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NOIRœS project: Total study of the historical and technical background of Soulages' paintings to define the conservation strategy

Pauline Hérou-de La Grandière¹, Shadé Alao Afolabi², Marouane Ben-Jelloul², Serge Cohen², Lionel Simonot³, Mathieu Thoury²

1 Cy-Paris Université (Research Unit Héritages : Culture/s, Patrimoine/s, Création/s UMR 9022)
 2 Ipanema UAR3461 (Université Paris-Saclay, CNRS, MNHN, UVSQ, ministère de la Culture)
 3 Institut Pprime, CNRS UPR 3346, Université de Poitiers



Issues in paintings around 1959 and 1960

As other paintings of the second School of Paris, some works by Pierre Soulages from 1959-1960 present peculiar degradations which consist of cleavages, softening of the medium, bleaching or discolorations of the surface and drops which ooze from the impasto. In the worst cases, the paintings run to a dramatic condition, that could be considered as ruins.

A Montparnasse Disease* :

This issue concerns other painters in the 1950s : Jean-Paul Riopelle, Karel Appel, de Kooning, Georges Mathieu, Zao Wou Ki, etc., all abstract painters from CoBRA and the Second School of Paris. The common points between the works of these artists are :

- a similar color palette in Montparnasse
- large formats, with a similar technique with wet in wet oil media
- works exhibited and ported very early, as soon as they dry to the touch.

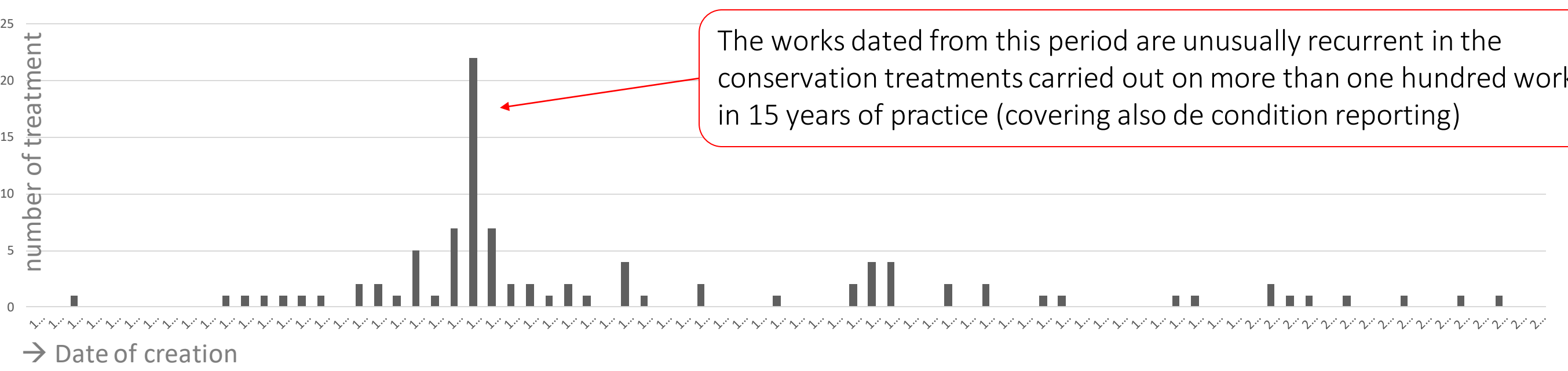
Be careful! Only a few paintings are concern by this issue and the major part of the works are in very good condition.

Degradations



Presentable (good to medium condition)
 Under frequent requirements
 Very instable: The painting runs to ruin

Conservation treatments of paintings by Pierre Soulages (museum & private collections)



The works dated from this period are unusually recurrent in the conservation treatments carried out on more than one hundred works in 15 years of practice (covering also de condition reporting)

Ph.D led-practice project NOIRœS**

**Nouveaux Outils Interdisciplinaires pour la Restauration des œuvres de Soulages.
 PhD presented by Pauline de La Grandière, directed by Thierry Sarmant, co-supervised by Mathieu Thoury and Lionel Simonot.
 The Ph.D is supported by the Ecole Universitaire de recherche PSGS HCH Humanities, Creation, Heritage, Investissement d'Avenir ANR-17-EURE-0021, Cy-Paris Université

With the scope to well define our decision making for the conservation of the paintings suffering from those instable issues, the PhD "NOIRœS" proposes to re-evaluate conservation processes : A thorough interdisciplinary approach brings together physicists and optics engineers to develop new tools taking into account the reflections of the works, among others.

