VILLA DI CASTEL VITONE AT LAMPORCECHIO SOPRA VINCI

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SPECIAL VOLUME ON LEONARDO'S THEORY AND PRACTICE OF ART
PUBLISHED IN CELEBRATION OF THE GIUNTI FACSIMILE EDITION
OF LEONARDO'S LIBRO DI PITTURA (CODEX VATICANUS URBINAS LAT. 1270)
AND PRESENTED BY MERCEDES-BENZ ITALIA SPA
LEONARDO'S SUPERIORITY in technological innovations is best shown by Hans Burgkmair's woodcuts of 1516-18 representing the manually propelled gala carriages from the triumphal procession of Emperor Maximilian I - a simple system of motion transmission requiring a man cranking along either inside or outside the float. In fact, long before then, in 1478, Leonardo had planned one such carriage that could be self-propelled, apparently by the energy released from a complex system of multiple springs. Often referred to as Leonardo's 'automobile', and known only from rough, preliminary sketches on a sheet of the Codex Atlanticus (f. 256 v-r), it may be taken to suggest his early involvement with the organization of festivals and parades in the Florence of the Medici. Such a destination of the vehicle, as first suggested by Carlo Pedretti, is hinted at by the sketch of a coat-of-arms on the newly discovered verso of the Codex Atlanticus sheet.  


4 The sketch, not by Leonardo, is inscribed 'azzurro Iero'.
namely of 'carriages of easy movement'. A cryptic sentence in Paris M.S. B, f. 95 v (5 v), c. 1487–90, may hint at the kind of self-propelled vehicle running on ice as later invented by Simon Stevin: 'Just as on a frozen river a man may run without moving his feet, so a car might be made that would slide by itself'. Arbalet-like springs as in the 1478 project also appear in Leonardo's studies of flying machines on sheets of the early 1490s. Some twenty-five years later, in France, Leonardo's mechanical lion was again a self-propelled device, an automaton far advanced technologically, but known only from contemporary and later accounts, again as a Medici commission. This in 1515, on the occasion of the solemn entry of the new King of France, Francis I, into Lyons, where the Florentine colony was to greet him with a symbol of the new Medici pope, Leo X, and of his nephew Lorenzo di Piero, governor of Florence. The lion is an old emblem of Florence best known from Donatello's *marzocco*, and in fact lions were kept in cages on the back of the Public Palace, the way a she-wolf is still kept in the Capitol in Rome. Leonardo's mechanical lion walked up to the King, stood on its hind-quarters and opened its breast to show that in the place of its heart it carried the Florentine lilies - the *fleur-de-lis* that Louis XI of France had given to Florence as a heraldic token of friendship, an event commemorated by Ghirlandaio's famous decoration of the Sala dei Gigli in Palazzo Vecchio in 1480. Leonardo was then twenty-eight years of age, thus at the very beginning of his extraordinary career as an artist and inventor - the time of his 'automobile'.

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6 Richter, § 1240: 'Siccome per lo fiume si accostano l'uno corrente il passo, ovvero il carro può passare così che corre per 80. This is fully discussed by Carlo Pedretti on pp. 143-8 of the present volume, where the correct sequence of the sheets in the last signature of Paris M.S. B (Ash, MS. I) is also established.

8 CE CA, f. 514-r-b (863 r), c. 1499-1, with a detail of the motor inscribed 'fundamento del movimento', i.e. ground plan of the motor. A model of the device, as constructed by Alberto Geda, was presented as a clock mechanism at the recent Leonardo exhibition in Speyer, Germany (exhibition catalogue, p. 132), but it was curiously positioned upright when this is clearly not the case. Cf. Luca Beltrami, 'L'orologio di Leonardo', in Leonardo da Vinci. Conferenza fierentino, Milan, 1916, pp. 13-26. For a correct interpretation of the clock mechanism, see Carlo Pedretti, 'Il tempio dell'orticolo', in the author's Studi Viniziani, Genova, 1957, pp. 99-128, in particular pp. 106-8 and fig. 46. This is known to be used only through the mentions by Vasari and Lomazzo, who did not indicate the precise occasion of the event nor its symbolism. The missing information is supplied by the Documentazione delle vicissitudini natali della Cittadissima Marina di Mastro Domenico di Porti di Navarra by Michelangelo Buonarroti the Younger (Florence, 1600), p. 10, as reproduced by Pedretti, Leonardo architetto, cit., p. 122.