Appetizers

appetizer, *n.* ('æpɪtaɪzə(r)) [...] ► *fig.* Something intended to arouse interest in what follows; a sample of what may be expected in the future.

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Simpson & Weiner (1986). Definition of "appetizer".
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A.1 Martini

Without question, the undisputed king of cocktails is the Martini.

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At the beginning of the fourteenth century, Giotto di Bondone was sowing in Florence the seed of the Italian Renaissance in painting. His works attempted to abandon the stiffness of the Byzantine style and replace it with a more naturalistic approach with a marked emphasis on the representation of space and volume. In the nearby city of Siena, the intent was different. "Their greatest master of Giotto's generation, Duccio, had tried – and tried successfully – to breathe new life into the old Byzantine forms instead of discarding them altogether" (Gombrich, 1989: 160). So did Duccio's most renowned pupil, Simone Martini.

Little is known with certainty about Martini's early years. He was born in the first half of the 1280s, probably in the town of San Gimignano,[1] where he had an early contact with the craft of painting as his father specialized in the preparation of the first coat (*arriccio* in Italian) applied to wall surfaces on which a fresco was going to be painted. He subsequently became a pupil of Duccio, and by the early 1310s he was producing his first works.

The favourable view of these works is evidenced by the fact that, in 1315, he was commissioned to paint a *Maestà* (Figure A.1) in the Sala del Mappamondo of the Palazzo Pubblico (the town hall) in Siena. Only a few years before, the same city of Siena had commissioned another Maestà, this one to be installed at the Cathedral of Siena, to Duccio (the commission dating from 1308 and finally installed in 1311) and the fact

[1] A small town close to Siena which could have been, in a sense, the Manhattan of the Middle Ages. The town traded with textiles, which were dyed and dried in tall towers built for that purpose. The view of such a cluster of towers must have produced at the time a feeling not unlike the twentieth-century view of Manhattan.

Figure A.1 ***Maestà*, 1315 (fresco) by Simone Martini (1284–1344). (Palazzo Pubblico, Siena, Italy/The Bridgeman Art Library.)**

that the chosen one was now Duccio's pupil points to the recognition that Martini must have enjoyed by 1315.

The word *Maestà*, meaning "majestic" in Italian, denotes a depiction of the enthroned Virgin Mary with Jesus. It may or may not be accompanied by saints and angels. The former is the case in both Duccio's and Martini's frescoes. The common representation of the Virgin and the Child provides examples for the latter. The word "majestic" is entirely appropriate for Martini's *Maestà*. More interestingly, some attributes of medieval painting, such as a certain hieratic manner or a marked solemnity, are only partly satisfied, and one may say that the fresco "breathes new life" to these attributes.

Martini's fresco is large; it occupies the whole end wall of the Sala del Mappamondo. It depicts the Virgin and Child surrounded by a multitude of angels and saints. We see at the Virgin's right (our left) Saints Catherine of Alexandria, John the Evangelist and Mary Magdalene, the Archangel Gabriel and Saint Paul (whom we recognize by his sword). Also, in almost identical positions but at the Virgin's left, Barbara, John the Baptist, Saint Agnes, the Archangel Michael and Saint Peter (identified by the key he is holding). Martini included in the scene the four patron

saints of Siena: Ansano, Bishop Savino, Crescenzio and Vittore, who are kneeling in front accompanied by two angels offering flowers to Mary.

The composition of the whole reveals an interest in space and volume that had only recently reached medieval painting, as we mentioned, through the works of Giotto and Duccio. This interest is evinced in the poles supporting the canopy, which are drawn in correct perspective, as well as in the placement of the host of saints and angels. The predominant composition for such a host in the Byzantine style would have positioned these figures in both the left and right groups in parallel rows, with equal spaces between figures, standing in the same stance. Martini, in contrast, does not impose such a strict collocation of the figures and allows different ones in the scene to have a bearing (and an appearance, for Martini is also attributed to have introduced individual portraiture in medieval painting) appropriate to his or her role in the Sacred Story. Yet, unordinate as each of the two groups may be, there is a law in their joint display which is given by the fact that the positions of the figures at the right are replicated, as if mirrored, by the positions of the figures at the left. This arrangement, which is going to appear in the chapters to come, increases the feeling of solemnity and drives the attention towards the central pair of Virgin and Child.

