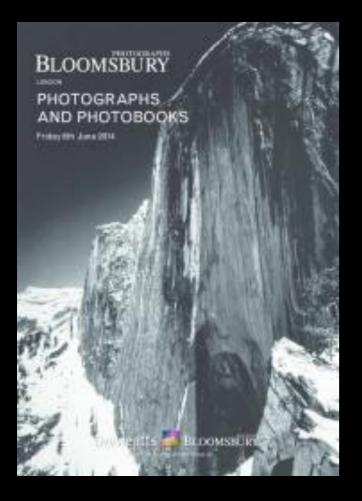
ANALYSIS OF PHOTOGRAPHY AUCTION RESULTS SCRAPED FROM THE WEB USING PYTHON

J.E. MOLLY SEEGERS

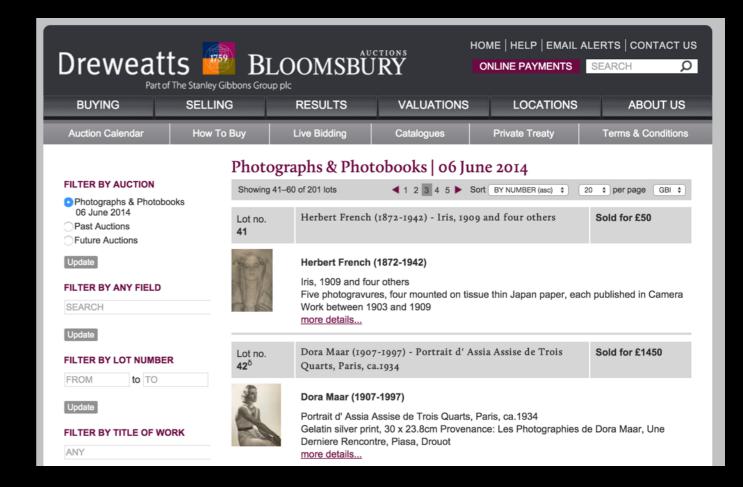
WHY PHOTOGRAPHY AND DREWEATTS & BLOOMSBURY



- Became interested in the Auction House because I am QA'ing the website for the Frick Art Reference Library's Web Archiving Initiative
- As a student of art history/library science and as an archivist, I am passionate about the history of photography and will eventually be writing my art history master's thesis on the subject
- Want to investigate the circumstances that have led to the establishment of photography as an "accepted high art form" and that conception's subsequent influence on the sales of photography at auction
- Selected 6 auctions that were photography based
 - 2011, May
 - 2012, May
 - 2012, November
 - 2013, November
 - 2014, February
 - 2014, June

LOT (*LÄT*) - AN ARTICLE OR SET OF ARTICLES FOR SALE AT AN AUCTION

- Scraped information about:
 - Artist
 - Date Created
 - Price in GB Pounds for which the lot sold (or was Unsold)
 - Title
- Wrote out to JSON File



```
from bs4 import BeautifulSoup
import requests
import re
p = re.compile('[0-9]+\s')
all_lots = {
}
with open("june_2014_auction.txt") as lots_urls:
    for each_lot in lots_urls:
        lot_requests = requests.get(each_lot)
        lot_html = lot_requests.text
        soup = BeautifulSoup(lot_html)
        #print(lot html)
        all_lots[each_lot] = {}
        all_links = soup.find_all("div" , attrs = {"class" : "wide-right-column" })
        for div_link in all_links:
            #print(div_link.text)
            artist = div_link.find("h4")
            artist = artist.text
            #print(artist)
            all_lots[each_lot]["artist"] = artist
            title = div_link.find("h5")
            title = title.text
            #print(title)
            all_lots[each_lot]["title"] = title
        p_in_div = soup.find_all("div" , attrs = {"class" : "right-column" })
        for p_link in p_in_div:
            #print(p_link.text)
            price = p_link.find("p", attrs ={"class" : "price sold"})
            price = price.text
            m = p.search(price)
            if m == None:
                #print("No interest")
                all_lots[each_lot]["price"] = "Unsold"
            else :
                #print(m.group(0))
                #print(price)
                all_lots[each_lot]["price"] = m.group(0)
            #def only_money_or_unsold
```

import json

```
with open('june_2014_results.json' , 'w') as f:
    f.write(json.dumps(all_lots, indent=4))
```

