Schizophrenia and Capitalism: Assemblage and Absurdity, Essays on Ontology, Morality, and Global Society

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Let us go then, you and I,
When the evening is spread out across the sky
Like a patient etherized on a table;
Let us go, through certain half-deserted streets,
The muttering retreats
Of restless nights in one-night cheap hotels
And sawdust restaurants with oyster-shells:
Streets that follow like a tedious argument
Of insidious intent
To lead you to an overwhelming question ...
Oh, do not ask, "What is it?"
Let us go and make our visit.

Сфинктер

Ch. -8: TP

Ch. - ७: X©X

Ch. -२: ToC

Ch. -\s: CoB

Ch. o: PCAA

Двенадцатиперстная Кишка

Ch. ኔ: tNE

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Тощая Кишка

Ch. 8: tloBO

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Подвздошная Кишка

Ch. 9: GMiWaA

Ch. 设: A,O,aDO

Приложение

"I shall wear my trousers rolled." "As a private citizen, I think that all this striving after greatness and domination is idiotic; and I would like my country not to take part in it." (Ch. 2) -- A.J.P. Taylor, The Origins of the Second World War [https://existentialcomics.com/comic/344] [https://existentialcomics.com/comic/400] [https://medium.com/@econometricfun/predicting-the-economy-of-a-petrostate-baa0b94d295d] A Social History of Engineering

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Playing Chess Against Ahistory

Rant

"It is not enough to tell people the truth. You must also be prepared to morally embarrass them."

Capitalism is a notoriously fickle and chimerical malady. It may become an infinite malady if one is not careful (Ch. 5). Let us consider

What is the impression one gets when one sees

the same Europeans that would pay €100 for a silly alligator to be stitched on a normal cotton t-shirt that one can get for €5 so that everybody can see the extra dollar signs on this set of deployed semiotic armour

the same Americans that would tip 15% for a below-par cheeseburger at a Resto-Lounge in New York City

in Africa, where the spoiled English tart, who buys \$5 bottles of water inside the neocolonial nether space we call 'festival' without batting an eyelid says to the poor local inhabitant of the poor local village that exists just 100 metres away from the (temporarily) colonized beach she is standing on when he asks her to pay \$2.50 for the same bottle of water (okay Derek Parfit, not the *same* bottle of water) "But he said over there that it's \$1! I won't pay more than \$1!" and when the local man grudgingly sells the bottle to her for \$1 (some money is better than no money, after all), she gives him the \$2.50 note, *asks* for change deliberately (sounding out every word like some self-declared Queen of the Colony, of course), then, upon receiving three \$0.50 notes gives one back, saying "Now that's for you. I like to support small business."

in Africa, where the American law-abiding citizen asks the price of a motorcycle ride to the next village, asks "How much?" and when confronted with a cost of \$2.50, says "No dude, it's \$1.50. He said so at the hotel. That's the price. He said so. Sorry."

• What is the impression one gets when one sees

lifetime supporters of Soviet communism to such an ideological degree that it's almost cultish, who peddle their ideological wares—by no means wrong, in fact quite correct about the historical wrongs of imperialism and the consequences of its horrific slaughter (Freud's *Civilization and its Discontents* is on point here, (Ch.3)), its soul-destroying hypocritical Smithian cultism (Perelman's *Invention of Capitalism* tells us definitively what a charlatan Adam Smith was with his ridiculous pin factory), its ruthless McCarthyism and billion-dollar support for African pariahs like Mobutu, its two-faced billionaire purveyors and their egotism and selfishness—to the faithful, i.e. those that already agree with everything that is being said waving their imaginary "Thumbs Up Communism"

gigantic foam hands, and holding up signs on some safe street in some safe city protesting—again correctly—the latest American pulverization campaign to send country X "back to the Stone Age and tell them that it's for their own good because their culture's inferior" (*Fear of a Brown Planet*)

lifetime friends interested in your projects and looking to possibly promote change in their country who have already made millions of dollars making the wealthier more wealthy through the very investment schemes that are crushing the countries that he is trying to help

when quoted Marx about support for a project that actually tries to help a community affecting by these very same forces, replies (essentially) "But we live in an ethnocapitalist society, and you must play by the rules... that is philosophy and this is reality... if you want to give your money away to support friends and communities less fortunate, that's your business, but my accumulated capital is mine and mine alone... you should have spent more time making money instead of trying to change the system, buck-o, don't come crying to me."

when asked "but you make a substantial amount of money, and I'm sure you could survive quite nicely if you just gave me 10% of that to allow me to do my work, because why is your work infinitely more important than mine where you make substantially higher than average remuneration based on your spending habits", the reply is "but I don't just give away money, that's not my style, and anyway I'm not financially stable yet."

What is the impression one gets when one sees

a group of African individuals peddling Jesus Christ on a street corner of their adopted former colonialist homeland

a group of individuals both local and immigrant from various ethnic backgrounds peddling Jesus on a street corner of the former colonialist homeland they were born into

a single individual holding a poster with a quote in front of a church

when quoted Fanon about "the white man's religion where many are called and few are chosen" (*The Wretched of the Earth*) and being reminded about colonial occupation and oppression, and the massive amounts of wealth and resources extracted from their country every day by the very forces that sold you that religion tell you "you're right but you still need Jesus"

when quoted Kierkegaard about how if someone convinces you to believe in God, then that person is your god, or how if someone tells you about Christ on the cross with witnesses, the generation after generation of people that would have to pass it on for this genuine information to reach you without any sort of subterfuge (*Philosophical Fragments*), they say "I agree with you, but this is my calling", and when you suggest that instead of giving up that law degree, he

might have pursued it so that you could actually help people and not just sit on the sidelines and say "since that guy killed that other guy, he's not a Christian, now we know", he insists to you "I agree with what you're saying but you still need Jesus"

when asked about who he is quoting, tells you it is "some Lutheran pastor that I think died in 1945, I think in Germany" (sketchy on details of course), and when you start to see how uneasy he is when confronted by knowledge of Luther and Calvin and Erasmus and Kierkegaard tells you what he is really after, namely his precious libertarian freedoms that have been taken away by coronavirus restrictions, and when you confront him about the fact that Luther would have never allowed the individual to be of greater importance than the community can only reply that he feels threatened by the tone and volume of the voice that is castigating his hypocrisy.

What is the impression one gets when one sees

a representative of Amnesty International peddling the sympathetic "do it for Afghanistan" message

when asked about what sort of work they do, hears the reply that "they get people talking", mentions Reagan's role in the training and arming of the Mujahideen along with Saudi Arabia in the 1980s, mentions further the role of the United States in further geopolitical travesties, and then when confronted with the reply "I think we can all agree that the US is a problem", the logical reply of "if everyone agrees that the US is a problem, then what has Amnesty been doing for the past sixty years 'getting people talking'?" gets the long song and dance about the impartiality of Medicines Sans Frontiers, and then when confronted with the fact that MSF was acting essentially as the Red Cross for the Mujahideen against the Soviets in the 1980s replies with the tired "but if you have a bullet wound, MSF will help you" to which you reply in turn "they sure as hell weren't helping the Soviets, bro!"

What is this strange game that everyone is playing, anyway? I recall Karl Marx writing something about contradictions somewhere. Maybe.

I do not always process all of the pieces correctly and I definitely do not always react in an appropriate manner if the information is jumbled, but it is useful to have second and third opinions from others that do see the world through your lens. For example, a message from a friend also in Africa that I have known for quite awhile after unleashing some frustration about these observed contradictions against the individuals that you care deeply for and care deeply for you:

Hey how you doing bro,

I just read your post and I must say that I totally understand your situation. People get so engrossed in themselves that they forget that the whole essence of living is to make life easier for everyone. That's the purpose we are all meant to

serve but many forget while trying to survive. Many face inhumanity while trying to survive. It's now easier to live the way they do by continuously telling themselves that everyone is for himself

I want to charge you to do both. You are very smart and any problem you put your mind into, you'll most likely think of a solution. The world wants you to survive by yourself because money has become the new god. Very few like you still know that money is just a side attraction created by man.

If that's the case, start thinking up something that'll bring in money and that would still make you achieve your life dream of serving humanity. You can think up profitable solutions that can still be useful to humanity but self sufficient [sic]. So you don't have to depend on any other person.

I suggest you take ______'s reaction as a challenge and come up with something profitable and still server your purpose in life. You can take up some entrepreneurship courses. It might guide you.

And, I'm always here to talk.

I am indebted to such support. It reinforces the idea that there is a huge split between those who understand what it's like to have nothing and those who leverage those who have nothing to argue about justice and the status quo or injustice and change. At the end of the day, if you do not actually spend time in a postcolonial community and come to care about people where an extra few hundred dollars a month is extremely important, and you look at others making tens of thousands a month saying "my money is mine, I earned it fair and square", you cannot help but think "well, there are some people in my life that I care about that could be helped by a little of your money instead of you spending it on the latest commodified whatzit that catches your eye."

The entrepreneurship courses would probably lead me to quote *Critical Teaching and Everyday Life* about the vocational class of workers and the managerial class of Ivy League graduates that learn at the Kennedy School for Democracy how to sell out their own country (if from abroad) or how to convince others that they should sell out their own country (if "Western"). Business courses always strike me as extremely strange, almost a scam: "we will teach you all the same techniques to try to fight over a limited pool of money, and we will watch as you fight to the death unleashing your 'free markets' and 'competition' on the world so that you can climb corporate ladders and throw them down from below you once you have ascended successfully. It's enough to make one crazy (Ch.1).

