Framing

March 15, 2021

General

- Design moral and unmoral frames and pretest both on MTurk, then use the 'proven' frames for the survey experiment. This is a chapter on framing where I apply both methods in the experiment, analyze the methods' performances, and analyze the substantive results in terms of moral frames (the latter is where I produce/add some nuance in our understanding of framing)
- Using the experiment as the application for both papers
  - Paper I: One half of the sample gets the ordinal probit education categories, the other gets the original ones without giving respondents `Don't Know/Refuse` options. Compare the differences between the ordered probit and the original results whilst knowing which one is closer to the truth based on the simulation results
  - Paper II: Use the resulting completely observed data, introduce random missing data, and show how the ordinal affinity score method performs on ordinal variables compared with other method . Assess the performance of the ordinal affinity score method because we know the true values of the completely observed data

Order

- Rework theory, design frames/questionnaire
- Pre-test
- New IRB approval
- Pre-analysis plan and pre-registration
- Field experiment
- Analysis of the results

Rework theory, design frames/questionnaire

- I have sent Liz an email with my current framing chapter and the questionnaire from the previous experiment. I recall that she had various input on the chapter setup, the experiment design, and the questionnaire, so I thought it best to start out from these documents. She emailed back with general instructions to sharpen up the theoretical part. I then researched the literature, and we had a Zoom call on June 23. The main change from that talk is that I will juxtapose moral frames (i.e. values) with self-interest frames. This is more precise and clear-cut than the vague 'amoral' frame category that we can't be sure even exists
- After researching and reading a lot, I emailed Liz again with the following design idea. She signed off on it. It's not a major change. I basically only adds a moderator as a further nuance:

- Moral conviction literature tells us that people with moralized attitudes hold those attitudes strongly. I take from this that these people's attitudes can't be moved, no matter what opposing or supporting moral or self-interest frames we give them. We can only move the attitudes of people who don't hold highly moralized attitudes, since there is room for movement here
- I thus suggest to separate respondents into those who hold moralized attitudes on an issue and those who don't. To do so, I would first give all respondents descriptions of what 'moral' is and what 'self-interest' is, for instance: "Moral concerns what people should or should not do etc." and "Self-interest concerns actions and attitudes that only suit yourself etc." (obviously I need to flesh these out much more). I will take the 'moral' description directly from Ryan. He essentially took Skitka's moral conviction measure (below) and added the 'moral' description. I will take that and further add the 'self-interest' description
- I would then use Tim Ryan's version of Skitka's moral conviction measure (asking respondents "To what extent is your position on [issue] a reflection of your core moral beliefs and convictions" and "... connected to your fundamental beliefs about right and wrong?") – with the tweak that I don't ask them about their position on the issue, but about their attitude towards the issue overall. Let's say that the issue is abortion. I give respondents the descriptions of 'moral' and 'self-interest'. I then ask them: "To what extent is your position on abortion a reflection of your core moral beliefs and convictions" and "To what extent is your position on abortion connected to your fundamental beliefs about right and wrong?" – but without actually asking them about their position yet (basically leaving that open until they get the frame). The alternative is that I ask them about their position on abortion twice. I would here (1) ask them where they stand on abortion on 1-5 Likert, (2) give them the descriptions, (3) measure moral conviction, (4) randomly assign a frame, (5) ask them where they stand on abortion on 1-5 Likert again. The big problem with that is anchoring. Liz agrees with my approach. While it's better to have people write down their stands (more concrete for them and also allows me to be more precise in my analyses), the downside effect of anchoring is a pretty big (too big) downside
- After I measure moral conviction on their attitude towards the issue (1-5 Likert; "Not at all", "Slightly", "Moderately", "Much", "Very much"), every respondent randomly gets one of the five frames: opposing moral frame, opposing self-interest frame, control frame, supporting moral frame, supporting self-interest frame. Every respondent then registers his support/opposition to the issue on another 1-5 Likert scale ("Strongly oppose" ... "Strongly approve")
- For the respondents with highly moralized attitudes on the issue, their support-/opposition for the issue should be statistically the same across all frames – since their attitudes are set and can't easily be moved. For the respondents without highly moralized attitudes on the issue, the frames should move responses towards support or opposition, depending on the direction of the frame. For these people, we can see whether the moral or the self-interest frames cause bigger shifts. I would expect moral frames to cause bigger shifts for highly moralized, since moral arguments likely fall on fertile ground here. For low moralized, I would expect