the first code

MORE CODE

- Used regular expressions
- Had to separate the date created from the title
- Converted date created into decade created
- Counted how many times an artist works were sold in an auction

```
import json
import re
p = re.compile('[0-9]{4}')
d = re.compile('[0-9]{3}')
artist_count = {
}
with open("june_2014_results.json") as json_file:
    json_data = json.load(json_file)
    for a_work in json_data:
        if "artist" in json_data[a_work]:
            if json_data[a_work]['artist'] in artist_count:
                artist_count[json_data[a_work]['artist']] = artist_count[json_data[a_work]['artist']] + 1
                artist_count[json_data[a_work]['artist']] = 0
            json_data[a_work]["artist_count"]=artist_count[json_data[a_work]['artist']]
        if "title" in json_data[a_work]:
            title = json_data[a_work]['title']
            m = p.findall(title)
            if len(m) > 0:
                #print(m[0])
                json_data[a_work]["date"]=m[0]
        if "date" in json_data[a_work]:
            date = json_data[a_work]['date']
            dec = d.findall(date)
            if len(dec) > 0:
                    if dec[0]=="185" :
                        json_data[a_work]["decade"]= '1850s'
                    if dec[0]=="186" :
                        json_data[a_work]["decade"]= '1860s'
                    if dec[0]=="187" :
                        json_data[a_work]["decade"]= '1870s'
                    if dec[0]=="188" :
                        json_data[a_work]["decade"]= '1880s'
                    if dec[0]=="189" :
                        json_data[a_work]["decade"]= '1890s'
                    if dec[0]=="190" :
                        json_data[a_work]["decade"]= '1900s aughts'
                    if dec[0]=="191" :
                        json_data[a_work]["decade"]= '1910s'
                    if dec[0]=="192" :
                        json_data[a_work]["decade"]= '1920s'
                    if dec[0]=="193" :
                        json_data[a_work]["decade"]= '1930s'
                    if dec[0]=="194" :
                        json_data[a_work]["decade"]= '1940s'
                    if dec[0]=="195" :
```

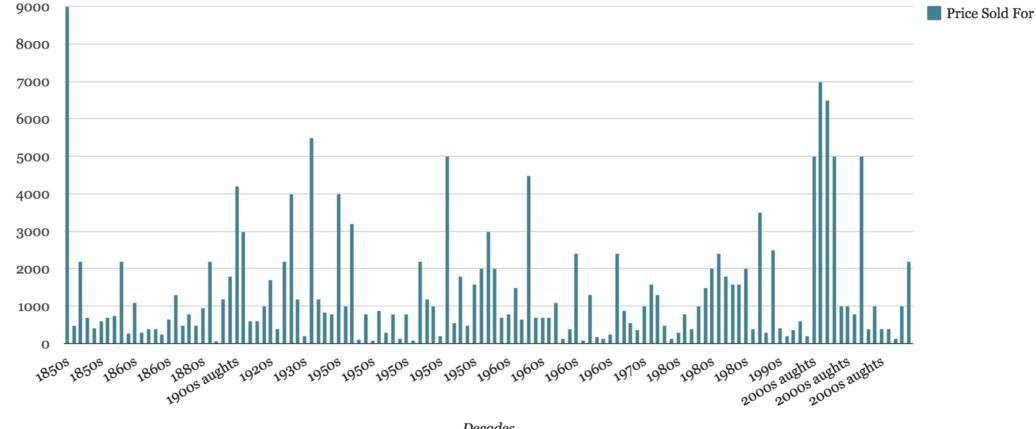
json_data[a_work]["decade"]= '1950s'