This is all just some personal observations that flabbergast me about this strange reality of contradictions that we call communism. Or some might call it a *Rant*. Many would say that it is tinged with presumption, haughtiness, and arrogance. Or that there seems to be some sort of vindictive score-settling with demons from my past that I haven't been able to confront myself. I would accept such a judgment, but whatever such a judgment might be, only the reader can decide how far s/he wishes to read, and that's really my role as an entrepreneur playing the rules of the ethnocapitalist game. Book, meet reader. Reader, meet book. More information can be found in *A Thousand Plateaus*. (You only need to read the first few pages, D&G have done an excellent job make no

mistake... assemblage theory is everywhere even if nobody understands what it is, but that's the whole point, as you would see.) Or one can look at my interpretation (Ch. 6).

In the end, I am only trying to ask the people who make the decisions and have the attitudes that trickle down into the morass of neocolonial poverty via the colonial imaginary to ask themselves whether they can't make better decisions during their time in the world to allow others with less opportunity to also make more of their time in the world if one has a surplus of resources. I am not saying that people don't do this already, I'm simply saying that they don't do it enough. Not in a Peter Singer sort of way though, and there are various reasons for that.

Invisible Monsters

"Natural scientists try to discover what is. Engineers try to create what has never been. Social scientists try to understand what could be."

Id Insinuation

The first two sentences of the quote above paraphrase Auyang's Engineering: An Endless Frontier. I have substituted "what is" for "what was not known" and "what has never been" for what did not exist. I have also added that these are attempts (i.e. I have inserted a "try to") because the outcome is seldom what is predicted. The importance of praxis—emphasizing a process rather than a final outcome—is bound up in its ontological value. Unless you are trained as an engineer, you never think about the interstitial space that comes with discovering a new natural process or building a new edifice. When it comes to construction engineering (the process of erecting a building), it doesn't occur to the layman that the large cranes that move materials from the ground to where they are needed are then taken apart by a smaller crane deployed on the roof of the building, which is then taken down in pieces, something like a matryoshka.

Further, a good example of the former is expounded by James Gleick in *Genius*, where he recounts Richard Feynman being bored with physics and putting all of his efforts into discovering a pattern in biology that would be key to Crick and Watson's discovery of the double helix structure. Similarly, in Constance Reid's biography of David Hilbert, (the dominant figure in world mathematics for a generation, who when queried by a Nazi about how mathematics was doing now that the Jews were all pushed out calmly replied "Mathematics in Göttingen? There isn't really much anymore"... he died in 1943) looked at Einstein's work and proceeded to invest his time into understanding mathematical physics and was able to deduce and define what became known as the Hilbert-Einstein action while Einstein struggled with a more trial-and-error approach to his equations.

The third sentence, related to social scientists, is far more contentious and difficult to envision since society is all about praxis (Ch. 6), or at least one hopes that it will be. Yet the influence of the two Herberts—Spencer and Hoover (Ch. 1)—coupled with the influence of Edward Bernays during the Great Depression (see Adam Curtis's *The Century of the Self*) has come to project a Fordist essentialism onto social life: the imaginary of new forms (see e.g. *World in Fragments*) is led more and more to reflect the

Smithian emphasis on utility (*The Theory of Moral Sentiments*) later taken up by John Stuart Mill versus the continental influence of existentialism and authenticity. In this sense, it is somewhat ironic that Mill complained of the inability of individuals to see past what society has delineated for an individual within the social algorithm (**Ch. 4**) when Bentham's calculus could only result in a "shut up and calculate" Copenhagen interpretation of society, hence the influence of Spencer and Taylorism in both the United States and the Soviet Union. The result of a century of Hoover's managerial decree in the United States—maintaining that engineers should kowtow to the corporate class (here again Ira Shor is on point)—and Lenin's adherence to Taylorist values is that our only recourse to release ourselves from economic decay, as AbdouMaliq Simone notes in "Cities of the Global South", is to build ourselves out of it. Within such an anomic social construction, how is "sustainable" possible when it comes to engineering, whether physical or social?

Mind Thrust

Albert Camus speaks at length about absurdity and authenticity (Ch. 4). In James Gould's compendium Classic Philosophical Questions, Camus' existential claim that it is up to each individual to find meaning is placed against Tolstoy's essentialist claim that meaning is found through God. De Grazia's masterpiece *The Political Community: A* Study of Anomie describes the way by which God is naturally constructed in the minds of children. Once brought into the world, they see parents providing for their every whim, and for the inexperienced and undeveloped brain, parents begin to embody perfection in the life of the young child. However, eventually the child comes to understand that parents are not omnipotent, omniscient, omnipresent, or infallible. God then becomes a construction for the child to cling to as external projection of the infallible and omnipresent caregiver. Following this initial exposition, de Grazia describes how this constructed ideal encounters conflict, deteriorates, persists, or is reinforced. One may consider how this is reflected in the rants regarding the manic street preachers above: if you tolerate this, then your children will be next. Perhaps tolerance of such views is the optimal strategy, perhaps it is not. Here is not the place to debate this issue.

What is the "absurd condition"? It is precisely the Sisyphean condition of perpetual servitude to a cause. This cause may be anomic capitalism wherein one continues to reinvest money into accumulation of more and more capital to the point where the Will to Power is brought to absolutism as the only thing meaningful in one's life, or it may be the desire to invent souls of one's brethren (Ch. 4). The choice between the two can be summarized by a single decision surrounding the approach one takes to the morality of labour (Ch. 7). However, it is unlikely that any individual is sold to a single cause, hence the schizophrenic neurosis of the individual when confronted with intersecting and often conflicting causes (Ch. 1). Similar to Karatani, Castoriadis invokes the "double bind" language of the psychiatrist in "The Greek and the Modern Political Imaginary", suggesting that "ignorance of the law is no excuse for anyone, but no one can know the law". What does this mean? One need not go so far as appealing to Walter Benjamin or Giorgio Agamben's "state of exception" (the latter in "On the Concept of History"); Jon Stewart's comment that "there is the letter of the law and there is the intent of the law" is much more on point. In the Global North, the political imaginary appeals to the letter

of the law, and with it hegemony, technocracy, and Smithian utility is used to dominate those in a weaker position regarding the legal apparatus, (see, for example, Bowden's *The Empire of Civilization*). This legal apparatus is, of course, constantly shifting and being reformed by those in power to the advantage of themselves: despite wishful thinking to the contrary, human society has not moved much past feudalism, exchanging the Divine Right of Kings for the Divine Right of Capital, as argued by Max Weber. In other words, the State of Exception becomes the rule, as was correctly identified by Benjamin within the context of Nazi Germany.

What, then, of absurdity? Simply that there is a choice. One choice is to hold onto God as the parental force that reinforces our belief in the Good whenever we are confronted with the Not-So-Good ("God is really testing me") and all that comes with the problems inherent in theodicy (Voltaire's Candide famously satirizing Leibniz's attempt at a means to circumvent this impasse). The other choice is to abandon any appeal to essentialism and simply live for whatever cause(s) or *project(s)* that one feels an affinity to at any given time. Sartre puts it succinctly:

Now you see why Christianity is so powerful. Everyone is a sinner. How to live with that? By total commitment to god. Right? No. If that was the escape, the church would lose all its faithful. So it introduces the mystery, the dogma that no one can be sure of salvation, no matter how good and honorably one lives. That solves the question of why did that innocent child next to me get hit by the stray bullet while I went unscathed. If one cannot predict god's ways, one can never be saved, or committed, hence we all stay sinners. And as sinners we dread what will happen after we die. We remain frightened. Very nicely done. But it doesn't work with those who do not fear death. And they don't fear death because they are totally committed to their act, their project.

-- Talking with Sartre

As Camus correctly points out, time passes at the same rate for everybody, and so what is important is how we use that time. One can choose to spend all of one's formative years in school trying to be cool and chasing skirts, but such an individual might look back at the age of 30 when so many doors are closed wondering why s/he did not make a greater commitment to doing assigned tasks that would have resulted in more open doors. It is for this reason that I suggest that advising a child that s/he can be / do anything is wrong-headed as it provides a false sense of security that all doors should and will remain open. The better strategy is to maintain that a child should strive to do one thing in her / his life that no one else can do. This will result in the child searching inside for which talents and proficiencies should be developed, rather than looking outside at which doors one eventually wishes to walk through, as those doors can and will close at any time.

Ego Whip

It is possible to take this idea of anomie in the individual and interrogate Genesis from this viewpoint to the development of a form of "metaphysical schizophrenia" in the Christian population (the basis of all Western civilization). The Fall describes the process by which Adam was enticed by the Serpent to eat from the Tree of Knowledge.

Having thus eaten Knowledge, he is then cast out of Heaven by God, and we have Lot in Sodom and Gomorrah (see *The Professor Brothers* clip for the places that God thought might qualify for annihilation), the Tower of Babel, and Speaking in Tongues (my memory of scripture is spotty). Here we may identify Adam with the ego, the Serpent with fallibility, and Heaven with a model of human perfection. Once Adam falls from Grace the first time, there becomes a constant internal struggle in all of us to bypass our flaws, especially in situations where we are challenged.

Yet because we are paranoid about our own flaws and assume that others do not suffer like us, we are Dunning-Krugered into submission. We carry around the illusion that if we are called hypocrites in front of others, we should be forever ashamed, even though those that look at us will quickly see their own faults in our action and will probably have too much to worry about in their own lives to really care. It is because we are always worried about our liability. Another calculation of risk and utility. Perhaps instead of feeling embarrassed, one should see it as a teaching opportunity: "we all have fallen, and yet we all find ourselves still upright... more or less... so perhaps existential guilt and shaming oneself for indiscretions is not the way to go... instead we should ask 'what inconvenience has been put on the other, and how can we come to some agreement that is satisfactory to both parties?" I would be lying if I believed I always treated women in the correct way when I went out at night in many different cities drinking many different beers and getting involved in many different games. But then I could only say "if any women says that I have wronged her, then let's not get into the he-said-she-said game; assume what she says is true. Now what? If it is deemed that I should spend five years in jail because 'rules are rules', then so it shall be. If I preach social responsibility, I should be willing to accept judgment upon myself.

