

Data Expeditions
STA101 Data Analysis and Statistical Inference

Paintings in Paris
1764-1780

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<http://www.dukedalmi.org/>



Significant transformations are taking place in Visual, Media, Art & Markets and Information Studies at Duke, which is shaping new pedagogies and research. **DALMI** creates a new niche for Art and Market research using a hybrid combination of new historical, econometric, statistical and computational methodologies to study large aggregates of art market data. This new type of data analysis generates new, fundamental questions and new methodologies from the humanities outward to the social sciences and sciences.

Current projects include:

- (1) **ART AUCTION DATABASE WITH GETTY RESEARCH INSTITUTE**
The core objective is to assist in the research and development of a new Data Base Management System (DBMS) and to help re-design the Getty Provenance index® databases from a flat file data model to a user friendly, relational and historical art auction database, accessible to students and scholars worldwide, with support from Information Initiative @ Duke (iID).
- (2) **ART TRADE NETWORKS BETWEEN EUROPE AND THE AMERICAS**
Advanced research that maps new data on transatlantic art trade flows and agents' network dynamics in a context of cultural exchanges and proto-industrialization, using statistical and visualization tools and network analysis techniques;
- (3) **EMERGING ART MARKETS : PARIS**
Advanced database driven research on dealer-consumer behavior in Paris in the eighteenth century using CCR, regression analyses and consumer theories to uncover how art expertise and preferences (taste) were constructed;
- (4) **FANTASY COLLECTING: AN ART MARKET SIMULATION GAME**
R & D of a web-based network game that allows users to form virtual art collections as part of already existing courses in Economics and Art History. Versions of the game software will be maintained and made available using GitHub under the terms of the GNU General Public License as open source, with support of Humanities Writ Large.