FROM WEB CONTENT TO DATA

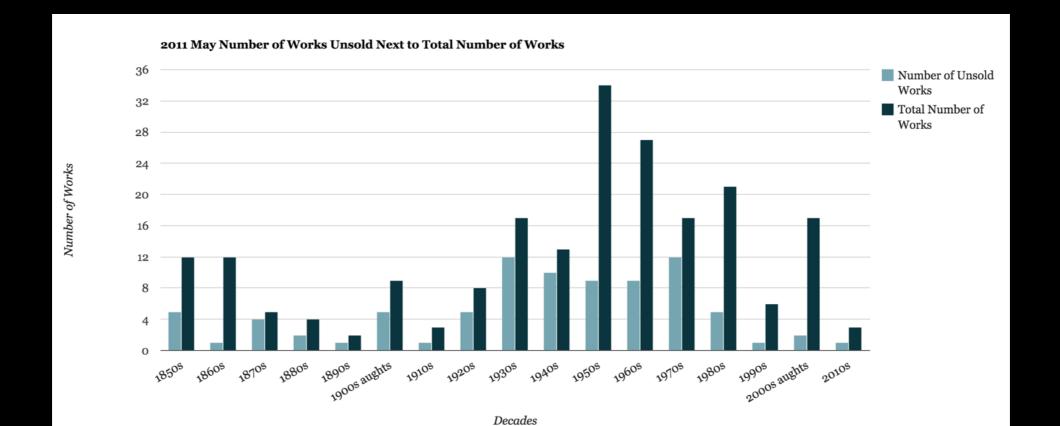
Lot no. 125	Elliott Erwitt (b.1928) - Las Vegas, 1957	Sold for £1600
N.S.	Elliott Erwitt (b.1928) Las Vegas, 1957 Gelatin silver print, printed no later than 1986, signed in ink in the n (14 3/8 x 21 7/8in) more details	nargin, 36.6 x 55.7cm
Lot no. 126	Diane Arbus (1923-1971) - Family Beauty Contest at a Nudist Camp, PA, 1965	Sold for £3200
THE EXA CONTRACT	Diane Arbus (1923-1971) Family Beauty Contest at a Nudist Camp, PA, 1965 Gelatin silver print, printed later by Neil Selkirk, stamped 'A Diane Arbus photograph', signed, titled, dated more details	
Lot no. 127 ^ŏ	Martin Parr (b.1952) - Last Resort, 1982-1985 and five others	Unsold
	Martin Parr (b.1952) Last Resort, 1982-1985 and five others Six digital colour prints, printed later , each signed , titled and dated black ink with more details	d and annotated in
Lot no. 128	Burt Glinn (1925-2008) - Nikita Khrushchev, Lincoln Memorial, Washinton DC, 1959 and five others	Unsold
	Burt Glinn (1925-2008) Nikita Khrushchev, Lincoln Memorial, Washinton DC, 1959 and five others Three gelatin silver prints and three chromogenic prints , printed later, each signed in pencil with "Magnum Magnum more details	

```
},
"http://www.dreweatts.com/cms/pages/lot/36045/55\n": {
    "title": "Dordogne, France, 1991",
    "decade": "1990s",
    "price": "900\n",
    "artist_count": 5,
    "date": "1991",
    "artist": "Edouard Boubat (1928-1999)"
},
"http://www.dreweatts.com/cms/pages/lot/36045/127\n": {
    "title": "Last Resort, 1982–1985 and five others",
    "decade": "1980s",
    "price": "Unsold",
    "artist_count": 0,
    "date": "1982",
    "artist": "Martin Parr (b.1952)"
},
"http://www.dreweatts.com/cms/pages/lot/36045/98\n": {
    "title": "Untitled, Teachers, 1956",
    "decade": "1950s",
    "price": "1600\n",
    "artist_count": 11,
    "date": "1956",
    "artist": "Bert Hardy (1913-1995)"
},
"http://www.dreweatts.com/cms/pages/lot/36045/203\n": {
    "title": "Changing New York, 1939",
    "decade": "1930s",
    "price": "Unsold",
    "artist_count": 0,
    "date": "1939",
    "artist": "Berenice Abbott (1898-1991)"
```