In 1336 Martini moved to Avignon, where the Papal See had recently been established. A meeting point of artists coming from different places in Europe (but mostly from northern Italy) in search of the Pope's favour, the exchange of ideas and techniques at the Papal Court would evolve into a style known today as International Gothic, of which Martini, who incorporated a number of features of northern European art into his own work, is presently considered a precursor.

A.2 On their blindness

John Milton is nowadays considered one of the highest exponents in English literature, mostly due to his epic poem *Paradise Lost*. Born in 1608, Milton pursued studies at Cambridge between 1625 and 1632. With a broad set of interests, encompassing theology, philosophy, history, politics, literature and science, he is also considered one of the most learned English poets. Milton had an unusual knowledge of both classic and modern languages, with a command of Hebrew, Greek, Latin, Spanish, French and Italian. The last two he used extensively in his tour to France and (mostly) Italy between May 1638 and summer 1639.

In a moment of religious and political turmoil, Milton, who had very definite religious opinions, became a strong critic of some facets of Christianity (notably, of episcopacy). This aspect of Milton's life was prominent among his fellow citizens and, remarkably, most of the

references to Milton reaching us from the seventeenth century "testify to his public life as a polemicist rather than his relatively unnoticed career as a poet" (Campbell, 2001: 483).

Milton's existence was plagued by a number of familiar misfortunes, as well as by the ups and downs that the changes in the English government during his lifetime had to bring forward to him as a consequence of his marked political and religious views. Neither was he immune to physical calamity.

During the early 1650s Milton had been losing his eyesight and by March 1652 he was totally blind (Flannagan, 2002: 75). More than a decade later, the narrator of *Paradise Lost* would be sightless, as Milton was, and compared "to the blind epic poet Homer or blind prophets such as Tiresias, given the gift of second sight to compensate for the loss of eyesight" (Flannagan, 2002: 75). But soon after the loss, Milton has a less assertive stance. Around 1655 he wrote a poem – formally *Sonnet 19*, but later called *On His Blindness* by the compilers of his work – in which he wonders whether his impairment would affect his capacity to serve God and, in particular, to use his talents for poetry as he had done until then. To pose the last question he refers to the "Parable of the talents" (Matthew, 25:14–30)[2] and points to "that one talent which is death to hide lodged with me useless". It is his patience (which he capitalizes to personify it) that reminds him that God is in no need of having men working for Him and that he may serve Him in ways different than those he had carried out until then. In the last verse, Patience even suggests that he might not need to do anything, since "they also serve [Him] who only stand and wait". This is the poem in its entirety:

> When I consider how my light is spent
> Ere half my days, in this dark world and wide,
> And that one talent which is death to hide
> Lodged with me useless, though my soul more bent
>
> To serve therewith my Maker, and present
> My true account, lest He returning chide;
> "Doth God exact day-labour, light denied?"
> I fondly ask. But Patience, to prevent
>
> That murmur, soon replies: "God doth not need
> Either man's work, or His own gifts, who best
> Bear His mild yoke, they serve Him best. His state
> Is kingly; thousands at His bidding speed
> And post o'er land and ocean without rest;
> They also serve who only stand and wait."

[2] A master gives three servants some talents (a unit of weight for money in Biblical times) to hold for him while he is away on a trip. After returning, he rewards the two servants who increased the money given to them and cast into darkness the third one, who had buried the talent given to him.

Milton would return shortly after to the subject of his blindness in *Sonnet 22*.

Ironically, Milton's best poetry would be written after the onset of his blindness. *Paradise Lost* was dictated by Milton to transcribers. Helped by a remarkable memory, "critics still marvel at the fact that the blind Milton could remember what he had dictated in Book 2 of *Paradise Lost* even as he was dictating lines in Book 11" (Flannagan, 2002: 76).

Three centuries later, and much to the south, Jorge Luis Borges, one of the greatest writers in Spanish of the twentieth century, was going to meet a fate similar to Milton's.