Man is condemned to be free, because once thrown into the world, he is responsible for everything that he does.

Absolutely true. The probably is that "responsibility" is calculated, bought, and sold. In *The Origin of Our Knowledge of Right and Wrong*, Franz Brentano cautions us that although there are ideas, judgments, and emotions that influence our intention at any point in time, ideas cannot be said to be either correct or incorrect. In other words, they should not have value when it comes to "truth" or "the good". Further

in the case of the of the acts that belong to the second class, one of the two opposing modes of relation—affirmation and denial—is correct and the other is incorrect, as logic has taught since ancient times. Naturally, the same thing is true of the third class. Of the two opposing types of feeling—loving and hating, inclination and disinclination, being pleased and being displeased—in every instance one is correct and the other incorrect.

He continues

And now we have found what we have been looking for. We have arrived at the source of our concepts of the good and the bad, along with our concepts of the true and the false. We call a thing *true* when the affirmation relating to it is correct. We call a thing *good* when the love relating to it is correct. In the

broadest sense of the term, the good is that which is worthy of love, that which can be loved with a love that is correct.

In *History and Repetition*, Kojin Karatani speaks of repetition within historical periods, and one can be seen today in alienated labour and wage slavery. In *The Great Transformation*, Karl Polanyi describes how the new Enclosure Laws resulted in an army of labourers who could no longer rely on usufruct or living off the land (Michael Perelman's *The Invention of Capitalism* is definitive in laying out for the reader the Smithian swindle of James Steuart), these were to be started in workhouses as young as five in a panopticon to make sure that they didn't have any bad habits. These labourers would then slave away for the government under the tutelage of its genius conceiver, the great Jeremy Bentham of "maximize pleasure, minimize pain" notoriety. In fact, utility trumped sympathy in the United States and the Soviet Union, as both Herbert Hoover (Ch.1) and Lenin were extremely invested in Taylorism, and to this day mass production in the universities still provides a managerial class (Ira Shor) that then becomes the entrepreneurial class (Harvey) under the Post-Washington Consensus.

In German, Brentano's influence was discretized by Husserl into doxa and protodoxa to become phenomenology, which Heidegger then turned into an exercise that too often looked merely like an attempt to maximize the number of times he could write Dasein in a paragraph and still have it be seen as coherent. Rorty has much to say about the linguistic trickery of Heidegger and Derrida in *Contingency*. The German Marxists—which had shown some interest in both Schelling and Hegel—might have been able to make something of intentionalism beyond Taylorism and phenomenology, but attempts by Brecht, Weill, and others to make some inroads against the Nazi brownshirts were ultimately silenced by mass surveillance and hysteria (Pamela Katz's *The Partnership* is excellent). Thus, Franz Brentano may be seen as a last attempt to, following Schopenhauer, ground intention in sympathy rather than in calculation.

It was Brentano versus Bentham, and the friendly panopticon of calculation won (Polanyi) and *The History of British India* was published and it took India almost a century to allow Bose to become a historically-important physicist and allowed Churchill to disparage India at every turn, engineer a famine where two million Indians died ("I hate Indians. They are a beastly people with a beastly religion"), and be seen as a "liberal" hero. So of course the Reaganites love him as well. Friedman again. But strangely, if Frantz Fanon says it, "corporations making shareholders as much money as possible", it rings hollow, because who if they shareholders are normal Africans, suddenly it's not a good deal any more. would want corporations in African to have any power? So why is it so compelling when Milton Friedman says it? And forget about Reagan's support for apartheid. I could go on but I won't (Adam Curtis again, *Bitter Lake*). In the foreword to the paperback edition of *Straw Dogs*, John Gray laments

Outside of science, progress is simply a myth. In some readers of *Straw Dogs* this observation seems to have produced a moral panic. Surely, they ask, no one can question the central article of faith of liberal societies? Without it, will we not despair? Like trembling Victorians terrified of losing their faith, these humanists cling to the moth-eaten brocade of progressive hope. Today religious believers are more free-thinking. Driven to the margins of a culture in which science claims authority over all of human knowledge, they have

had to cultivate a capacity for doubt. In contrast, secular believers — held fast by the conventional wisdom of the time — are in the grip of unexamined dogmas.

I admit that (Ch. 2) is not mentioned. I was trying to look into this story of progress itself. And I hit a wall. I needed a different perspective (Karatani, (Ch. 3).) and more *actual* history (Braudel et al., (Ch. 4).). But it is interesting for its own sake. Augustine versus Aristotle is key.

Psychic Crush

What does a wall represent? It depends on which side of the wall one is on, and what one's privileges are in relation to it. A three-metre wall with razor-wire is going to be a far more formidable opponent than a chain-like fence. Meanwhile, prowling around the external yard of your neighbour's property might not win you friends, but it will probably result in far less punishment than doing so in a military base. To this end, there are two types of subject-object ontological meaning, the first is in the creation of the object in question. That is, if you construct a wall, then until that wall is taken down, one can always gaze at it and know that it would not exist but for the labours of the one that created it through praxis. Yet not everyone can build a wall, nor should everyone build a wall. Thus, there is also the subject-object relation due to interaction. Whether one has built the wall or not, one must abide by its frame separating and outside from an inside, usually clearly defined (we may chortle at the example of the philosopher who is to build the sheep pen building the fence around herself and declaring herself to be outside). In this sense, there is relation-by-creation and relation-by-interaction.

Yet the question of the semiotic value represented by a wall or a school or a border frontier outpost or a military fortress in the middle of a pitched battle may differ markedly. If one lives on the inside of a gated community, it is everyone else who are the Other and must be kept from one's property except under the strictest of rules and observations. In one lives on the outside, one must hope for favourable conditions if one wishes to ever exist on the other side of it. Thus rag-pickers and security guards get slave badges from those who have lost their souls to capitalism: cheap labour and someone from "the street" to keep others from "the street" lusting after a similar job and hence staying honest around bourgeois property. In *Splintering Urbanism*, Chomsky reminds us that it is nothing new, just the colonial practices of the Third World exported to the First World. But it goes both ways of course, as USAID pays for conferences in Africa about how the American Dream is to own a house, and then Bush's Carlyle group goes into African real estate markets and buys everything (Winter, Week 6, appendix). AbdouMaliq Simone speaks of the assortment of extremely interesting ex-pats who live in detached caves in the condo market of Jakarta, while the slumdogs are continuously in the process of autoconstruction: wagering a little here and there to create an ever-present dynamic praxis. And when the time comes for them to "graduate" to a condo and a mortgage (held open by Indonesia grants to construction companies to create buildings for its "global city" waiting for someone to occupy them but never considering that the street people of Jakarta might like those empty condos in a nod to Sukarno before Suharto's treachery that is seen today in

Korea palm companies clearing large tracts of Old Growth forests in New Guinea and saying "we're doing nothing wrong, check the contract", while locals see their jungle turn into a moon crater: Schefferville resembling this in *Mining and Communities in Northern Canada: History, Politics, and Memory*.

Psionic Blast

What of John Gray's question? Are we lost? In the Foreword to *Man on his Own*, Harvey Cox maintains that Ernst Bloch is not a theologian and an atheist (except on his own terms), and he simply defines humanity as "he-who-hopes". This is instead of "he-who-thinks", "he-who-argues", "he-who-builds" or "he-who-relates". This allows us to get out of the postmodernist loophole (Ch. 8). Richard Rorty's neopragmatism always gives us hope in a new *language*, releasing us from the finite joys of industrialization to the infinite jest of wordplay. In this way, all languages become secret languages between two people. And everyone has a private language with rules that can be *discerned* if one studies another enough. The externalization of ourselves will always tell when we show our cards at the end of the game. One can tell if one is cheating by simply associating an involuntary myoclonic twitch and saying *post hoc of course*, "I knew you were going to shudder there... it always happens around times when we talk about..." Shaking out of the creeping hand of the metaphysical schizophrenia perhaps. Because you can remember what others are too distracted by money to ponder over and order.

Snuff

"Capitalism: Also sometimes referred to as economic despotism, a pseudo-oligarchic economic system where the feudal class legitimize their grip on power by designating that wealth should beget more wealth, especially through the continued theft, dehumanization, and neocolonialist exploitation of underdeveloped regions as practiced in previous feudal systems."

To self-proclaimed Jesus disciples preaching that I need Jesus in my life, I always make the following argument:

Suppose there are two realities. In one of them, God exists. In the other, God doesn't exist. Suppose even that there is a 99% chance that God exists and a 1% chance that God doesn't exist. Now, when I die, the things that I have done will be remembered by people in the future. We may say Hitler is in Hell, because there is a universal condemnation of his acts in relation to society. We may say that Plato is in Heaven, because there is universal acceptance that he has contributed an unfathomable amount to society. Whichever reality is true, history will judge me based on my actions. Only in the reality where God exists does my praise for Him count for anything, and wouldn't that divert my focus to studying and going out and trying to create real change?

