Guidelines for Experts authenticating works of fine art

RAM
Responsible Art Market
Preamble:
Main purpose and scope of the guidelines

These guidelines have been drafted with the expertise of fine art in mind, but they may be useful for other kinds of collectibles. Please note that these guidelines suggest best practice. These guidelines do not suggest a "one-size-fits-all" solution. The verifications and guidelines that are relevant may vary on a case-by-case basis.

These guidelines have no legal effect and do not constitute legal advice. Experts are responsible for complying with legal obligations in the jurisdiction(s) in which they operate and must obtain their own legal advice in this respect.

Finally, these guidelines do not consider employment or insurance concerns for the professional activity of experts, nor deal with data protection rules that may apply.

Who should follow these guidelines?

The Guidelines are intended for any person who is asked to provide an analysis or expertise on a work of fine art (the "Expert"), including but not limited to: independent Experts, living artists, artists’ heirs, committees, foundations and authentication boards. In this context, Experts may be required to establish whether a work is by a specific artist (or not), or identifying the artist of a work.

Other persons involved in the art market (including, but not limited to dealers, auction houses, collectors, and art businesses providing ancillary services) may choose to adopt all or some of these guidelines as a matter of best practice.
1. Qualifications of the Expert

Every Expert should self-assess their qualifications and be able to establish proof of such qualifications (including, but not limited to, publications, academic degrees, professional experience etc.) relevant to the assignments they accept. The Expert should have a thorough understanding of the possibilities and limitations of their analysis and be able to determine whether it is sufficient in the given case. If a technical examination is deemed necessary, the Expert should collaborate with professionals from the field of conservation/ restoration and cultural heritage analysis experienced in authentication work.

Upon receiving an authentication request, the Expert should conduct a self-assessment in order to determine whether there is any conflict of interest arising from this request (see also Section 3). The Expert should not accept any assignments that do not fall within their competence.

2. Communication and preparation of the expertise assignment

Transparency is the basis of accurate expertise.

Before accepting a request for authentication, the Expert should:

— Be informed who the beneficial owner of the work is (the “Owner”);

— Also prior to accepting an authentication request, the Expert should clearly establish who their counterparty is: it may be the Owner or an intermediary (e.g. art advisory and/or brokers) acting for the Owner (together the “Client”);

— Before accepting the authentication request, the Expert should unequivocally inform the Client about any conflict of interest (see also Section 3), their field of Expertise and the implications of any applicable limits of their expertise.

The Expert should clearly inform the Client about the scope of their work, including the analysis and research they undertake and what they have intentionally not conducted. The Expert should also communicate about the limits of their analysis and what outcomes may be expected from it (e.g. if they will deliver a certificate of authenticity or an Expert opinion).

The Expert should clearly communicate the price of their services and any extra costs to the Client, and have them approved by the latter, in advance of starting the authentication work. If the work must be transported for authentication, the Client should be responsible for insurance, transport and customs formalities for the work and the Expert should inform the Client accordingly.

The Expert should notify the Client about any problem in the work’s provenance (e.g. a gap in the provenance, or that the work was looted during war, etc.). See also the RAM Toolkit.

Should the Client have any doubts about the authenticity or concerns regarding the results of their analysis, they should then communicate these doubts or concerns to the Client.

If applicable, the Expert should clearly inform the Client about the Expert’s right to make public the results of their examinations and research prior to publishing such results, and that the Owner’s name will be withheld unless express permission is granted to publish the Owner’s name.

3. Conflicts of interest

In general, Experts should reveal any conflicts of interest including financial interest in the artist’s market.

In a transaction, Experts who delivered a certificate or an opinion should not be involved as an intermediary.

An Expert who is an employee of a public museum or institution should verify whether they are allowed to provide opinions.

4. Analysis

4.1 How to conduct the analysis

The Expert should request from the Client all available documentation on the work including, but not limited to, copies of the gathered evidence (e.g. invoices, references to a mention in a catalogue raisonné, an exhibition catalogue or any other authoritative literature, photographs, archival material, etc.). The Expert should double-check the veracity of the stated facts and/or authenticity of the provided documents. If possible,
a recent condition report should be included with the documentation relating to the work. Experts should also request from the Client high resolution photographs of the work (front and back of the work with inscriptions if applicable, close-ups of details and signature) so that they may conduct a first examination and internal research. Often, non-authentic works can be detected based on photographic evidence alone.