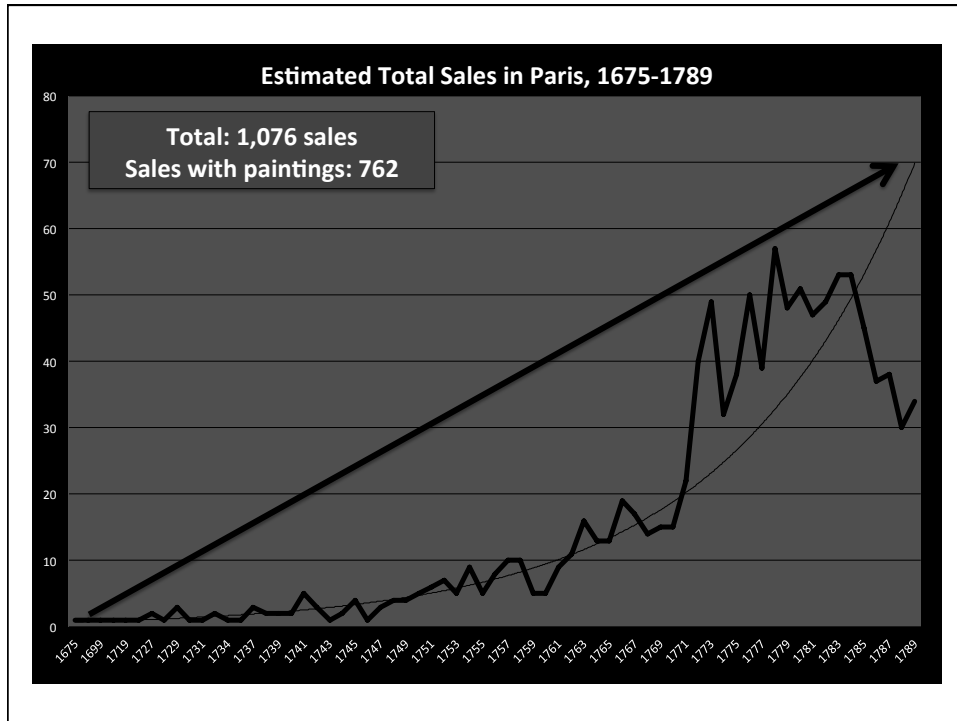
The Auction Market in 2014

Sotheby's Old Master & British Paintings Evening Sale Soars over Estimate

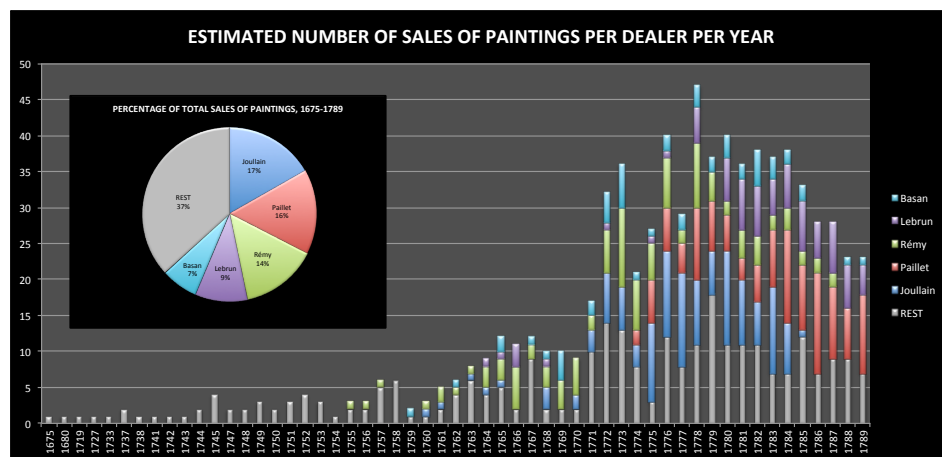
The Auction Market in the Eighteenth-Century Paris



Pierre-Antoine de Machy, *Public Sale at the Hôtel Bullion*, Musée Carnavalet, Paris



Professionalization of the Art Dealer



AUCTIONS AND SALES CATALOGUES



Pierre-Antoine de

llion, Musée Carnavalet, Paris

AUCTIONS AND SALES

CATALOGUES



CATALOGUE

RAISONNÉ

Des Tableaux, Bronze

laines, Bijoux & au

curieux du Cabinet

sieur DE GAIGNAT

TABLEAU

Ecole d'Itali

Leonard de Vinci

Jocunde, vue de sa

qu'à demi-corps, sa tête

quatre; elle a sur les genoux

sa main gauche du Jaspé

de l'autre une branche

qu'elle semble porter à

Une chemise très plissée

broderie en or, laisse voir

de la gorge, une drapette

INDICATION des numéros des
articles qui seront vendus chaque jour,
à commencer,

Jeudi, 27 Février 1777.

Tableaux, Dessins, Estampes,
Vases, Tables de marbre, Porcelaines,
Agates & Pendule de Marqueterie.

Nos. 1, 30, 32, 40, 105, 115, 140,
170, 173, 175, 243, 274, 322, 332,
382, 387, 403, 404, 464, 467, 492,
514, 539, 572, 594, 611, 639, 651,
672, 673, 715, 729, 734, 803, 831,
860, 898, 903.

Vendredi, 28 Février.

Tableaux, Gouaches, Terre cuite,
Dessins, Estampes, Vases de marbre,
Coupes, de Jaspé, Porcelaines & Meu-
bles.

Nos. 9, 31, 33, 67, 106, 114, 119, 174,
177, 193, 244, 270, 321, 333, 334,
388, 405, 406, 460, 470, 515, 538,
541, 550, 578, 618, 640, 642, 653,

A v

les Pays-Bas. 15

5, un homme & une
chemin; l'autre par
est composé de ro-
es, de plusieurs arbres
de montagnes & de
remarque sur le pre-
femme, des chevres,
un mulet. Le ton de
dernier tableau, est
d'un pinceau moelleux.

Rottenhomer.

e de Notre Seigneur,
peint par Breughel

1, sur cuivre de 12
ur, sur 18 de large,
e coloris; il est du
ps de ces deux Mai-
du Cabinet de M. le
ard.

bleau brillant de colo-
position en est autant
riche, c'est le festin
on compte quarante-
sur des plans différents.

Philip Wouwermans (1619-1668), *The Departure of a Hunting Party*, oil on panel, 52 x 67 cm.