self-interest frames to cause bigger shifts, since these people reject the importance of morals for the issue
  - Insights that I can see:
    * We can test which issues are considered more moral than others
    * We can test whether people with highly moralized attitudes really stick to their pre-formed attitudes, no matter what they're exposed to
    * We can test whether people with low moralization are more influenced by moral or self-interest frames
    * We can test whether people with no moralization are most influenced by arguments based on self-interest
- Reorganize chapter outline
- Expand framing section
  - Outline differences between equivalency and emphasis frames (I'm looking at emphasis)
  - Outline differences between emphasis frames and new information (Leeper & Slothuus)
  - Clearly express that we do know why frames work (Zaller: Frames move persuasive information to the top of one's mind) but that we don't know why some frames are successful at moving persuasive information to the top of one's mind and others aren't. This was not initially clear to Liz
- Set up section on morality from the literature
  - Incorporate Stoker on public opinion in the public sphere (i.e. her stuff on ethics)
  - Is there theorizing on "value frames" or "moral frames" (Stoker, Google Scholar)?
  - Jamie's article he sent me
  - Chris Wolsko
  - Willer and Feinberg (how they used MFT)
  - I need a description of 'morality'. I can take that from Tim Ryan
  - I need criteria along which I can construct the frames. For morals or values, Moral Foundations Theory is an option. Liz has also written about this in her diss. I'm not sure whether to go with MFT, since it's so party-ID based, though
  - Feldman chapter in the Oxford Handbook of Political Psychology (some time around 2016 or so) – gives a more complete overview of the field
  - Kinder on the "primary ingredients" of public opinion (one of which is "matters of principle"), Feldman on values, Milton Rokeach on values
- Set up section self-interest from the literature
  - Look at the paper I wrote for Liz' class for works on self-interest
  - I need a description of 'self-interest'
  - I need criteria along which I can construct the frames
- Choose issues based on the literature and what works for perceived self-interest
- Design issue frames built on morals and self-interest
  - Do I use stuff from MFQ?
- Connect everything up coherently
- Send it to everyone for feedback
- Email Lucid to arrange experiment to be run before the end of the year
- Morals

  - Leave out moral conviction, it just complicates things because conviction and MFT don't play well together → DONE
  - Play down the language on Haidt a bit. He exaggerates the differences between parties. There is nothing sacred about pid in Haidt, the values are what matters. He just shows that Dems and Reps differ on average with respect to the foundations, i.e. not all Dems have the Dem pattern and vice versa → DONE
  - As I talk about moral vs. nonmoral issues, make sure to mention that I'm about moral and self-interest frames, not the issues. Don't get lost in the issue discussion, so that readers won't think I'm mainly about the issues → DONE
  - Fix disjuncture between theory and design: I say that moral frames work because people have emotional attachments to their morals/values/whatever, but then I posit that moral frames work among people without moral conviction. Why would morals influence people who don't seem to have morals? → DONE
  - Forget about pid, just ask people about their moral preferences, the same way I ask about their self-interest tax burdens (directionality, where you stand). Measure self-interest, measure moral foundations for each respondent (i.e. query where they stand on the particular moral foundation) – use parts of MFQ → DONE
  - Find moral frames that appeal to all (or most) people. Fasten on some moral foundations that I think map best to each of the two issues → DONE
- Self-interest
  - Kinder is one of the doubters that self-interest matters all that much. Make sure I only cite him that way → DONE
  - Do Campbell, Converse, Miller, and Stokes really say self-interest is the main driver of political opinion? – They don't. Delete that reference → DONE
  - Political psychologists who talk about self-interest are definitely not rational choices. Don't put everyone on this topic into the rat choice rat hole. Self-interest is not automatically part of rat choice → DONE
  - Move away from material self-interest. Material self-interest is not the same thing as self-interest. Don't limit my study to that, since I'm biasing my findings against self-interest right out of the gate. This narrow understanding of self-interest is precisely why researchers have found little evidence of it in public opinion → DONE
  - Leave out perceived self-interest (i.e. not make it a major thing) → DONE
  - Define self-interest as related to personal autonomy, health/safety, wealth, and status (Weeden and Kurzban, evolutionary psychology). No need to include family well-being (that's too far for my purposes). Example of "non-material" but obvious self-interest: Young guys who oppose hawkish Presidents because they don't want to be drafted are acting in their self-interest. Women of child bearing age who want to be free from the possibility of an unwanted pregnancy may support abortion rights out of self-interest → DONE
  - Set up competing self-interests that people have (e.g. everyone wants low taxes, everybody wants to be healthy) → DONE
- Frames
  - Move away from the whole "move to the top of people's minds" thing. That's priming, not framing, and it doesn't fit my theoretical setup. I'm doing strong and