2011 May Auction Results

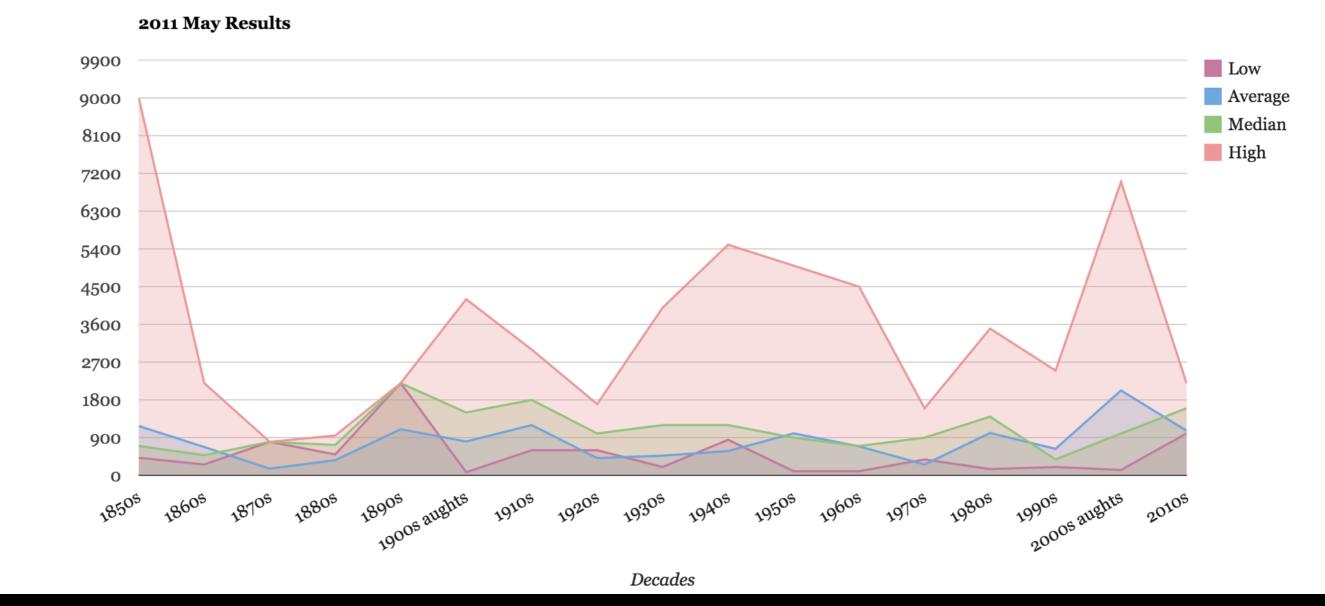


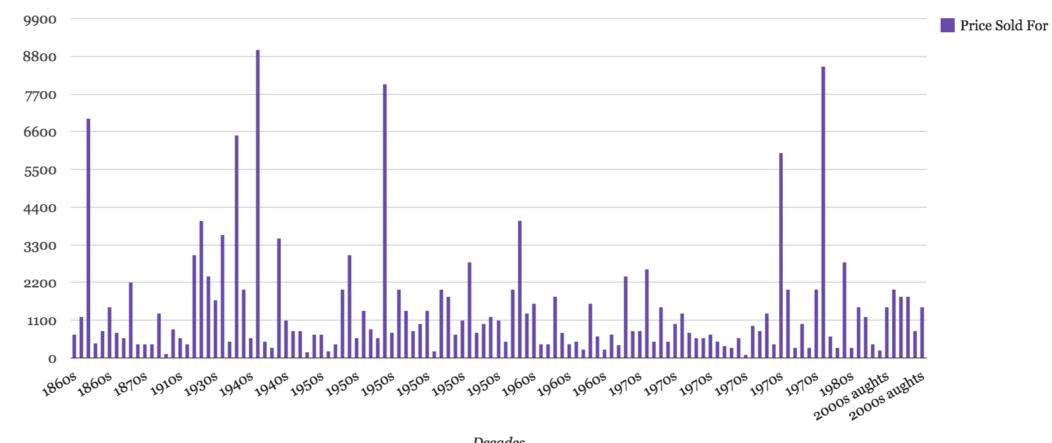
Decades



Price Sold in Pounds

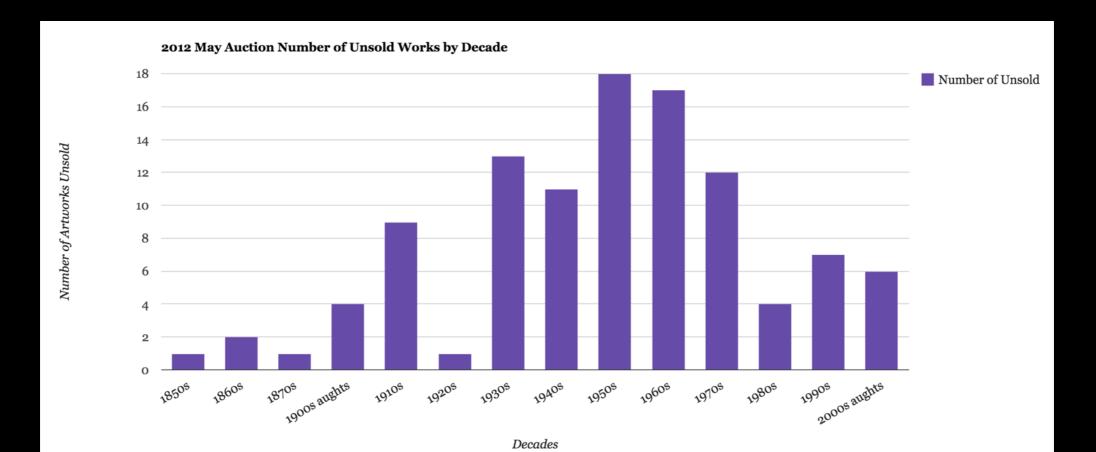