I like to talk about Plato in Dante's *Inferno* at this point (i.e. Plato et al. are in the upper level of Hell because they were not, but also could not be Christians because the timing wasn't right), and there's that Whitehead quote about "footnotes to Plato". Moreover, if everything is about God, then my good work is either done through God or not done through God. If it is done through God (Malebranche's occasionalism would fall under

this category), then what of my Judgment? And if it is not done through God, then what of omniscient goodness? Am I not infringing on God's monopoly by helping others without His assent? My aim here is, of course, not to discredit religion. As Durkheim realized, ritual is the basis for human organization, and it is indispensable for group morality and hope.

And there is much of Erasmus and Kirkegaard that is extremely interesting and useful. Johan Huizinga's *Erasmus and the Age of Reformation* is an indispensable book to understand Erasmus' problem with Christendom (and his loathing of having to obsequiously praise his liege whenever asked in order to maintain his social position and financial stability), and the dynamic of Luther reflecting on Scholasticism, Calvin reflecting on his technocratic desires and his later influence on Rousseau's social contract theory, and the rise of the Puritan Americans and British written about in *The Protestant Ethic and the Spirit of Capitalism* (Ch. 4). In terms of Kierkegaard, even if one is not a Christian, if one has any interest in existentialism one must try to understand what Kierkegaard wanted to say even (Ch. 7) without his *Attack on Christendom* polemic. Jaspers' *Man in the Modern Age* and Marcel's *Man Against Mass Society* are excellent interpretations of existentialism that steered it away from becoming completely consumed by Husserlian-Heideggerian phenomenology that both Arendt and Marcuse toyed with before ultimately rejecting.

Instead, I wish to ask the fundamental question "why does inaction make sense to you?" And by inaction, I do not mean that everyone must go out immediately and help the poor in some random country with whatever disposal income they have. Although the Singerian approach would be nice to see and would definitely create a new dynamic that might push our extremely unequal society towards a theme of redistributive justice, there are some problems with it that I will get to in a moment. What I mean is that if one is teaching about the actions of Christ, feeding the sick and visiting the prisons, why is it that when I say "shouldn't you be visiting people in prisons, then, instead of preaching idolatry?", the reply is always about a personal choice or an edict of God directing the individual to tell other people what is best for them instead of engaging in this praxis. We then come to the familiar arguments of Erasmus and Kierkegaard about Christendom and the organized assemblage of Christian followers of the ritualization of belief and not the ritualization of work (Ch. 7). One then sees the familiar Freirian classist criticisms of Ira Shor: everyone wants to be in the managerial class and no one wants to do the actual work. In other words, based on calculations and perceived optimizations about what might be good for the world based on my observations and experiences, I am trying to convince people of employing their reason even though it contradicts Reason (Ch. 7).

The inherent problem with Singer's approach can be found in the Giving Pledge of billionaires. "Giving 'til it hurts" is all well and good if it's done from a blind trust, but this is not reality. While Billy Gates Gruff is spending his billions on curing HIV / AIDS through his foundations, he expresses firm opposition to being taxed \$3 billion a year even though it would take over forty years for his entire fortune to be gobbled up if he didn't make another penny and he puts far more than that into causes every year. The problem is a *historical* one, one of *legacy*. If Bill starts handing over money to the government, this money becomes public and he can no longer claim to be the cause of its effects. And if he manages to find a cure for HIV, then when history must judge him

as The Future Lasts Forever, they might forgive and / or forget how much of his ideas he stole from others to make his fortune. I'm not saying he's not a smart guy, but anyone who was raised on Macintosh computers from the 80s could see immediately how wretched an operating system MS-DOS was compared to the MacOS where "Windows" was simply a given as the homescreen formation. When Windows 3.1 came out, it may have been a novelty for PCers, but the Mac people could immediately see a problem. And then one only has to look at the tens of upgrades to "Windows" (and all the problems associated with it) that users were on the hook for in order to have a usable operating system that was already second nature to Apple.

In other words, the difference between Billy and the fairy godfathers of space Jerff Bozos, Pay the Richard, and Aynstein Rand, is that the former has understood to the greatest degree that it is history who will judge him, and it will not judge him kindly if he is all about himself. I can tell you of many of the (Western) philosophers throughout (Western) history. I can tell you of many of the (Western) scientists throughout (Western) history. But I cannot tell you who was the wealthiest person in any of these areas, and if history has not recorded this information, it cannot be that important. Granted, we may have transcended politics and pure materialism and arrived in a postmodern era (Ch. 8), but some still aren't able to look past their time on Earth to existence as inherently historical (Ch. 4). Thus, if we take the approach of "give 'til it hurts", we will have some degree of redistributive justice, but given the manner in which a slew of NGOs can do little for countries in need outside of what their donors allow, there are too many strings attached to philanthropy given the extent to which it can be used in exchanges to cancel out the existential guilt that plagues even the wealthiest of individuals, and to make a historical claim on being "good" that one hopes all others will buy into irrespective of past transgressions.

As much as we might like to pillory the rich, however, this does not do anything to promote action. A fervent Marxist can always point to those with millions and billions of dollars and say "what about them?" to avoid committing money to ventures that contain some risk and don't guarantee profit. The idleness (from a justice point of view) of those with a substantial degree of resources, power, and influence can suggest not only that there's nothing a "middle class" individual with a comfortable bourgeois life and not-insubstantial resources *should* do, but also that there's nothing such an individual *can* do.

Taylor speaks of this regarding the criticisms that he exonerated Hitler with his analysis. No, he gave an explanation as to why the reflexive response to World War II of "Hitler" is grossly inadequate, just like the reflexive response of "the rich and powerful" is also grossly inadequate, but is at the same time by design in order for other nations (the winners that wrote history) to shirk any sort of responsibility. We are quick to denounce all those eighteen billion (or whatever astronomical overestimate they use these days) that starved under Mao and Stalin under historical conditions that did not always make for good reading: a backwards agrarian economy with little public resources and technology aside from work, and a well-established hierarchical society of local fiefdoms with historically enslaved peasants. Yet all of the patriotic Union Jack flag-wavers seem to strategically forget that Winston Churchill deliberately prevented surplus food to get to Bengal in 1943, causing millions of Indians to perish. Churchill obviously didn't mind: "I hate Indians. They are a beastly people with a beastly

religion." No doubt he had spent a lot of time reading James Mill's extremely well-researched *History of British India*. Further, all of the Stars and Stripes flag-wavers will strategically forget that Hitler and Henry Ford were bosom chums.

The difficulty then becomes (and this is reflected by the contradictory responses of Western friends and my African friend quoted above) that those with money maintain that the world won't change (appealing to history) so there's no reason to help (unless the uber-rich change their attitude first, of course). Meanwhile, the poor reason that the world *must* change if they are to transcend a life of misery from cradle to grave (Ch. 5), and so they must try even if they get no support from all of the administrators peddling Hernando de Soto's idea that all we need is for free markets to reach the dirt poor so that they can also be "freed" into our brilliant neoliberal system. We may cite the Canadian embassies that supported Canadian mining companies cheerleading the end of apartheid in South Africa but then saying "hang on, you can't take our profits and put them into rebuilding a life for black people in your country, what about our contract?" We may then point to the subsequent efforts to change (sorry, "suggest modifications to") the laws of various African nations that would "bring them in line with Canadian law" (e.g. exploitable by monopoly capitalists pushing out those competitors without capital) and allow the mining companies to maintain the lion's share of their neoliberal ventures exploiting the poor (Butler's Colonial Extractions, I have not read details of the neocolonial exploits of other countries, but I expect little difference). And I will say nothing about the way in which these ventures savage the land and resources of indigenous peoples and leave poisonous tailing ponds and topographical craters in their wake and call it "business". And whenever it is convenient, but definitely before they have to put money into cleaning up their mess, complaints about high tariffs and environmental oversight justify them taking their ball and going to a more exploitable resource commodity with less restrictions, the joke of Corporate Social Responsibility remaining as a useful footnote when needed.

And then we may say of free markets for poor people in poor countries and the criminal Strategic Adjustment Programs that condemned these countries to foolishly buy into debt traps that would enslave them until the year 3000 or when a certain figure decides to slouch toward Jerusalem again "What?? So when you bring your tens of thousands of dollars from working your bourgeois job in your bourgeois country into a world where \$200 is something to cherish, you're going to talk about letting markets decide when you can buy out almost anyone you wanted and force them to starve and / or pay exploitive prices to not starve (there is a passage in *A Grain of Wheat* to this end), and call this 'fair'?" If we let the market decide, then it is always going to decide that those higher up the pyramid will not budge with their money unless they can make profit (Milton Friedman: the biggest threat to freedom is that corporations should have a social obligation other than to make us much money for their shareholders as possible... and then the Chicago Boys are traded to go in and destroy and vestige of socialism left in South America). But for them to make profit, they must be gaining a larger share of resources than all of the workers that actually create that profit.

In other words, for economic activity to be "rational", those higher up on the pyramid must always increase their overall share of economic clout vis-à-vis the workers underneath them. What can be the result except profits to the rich, risk to the poor, and runaway inflation? On principle, a deficit must occur between business owner and the

conglomerate of workers in order for business to be "rational". If one imagines this business to be the only one in the world, then it is easy to see that the only result is inflation and slavery (essentially a throwback to the Divine Right of Kings). If one imagines that all businesses in the world operate according to this principle ("rational choice theory" (Ch. 7)), then how can anyone argue that such an approach is sustainable?

Make Something Up

Glossary

There is postcolonial ethnohistory and there is postcolonial wankage.

Tautology

Postcolonial wankage = "anything that falls outside of postcolonial ethnohistory".

Ouestion

What are the formations of infrastructure, law, culture, and morality inherited by a former colonial state, and how do they affect the present?

