

Towards a cognitively oriented database of early shadow depictions

Roberto Casati

► **To cite this version:**

Roberto Casati. Towards a cognitively oriented database of early shadow depictions. 2003.
<ijn_00000461>

HAL Id: ijn_00000461

https://jeannicod.ccsd.cnrs.fr/ijn_00000461

Submitted on 5 Apr 2004

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Towards a cognitively oriented database of early shadow depictions

Roberto Casati

Institut Nicod, CNRS-EHESS-ENS

1 bis avenue de Lowendal, 75007 Paris, France

casati@ehess.fr
www.institutnicod.org

There are two advantages of the study of **historical examples** of the depiction of cast shadows:

1. satisfy general constraints on the study of the art-cognition interface. These include: choosing *production* or the production-perception interface (vs. purely perceptual approaches); widening the field of artistic products to include *demotic art* (vs. one-sided focus on beaux arts); selecting a *large sample* of artworks, possibly exhibiting trial and error endeavors devoted to the solution of specific problems (vs. direct analysis of anecdotal cases that are likely to be biased by poor data selection); requiring the involvement of *sufficiently articulated* cognitive capabilities (vs. relatively “simple” cognition, e.g. colour cognition) but at the same time choosing capabilities that are *sufficiently delineated* (vs. large or diffuse capabilities, such as reading words or understanding narratives); and, finally, choosing a field that is backed by *substantial empirical research* on the cognitive side (vs. general speculations, e.g. on the social role of some artefact building techniques).

2. rely on a wide corpus of existing “attempts” at depicting shadows in a perceptually adequate way.

A. Attached shadow (*chiaroscuro*) is not universally used in depiction, but even where it is mastered skillfully, it is not generally accompanied by the use, let alone the mastery, of cast shadows – cast shadows are rare until the European Renaissance. B. After the Renaissance, shadows in European painting were canonised and shadow painting was the subject matter of a number of painting treatises. C. During a circumscribed period in history, the depiction of cast shadows has been the object of a representational struggle. Painters of the early Renaissance appear to have been fascinated by shadows, and to have learnt over about one century how to depict them in a geometrically and perceptually adequate or satisfactory way.

The sample

The sample includes about 800 paintings (with 1600 shadows) produced 1415-1515. Inspected at various locations, mostly in Western Art museums and collections in Europe and North America. All items registered have been inspected *de visu*, as most available photographs do not convey enough relevant detail.

Proposed Shadow Categories

| Shadowless paintings | | | |
|---|---------------------------|---|---|
| Mainly imitation shadows (specify shape properties of casters) | | Virtuoso (the caster can be recognised from its shadow) | Vittore Crivelli (c. 1450-1500); S. Giacomo della Marca; Urbino |
| | | Triangle, spike | Gerolamo da Treviso il Vecchio (1451-1497), <i>Cristo Morto Sostenuto da Due Angeli</i> , Milan, Brera. |
| | | Reverse triangle | Ravenna, Mausoleo di Galla Placidia (425-450 A.D.). |
| Mainly instrumental shadows (specify locational properties of casters and surfaces) | Anchoring shadows | of stick touching ground | Bartolomeo Vivarini (1432-1499), <i>Polittico di Conversano</i> , Venice, Accademia (1475) |
| | | Marks with no shadow feature but with shadow function | Anonymous, <i>Triumph of Love</i> , Museo Bandini, Fiesole (drawing not available) |
| | Surface enhancing shadows | of partly suspended horizontal object | R. van der Weiden (c. 1400-1464), <i>The Crucifixion</i> (c. 1460), Philadelphia. |
| | | that climbs a step | Vittore Carpaccio (1473-1526), <i>Presentazione della Vergine al Tempio</i> , Brera, Milan. |
| Mistaken shadows | | of protruding object | Vittore Crivelli, <i>Pietà</i> (c. 1481), Urbino, Galleria Nazionale delle Marche. |
| | | Truncated | Piero della Francesca (1416-1492), <i>Annunciation</i> , Galleria Nazionale dell'Umbria Perugia (1460-1470). |
| | | Truncated at edges (do not climb steps) | Girolamo di Benvenuto, (1470-1524) <i>Madonna col bambino</i> , Urbino. |
| | | Wrong step-climbers | Girolamo Genia (1476-1551), <i>La Madonna col figlio, santi e dottori della chiesa</i> , Milan, Brera |
| | | Film-like | Domenico di Paride Alfani, <i>Pala della Sapienza Vecchia</i> , Galleria Nazionale dell'Umbria, Perugia |
| | | Lone | Anonymous, <i>Adoration of the Magi</i> , San Diego. |
| | | Inconsistent | Signorelli, <i>Flagellation</i> , Milan : Brera |
| | | that bend around corners | Conrad Witz (1400-1446c), <i>Adoration of the Magi</i> (1443-1444), Genève, Musée d'art et d'Histoire. |
| | | Crossing | Vivarini (1442/53-1503/05), <i>Madonna col Bambino e Santi</i> , Urbino. |
| | | Poor interactivity with surface | Masaccio, <i>S. Pietro</i> , Cappella Brancacci, Firenze. |
| Shadow exotica | | Profile as from observer's viewpoint | Belbello da Pavia (active 1430-1473) in the Visconti Hours, <i>Spies of Jericho Escape</i> (Florence, Biblioteca Nazionale) |
| | | From multiple sources | Piero della Francesca (1416-1492), <i>Flagellation</i> (c. 1455), Urbino. |
| | | Silent witness | Tarsie, <i>Studiolo</i> , Urbino |
| | | Broken | Biagio D'antonio, the story of Joseph, Getty Museum, Los Angeles, |
| | | Occluded | |
| | | On water | Vittore Carpaccio, <i>Hunting on the Lagoon</i> (1490), Getty Museum, Los Angeles |
| | | Caster/light on our side of the canvas | Giovanni Bellini (1430-1516), <i>Pietà</i> (c. 1465), Milan, Brera; |
| | | Violation of taboo on human body | Bernardo Strozzi (1581-1644), <i>Convito in Casa di Simeone</i> , Venezia, Accademia |
| | | Unintended | Piero della Francesca, <i>Annunciation</i> , Galleria Nazionale dell'Umbria, Perugia. |
| | | | |
| | | | |
| | | | |

Drawings are by Roberto Casati.

References:

Casati, R., 2003 *The Shadow Club*. New York: Knopf.

Casati, R., 2004, “Methodological issues in the study of the depiction of cast shadows”, *Journal of Aesthetics and Art Criticism*.

Research for this study has been made possible by a Cognitique Grant of the French Ministry of Education, ACI Cognitique 2000 2P3470, «Le rôle de la reconnaissance dans la représentation picturale». Thanks to Sarah Bendaoud and Nathan Sperber for assistance with the database.