2011 May - High, Low, Median, Average

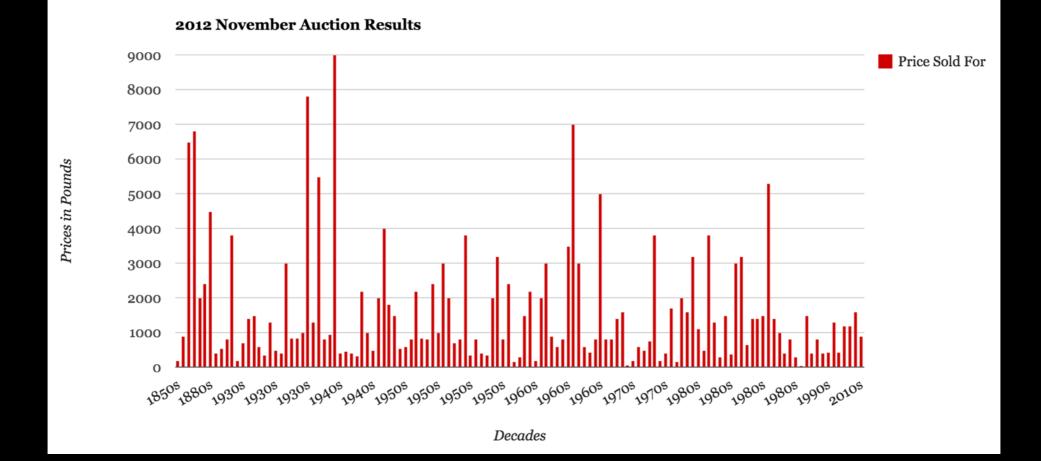


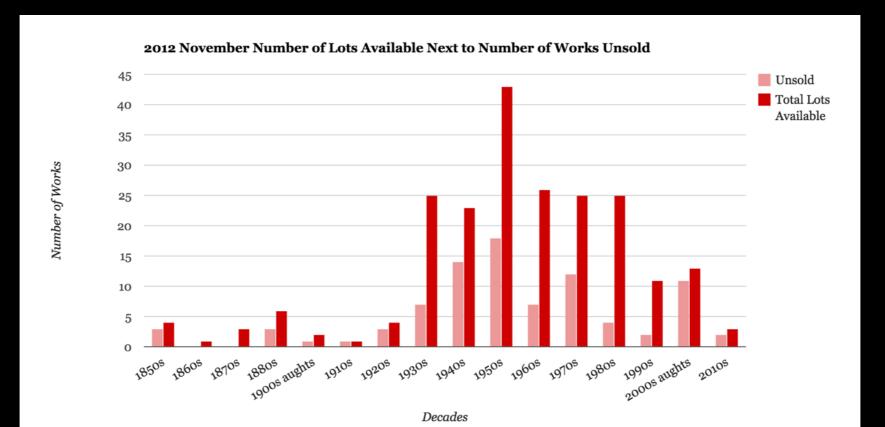


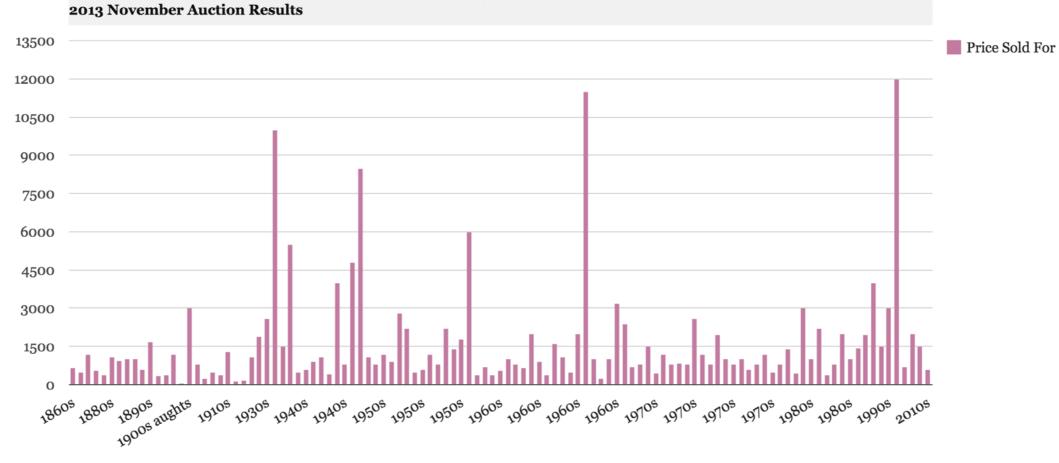
2012 May Auction Results by Decade Without 2 Outliers