Two paintings very rich in composition, of a beautiful execution, and whose merit is very remarkable, each 17 inches 3 lines high, 23 inches wide; the first, painted on wood, comes from the Cabinet of Madame la Comtesse de Verrue; it represents a departure for the hunt: it shows in the front a child on a white horse, a man who gives the horn to gather the dogs, a falconer and other figures nicely distributed across the width of the painting; two horses drinking from a fountain; on the right in the corner a lovely country house topped by a terrace, on which people are at the table, others who play instruments; trees and **fabriques** pleasantly enrich the background.

89. Deux tableaux très riches de composition, d'une belle exécution, & dont le mérite est très remarquable, chacun de 17 pouces 3 lignes de haut, sur 23 pouces de large; le premier, peint sur bois, vient du Cabinet de Madame la Comtesse de Verrue; il représente un départ pour la chasse: on y voit sur le devant un enfant sur un cheval blanc, un homme qui donne de la trompe pour rassembler les chiens, un Fauconnier & d'autres figures distribuées agréablement dans toute la largeur du tableau; deux chevaux qui boivent à une fontaine; à droite dans le coin une jolie maison de campagne surmontée d'une terrasse, & sur laquelle sont des gens à table, d'autres qui jouent des instru-

48. Tableaux.
ments; des arbres & des fabriques enrichissent agréablement le fond. Le second tableau, qui est sur toile, fait voir un terrain d'une grande étendue, près la mer qui est à gauche, & sur laquelle sont des vaisseaux: on y voit aussi des bagages que l'on décharge d'un charriot, des hommes, des femmes, des enfants, deux chevaux qui mangent, & des mulets chargés de bagages.

Data Matrix: Basic Information about the Painting

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1	name	sale	lot	dealer	year	origin_author	origin_cat	school_pntg	diff_origin	price	count	subject	authorstandard	artistliving	authorstyle	author	winnit
2517	R1777-86	R1777	86	R	1777	D/FL	D/FL	D/FL	0	620.0	1	2 femmes, enfants, paysage vu à travers une arcade	Bega, Cornelis Pieterszoon		0 n/a	Cornelle Bega	Lebrun
2518	R1777-87	R1777	87	R	1777	D/FL	D/FL	D/FL	0	12,000.0	1	Course du hareng	Wouwerman, Philips		0 n/a	Philippe Wouwerman Dorjes	
2519	R1777-88	R1777	88	R	1777	D/FL	D/FL	D/FL	0	8,000.0	1	Paysage sablonneux	Wouwerman, Philips		0 n/a	Philippe Wouwerman Lamb	
2520	R1777-89a	R1777	89	R	1777	D/FL	D/FL	D/FL	0	5,300.0	1	Départ pour la chasse	Wouwerman, Philips		0 n/a	Philippe Wouwerman Langlé	
2521	R1777-89b	R1777	89	R	1777	D/FL	D/FL	D/FL	0	5,300.0	1	Déchargement d'un chariot, estran	Wouwerman, Philips		0 n/a	Philippe Wouwerman Langlé	
	name	unique ID of painting															
	dealer	Joullain (J), Lebrun (L), Paillet (P), Remy (R)															
	year	1764-1780															
	econindex	price economic index (agricultural)															
	Origin_author	A (Austrian), D/FL (Dutch/Flemish), F (French), G (German), I (Italian), S (Spanish), X (Unknown)															
	Origin_cat	D/FL, F, I, O (Other masters)															
	School_pntg	D/FL, F, I, X															
	Diff_origin	if origin_author differs from origin_cat (1); otherwise (0)															
	price	price fetched at auction (sales price in livres)															
	Authorstandard	name of artist (starndardized)															
	artistliving	if living artist (1); deceased (0)															
	Authorstyle	artist unknown but inspired on another (copy of, in style of, attributed to)															