Equivalence

Méli-mélo = assemblage madness

Ouivalence

Observing a grain of sand + pushing a paper = parroting Object-Object reactionary ahistory (for whence, then, is agency? (Ch. 5)) = measuring Bruno's Freudian ego

Wordplay

"I don't think I could pull those pants off." But maybe I could. *And then the glare! Hahahaha! Killing!!* You were right, wetywa. I do miss you. A lot.

Wernicke-Korsakov

Street Justice

"You see that house over there? You will never meet him, but he knows you. And he is the one who keeps you safe. He is also the one that makes sure that the kids have shoes on their feet at Christmas. Everyone in this neighbourhood knows that if something happens to you, something happens to them. The police only come here occasionally, like when they are looking for someone. Like my brother.

No Future

Walking: When I was here before, I visited you in prison. Now that you're out here, what are you going to do? How do you live? If you could choose to be anything at all, what would it be? **Slowly, on bicycle**: "A scientist."

Optimism

The picture that I have painted so far may be seen as bleak and pessimistic, but it is reality. The best approach to this reality is as suggested by a lecturer that I came across during my wanderings who said of this unsustainable world careering towards a teleological cliff: "One can either look at this picture with gloom and doom, or one can look at this picture and say 'What an opportunity!'" This is what I have attempted to do

in the following essays. I do not offer anything prescriptive aside from Chapter 7, but from first principles of engineering and development to postcolonial and critical theory to history and economics to a plethora of case studies from around the world I try to construct and present this same reality that maintains that the Hegelian world-historical individual must be a demiurge or at least someone with a Wikipedia page, but through a lens that says "maybe it's not so complicated after all". The underlying assumption is that under capitalism, there has developed in the human population a certain form of "metaphysical schizophrenia" grounded in egoism and anomie, and if this malady can be addressed, perhaps Zizek's claim that "another reality [aside from capitalism] cannot even be envisioned" may be circumvented.

https://thecharnelhouse.org/wp-content/uploads/2018/05/Ernst-Bloch-On-Karl-Marx.pdf

Haunted

There's this one roller coaster.

Does it go upside down?

No, just down and up. Like this.

The word is 'undulates'. So it undulates. That's all? No upside down?

No. Okay, I think I can do it.

[In line]: I'm good at philosophy. Roller coasters, not so much

[In the ride]: It's going to go really fast.

Time will pass. And all we can do is see what will happen.

[As the ride goes up to its apex]: I'm supposed to be afraid, right? Because it's high?

[As the ride falls into its gravity acceleration frame]: Okay, it's just physics. Be the stone.

[During the ride]: I'm holding up hands!

I'm not!

[At the end of the ride]: That was one of the greatest existential experiences I've ever had. That was incredible.

Okay, one more ride. That one.

[There's a mechanical error and they have to run a couple test runs]: So it swings up, and it spins around.

Yes.

I don't want to go on that one.

The other one is scarier!

It goes too high.

And they are doing a mechanical thing. Do you trust that?

What she said.

They do these mechanical runs all the time. They care about our safety.

[Pointing to weird cars spinning around each other]: What about that one?

No. This one. Come on.

But we are still waiting. Why don't we go on that ride, and then we can be ready for this ride when it finishes its mechanical stuff. You are not losing any time because you are waiting anyway.

That one makes me throw up.

Okay.

Just this one.

No, sorry.

Just once. The one you went on is scarier.

Okay, I am going to go on that spinny car ride, and then I will be back.

[On the ride]: Wow, I'm in a weird velocity frame with all of these kids. It's like a movie where I can see the illusion of how I'm actually driving and cars are passing me. I never noticed that before. This is amazing.

Well that was amazing. What about this ride?

Let's go!

No. Not this ride.

What about that ride that you told me about. Right there?

The Vampire? That's scarier.

I will go on that one.

You'll go upside down there also.

I am prepared.

[Dodging under empty barriers for lineups]: Hurry!

I like your style.

[In line]: But this one is scarier than the other one. And you go upside down.

Okay.

We're going on the front.

If you say so.

[Getting strapped in]: You see, this ride stays closer to the ground. If the ride malfunctions and I'm thrown from it, it seems like I can survive. It just goes on a track.

[As the ride goes up to its apex]: Oh my God I hate the front!

So do I!

Then why did you choose this?

FOR YOUR EDUCATION!

Batter up!

[As we drop into the gravitational acceleration frame]: Hmmm... I feel strangely safe on this track

Shriiiiiiiiiiiiek

[Going upside down]: It's like I'm on the acceleration frame relativistically, and the entire world is just turning around me. A change of direction here... more sensory input here... go up... go down... go upside down... if the ride malfunctions, I'll be okay... this is a Daily Teaching from some cool young 13- and 14-year-old dreamers who are surrounded by poverty but still dare to dream.

[After ride]: See, you asked how long... 30 seconds. And 30 seconds later, time passed and things happened. And here we are. How is it over already?

Okay, my mom is here. We really have to go.

What if I meet her?

She'll kick your ass.

I have a way with people.

No. You can't.

[Thinking with the Other side]: Okay. You're right. That's a stupid idea. Which direction are you going?

That way.

Okay, I can walk with you. Or you can walk ahead. I don't know you.

[Thinking that I need to count this game as complete for tonight]: No, I have to go. I'll just walk really fast ahead of you.

Okay.

Thank you, this was amazing! I cannot believe I did this! I met you, gave you my number and you just HAPPENED to text me for the first time to invite me out to this. And you thought it was "too late" and I wouldn't come? You already know me.

Bye.

[At home, anteing up again]: Did that actually happen? Was I there two hours ago? But I could have been in my bedroom doing nothing. But I wasn't. This is fun.

Making Something Up

Montreal. And you?

The Neurotic Engineer: Forging an Identity at the Intersection of Competing Interests

Introduction

It is well-documented that there is an ongoing battle amongst engineers to be compared to doctors and lawyers within the social milieu (Davis, 1997). Although Davis argues about the merits of the *professional* definition of engineering, the establishment (or lack thereof) of such an equivalence is merely an *administrative* one. That is, it merely acknowledges a social custom of providing external criteria that an engineer may (or may not) fit within. This, however, masks a far deeper consideration that strikes at the very heart of the engineer (literally) and motivates this desire for recognition in the first place. The inherent problem is not a social one but rather an *ontological* one, and it is argued that an exploration of the personal relationship between the engineer and society can shed some light on the unique place of the engineer within society, replete with various loyalties to various competing social forces, and the internal struggles that may motivate a certain penchant for a neurotic sense of identity amongst engineers. The breakdown of this inquiry into the identity of the engineer will proceed along two not-independent axes, an *ontological* one—which defines what an engineer *is*, *personally*—and a *teleological* one—which defines what an engineer *should do*.

Ontology and History

So it would seem foolish, would it not, to adjust our lives to the demands of a goal we see from a different angle every day? How could we ever hope to accomplish anything other than galloping neurosis?

-- Hunter S. Thompson (Usher, 2013)

Although engineering has a long history, it is argued that within a western context, the development of the ontological identity of the contemporary engineer began to take shape in the late 19th century with the prioritization of three forces within circles of science, technology, and engineering: i) the rise of positivism as well as its subsequent interpretation by Frederick Taylor as espousing the possibility of applying scientific principles of process optimization to management, and ii) the application of evolutionary theory to human society by Herbert Spencer, and iii) the rise of corporate power in the United States,. The coming together of these three forces in the United States in the early 20th century that set off a battle over the souls of engineers between scientific and corporate interests is well documented by Layton (1971).

It is acknowledged that the ontological momentum for defining the identity of engineers was different in other countries, such as in the United Kingdom, France, and Germany (Downey and Lucena, 2004). Broadly speaking, these have tended to follow the dominant school of philosophy in each country: Locke and Smith and the espousing of the rules governing private property in the UK, Rousseau's social contract theory in France, and Hegelian historicism and the phenomenology of spirit in Germany. Similarly, the American approach towards preferencing private corporations over the state can be interpreted as an amalgamation of the forces of the British school and the forces of the French Revolution's slogan of *liberté*, *égalité*, *fraternité* as espoused in Paine's *Rights of Man*: the prioritization of private property coupled with a deep mistrust of the historical state apparatus (the latter motivated by the same forces as the

War of Independence). Despite these differences of opinion between countries, given the privileged position that the United States occupied at the end of the First and Second World Wars—with Wilson the leading proponent of the establishment of the League of Nations at the end of World War I, and the United States having achieved economic dominance at the end of World War II—coupled with the Cold War and the capitalist-communist dichotomy taking centre stage, it is suggested that the United States maintained the greatest degree of ontological momentum for influencing the identity of the contemporary engineer even in other countries.

To these three underlying social forces, one can add further developments over the past century in parallel to their reinforcement. The first is the deepening of the competing interests of business and science that began at the end of World War II. This was motivated by the observation that many baccalaureate engineers with industry experience were found to be sorely lacking in the theory and problem-solving skills required to address the immediate and dynamic demands that the conflict posed. For example, Director Frederick Terman of the WWII Radio Research Laboratory was forced to recruit physics PhD students in place of electrical engineers, afterwards declaring "never again will electrical engineers be caught short". Agreement within other engineering disciplines led to a revamping of curriculum towards more theory and scientific principles (Auyang, 2004). The second is the advent of the environmental movement with, e.g. the publication of *Silent Spring* in 1962 and other scientificallysupported critical analyses of corporate interests within the engineering field (De Weck et al, 2011). The third is the unfolding of these interests within a broadening and deepening of ethical principles and guidelines accorded to the professional engineer, which again often compete against corporate interests and have involved many uncomfortable debates amongst engineering societies (Vesilind, 2010). The fourth and final one is the almost wholesale implementation of neoliberalism in western countries beginning in the 1980s with Reagan and Thatcher that centre around the (arguably competing) assumptions that the atomized human being places personal freedom above all (Hayek) while being constrained solely to acts that reflect the whims of a rational utility maximizer as espoused by game theory (neoclassical economics) (Van Horn and Mirowski, 2019). In contrast to the previous three developments, this fourth one has generally worked in the interests of corporate power.