Decades

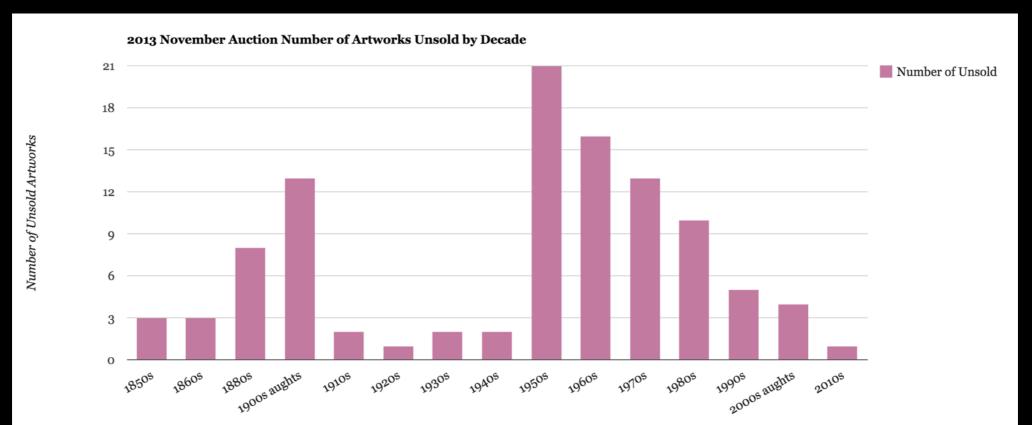






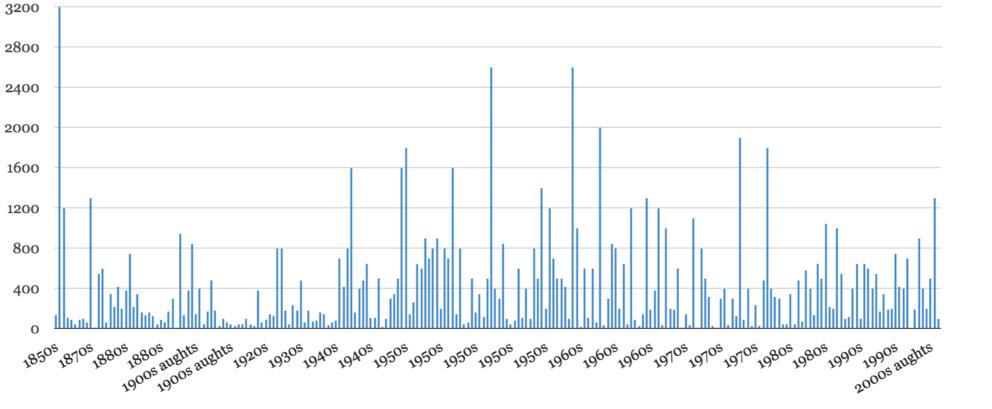


Decades

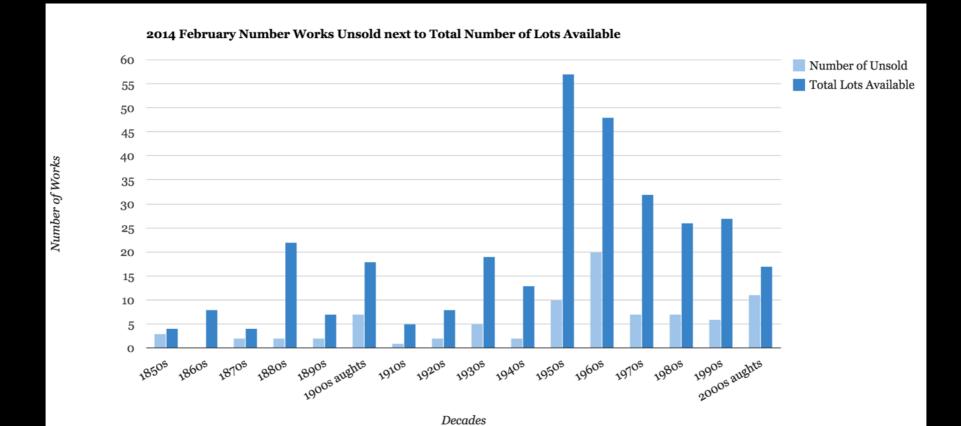


Price in Pounds

2014 February Auction Results



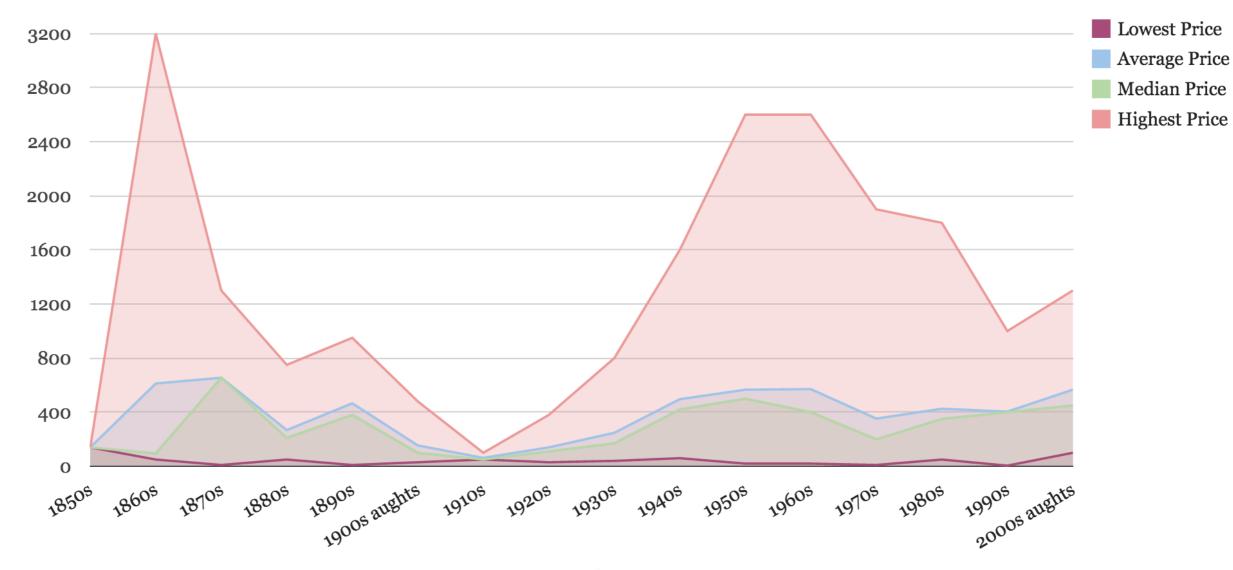
Decades



Price in Pounds

Price Sold For

