What Mar works on:

-What size, structure, diversity -> what makes a successful reserve from a scientific and governance prospective. Eleanor Rostrum -> governance principles when present at certain levels, can manage resources correctly

-Case study analysis of reserves in world, identify if these principles are present or not, endogeneity and multi-colinearity, need independence kept, define success that it isn’t based on indicators on right hand size, stopped doing this chapter in dissertation because is too much work

-QCA (qualitative comparative analysis), helps avoid statistical issues with regression, turn qualitative data into quantitative data, 0’s and 1’s (Boolean approach)

-2010 marine reserves linked socioeconomic systems paper, added compliance into regression, not as good as QCA. Polnac paper (Mar doesn’t like this approach?)

-QCA would be separate from other indicators, helps look for multiple causations, can be multiple different combinations that lead to success, can look at different combinations and configurations of indicators and see which ones are necessary and sufficient (not having all will necessarily lead to success, need a least a few of them)

-Mar will send documents about QCA

-On right hand side have governance indicators (legal recognition of reserves, number of fishers, how are organized) and dependent variable (biophysical indicator of success)

-Goal: outcome variable. Rest would be indicator variables. Develop a codebook where have outcome variables/success outcomes separated from indicator criteria. QCA will help look at governance independently from socioeconomic and biophysical. Will be able to tell if have just success of biophysical because characteristics of area vs. success because of governance.

-Constrain what can interpret results if don’t have all combinations (ex. don’t have open access scenario data, but have other kinds, is that a problem). If only look at concessions, make sure that those indicators work with TURFs and can’t extend unless have data from other types of strategies.

-Want established codebook so COBI can ask people for data. Examples of questions in codebook: Mar will send. Outcome variables: various compliance variables. Had perception variables. Institutional variables (rules, participation, monitoring, accountability). Can incorporate biophysical conditions into the QCA.

-Will send another paper on how to do the analysis (Eleanor Rostrum paper is confusing). Our goal should be to develop the codebook. The analysis is not as straightforward as regression, need a researcher to select combinations to make judgement call if it makes sense, etc.

-Also did comparison of 10 different reserves that have different reserve types, too few cases and data is poor so may not be able to do QCA. May do a rough description/comparison as worst case scenario. Mar thinks just a description is fine as a worst case scenario because a lot of QCA is done on data from previous studies. Have multiple readers/coders read a single case and apply the codebook. Compare their codes and discuss if there were discrepancies and decide together what the appropriate code is. Inter-coder reliability. Are methods to make less subjective and more reliable.

-Most valuable: develop the codebook, gather data for other people to QCA on later. Descriptions regardless provide context

-Mar willing to work with us if we pursue this method

-High, medium, low is subjective. All is subjective with governance issues. Us: high, medium, low is based on literature and assign based on literature.

-Just do descriptions and codebook for our project. Need human infrastructure (multiple coders) to actually implement the framework.

-Coupled infrastructure distance framework.

-QCA is good if are looking at a lot of cases

-Feel free to field questions to Mar who can ask others

-Organization science for marine reserves, Gaines, PNAS

3 options:

1. QCA
2. Just descriptions
3. High, medium, low based on literature