weak frames, particularly whether moral or self-interest frames are more likely to compel people to change a specific attitude. The term "frame" comes from the idea of framing a picture. If you were to photograph a scene, you might choose to include some details and exclude others and, when you do so, that changes the way people will interpret the scene → DONE
  - Move away from "more important in shaping political attitudes". My chapter focuses on "what makes a strong frame", with the assertion that "strong frames are moral frames". A chapter focusing on "what is more important in people's attitude formation, morals or self-interest?" is too general of a question and also has been looked at by others. Make sure it's specifically about the juxtaposition of moral vs. self-interest in frames, not in general → DONE
  - Engage more with Druckman and Chong (2007) since they differentiate weak from strong frames → Druckman and Chong (APSR, 2007) ask respondents in a pre-test what arguments they consider strong or weak for the issues they chose. Druckman and Chong then assert that frames containing arguments deemed strong are strong frames and frames containing arguments deemed weak are weak frames. They then use these strong and weak frames in their actual experiment. They let people decide pre-experiment what they consider strong, which doesn't give any insights as to what actually makes a frame strong. We just know which are considered strong and weak, but not why → DONE
  - 5 frames per issue → DONE
  - Find one other issue. Ditch taxes for ... national security, infrastructure (something where self-interest and moral frames are each roughly equally strong). For healthcare: Healthcare costs and health insurance costs may be very different things (p. 83). I may love paying $0 for insurance, but hate that my out-of-pocket expenses are enormous. Make sure I consistently stick to one and don't mix them up → DONE
  - My frames are not actually frames, since I'm describing different policies. To build stimuli appropriate for testing my theory, I need to keep the content (scene) the same across the various treatment groups but change what implications are emphasized, e.g. a low cost health care plan might save tax payer money or harm poor people. Set up a policy with some meat on it, something more substantial that is the same across treatment groups → DONE
  - Make frames a bit longer in terms of sentences. Have them read articles, bigger things, longer, more, not just one sentence → DONE
- Miscellaneous
  - Palin example needs to go – that's providing new (mis)information, not a frame → DONE
  - Cite literature to back up content in the introduction → DONE
  - I say in the introduction that morals have supplanted self-interest over time and recently. It sounds like I'm asserting that, when I'm actually just referring to what scholars are saying. Be more explicit and back it up, e.g.: Scholars suggest that morals have supplanted self-interest over time. Frank (2004), Haidt (2012) and several others argue that morals are more important now → DONE
- Send chapter to Liz

- Questionnaire
  - Healthcare → DONE
    - Single-payer, tax-based, universal, pay healthcare by taxes, government hired the companies – too direct, too detailed, take that out. "Improving healthcare in the US", "paid through a mix of individual and employer fees", keep everything much more vague, not many details so as not to put anyone off
    - Moral supporting: "Affordable healthcare for everyone" – that's self-interest. Find some form of "this doesn't help/hurt you, but it will help poor/elderly people"
    - Moral opposing: Vulnerable/Elderly people will get substandard care, long lines, no appointments etc.
    - Self-interest supporting is good
    - Self-interest opposing: The typical person needs to pay more (move away from the autonomy of decisions here)
  - Environment → DONE
    - Don't use climate change, stay with some kind of environmental restrictions/regulations, e.g. preventing companies from dumping chemicals into the water, something like that. But phrase it as generally as possible so as not to trigger anyone
    - Moral supporting restrictions: Poor people are harmed by companies without regulations
    - Moral opposing restrictions: Difficult for people to comply with regulations, poor people might lose their job when companies need to pay more. The people who deforest need money from logging, with restrictions they don't have any income any more. Same for fisheries
    - Self-interest supporting restrictions: Otherwise we might get cancer and die
    - Self-interest opposing restrictions: Restrictions costs money, you will pay more for products
  - "How much does Care/Harm and how much does self-interest matter to you?" – I do that very well with the MFQ questions. Now I need to get a self-interest scale comparable to the MFQs that estimates, overall, how selfish (i.e. self-interested) a person is (WITHOUT asking about each issue, just asking in general) → DONE
  - shiny
    - Remove the last question about the code as it may deter people from completing since Lucid gives everyone an RID value when they complete → DONE
    - Do multiple attention checks in different formats (apparently important for Lucid). From Ryan: Qualtrics, Wiley → DONE
    - Set up that each respondent randomly sees (and gets blocked on) either ordered probit or ANES → DONE
    - After speaking with Jeff and Ryan, here is the final setup: I split the sample into ANES and probit categories. Each respondent randomly gets one or the other. I save the assigned data for each set in separate folders. Probit respondents are in /seqblock.op, ANES respondents are in /seqblock.an. So I get two datasets per issue. I assign treatment for the issues independently, i.e. respondents are not assigned to the same treatment group for both issues.