2014 February - High, Low, Median, Average

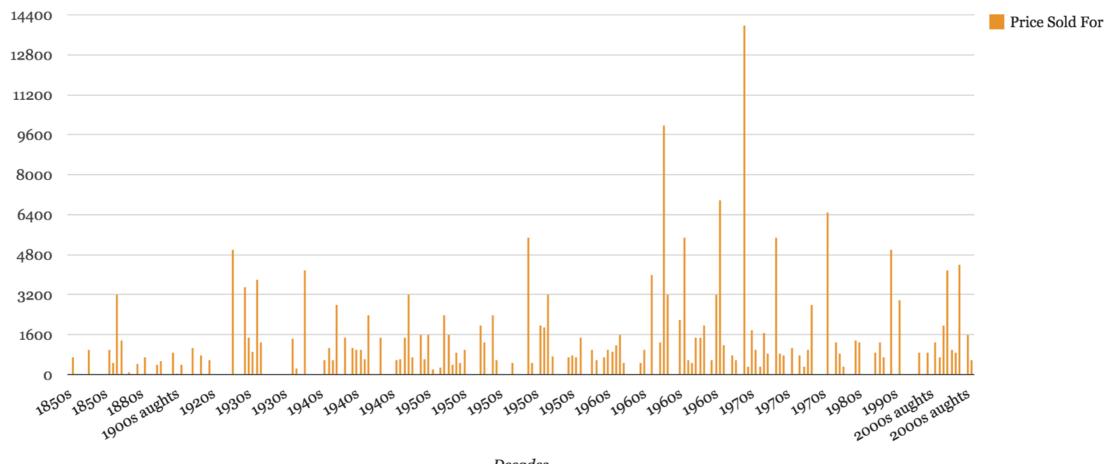


2014 February Results

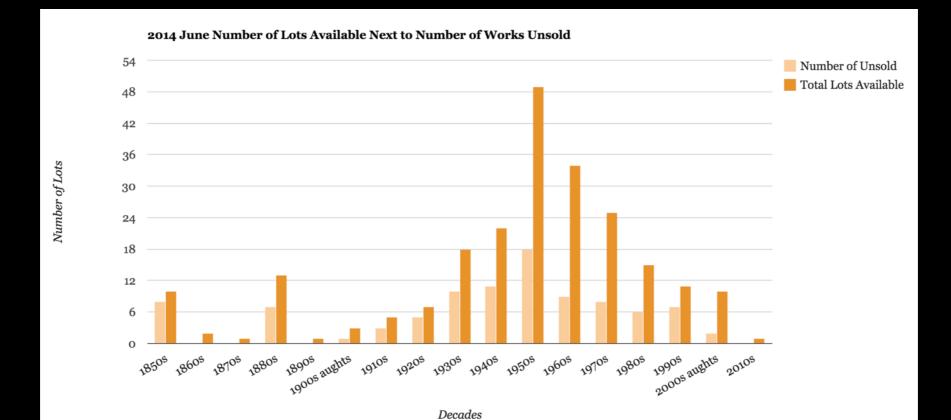
Decades

Price in Pounds

2014 June Auction Results

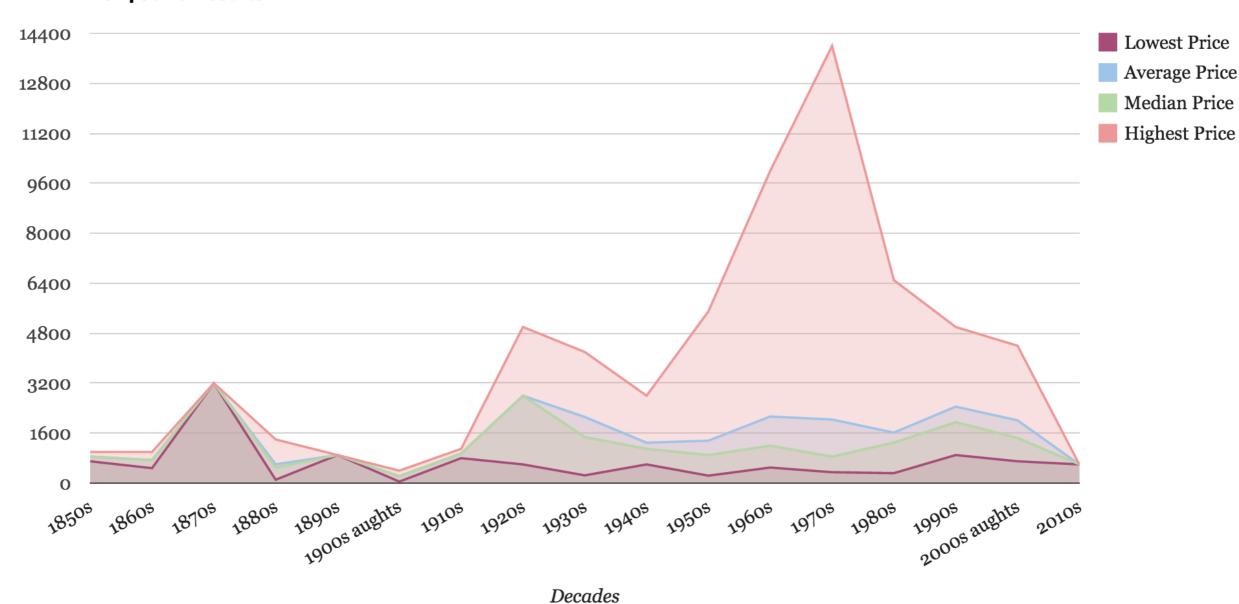


Decades

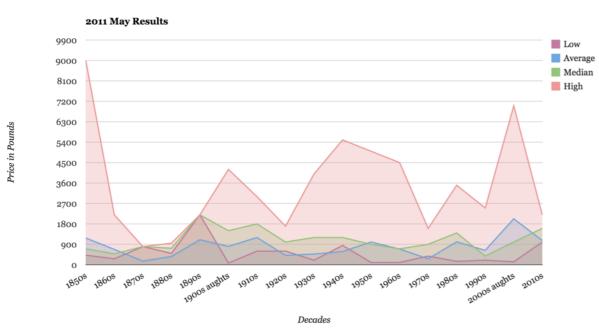


