1. Title
2. Acknowledgements
3. Abstract
4. Table of Contents
5. Introduction
6. Overview of Art Auctions and Anchoring
   1. How do auctions for art work?
      1. Overview of the two houses
      2. Format

(Anecdotal / observational details (important for anchoring!))

* 1. How anchoring affects art auctions
     1. Definition of anchoring
     2. How does anchoring affect buyers/sellers/auctioneers at auction?
     3. Anecdotes here

1. Literature Review
   1. Anchoring
      1. Remind reader of black box past prices -> influencing current prices. talk about more liquid market -> past prices more important? Little paragraph or something
   2. Anchoring and Art Auctions
      1. Specific works done on art auctions
      2. Aside: tiny bit of other related research, behavioral biases – same kind of black box issue
      3. (maybe parallel to anchoring in real estate – anecdote on how anchoring is accounted for)
   3. Where does this research fit in?
2. Methodology
   1. Hedonic regression
   2. Anchoring effects (resale): Beggs & Graddy (2009)
   3. Anchoring cross-effects (substitutes): my contribution
   4. Measures of substitution
      1. Negative log of second moment, hedonic differences
      2. Domain knowledge
      3. (maybe something else from the literature here. Easy to code up)
   5. Assessing efficacy of substitution measures – other regressions maybe
      1. Ideal measure of substitution? (where would fill in the holes?). maybe regress relative differences between prices of goods on the measure of substitution
      2. Information entropy?
3. Data, summary statistics, preliminary regressions
   1. Impressionist Art
   2. Contemporary Art
   3. Recent Assorted Art
      1. Motivation: why a new dataset?
         1. More recent than other data
         2. Short time gaps between auctions
         3. Assorted art, lots of material to test substitutes
4. Results
   1. Hedonic regression results
   2. Replication, anchoring effects (resale)
      1. Impressionist Art
      2. Contemporary Art
      3. Recent Assorted Art
         1. # use old regressions you ran for draft, with substitute as proxy
   3. Performance: measures of substitution
      1. Regressions here for performance
   4. Anchoring cross-effects (substitutes) – using both measures, for full datasets
      1. Impressionist Art
      2. Contemporary Art
      3. Recent Assorted Art
   5. Some comparison between specific artists (from Hadley Newton ‘16, formerly @ Sotheby’s -> full time)

(easy to code up – just filtering data before running. For finding similarity (across-pieces), add the restriction that the artists must be DIFFERENT (to see how they impact each other.)

* + 1. Miro & Dali
    2. Picasso & Chagall
    3. Munch and Toulouse-Lautrec

1. Limitations and Future Directions
   1. Black box of past price -> affect current price
   2. Ambiguity & problems in constructing measures of substitution / similarity
      1. Draw upon domain experience / interviews heavily here
      2. Regression model: marginal effect of individual substitutes on the given good?
   3. Directions for anchoring
      1. Asymmetric anchoring effects
      2. Presale estimates, probability of sale
   4. Future data to explore (if time)
      1. Online art auctions vs. in-person
2. Conclusion
3. Bibliography
4. Appendices
   1. Tables
   2. R Code
5. Honor Pledge