I speed things up a bit by incorporating observeEvent() into eventReactive() when treatment is assigned. That eliminates the additional download I had before. I block only on education (so I took pid out)

- Safe-guarding against file-write traffic jam
  - I have tested it simultaneously on two laptops. When one laptop is accessing Dropox, the other simply waits, then accesses Dropbox itself. There is no error or other conflict. That means if 50 people click it at the same time, the 50th person would have a 1-minute lag. It's not ideal but not a big problem
  - I added one sentence in brackets to the assignment pages that it might take a bit for the code to load and that they please not quite the browser
- Final adjustments
  - Go through Liz' .pdf with comments
  - Include the words "environment" and "healthcare" in each of the issue's information section
  - Read through each frame carefully and try to make sure they are similar in terms of (a) length, and (b) oomph (i.e."strength")
- Work in committee feedback
  - Ryan: Take out "Permanently disabled" as an employment group
  - Liz (and Jeff): Insert some throw-away questions at the start of the survey (so that things don't start off with the heavy psych stuff), e.g."For how long have you been using the Mechanical Turk service?", "For how long have you been answering surveys with Lucid?", "How interested are you typically in the studies you take part in?"
  - Liz: Create a separate page introduction to the psych batteries to prepare people for what is to come, e.g. "Next, we'd like to ask you some questions about your social views and how you see yourself" – I also added separate introduction pages before the demographics and before the issues
  - Liz: Create a bold title (like a newspaper headline) for the treatment pages so that people know what this is and what I'm asking of them, i.e. "Potential new healthcare plan introduced". Above that, in italics, write something like "Please read the following text carefully and answer the questions that follow"
  - Ryan: Overall, if possible, try out font sizes, bolding to make things more visually pleasing – I discovered that you can adjust a few things by setting the type to HTML. I added a nice logo, spaced everything out a bit more nicely, put any comments to respondents in italics, and made the bullet points nicer

Get new IRB approval

Pre-test

- Set pre-test up according to Liz' emails
- Liz:
  - She said to basically just test the experiment survey before the experiment. A sort of mini-experiment, to see if the patterns emerge as they should (i.e. we don't see effects that reverse my hypotheses), just with fewer people

  - If something is off, I can then adjust things. Ideally, I would then test them again, but nothing is perfect. One pre-test is still better than none
  - She recommends $0.50 per respondent, so that's 240 overall
- I don't want to have two separate surveys. If I make changes in one, I have to manually adjust the other, and that will just lead to differences in the end. Instead, I set up the survey to run for MTurk and Lucid with if()-statements. I made the following tweaks:
  - For Lucid, education samples probit or ANES. For MTurk, education only samples the probit categories. Otherwise the small sample would get split up even further. And the blocking comparison between the two sets is useless for this amount of respondents anyway
  - For Lucid, the code reads in the RID, saves it, and uses it for the redirect at the end. For MTurk, the RID and the redirect don't matter
  - For Lucid, respondents get code.txt without a unique code at the end. They also get a Continue button, since they need to be redirected in Lucid's sytem. For MTurk, respondents get code.mturk.txt with a unique survey code without a Continue button
  - Following Liz' suggestion, I added a comment box page before the code page so people can tell me if they thought something was problematic ("If you have any comments for the researcher, please share them here")
  - Originally, the code saved all data when people hit Continue on the last page. That doesn't work now since MTurk people don't have a Continue. I thus moved the data saving to the comments page for both platforms
  - MTurk people need to see the unique code on the last page, but the survey needs to save that code beforehand (since they can't hit Continue on that page). Originally, the unique code was created inside code.mturk.txt in reactive() code, so it was created on the page that people saw. That doesn't work any more. To work around that, I now create and save the unique code with normal R before the shiny code starts. Then I simply save that object together with all the survey input on the comments page and insert it inside createPage() for the code page. That way I can save the unique code and MTurk people can see it on the last code page to then copy-paste into the MTurk browser window
- Code checks
  - (Be INCREDIBLY careful with any randomization of response options. Many things in the code use the corresponding number for respondents' response selections, not the actual words, so messing with the order is a very delicate thing)
  - Set platform to MTurk
  - Do 200 trials, then see that everything was blocked properly for both sets of education categories (i.e. check that in R and on Dropbox)
  - Are the education categories blocked like I want?
  - Are all the responses being saved to Dropbox like I want?
  - Are the correct .txt files shown in the survey depending on the group I'm being blocked into?
  - Do all the treatment group .txt files contain the correct corresponding frames?
  - Are the apostrophes working?
  - Are the words "environment" and "healthcare" in each frame setup (for the

