Capital as power brief summary for listeners:

Capital as power examines capitalism like the previous feudal and slave-based systems of statecraft as a way of organizing power, rather than a "mode of production". It holds capitalization as the core organizing principle, which measures assets and organizations in terms of the expectation that they will draw in power, measured as money revenue, in the future. In other words, money is a form of power, and capitalists use finance, the science of money accumulation, to acquire power.

Energy, growth, and hierarchy summary, if needed:

Blair sought to examine current theories of "economic growth" to find whether or not they can actually explain what they seek to explain. The core problem with the current literature is that it isn't actually measuring anything; it's measuring "growth", but can't define what exactly is growing. Blair proposes an alternative analysis based on examining energy scale and human hierarchy. He finds that energy scale and hierarchy exhibit a significant relationship, and examines why hierarchy is necessary for capitalist organization.

Capital as power theory of income distribution summary, if needed:

Blair examined various factors as they relate to the distribution of income in contemporary capitalist society. He looks at factors that are currently used to explain income distribution, such as level of education, race, gender, and so on, and compares these factors to the position that someone has in business hierarchies. He found that the latter factor has vastly more explanatory power for income distribution than any of the others.

Important concepts to mention:

Nitzan expanded on the energy/hierarchy research by pointing out that of the total energy use in society, there will be some proportion going toward sustaining life and the rest going toward sustaining hierarchy. He illustrated this with a "hierarchy-energy curve" and identified four possible trajectories for the hierarchy/lifemeans mix:

- 1. Expanding power (more energy overall, more going toward both hierarchy and lifemeans)
- 2. Declining power (less energy overall, less going toward both)
- 3. Power in crisis (less energy overall, more going toward hierarchy, less going toward lifemeans)
- 4. Democratization (more energy overall, less going toward hierarchy, more going toward lifemeans)

Both of these research topics note that it's not just 1:1 hierarchy that is prevalent, but a tree-like hierarchy. The structure allows people to be managed in a way where only a few people need to interact with one another for the organization to work, with only a handful of hierarchical levels, scaling easily to the millions of members.

""To each according to his power to take" [...] implies that redistribution of income is nothing but a check on power. And since checks on power are basically the foundation of every liberal

democracy, if you accept a power theory of [income], you accept that redistribution is an imperative to check power."

Ryan:

- 1. General
 - a. How did you end up studying CasP?
 - b. Are you working on anything new right now?
 - c. Who are your favorite writers/scientists?
 - d. Do you follow politics? How would you describe your politics?

2. Personal Income Distribution

- a. Maybe it's just not possible with available data, but would you consider a company hired by another company to have a hierarchical relationship that can affect income distribution? In other words, you've looked at hierarchies within organizations, but could you and would you also look into hierarchies of organizations?
- b. You noted that utilities were the most equal companies due to the extensive regulations on them. What were some of the most unequal companies?
- c. Were you able to observe any changes over time? We all know that income distribution has become more unequal, so was there a corresponding change in the structure of companies?
- d. One of the things I found most interesting was that position in the hierarchy is a far more significant factor in income than either gender or race. Was there any way for you to see the gender or race of people in the upper levels of the hierarchy? It certainly seems like most of the upper managers and CEOs are white men, but do we have the evidence to back it up? It would be interesting to correlate those other factors with hierarchical level rather than the typical practice of comparing them with income. *Note:* someone asked this question in his presentation,
- 3. Energy, Growth, and Hierarchy
 - a. I've always had a feeling (not one that I've ever really tried to prove) that capitalism, or statecraft more generally, would be impossible without pre-peak fossil fuels. In other words, would capitalist growth be possible with renewable energy, given it requires ever-greater levels of energy?
 - b. Is there any evidence that higher levels of energy become harder to maintain?
 - c. Would it be possible for growth of revenue to occur even without a corresponding increase in actual material/energy use? As in, if capitalists are fighting over a dwindling resource base that's beyond its peak?
 - d. Do you have any vision of what non-hierarchical organization might look like?
 - e. Nitzan pointed out that increasing energy per capita is unique to capitalism. Is it possible that either capitalization made this possible, or that capitalization took over out of necessity to manage the increasing energy per capita thanks to new technologies?

4. Synthesis

a. Would you say that given the negative effects of large-scale energy use (climate change, global mass extinction, spills, energy conflicts) and of polarized social inequality (violent crime, health problems, low trust, low happiness), the root that we

have to tackle is dominance hierarchy itself? Can we actually change this through policy/institutions?

b. Have you heard of Bookchin generally, or social ecology specifically? It seems as though your research sort of vindicates his ideas on social ecology and anarchism, that ecological problems are rooted in social problems, and that hierarchy is the real issue at the heart of dominance.

Pieter:

- 1. It's quite obvious from your data that Hierarchical companies robustly follow your Power Theory of income distribution, but I have spent several years looking into organisational culture, as first described by Henry Mintzberg, and have found that Hierarchies are not the only form of organisational culture. There are also clan, market, and adhocracy cultures, with each providing a slightly different internal structure and outcomes for companies. My question is, how would you propose to apply the power theory to these different cultures? Could these cultures possibly account for discrepancies in the existing data?
- 2. What variables were the most difficult to control for? le, do you think things like individual personality traits might have a larger effect on the data than expected?

Energy & Firm Size paper

Ryan:

Excerpt:

"To summarize our findings, the evidence in Figs 1–3 suggests the following 'stylized' facts. As energy use per capita increases:

- 1. The small firm employment share declines;
- 2. The large firm employment share increases;
- 3. The mean firm size increases;
- 4. The government employment share increases.

Findings 1–3 suggest that increases in energy consumption are associated with a shift in employment from small to large firms. This indicates that the firm size distribution becomes more skewed as energy consumption increases. In S1 Appendix (part C), I demonstrate that this shift (at the national level) can be accurately modelled in terms of the changing exponent of a power law distribution. Assuming a correlation between energy use and GDP, then the evidence presented here is consistent with previous research that has focused on the relation between firm size and GDP per capita [18, 20, 29–31]. However, my focus here on energy use (rather than GDP) is intentional: it is part of a larger effort to ground economic theory in the laws of thermodynamics [32], and to root empirical analysis in biophysical (rather than monetary) phenomena [33–36]."