If one now considers the consequences of the aforementioned three primary social forces on the identity of the engineer, one can suggest three broad competing interests for what the contemporary engineer embodies (or is led to embody more often than not by a combination of personal reflection, societal expectations, and educational reinforcement): i) possessing privileged scientific and technical knowledge with its underlying rationality and objectivity, and ii) the power to actively intervene to shape society, and iii) corporate loyalty. Into this mix, and generally going against corporate loyalty and engineering practice and its consequences, one can add the development of a new techno-scientific bent and the motivating of a greater conscience and sense of personal and professional responsibility to society and the environment. Finally, a reification of the autonomy of the engineer on the one hand and a positivist bent on the other has been recently reinforced by the dictates of neoclassical economics. Interestingly, this falls in line with Hoover's intervention to stem the tide of progressivism in 1920 via an appeal to reaffirming nationalistic values as implying engineering should follow the dictates of corporate power (Layton, 1971) when

considered from the point of view of Milton Friedman's "radical neoliberalism" that upholding its values was equivalent to defending the nation (Connolly, 2013). From the ontological considerations, one can begin to explore the teleological implications of what role the engineer *should* be led to imagine playing within society and what role the engineer *actually* plays in society, more often than not. This suggests not only an internal struggle to prioritize certain personal and social demands over others when they may be contradictory, but also additional complications if reality does not accord to this vision.

Teleology and Society

In every man, heredity and environment have combined to produce a creature of certain abilities and desires—including a deeply ingrained need to function in such a way that his life will be MEANINGFUL. A man has to BE something; he has to matter.

-- Hunter S. Thompson (Usher, 2013)

The most basic—and one could say pseudo-tautological—reply to the question "what should be the goal of one's life?" would be "to exist." Here it is useful to suggest a spectrum of existence, at one end is what one can refer to as existence-as-survival and at the other is existence-as-being. Existence-as-survival in its crudest from would be an individual in a borderline-vegetative state: the individual continues to exist but cannot really interact with the world or have any sort of agency. One could also consider an individual serving a life sentence in prison with no opportunity for parole. Here, the individual maintains extremely limited agency, but a sufficient amount to *do* even if only within a highly constrained space: he may darn wool socks for the homeless or work on a chain gang to clean up a beach or extend a railway. In both cases he is not only doing in the most basic sense, but doing in such a way that there is some benefit to the rest of the world, even if he cannot interact directly with that world.

One can then define a sense of *being* in terms of transcendence, either of the self or of the world. Transcendence of the world would be like the prisoner making socks: those socks would not be created without that prisoner, though the prisoner could conceivably be replaced by a second prisoner who could also be taught to make socks. One can thus suggest that this level of being-as-transcendence-of-the-world is in some way related to the unique nature of the acts of the individual: if no other individual in the world knew how to make socks and socks were of critical value, then this prisoner would be *irreplaceable* and his influence on the world would be great. Transcendence of the self can be summarized by Rorty's interpretation that Freud

suggested that we praise ourselves by weaving idiosyncratic narratives — case histories, as it were — of our success in self-creation, our ability to break free from an idiosyncratic past. He suggests that we condemn ourselves for failure to break free from the past rather than for failure to live up to universal standards (Rorty, 1989).

It is possible now to situate the engineer within this narrative. The possession of specialized technical knowledge and the Spencerian conviction that she has the power

to create a recognizable change in society provides a powerful compulsion towards a sense of a heightened opportunity for transcendence of the self and the world, respectively. In addition, with the increasing sense that greater wealth implies greater power both because of external opinions of affluence and the greater opportunity that having wealth accords especially with the added influence of neoliberalism prioritizing autonomy and market forces, and the three foundational forces on the engineer alluded to in the previous section puts the engineer in good stead. However, the added constraints of ethical considerations towards society and the environment may temper her ability to pursue this opportunity towards transcendence to its fullest degree, while a greater devotion to the scientific over the business side of engineering does not tend to pay as much if money is accorded high value.

Doctors and Lawyers

As I said, to put our faith in tangible goals would seem to be, at best, unwise. So we do not strive to be firemen, we do not strive to be bankers, nor policemen, nor doctors. WE STRIVE TO BE OURSELVES.

-- Hunter S. Thompson (Usher, 2013)

From this theoretical consideration of competing interests on the engineer, one can now consider the practical difficulties an engineer may face once she begins to practice and on this note, the comparison to doctors and lawyers is instructive. Since what we do or create in the phenomenal world is the only means by which others can recognize and judge our powers (and hence our level of transcendence), the *subject-object relationship* is crucial; that is, our being tied or traced back somehow to the products we create. Its rupture leads to Marx's notion of alienation of labour. In contrast to a doctor who may speak of "my patient" or a lawyer who may speak of "my client" or "my case", engineering tends to be a collaborative effort, especially within the corporate world. Thus, if a typical civil engineer spoke of "my building", he may have contributed to the façade, or the foundations, or even the geotechnical analysis or how to set up the cranes, the latter two not even remaining as a component of the final building.

Further, those who enjoy this building may thank the corporation for its creation, while the engineer gets little external recognition. This is in contrast to the lawyer who is recognized by his client for winning his case, or the doctor recognized by her patient for her timely intervention. Thus, in the case of the lawyer and doctor, there is a direct connection to the transcendence-in-the-world that he or she is responsible for. In fact, Coeckelbergh suggests that engineers may feel a sense of *double* alienation, first as a designer removed from created products, and second as a consumer removed from the design of consumed products. Although the latter is experienced by most, the engineer is more aware that such a production process exists and what it may consist of, while doctors and lawyers tend not to create the types of products that are bought and sold. The very nature of this one-to-one correspondence between doctors and lawyers implies that they tend to inherently have both greater autonomy and a lack of need for managerial oversight (both additionally valorized by contemporary society via its neoliberalist bent) or collaboration beyond a very intimate circle (e.g. a surgery or legal team). This is in contrast to many engineers who may contribute only small and specific (but crucial) components to a large team overseen by administrators, effectively

anonymizing them and reducing their sense of agency, thereby creating a feeling of replaceability.

The way in which engineers are more likely to gain ownership over their products or at least to be able to represent these products is by rising in the engineering ranks of the corporate world. This is thus an extra incentive towards corporate loyalty, and if one prioritizes external recognition through corporate loyalty one may have difficult decisions to make regarding ethical responsibilities and commitments to society and the environment in case where the two are at odds with each other. Because doctors and lawyers seldom have degrees of separation between themselves and their work, ethical commitments must be taken far more seriously and abided by: there is far less leeway to be able to balance personal and social interests for doctors and lawyers even if the personal desire to do so would exist. An increase in focus on the scientific side of engineering can also create tension not only with commitments to business and the outward prestige that having money entails (as there tends to be less money in the sciences than in the corporate world), but also in that engineers that are drawn towards working in more theoretical fields may find themselves at the bottom of a pecking order that prioritizes the theoreticians and feel that they are not getting the recognition they deserve (Layton, 1971).

The very nature of engineering further motivates a difference between doctors and lawyers in that other humans tend to be the "objects" that doctors and lawyers "add value" to by curing an ailment or winning a case. Engineers, on the other hand, create objects through highly technical processes and are often educated in programs that fail to balance the focus on objective scientism with a sense of social engagement that would allow for the contextualization of their work and their projects (Vesilind, 2010). In this sense, the engineer as possessing specialized knowledge and able to objectively assess and attempt to improve social needs in a positivist Spencerian manner merely plays to a central strength. Such an approach is also in keeping with the positivist nature of neoclassical economics and the assumptions of humans as rational utility maximizers and is further reflected in the normative ethics of engineering codes and the tendency of engineers to a "technical systems approach" to ethics that relies on a calculable consequentialist interpretation of future risk (Bowen, 2008), contributing to the stereotype of engineers as ultrarational, calculating, unemotional robots.

The previous analysis has attempted to situate the engineering at the centre of many competing interests, and one could say *uniquely* so in that these conflicts of interest tend not to arise in doctors and lawyers to nearly the same degree, and yet as a *profession*, engineers are held to externally-imposed constraints and codes of conduct that most occupations are not. If one then takes Hunter S. Thompson's advice at face value, then it would appear that "neurotic" is a descriptor that would have a greater propensity to arise in engineering than in most other lines of work given the many angles that the profession or even a single decision, motive, interest, or value may be seen from—especially considering the importance of meaning as an inherent priority in an engineer's conduct. What, then (if anything), is to be done?

The Global Engineer

The answer— and, in a sense, the tragedy of life— is that we seek to understand the goal and not the man. We set up a goal which demands of us certain things: and we do these things. We adjust to the demands of a concept which CANNOT be valid.