checks)?
  - Any typos anywhere?
- Final tasks before launch
  - Delete everything in all /alldata and /seqblock folders online
  - Delete everything in all /alldata folders and all seqblock files on my machine
  - Re-deploy app

Analyze pre-test results

- How do the groups look?
- Which frames got more support than which others?
- Do any results look weird?
- Any helpful comments?
- I rejected everyone who failed any of the three attention checks (one pre-treatment on numbers/letters, two post-treatment factual ones) and reassigned those tasks. It took 7 batches, but I now have 240 responses who passed all tests
- However: After I had done this, Liz told me that I should not exclude people who failed the two post-treatment checks. Something about treatment affecting passage rates and the failed checks potentially showing something other than lacking attentiveness, e.g. that my treatments were difficult for people to understand. I get the first, sort of, but I don't believe the second
- Regardless I now have one analysis for all the people who passed (the 7 batches) and one analysis for all the people who passed the first check (only from batch 1), both in `pre.test.analysis.R`

Set up pre-registration on OSF (from RT2 training)

- Created account
- Filled in all the details
- Note: Just because you have a pre-analysis plan doesn't mean that's all you can do with your data (and it doesn't mean exploratory analysis is now forbidden). If there is a good theoretical motivation that you can defend, then you can do that

Experiment

- Power analysis
  - Do a power analysis to be see that I have a chance to detect typical framing effects. There is an R function for that, use that (`DeclareDesign`)
  - DeclareDesign is super complex, so I asked Jeff and Ryan for help. Ryan couldn't help me too much, but I can try to experiment with the stuff here and see whether that gets me anywhere (though I doubt it)
  - I'm leaving this be. It's super complex and requires tons of assumptions to begin with anyway. Besides, I will run the experiment no matter the any power analysis results, and I have plenty of respondents
- Lucid attention checks
  - Lucid can redirect people who fail the check, then the survey will stop, the people will be removed, and I don't have to pay for them
  - Something that has come up in the pre-test: Since I throw out people who fail the

attention checks post-test, those people are all part of the blocking data. I block on 300 people but only analyze 200, in general terms. Nothing I can do here with MTurk, but since Lucid can terminate people during the survey, this comes into play
    - Following what Liz said about not excluding people based on the post-treatment checks (see above), I added a terminating redirect for anyone who doesn't select option 2 for the first (numbers/letters) check. Those guys won't see the rest of the survey, won't be blocked, and won't be part of the saved data
- Pre-registration
    - Update questionnaire .pdf to reflect final shiny version
    - Upload questionnaire to pre-registration and look through my entries again
    - Publish pre-registration
- Code checks (less extensive than before and set to Lucid)
    - Re-deploy app
    - Are the redirects working on my end?
- Final tasks before launch
    - Set platform to Lucid
    - Re-deploy app if needed
    - Delete everything in all /alldata and /seqblock folders online
    - Delete everything in all /alldata folders and all seqblock files on my machine
- We did a soft launch with 50 people. The code worked as it should, and we only got people who passed the attention check, meaning the redirect worked as well. I authorized the full launch

Analyze substantive results

- Most straightforward is to use the method I use to block
- But I also have lots of good resources how to analyze ordinal variables as DVs, instead of turning them into intervals for a normal regression, including a Bayesian way
- Brad Jones feedback from a while ago: "A key part of the argument that I was trying to make in my dissertation was that the effect of different frames would be differentially felt conditional on respondents' own moral priorities (measured with the moral foundations questionnaire). So, a sanctity framing only would affect someone's opinion if they were scored particularly highly on the sanctity dimension of the MFQ. For someone who doesn't get worked up by sanctity, they wouldn't be expected to react to the frame (or even consider it a moral/ethical framing)
- Select figure/tables (what do I use, what goes in the appendix) and write up text

Add missing data with all my tested methods and compare results

- I did the same analyses that I did in the ordinal missing chapter. 5 variables NA for ANES and OP, MAR and MNAR. Then the same again for 10 variables each
- Write up results

Final write-up

- Write conclusion