptist's future life as a hermit. Both may equally serve a double purpose in the painting since they are equally associated with the Crucifixion (physical death) and Incarnation respectively. 

The dandelion, practically isolated in the foreground of the composition, is generally associated with the Passion, although in this case it may refer to the spreading of the Gospel given that it is depicted at the sage where it is about to disperse its seeds following the death of the actual flower. This can also be translated as a reference to Christ who, following the Resurrection, appears to his disciples and orders them to spread the Gospel (Mt 28: 19-20; Mc 16: 15-16; Jo 20: 21).

The concept of duality between death and life, between the earth and the heavens, between Christ and man, are perfectly depicted at different levels in Piero’s tondo – from the delimitation and choice of grandiose settings to the inclusion of small peripheral elements that bear strong, though sometimes not so explicit, symbolism in and of themselves. Here one could perfectly agree with the motif of the microcosm, with the very tiny, as the key to how the universe functions, a miraculous reduction of the mystery of “God's grand design,” where medieval theological reason leads to Renaissance aesthetic reason. The purpose of all the elements in the painting can be explained on an individual symbolic level, as was presented above, yet can also culled from their more overarching, natural and immediate placement on account of the strong convergence of their discourse: birth, death and regeneration (or reproduction) are compared to the Divine Birth, Death and Resurrection. As such, from a theological point of view, Nature and the Bible complement each other, and we could say of the tondo what Belting wrote of Bellini’s Madonna of the Meadow: in both paintings, “the Christian mystery is in harmony with the cycle of nature.”

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94 Ibid., p. 126.
Figure 1:

Piero di Cosimo (1462-1522), *Virgin with Child, Young St. John the Baptist and an Angel*, 1500-1510. Oil and tempera on panel, diameter 132 cm, Museu de Arte de São Paulo Assis Chateaubriand, São Paulo (Photo MASP / Karen Barbosa).

Figure 2:
Black redstart and Death’s-head hawkmoth caterpillar (Detail of the Figure 1)

Figure 3:
Ultimate stadium caterpillar of the Death’s-head hawkmoth *Acherontia atropos* (Linnaeus) on an olive branch.
Sardinia, Italy
(Wikimedia Commons / Giancarlo Dessi)
Figure 4:
Detail of the Figure 1: Field or dog rose.

Figure 5:
Detail of the Figure 1: Mushroom, German chamomile, Betony and Unidentifiable plant.
Figure 6:
Detail of the Figure 1: Buttercup and Sweet woodruff

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