-- Hunter S. Thompson (Usher, 2013)

The simplest answer is, of course, that nothing (substantial) should be done. Because of the place that engineers occupy in society, there is a decent case to be made for this. Unlike doctors and lawyers who are largely employed to maintain a state of affairs (public health on the one hand, and the coherence and preservation of a legal framework for society on the other hand), engineers are supposed to *advance* the current state of affairs, e.g. "natural scientists discover what was not known, engineers create what did not exist" (Auyang, 2004). Deciding on which direction society should go forward is indeed an extremely difficult task composed of many variables and fraught with many risks. Rather than looking at the situation the engineer finds herself in as tragic, one may simply suggest that with great power comes great responsibility, and whether the legacy-ego of the individual engineer is satisfied or not, those employed within the field of engineering should bask in the roles that they have undertaken for the betterment of society. Moreover, codes of engineering ethics state the importance that the engineer continue to advance her knowledge, aptitude, and proficiency (Vesilind, 2010). To do otherwise is to become obsolete in a rapidly changing world. Thus, the engineer who pursues her craft to its fullest is by no means a static individual pursuant to a life of rote perpetuity. Further to this, one may argue that for engineers to worry about things other than their craft and to try to reform themselves toward ends outside of their profession threatens the extent to which the built environment can advance efficiently for the benefit of society at large.

To the final point, there is an important question discussed at length by Stein (2001), namely "efficiency for whom?" and "to what end?" The historically reinforced entrenchment of corporate power in the realm of engineering would suggest to a certain extent that the ends and efficiencies of a lot of engineering projects are in the interests of corporations. This is not necessarily saying that they are not beneficial to society as well, but rather that an uncritical acceptance of the validity of engineering pursuits toward whatever aim they set for themselves may be dangerous and have unintended (or intended but malicious) consequences. Moreover, the very suggestion that engineers must be wary of the potential for ethical impasses when they pursue many of these goals (and the numerous concrete examples of haranguing amongst engineering societies on this score and questionable outcomes of projects) in contrast to e.g. doctors suggest that many of these goals may indeed be at odds with the interests of society.

A need for a critical analysis of engineering outcomes is especially true when one looks at the situation from a global, geopolitical perspective within the current neoliberal reality. As Wade (2010) makes clear, the unquestionable winners of neoliberalism have been the wealthy and the well-connected, with a steep increase in the share of wealth by the top income earners since 1978, and the lowering of social mobility amongst those outside of this clique; in fact the most fervent adopters of neoliberal ideals (the United States and the United Kingdom) have the lowest rates of intergenerational mobility, with the well-to-do largely assured of their progeny's place in good schools and good

jobs, and the not so well-to-do having their struggle to emancipate themselves from the lower echelons of society compounded. A strong case can be made, then, that it would be unwise to maintain "business as usual" when it comes to the cozy relationship shared between the corporate and engineering worlds and the specific directions that engineers may be motivated to take (e.g. climbing the corporate ladder) if one makes creating greater opportunities for a greater number of people within society an important goal.

From a global perspective, one can add the questionable motifs symbolized by and motivations for various engineering pursuits, not least the extent to which the militaryindustrial-academic complex attempts to recruit engineers to "defense" (Vesilind, 2010), an additional nod to upholding Friedman's radical neoliberalism. Lim (2012) argues that the dominance of modernist architecture on urban skylines and the further emulation of "bigger is better" in cities like Dubai, Taipei, and Kuala Lumpur only serves to reinforce an Orientalist conception of the world and further the claims for the universality of western ideas, including those pertaining to neoliberalism (Rapley, 2002). The increasing leverage of pseudo-governmental international organizations like the World Bank and the IMF, which tend to make decisions that promote these western economic interests (e.g. Stiglitz, 2002) only adds to the suggestion that global engineering practice inherently serves hegemonic western-serving interests, with claims towards reducing poverty able to be questioned (Schatz, 1996, Wade, 2010). Lucena et al (2010) mentions the example of the El Copan Dam built in Honduras. Despite fervent local resistance from Hondurans including local engineers who suggested that the project was too expensive (approximately 50% of its annual budget) and too risky, and suggested an alternative where five smaller dams could be strategically placed around the country with better results and less money, the World Bank went ahead with the project especially touting the symbolic glory in its size relative to other dams around the world. Not only did the dam not live up to promises, but the Honduran economy was on the hook for tens of millions of dollars to shore up shoddy craftmanship even before the dam could be filled, riddling Honduras with debt. In addition to the apparent gaffes on the part of construction and implementation, for various geopolitical interests the timing could not have been better. Despite the fact that the El Copan Dam idea had been floated since the 1960s (Lucena et al, 2010), it was rushed through in 1980 just at the point when anti-imperialist resistance in Central America posed a serious threat to American interests in the region. With Honduras now knee-deep in debt, they would have little opportunity to resist American overtures to treat their country as a military base to support the Contras in Nicaragua and pro-American governments in El Salvador and Guatemala (e.g. Binns, 2000).

Identity and Personhood

But don't misunderstand me. I don't mean that we can't BE firemen, bankers, or doctors—but that we must make the goal conform to the individual, rather than make the individual conform to the goal.

-- Hunter S. Thompson (Usher, 2013)

If it is agreed that doing nothing is not a viable option, then one returns to the question of what can be done. To couch a way forward in terms of transcendence is useful, but

one can also consider Foucault's treatment of Kant's Aufklärung ("exit" or "way out") as a conception of enlightenment (Foucault, 1997). The idea is that to become enlightened is to grow beyond a state of immaturity where our will compels us to substitute the authority of others for our own use of reason. Being a postmodernist and interested in specific relations in contrast to Kant's universality, Foucault's suggests that this Aufklärung is achieved in a contemporary setting by reflecting on personal limits and the means to go beyond them, rather than by achieving a collective transcendence of society (embodied in Hegel's interpretation). Schopenhauer, whose philosophy was intrinsically linked to Kant's, maintained a similar idea of personal will and enslavement, stating that thinking (in contrast to reading and learning) is the mind following its own natural impulse (Schopenhauer, 2000). The idea of enlightenment via thinking then necessitates a certain sense of *intuition*: a means to think about known or presented ideas in a way that defies a mere causal recombination but instead creates something new that goes beyond the limits of one's present constraints (Bergson, 1974). This general idea of focusing on a boundary between the known and the unknown within the individual's personal reality, in fact, comes full-circle back to Hunter S. Thompson and his notion of *edgework*: a metaphysical pushing on the edges of one's reality in order to expand its scope (Winston, 2014). It also furthers engineering towards a transformation from a top-down (authoritative, rational) to a bottom-up (individual, pragmatic) process (Coeckelbergh, 2010).

A way forward therefore presents itself around the common theme of expanding one's boundaries, but not in a linear fashion that is implied by engineers being coaxed towards and up the corporate ladder, as this would fail to go beyond adherence to an authoritative system and simply be a mere repositioning of oneself within one's known world replete with unchanged external constraints. Instead, a reimagining of one's place within one's profession and society in general is called for. It is only in this manner that one is able to make the goal conform to the individual rather than the individual conform to the goal. In this way also, there is a move towards *irreplaceability* and a reifying of greater meaning in the subject-object relationship to engineering products by being recognized for particular achievements since few others can contribute them (i.e. either they are still in an immature state or their mature state embodies different strenths and weakenesses). In this way, maturation in the Kantian sense implies maturation of *identity* and an exit from a replaceable and therefore anonymized role in the engineer's power to advance society. The three fundamental forces of techno-scientific prowess, Spencerian power, and corporate loyalty can then (in theory) be synchronized to a far greater extent as the first two are put towards meaningful contributions and the third is either inverted (since, in theory, the engineer will now have leverage over the corporation, as it would not want to let an irreplaceable individual go) or dismissed (as the emergence of greater responsibility to society and the environment coupled with a greater probability of access to sufficient financial resources implies that one can more often refuse an offer without imperiling oneself (Vesilind, 2010)).

To put this maturation into practice to its maximum effect, it would be strategic to consider which attributes of the engineer are most ingrained and to focus on challenging the engineer to rethink his uncritical acceptance of these underlying principles. Two in particular have become central to critical assessments of engineering education: approaches to problem solving and ethics. Lucena, et al (2010) note that

within the education system, problem solving, design, and implementation tends to be taught in a procedural manner, often with hundreds of repetitive examples that employ the same general approach. In addition, they suggest that this method of instruction reinforces a notion that there is a "right" and a "wrong" way to do things, the right way being that which is taught, and the wrong way being any another approach. Here one sees a reflection of what Kant would consider an immature mind, one that does not think for itself or push its boundaries, but one whose will is determined by authority in situations where reason is called for (i.e. to solve problems). They suggest that one way to overcome this is to practice greater critical self-reflection on the one hand (which gives one greater awareness of existing constraints on oneself) and practice contextual listening on the other hand, which prioritizes alterity and a means to try to get out from one's own constraints by approximating that of the other. Downey et al (2006) suggest that exposing students to individuals that "define projects differently" can also help to break students out of a tendency to make appeals to (personally established) authority when attempting to define or solve problems.

For a more robust sense of ethics, Bowen (2008) suggests that an engineer should work towards developing an *ethos* that underlies an active moral system that is consulted as a way of being, rather than taking the more calculable consequentialist approach common to engineers. Instead of approaching situations in a reactive manner asking "what are the risks and the consequences of each possible option for action?" (and thereby constraining oneself to calculating from what is already known in one's own world), he suggests that engineers should be proactive and ask instead something more along the lines of "which of these options is most in keeping with my moral principles?" To motivate a means of thinking about ethos, he suggests possible options of Aristotelian virtue ("what is the most virtuous action to take?"), Kant's universalist notion of duty ("which action best preserves my sense of duty?"), Buber's "I and Thou" approach ("what is the best way to act when I fully consider the human being (or object) that I am interacting with as something I care about?"), and Ricoeur's ethics of compassion and generosity ("here I am to be of service, how best can I help?"). Coeckelbergh (2006) argues for a renewed focus on developing one's moral imagination that would seek to place greater responsibility on the engineer while reducing the system of authoritative constraints. He maintains that regulation simply contributes to moral apathy and a lack of commitment to a given decision as it will more closely resemble an optimization problem to be solved given certain constraints (the consequentialist approach). In contrast, approaching ethical decisions from the point of goal setting allows an engineer to own a decision and builds trust in that engineer's ability to employ his agency towards positive ends, and perhaps creatively so. The approaches of Bowen and Coeckelbergh are both in keeping with the maturation-transcendence principle because they necessitate active, creative engagement in ethical problem solving based on the principles of one's own identity rather than through external calculations that could be replicated by anyone else given similar initial conditions.