One of the themes addressed is the consideration of all the data related to the complete corpus of works of the period (and not just one work as usual) in order to understand how their "social life" and their materiality have affected their evolution over time. Then, the quality of the aggregation and structuring of heterogeneous historical information is important.

420 Peinture 200 x 162 cm, 14 mars 1960
 private collection (auction Tajan 2019, Paris). Current condition : very good

Conservation treatments: 2019 - Pauline de la Grandière (dusting and cleaning efflorescences, only 1 small consolidation).

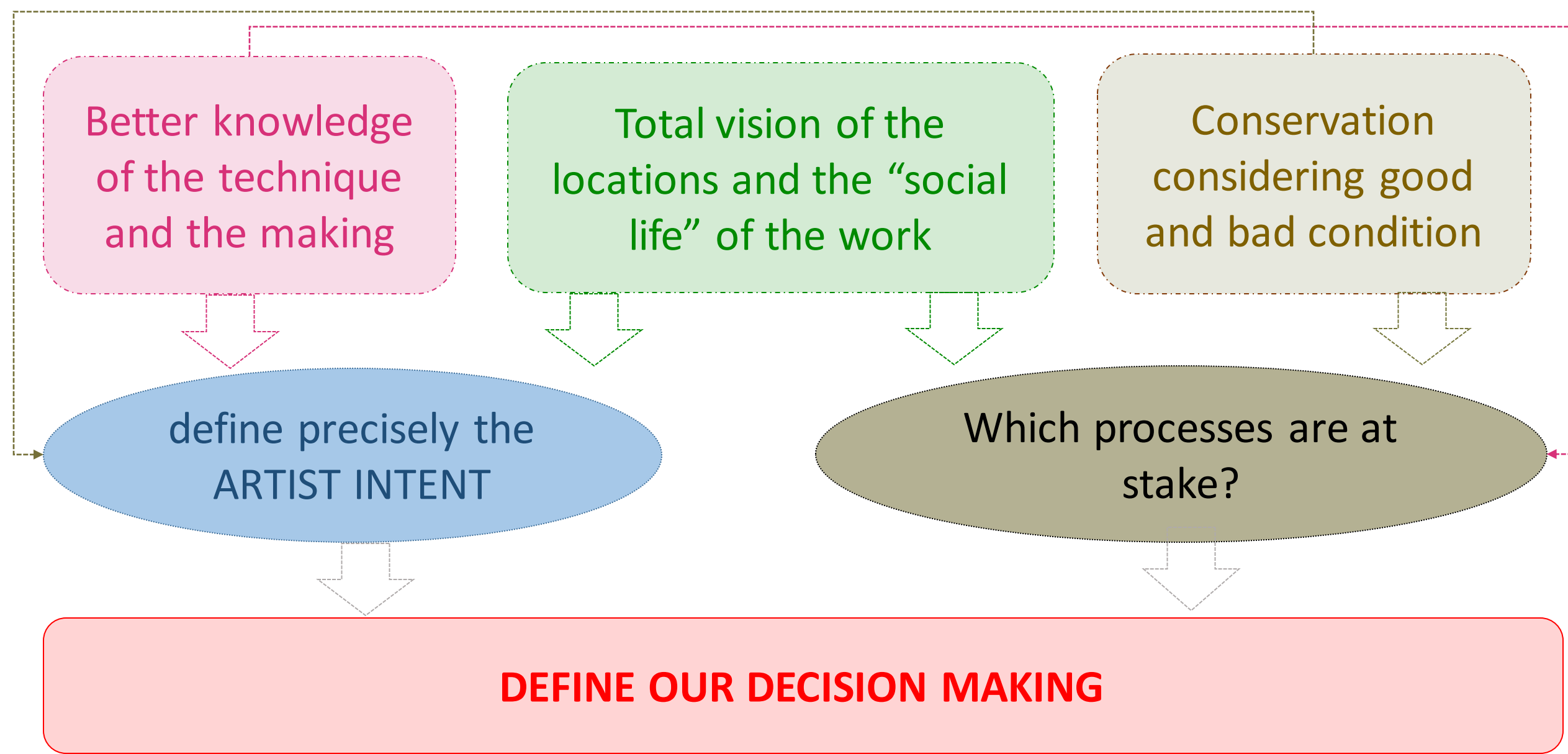
Technical features: non-porous priming; Layer 0: commercial ground; Layer 1: white underlayer by Soulages; Layer 2: black + brown; Layer 3: black + magma; No varnish on top.