Borges grew up in Palermo, at that time a suburb of Buenos Aires. According to his recollections (in *Evaristo Carriego*) he "grew up in a garden, behind a speared railing, and in a library of unlimited English books". Just as Milton, his knowledge of languages was extraordinary (his translations into Spanish of works originally in Old English or Norse give evidence of this fact). And just as Milton as well, his life was not exempt of ups and downs, in his case motivated by the moving wheels of Argentinian political life. With the ascension to power of Juan Domingo Perón in 1946, Borges was dismissed from his position at a Buenos Aires municipal library and given a new appointment as poultry inspector for the municipal market (an appointment he immediately resigned).

Probably the most important coincidence in the lives of the two writers, though, is the fact that Borges also became blind during adulthood. Alberto Manguel (2006: 15–16), one of the people who read to Borges after this event, provides the following description: "His was a particular kind of blindness, grown on him gradually since the age of thirty and settled in for good after his fifty-eighth birthday. It was a blindness expected since his birth, because he always knew he had inherited feeble eyesight from his English great-grandfather and his grandmother [...]". Graham Greene also mentions Borges' blindness in a reminiscence talk. He had been spending a day with Borges at Buenos Aires. "After an agreeable lunch, he sat on a sofa and quoted large chunks of Anglo-Saxon. That, I'm afraid, I was not able to follow. But I looked at his eyes as he recited and I was amazed at the expression in those blind eyes. They did not look blind at all. They looked as if they were looking into themselves in some curious way, and they had great nobility" (Greene, 1990: 306–307).

Not unexpectedly, Borges would turn blindness into a poetic subject. Probably the first work where he does so is the *Poema de los Dones* (Poem of the gifts), written around 1960. Other poems followed. In which is probably the last one on the subject, he made an unambiguous reference to Milton in giving it the title *On His Blindness* (in English).[3] It appears in

[3] This is actually the second poem by Borges with this title, the first having been published in 1972, in the book *El Oro de los Tigres*.

the book *Los Conjurados* published in 1985, just one year before Borges' demise. This is how it reads.[4]

Al cabo de los años me rodea	I am surrounded, after all these years,
una terca neblina luminosa	by a stubborn shining mist
que reduce las cosas a una cosa	which reduces all things to one thing
sin forma ni color. Casi a una idea.	without shape or form. Merely an idea.
La vasta noche elemental y el día	The vast elemental night and the day
lleno de gente son esa neblina	full of people are this mist
de luz dudosa y fiel que no declina	of dubious, loyal, light, without decay
y que acecha en el alba. Yo querría	and watching at dawn. I wish
ver una cara alguna vez. Ignoro	to see sometimes a face. I know not
la inexplorada enciclopedia, el goce	the unexplored encyclopedia, the transport
de los libros que mi mano reconoce,	of the books my hand recalls,
las altas aves y las lunas de oro.	the golden moon and the birds aloft.
A los otros les queda el universo:	For the others remains the universe:
a mi penumbra, el hábito del verso.	to my penumbra the habit of the verse.

Borges coincided with Milton in considering blindness as a fate imposed on him by God. But, unlike Milton, who began wondering whether he would be able to continue serving God and eventually fully accepted his fate, the passage of time shows an increasing bitterness in Borges' poems. Thus, he begins the *Poema de los Dones* describing his blindness as "God's irony" and making clear that there is "neither tear nor reproach" in this description, a description that otherwise compares blindness with the night that severed him from his all-encompassing library:

Nadie rebaje a lágrima o reproche	Let neither tear nor reproach besmirch
esta declaración de la maestría	this declaration of the expertise
de Dios, que con magnífica ironía	of God who, with magnificent irony,
me dio a la vez los libros y la noche.	granted me at once the books and the night.