The Expert should base their assessment of the work on a thorough understanding of its condition, and more specifically the degree to which it may have been altered by damage, natural ageing and restoration treatment(s).

In order to confirm a work’s authenticity, the Expert should examine the work in person.

The work should be unframed, with the verso available for inspection.

For works that were created posthumously, Experts must verify that the artist had not given any instructions to the contrary (e.g. in their will).

Upon the deposit of a work for personal inspection by the Expert, the Expert should prepare a deposit form or contract to be handed over to, and signed by, the Client and attach a copy of the Client’s proof of identity. If applicable, proof of the customs status of the work and its insurance coverage may be attached to, or mentioned on, the deposit form.

The shape and scale of the technical examination, but also the types of imaging and analytical techniques applied, and the order in which they are applied, differ for almost every single examination. Determining factors are, first of all, the particular reasons for doubting the work’s authenticity, as those reasons dictate the questions asked of the technical examination. Other factors that will guide the investigation are the material nature of the work to be examined, the analytical infrastructure available for examination, the individual background of the technical experts involved, the analytical strategy they will develop, but also other factors not specifically mentioned here. It is important to stress that Experts in the field of technical examination distinguish themselves by their flexibility in approach, not by their adherence to any type of standard procedure.

4.2. Analysis steps

Connoisseurship, art historical research and technical or scientific analysis are the three angles authentication problems may be tackled from. They complement each other.

4.2.1. Connoisseurship / Comparative analysis

— Connoisseurship or judgment by eye is the “sensitivity of visual perception, historical training, technical awareness, and empirical experience needed by the Expert to attribute the [work]”.¹ The visual examination of the work enables the Expert to “determine whether it looks and ‘feels’ like a work by the artist, by focusing on composition, subject matter, brushstroke, colour palette, surface and overall technical skill”.²

— The authentication process typically begins with a comparative analysis of a given work of art against works that have already been positively attributed to the artist in question. A typical comparative analysis may include the following steps:

  Analysis of the style and iconographic analysis

  — The Expert will generally assess whether the form and style of the work, for example the brushstroke patterns and the preparatory drawings underneath the painting, match the style of the artist for a given period of their life.

  — The Expert may want to consider the date of the work if the artist’s style has evolved over time.

  — The Expert may want to undertake an iconographic analysis of the work, that is to establish the work’s meaning at a particular time.

Analysis of the signature

— If the work bears a signature, the Expert will commonly examine the artist’s signatures on undisputed works by that same artist. The Expert may want to consider the date of the work if the artist’s signature has evolved over time.

4.2.2. Art historical analysis and scholarship

Provenance

If possible, the Expert should establish the work’s provenance since its creation and flag any provenance gaps.

An ideal provenance provides a documentary record of owners’ names, dates of ownership, methods of transfer, e.g. inheritance, or sale through a dealer or auction; and locations where the work was kept, from the time of its creation by the artist until the
present day. Unfortunately, such complete, unbroken records of ownership are rare. Thus art historical research is often required to fill the gaps in provenance.

**Art historical analysis and scholarship**

Art historical analysis and scholarship may entail verifying a great number of archival and scholarly resources including, but not limited to, the following:

— Artist’s inventory;
— Museum or gallery archives;
— Catalogues raisonnés;
— Authoritative literature;
— Auction sale catalogues or gallery catalogues;
— Exhibition catalogues;
— Verso labels from frames and backing boards;
— Registrars’ records, which generally contain information on the acquisition, loan, sale, and transport of a work of art.

Moreover, the Expert may find it useful to consult private online databases and conduct an online image search.

**4.2.3. Technical analysis**

Within the context of authentication, the technical examination of a work aims to reveal objective information permitting conclusions about the time and circumstances of the work’s creation.

A selection of both invasive and non-invasive methods that have been applied in the technical analysis of artworks and cultural heritage objects is listed in Appendix A. Although imaging techniques (non-invasive techniques) are used more often in the earlier stages of an examination and analytical techniques (mostly invasive techniques) more often in the later stages, almost all of the methods listed in Appendix A have, in the past, been used in all stages.