419 Peinture 162 x 200 cm, 12 mars 1960
 Sara Hildén Foundation, Tampere, Finlande. Current condition : very poor

Conservation treatments: 1976: conservation report; 1978: conservation report; 1979: conservation report; 1980: conservation report; 1981: conservation report; 1982: conservation report; 1983: conservation report; 1984: conservation report; 1985: conservation report; 1986: conservation report; 1987: conservation report; 1988: conservation report; 1989: conservation report; 1990: conservation report; 1991: conservation report; 1992: conservation report; 1993: conservation report; 1994: conservation report; 1995: conservation report; 1996: conservation report; 1997: conservation report; 1998: conservation report; 1999: conservation report; 2000: conservation report; 2001: conservation report; 2002: conservation report; 2003: conservation report; 2004: conservation report; 2005: conservation report; 2006: conservation report; 2007: conservation report; 2008: conservation report; 2009: conservation report; 2010: conservation report; 2011: conservation report; 2012: conservation report; 2013: conservation report; 2014: conservation report; 2015: conservation report; 2016: conservation report; 2017: conservation report; 2018: conservation report; 2019: conservation report; 2020: conservation report; 2021: conservation report; 2022: conservation report.

Technical features: non-porous priming; Layer 1: white underlayer by Soulages; Layer 2: black + brown; Layer 3: black + magma; No varnish on top.

What is the trigger between a very good condition work and a very bad one, painted in the same week ?



Building a data base

The heterogeneous information to aggregate and organise concerns the artist's practice, such as the materials choice and use, and the historical background of the painting: its drying condition, the succession of ownerships, storage period and loans for each painting and the conservation treatments.

A database backed information system is developed to structure the data and ensure its exploitation, both through the implementation of intelligible and interactive data representation and through the implementation of APIs (Application Programming Interface) allowing for the automated exploitation of data. The "data model" of this information system was the subject of a master's degree course followed by Shadé Alao-Afolabi, entitled Base-NOIRœS, which aimed first of all to establish precisely the typologies of data to be include in the information system, to propose a database structure suitable for organizing this information, and then, covering part of the model, to implement an interface for entering and exploiting the data.

Class diagram used for visualizing, describing, and documenting different aspects of a system and for constructing executable code of the software application.

Propriétaire	Type	de	à
soulages	Privé	1960 x X x 1960	1960 x X x 1960
galerie de france	Galerie	1960 x X x 1960	1960 x X x 1960
Sonja Hienise	Privé	1960 x X x 1960	1968 x X x 1968
sonja hienise-niels onstad kunstcenter	Musee	1968 x X x 1968	1985 x X x 1985
soulages	Privé	1985 x X x 1985	1985 x X x 1985
musee d'art moderne	Musee	1985 x X x 1985	2022 x X x Inconnue

Screenshot of the data entry for "Owners & collections" of a work

Learning about a holistic approach and define a conservation strategy

These data are complemented by a study of the works at the macroscale (by developing new imaging probes, with luminescence and gloss measurements) and at the microscale (using synchrotron and laboratory micro-imaging approaches, from infrared to X-rays) to extract informative physico-chemical evidence on the alteration processes at play, and provide signatures of the early stages of alteration. We hope

with this "holistic" approach to better understand the phenomenon in order to advise the appropriate conservation conditions to slow down the ongoing phenomenon, and to propose interventions that respect above all the artistic intention that Pierre Soulages envisioned, in order to allow future generations to see a work of Pierre Soulages as it was proposed in the 1960s.