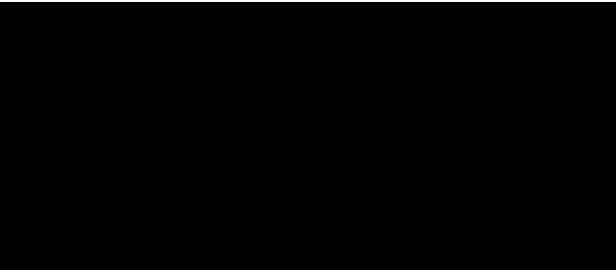
Price in Pounds

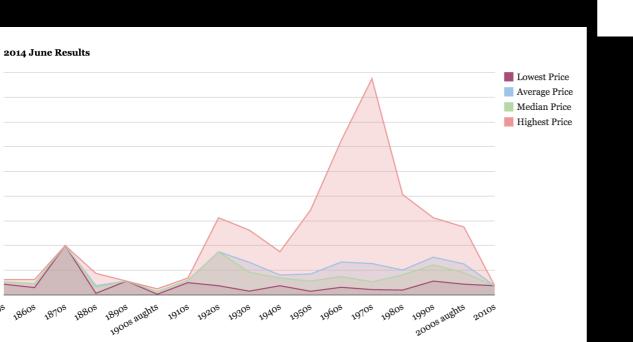
2014 June - High, Low, Median, Average

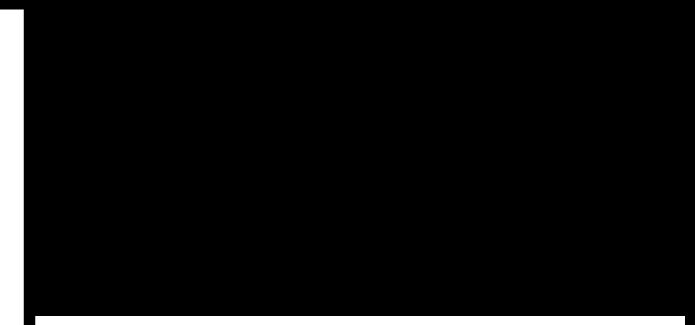


2014 June Results

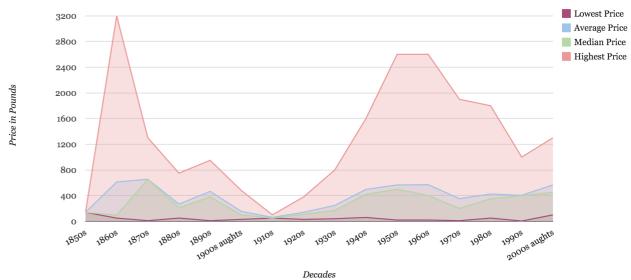








2014 February Results



Price in Pounds

1850⁵