What follows here is an attempt to draw an approximate picture of the steps that a technical examination may involve, using the example of paintings.

**Preparatory clarification**

As a first step, a technical Expert generally carries out a preparatory clarification before accepting an examination commission. The points that the Expert should clarify may be:

— The specific reason(s) for doubting the artwork’s authenticity;
— The agreed period of its assumed creation;
— The state of research on the assumed artist’s technique;
— The availability of authentic artworks (as comparisons);
— Other points, depending on the case.

**Non-invasive examination of the work**

As a second step and depending on the information that the Experts can gather during the first step, the Expert generally establishes a (preliminary) analytical strategy. This step is often carried out once the Expert has accepted a commission, with the aim of finalising an examination strategy. It may be guided by the following goals:

— Distinguishing between original and non-original substance;
— Defining which parts of the original substance are relevant for dating;
— Detecting signs of natural and/or artificial ageing;
— Other goals, depending on the case.

**Developing an analytical strategy**

As a third step, the technical Expert will generally develop an analytical strategy. Possible strategies are:

— Examination of the signature: its chemical composition and/or its positioning in the stratigraphy of the surface layers;
— Sampling a (carbon containing) part of the painting and dating with AMS 14C;
— Targeted search for specific features in the painting’s build-up or material composition for a comparison with the (assumed) artist’s working practice;
— Targeted search for one (or several) specific material(s) representing (an) anachronism(s) to the assumed date of the creation of the work;
— Other strategies, depending on the case.
Examination and examination report

The examination is implemented according to the chosen strategy but may take an unexpected direction as new information is revealed. The examination report explains the strategy that was finally used, lists the techniques, sample preparation methods and relevant results and ends with a conclusion.

4.3. Result of the analysis

The Expert shall clearly state the means and results of their analysis in a written document and provide a summary of their reasoning, whether it is based on the study of the work of art in person or from a photograph.

Experts should clearly express their positive or negative opinions. If possible, Experts should explain their assessment.

A specific assessment by one Expert does not preclude other Experts from reaching differing conclusions.

The certificate of authenticity or the Expert opinion shall reproduce the description of the work such as title, year, dimensions, medium, edition number (if applicable), and a high resolution image of the work within the document. It should also bear the date and the signature of the author of the document. The Expert may want to include in their opinion the assumptions based on which they conducted their analysis, and indicate whether they were able to verify the accuracy of this information or not.

In the event that the Expert cannot reach a definitive agreement on some, or all, parts of their conclusions, they should include a statement to this effect. If information provided is not sufficient, the Expert may want to reserve their opinion. Moreover, the Expert should, if applicable, add a statement specifying that other scholars may tend towards different interpretations of the same findings, and/or reach differing conclusions, and that additional or new facts may be uncovered in the future. It should further specify clearly whether the Expert has examined the work based on seeing it in person or only on seeing it based on a photograph.

No duplicate of the original certificate shall be issued.

5. Remuneration and disbursements of the Expert

The Expert’s remuneration should be a fixed fee owed to them for their work regardless of whether the work turns out to be authentic or not.

Any research that exceeds the scope of analysis agreed with the Client should be approved by the Client in advance, together with a notice of the additional costs that it will generate.

The fixed fee should not be a percentage of the work’s value, and should be owed in addition to any expenses incurred (travel costs, etc.).

The Expert should insist on advance payment for their services and any related disbursements.

The Expert should clearly communicate their pricing structure on a written invoice.

6. Records

The Expert should establish an internal record of all the research they have conducted on the work, including a copy of the evidence gathered (e.g. comparative study, references to a mention in a catalogue raisonné or an exhibition catalogue or any other authoritative literature).

Experts should keep a record of all the opinions or certificates they have issued, and of the fakes and forgeries presented to them.
7. Relationship between Experts and third parties

Experts should communicate with each other, if possible and if necessary.

For certain artists or different types of works of art, several Experts may be qualified, so a consensus may be required (and difficult to obtain).

The Expert should insist on being authorised to make available the results of their analysis for the scholarly research of other Experts. Authors of catalogues raisonnés are strongly encouraged to digitise their catalogues so that these can be accessed online in agreement with the publisher.