In contrast with this apparent lack of tear or reproach, in the poems that will come later, adjectives such as "vano" (vane), "mero" (mere) or "inútil" (useless), which point towards a lack of reality, have an increasing presence. In the same line, objects lose their individuality and are referred to with nouns such as "cosa" (thing) or "forma" (shape). In his last poem on the subject (see above) even this diminished individuality

[4] *On His Blindness* by Jorge Luis Borges, currently collected in *El Oro de los Tigres* and *Los Conjurados*. Copyright © 1995 by Maria Kodama. Used by permission of The Wylie Agency LLC and courtesy of Random House Mondadori, SA. The translation to English at the right is mine. It has no pretensions besides conveying some sense from the original Spanish.

is further enhanced, as different things are now "reduced to one thing". The act of writing, that in Milton was to serve God, in Borges becomes a shelter. The two last lines of *On His Blindness* leave no doubts.

Putting aside the differences in the way Milton and Borges faced the personal tragedy of blindness, it is worth noting the coincidences in the 1655 and 1985 namesake poems. Both are sonnets. That is, both are made of 14 lines, each of which having a fixed number of syllables (10 in Milton's, 11 in Borges'). In both cases the final syllables of these lines repeat their sound forming a well-defined pattern. Using the same letter to denote the same sound, Milton's poem has the pattern ABBA ABBA CDE CDE and Borges' ABBA CDDC EFF EGG. There is a strange evenness in the small differences in these patterns. The last lines in Milton's correspond to a pattern common in Italian and Spanish poetry. Instead, the last lines in Borges' are usually referred to either as "Shakespearean" or as "English".

Actually, Milton's poem is said to be a *Petrarchan sonnet*, since it possesses a rhyme structure introduced in the fourteenth century by Francesco Petrarca, the great Italian poet. Petrarca repeatedly used this structure in the love poems he wrote for Laura de Noves. Incidentally, these poems mention a portrait of Laura in the possession of Petrarca which, art historians argue, may have been one of the first portraits with an intention of likeness (Gombrich, 1989: 161). According to Vasari (1991: 42) this portrait was executed by Simone Martini.

A.3 The *Musical Offering*

The picture in Figure A.2 shows Johan Sebastian Bach in 1748 in a portrait painted by Elias Gottlieb Haussmann. Widely regarded today as the greatest composer of all times, it was not as such but as a virtuoso that Bach was known during his life (just as Milton was known as a polemicist rather than as a poet during his own). And so much so that even Frederick the Great, King of Prussia, had long desired to have Bach pay a visit to his court in Potsdam. Frederick had actually made suggestions to that effect to Bach's son, Carl Philipp Emanuel, who at that time was employed at the court as choirmaster. In addition to Bach's reputation as an organ player, he was also celebrated because of his ability to improvise. This explained Frederick's desire, as the King was the happy owner of several Silbermann pianos, instruments that, in the middle of the eighteenth century, were just making their debut, and Frederick wanted Bach to improvise on them.

Be it because of the mediation of his son, or because of some other reason, the fact is that on the evening of 7 May 1747, Bach paid his long sought-after visit to Frederick's court. The following description of that

Figure A.2 **Bach painted by Elias Gottlieb Haussmann. (Erich Lessing/Art Resource, NY.)**

evening is by Johann Nikolaus Forkel (1920: 25), one of Bach's earliest biographers:

> Accompanied from room to room by the King and the musicians, Bach tried the instruments and improvised upon them before his illustrious companion. After some time he asked the King to give him a subject for a Fugue, that he might treat it extempore. The King did so, and expressed his astonishment at Bach's profound skill in developing it. Anxious to see to what lengths the art could be carried, the King desired Bach to improvise a six-part Fugue. But as every subject is not suitable for polyphonic treatment, Bach himself chose a theme and, to the astonishment of all who were present, developed it with the skill and distinction he had shown in treating the King's subject. [...] On his return to Leipzig he developed the King's theme in three and six parts, added *Canones diversi* upon it, engraved the whole under the title "Musikalisches Opfer" and dedicated it to the royal author of the theme.