Data Matrix: Basic Information about the Painting

	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH
1	winningbidder	winningbiddertype	endbuyer	interm	type_interm ed	Height_In	Width_In	Surface_Rect	Diam_in	Surface_Rn d Shape	Surface	material	mat	quantity	nfigures	engraved	
2516	Peullet	D	D		0	16	20	320		squ_rect	320	toile	t		1	0	
2517	Lebrun, Jean-Baptiste- Pierre	D	D		0	13.25	11	145.75		squ_rect	145.75	bois	b		1	0	0
2518	Dorjeux, Vincent	D	D		0	23	29.25	672.75		squ_rect	672.75	toile	t		1	50	0
2519	Lambert, John (Chevalier Lambert)	C	C		0	23	30	690		squ_rect	690	toile	t		1	0	1
2520	Langlier, Jacques for Poulsen, Antoine	DC	C	1	D	17.25	23	396.75		squ_rect	396.75	bois	b		1	0	0
2521	Langlier, Jacques for Poulsen, Antoine	DC	C	1	D	17.25	23	396.75		squ_rect	396.75	toile	t		1	0	0
2522	Choiseul-Praslin, Comte de	C	C		0	6.5	9.25	60.125		squ_rect	60.125	cuivre	c		1	0	

Winningbidder name of winning bidder
 Winningbiddertype D (dealer); C (collector); E (expert); B (buyer); X (unknown)
 Endbuyer end buyer category from winning bidder type
 Interm 1 if intermediary purchased the painting
 Type_intermediary intermediary category from winning bidder type
 Height_in Height in inches
 Width_in Width in inches
 Diam_in Diameter in inches (if Shape = round or oval)
 Shape Shape of painting (squ_rect, round, oval, miniature)
 material material of support (alabaster, bronze, canvas, cardboard, copper, glass, miniature, paper, pastel, slate, wood, other)

Data Matrix: Characteristics about the Painting

I	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
1	nfigures	engraved	original	prevcol	ethartst	paired	figures	finished	irgfont	relig	landsALL	lands_sc	lands_fig	lands_m	marsh	mytho	peasant	otfgenre	singlefig	portrait	still life	discauth	history	category	pastorale	other
2517	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
2518	50	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2519	0	1	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2520	0	0	0	1	0	1	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
2521	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0

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Data Matrix: Characteristics about the Painting

	AF	AG	AH	AI	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
1	figures	engraved	original	prevcoll	othercoll	paired	figures	finished	lrgfont	relig	landsALL	lands_sc	lands_fig	lands_mech	mytho	peasant	othergenr	singlefig	portrait	still life	discauth	history	allegory	pastorale	other
2517	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0
2518	50	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2519	0	1	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2520	0	0	0	1	0	1	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
2521	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0

prevcoll: if previous owner is mentioned

paired: if painting is sold or suggested as a pairing with another

landsALL: if painting is described as a landscape

lands_fig: if description mentions figures in a landscape

arch: if architectural constructions are mentioned in the description

These variables get a 1 and all other variables get a 0

Information about the paintings and the manner of presenting it:

- engraved: if the dealer mentions engravings done after the painting
- original: if the original's whereabouts is mentioned (when the painting is a copy)
- prevcoll: if the previous owner is mentioned
- lrgfont: if the dealer devotes an additional paragraph (always written in larger font) to praise aspects of the painting
- discauth: if the dealer engages with the authenticity of the painting.

Visual traits identified in the paintings:

- othartist: if the painting is linked to the work of another artist or style
- paired: if the painting is sold or suggested as a pairing for another
- finished: if the painting is noted for its highly polished finishing
- figures: if the number of figures included is emphasized
- nfigures: if the number of figures is specified

Subject matter descriptors:

- relig: if a religious subject matter
- lands_sc: if described as a plain landscape
- lands_figs: if description mentions figures in landscape
- lands_ment: if landscape is mentioned in the description
- arch: if architectural constructions are mentioned in the description
- mytho: if a mythological scene is mentioned
- peasant: if description mentions peasants messing around
- othgenre: if description mentions a genre scene (different than a peasant scene)
- portrait: if described as a portrait
- singlefig: if description mentions a single figure (different than a portrait)
- still_life: if description indicates still life elements
- history: if description includes elements of history painting
- allegory: if allegorical scene is mentioned
- pastoreale: if "pastoreale" is mentioned in description



Cornelis van Poelenburgh, *Rest on the Flight into Egypt*, c. 1640, oil on copper, 34 x 44 cm, Fogg Art Museum, Cambridge

Research Questions

What drove the prices of paintings sold?

How can we characterize the marketing strategy of dealers who wrote the sales catalogues?

Can we identify the most preferred sets of characteristics in the paintings that buyers sought? Are there any substitutability criteria at work?