8. Liability of the Expert and dispute resolution

The Expert should use contracts and waivers that comply with applicable national law.

The Expert should seek an amicable resolution to any dispute that may arise in connection with their authentication services.

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Appendix A: Technical analysis glossary

A selection of imaging and analytical techniques that have been applied in all stages of the technical examination of paintings (and of other types of artworks/cultural heritage objects)

### Imaging techniques (non-invasive)

<table>
<thead>
<tr>
<th>TECHNIQUE</th>
<th>APPLICATION</th>
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<tbody>
<tr>
<td>Visual observations in normal light, raking light and transmitted light</td>
<td>Visualisation of different aspects of paint build-up, damages, previous restoration interventions, etc.</td>
</tr>
<tr>
<td>Large-field stereomicroscopy</td>
<td>Visualisation of different aspects of paint build-up, damages, previous restoration interventions, etc.</td>
</tr>
<tr>
<td>Examination with ultraviolet radiation: UV reflectography, UV fluorescence examination</td>
<td>Visualisation of surface structure and condition, presence of coatings, optical brighteners, different aspects of technique, previous restoration interventions, etc.</td>
</tr>
<tr>
<td>Examination with infrared radiation: IR-reflectography, IR-transmission</td>
<td>Visualisation of certain aspects of the image composition, of modifications carried out during the artist’s working process, of the physical structure and condition of all parts of the object, damages, restoration interventions, etc.</td>
</tr>
<tr>
<td>IR-luminescence</td>
<td>Visualisation of certain aspects of the material composition at the surface (presence of certain pigments)</td>
</tr>
<tr>
<td>X-ray</td>
<td>Visualisation of certain aspects of the image composition, of modifications carried out during the artist’s working process, of the physical structure and condition of all parts of the object, damages, restoration interventions, etc.</td>
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### Analytical techniques (mostly invasive)

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<thead>
<tr>
<th>TECHNIQUE</th>
<th>APPLICATION</th>
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<tbody>
<tr>
<td>Micro X-ray fluorescence spectroscopy</td>
<td>This is a non-invasive technique to identify the chemical elements present on a surface. Identification of inorganic pigments, metals and their alloys, ceramics, glass etc.</td>
</tr>
<tr>
<td>Fourier transform infrared micro-spectroscopy</td>
<td>Characterisation of organic materials (binding media, varnishes, adhesives, synthetic fibers etc.) and inorganic materials (pigments, corrosion products, salts etc)</td>
</tr>
<tr>
<td>Fourier transform infrared micro-spectroscopy, imaging mode</td>
<td>Proof of spatial distribution of certain colorants and binding media (in the sample)</td>
</tr>
<tr>
<td>Polarization microscopy</td>
<td>Identification of pigments and fibres by their optical characteristics from a microsample of a few tenths of a millimetre</td>
</tr>
<tr>
<td>Raman spectroscopy</td>
<td>Characterisation of the molecular structure of various organic and inorganic materials. This method is useful for identifying modern</td>
</tr>
<tr>
<td>Gas chromatography-mass spectrometry</td>
<td>This technique is used to separate organic mixtures such as oils, synthetic and natural resins, waxes, proteins, plant gums. This will help the characterisation of the individual components.</td>
</tr>
<tr>
<td>Scanning electron microscopy with, and without, variable pressure</td>
<td>Provides information about the surface topography and the chemical composition of a sample or a small object. This technique is often used to detect the characterization of different paint layers in a cross section.</td>
</tr>
<tr>
<td>High pressure liquid chromatography</td>
<td>This technique is used to separate, identify, and quantify each component of an organic mixture, in particular binders and colorants.</td>
</tr>
<tr>
<td>Radiocarbon dating using accelerated mass spectrometry (AMS 14C)</td>
<td>This technique is used to measure the concentration of the isotope Carbon-14 in objects containing organic material such as paper, wood, fibres, ivory, etc.</td>
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The Responsible Art Market Initiative (RAM)’s mission:

To raise awareness amongst Art Business of risks faced by the art industry and provide practical guidance on establishing and implementing responsible practices to address those risks.

www.responsibleartmarket.org