The dedication deserves attention. Translated into English, it would read "At the King's Command, the Song and the Remainder Resolved with Canonic Art". Here, Bach is playing with words, since "Canonic" alludes to the meaning "with canons" as much as it does to the meaning "in the best possible way". But the play on words goes beyond that. The actual dedication, in Latin, reads as follows:

The initials of it form the word "RICERCAR", an Italian word meaning "to seek" which was also used as a synonym for "fugue". Such a word structure is called an *acrostic*. Actually "ricercar" was the original term for a fugue (the Italian word "fuga" being of more recent use) but, by Bach's

time, it had earned a more erudite usage. Hofstadter (1979) notes that "a similar usage survives in English today: the word 'recherché' means, literally, 'sought out', but carries the same kind of implication, namely of esoteric or high-brow cleverness". In the *Musical Offering* Bach used the word "ricercar" to name its fugues. Following Hofstadter, we may say that this choice of words was itself recherché.

To understand that evening's exploit one needs to grasp the difficulty of composing (not to say improvising!) a canon or a fugue. Without entering into details, those are musical forms in which a melody is played against itself. Whereas this may seem easy, there is a basic snag: when the different copies of the primary melody are played together one is likely to obtain unpleasant sounds. And such sounds, called *dissonant chords*, are to be avoided for a canon to be considered well formed.

Accompanying the *Musical Offering* was also the following dedicatory letter in which Bach appears to dismiss all the complexity of the *Musical Offering* and put the emphasis on the theme given to him by Frederick the Great. Musical pundits ever since have, notwithstanding, disagreed with him.

MOST GRACIOUS KING!

In deepest humility I dedicate herewith to Your Majesty a musical offering, the noblest part of which derives from Your Majesty's own August Hand. With awesome pleasure I still remember the very special Royal Grace when, some time ago, during my visit in Potsdam, Your Majesty's Self deigned to play to me a theme for a fugue upon the clavier, and at the same time charged me most graciously to carry it out in Your Majesty's Most August Presence. To obey Your Majesty's command was my most humble duty. I noticed very soon, however, that, for lack of necessary preparation, the execution of the task did not fare as well as such an excellent theme demanded. I resolved therefore and promptly pledged myself to work out this right Royal theme more fully and then make it known to the world. This resolve has now been carried out as well as possible, and it has none other that this irreproachable intent, to glorify, if only in a small point, the fame of a Monarch whose greatness and power, as in all the sciences of war and peace, so especially in music, everyone must admire and revere. I make bold to add this most humble request: may Your Majesty deign to dignify the present modest labor with a gracious acceptance, and continue to grant Your Majesty's Most August Royal Grace to

Your Majesty's most humble
and obedient servant

The Author

Leipzig, July 7, 1747

Forkel (1920: 26) also writes that by late 1749 or early 1750 Bach completely lost his eyesight. A British surgeon named John Taylor, who had been the oculist of George II, operated twice on Bach, both times without success. In contrast with Milton or Borges, Bach was seriously affected by this condition, "sank gradually for full half a year, and expired on the evening of July 30, 1750".

A.4 The garden of the crossing paths

> Mighty is geometry; joined with art, resistless.
>
> Attributed to Euripides[5]

The preceding sections are somehow unrelated, at least at a first glance. They narrate episodes in the lives of artists who lived in different places and different times and even the artworks involved are of a different nature.

A closer look at these artworks reveals, however, a common feature which we may describe as a sense of order, a feeling that the constituents of the work, be it a painting, a poem or a musical piece, fit together following a pattern, an underlying law. A goal of the next few chapters is to unveil some of these laws, notably those having a geometric nature. These laws are doubtless meeting points in the paths of art and mathematics. But they are not the only points where these paths cross, because occasionally art has returned in kind the influence it received from mathematics and taken a role in shaping its development. Another goal in this book is to give an account of some of these occasions. To accomplish these goals we must first discuss geometry.

[5] The attribution is faulty. In verse 884 of *Hecuba*, the character with that name replies to the question posed by Agamemnon on how will women defeat men with the words δεινὸν τὸ πλῆθος σύν δόλῳ τε δύσμαχον which Morwood (Euripides, 2000) translates as "Women in numbers are formidable, and when allied with trickery, hard to fight against". I am amazed at the semantic derives that turned "numbers" into "geometry" and – doubtless through "artfulness" – "trickery" into "art". But I have read the quotation in a (large) number of places and, empowered by the might of this number, I have found the temptation to use it, as it were, resistless.