Conclusion

This article makes two claims: 1) the contemporary engineer can be seen as "neurotic" in the sense of having personal and social forces constantly compete for her sense of agency and her value systems, and 2) the engineer can mediate her relation to these forces and so help to quell the resultant internal discord. Three main forces were

identified that manifested themselves in engineering in the United States around the turn of the 20th century: privileged techno-scientific knowledge, Spencerian empowerment to change society, and corporate loyalty. To these were added four other factors that developed over the course of the 20th century: increased competition between the roles of "business engineer" and "engineering scientist", the rise of environmentalism, the broadening of engineering ethical codes, and the socioeconomic forces of neoliberalism. After considering the potential consequences and contradictions of these factors on the engineer in practice, it was argued that maintaining the status quo and thus a penchant for such "neurosis" amongst engineers implies the potential for the development or continuation of many personal and social difficulties.

An alternative approach to the status quo was put forward by reimagining identity and selfhood as necessitating the engineer to take an active role in transcending a dependence on authority by edgework, defined as a drive to push against the boundaries of one's reality with the goal of achieving a new and more mature state of being. Finally, it was suggested that in order to maximize this propensity for self-transcendence, particular aim should be taken to destabilize two of the most reinforced modes of being of the engineer: her approach to solving problems and her approach to ethics; alternative strategies were given on both accounts complete with elucidations of how they reinforced this maturation of identity via edgework.

It is hoped that this article and its focus on the philosophical principles of selfhood and its consequences will provide a means to critically analyze the notions of identity and place of the engineer within his profession and society at large, and challenge engineers and society to reimagine their mutual relationship to positive effect.

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A New Religion

"Secular" has two referents within this composition. The term is borrowed from Kojin Karatani's *Architecture as Metaphor* where he refers to the "secular architect" as one who is not bound up in the "will to architecture" but instead pursues goals that are contingent rather than formalized within a process that is designed to approximately achieve an idealized point. This will be returned to in the next chapter. Here, "secular" is related to the cultural aspect of faith in development as suggested by Gilbert Rist in *The History of Development: From Western Origins to Global Faith*. In this sense, secularity relates to resistance to a *hegemonic historical process* rather than to a *dominant mindset grounded in physicality*, though these two aspects of faith are by no means disjoint. Two questions then immediately arise, one in the form of "faith in development in what sense?" and the other about "why resist?" These two questions will be central to the current investigation.

The Making of Hegemony

It is not the place to recount Gilbert Rist's argument entirely, but several major historical figures and dominant metaphysical narratives will suffice to provide an overview of the general argument. They can subsequently be partitioned into three major categories: i) the metaphysical, ii) the economic, and iii) the geopolitical, which can each then be subdivided further temporally.

Metaphysical Hegemony

The first important metaphysical stage is the Aristotelian-Augustinian conception of the development metaphor and its relation to historical cycles. Rist describes the contribution of Aristotle as the development of the natural sciences. For Aristotle, nature is grounded in physics and generally relates to inner principles of change and the means by which these changes occur (in contrast to metaphysics, which relates to causes outside the physical world). The four potential sources of cause are material (what something is made of), formal (shape or other defining characteristics), efficient cause (the antecedent that brought the thing about in the first place), and final cause (the purpose of the thing). The manner in which "development" is related to biology is key to Rist and to Aristotle, as implicit within it is a metaphor to specific and necessary stages of biological growth (conception, growth, maturation, death). This is related to the potentiality for change of a given entity, whether it is according to nature or contrary to nature. For example, a ball rolling down a hill continue to roll according to nature, but to stop it would be against its nature. It is possible to see how "faith in development" is helped by a purposive notion of inherent final cause, and that this cause occurs according to nature, and should not be slowed.

The problem with the Aristotelian conception of development as biological is that growth in this sense is plural (i.e. there are many such beings that develop along unique trajectories) and necessitates death (the eventual non-being of said thing). The selective reinterpretation of Aristotle's notion of The One by Augustine within the doctrines of the Christian church quashes both of these difficulties. For Augustine, history is conceived entirely as the Earthly City (paganism) versus the City of God. The true

Christian is the individual who dedicates himself to the City of God by shunning earthly pleasures and devoting himself entirely to the eternal truths of God. In this manner, history not only becomes monolithic and linear (in contrast to the plurality of biological development) but also precludes death and an end (except as the realization of the Christian ideal). It is within this context that it is possible to conceive of the potential for development to accede to a hegemonically dominant narrative.

Yet faith alone does not underlie the hegemony of development, and the second component, namely the triumph of reason (and its consequences for science) within Western discourse also came about through Aristotle, though in such a circular manner that it would be over a millennium later that this second leap would be made. As mentioned, Augustine's reading of Aristotle was an extremely narrow one, citing only Aristotle's notion of the One over the Many (which actually corresponded to the single ideal Form over its many approximations within reality) as justifying a monotheistic interpretation of reality and history. During the Middle Ages, much of the use of Reason was suppressed, with Faith reigning superior via Augustine's justification: since Reason was earthly, true Christians could never place it above Faith (and commitment to God).

The banning of pre-Christian philosophy (aside from a few Aristotelian passages) and the general illiteracy of the population meant that reason disappeared, and reappeared via the spread of Islam. Ancient Greek texts were rediscovered upon the conquest of European libraries and translated into Arabic, ushering the Islamic Golden Age. The retaking of Muslim lands during the Crusades, and the subsequent work of "Doctor Universalis" Albertus Magnus and his pupil Thomas Aquinas brought reason and scientific inquiry back into Western civilization, largely via Aristotle's natural sciences. The Scientific Revolution ushered in by individuals like Copernicus, Galileo, and Francis Bacon then provided the impetus for Reason to by placed above Faith via Rene Descartes. Faith as subordinate to Reason (but still entirely valid) would be necessary for a science-based narrative like development to dominate an Augustinian conception of a single linear conception of history.

The final metaphysical leap that made development as hegemony possible was the historicism of Hegel and its materialist interpretation by Marx, and the rise of positivism beginning with Comte. On the one hand, Hegel took the Augustinian notion of history as the City of God versus the Earthly City, and made history an object separate from humanity via dialecticism. According to Hegel, history followed its own dialectical path as Spirit. The historical aspects of reality (theses) would be reach a point of insurmountable tension (antithesis), and a new reality that "improved" on previous conditions (synthesis) would result. From this, and in contrast to Augustine, he posited an "end of history" within reality wherein all such theses had been overcome by the force of history, and Spirit would have realized itself. Marx's interpretation of Hegel was to suggest a materialistic interpretation, namely that instead of theses being overcome through discourse (Subject-Subject), they were to be overcome through work (Subject-Object), with the result that history not only became Other to humanity (via Hegel) but that such a process could be analyzed and demonstrated scientifically through what is created and thus can be judged within the world.

Paired with the rise of history outside of humanity and following its own logic, there arose a philosophy called "positivism" as the brainchild of the French philosopher Auguste Comte, which suggested that not just the physical world, but all aspects of humanity could be studied and analyzed scientifically and mathematically. It is thus from Comte that the social sciences such as sociology and political science could be realized as disciplines that could be grounded in empiricism. Two subsequent developments of Comte's positivism completes the metaphysical category. The first is the work of the social evolutionist Herbert Spencer (a contemporary to Charles Darwin), who suggested that society itself followed natural evolutionary process that could be scientifically analyzed and shaped. The second is Frederick Taylor, who conceived of the discipline of scientific management (known as Taylorism). Taylorism would be taken up by Henry Ford as the basis of scientific optimization of mass production via management within capitalism, while also being enthusiastically upheld as a cornerstone of social policy by Lenin, and thus a cornerstone of the Soviet Union.

The metaphysical justification for the legitimacy of development as a dominant discourse in the twentieth is therefore clear. First, there is the biological notion of development wherein something proceeds along a natural path of growth and becoming and a purposive final cause as the reason for its existence (Aristotle). Second, one has a conception of history as following a single linear path (Augustine), and as a rational process outside of humanity acceding to an ideal point somewhere in the future once all of its inherent difficulties become resolved (Hegel), allowing one to prioritize the single discourse of development towards a global cornucopian endpoint. Third, positivism provides the means by which interpretations of disciplines considered up until that time as non-empirical could be analyzed via scientific methods, thereby legitimizing scientific models and data-driven investigations of the means, ends, and application of development within the world. Finally, Spencer's interpretation of positivism maintains that society also accords to evolutionary principles while Taylorism, as a cornerstone of both American capitalism and Soviet communism, suggests that methods can appeal to greater managerial oversight predicated on datadriven investigations, whichever side of the Cold War one situates oneself. In this way, a combination of the use of "esoteric mathematics and a hybrid experimental logic that seems deductive (but is in fact an instance of the 'fallacy of affirming the antecedent')" (Goldman, 2004) places development on a seemingly unchallengeable footing reserved for religious doctrine, as it is not verifiable externally (i.e. outside of its assumptions).

Economic and Geopolitical Hegemony

With an understanding of the metaphysical preconditions for development as faith, the economic and geopolitical realities of society necessitate the *form* that it has taken, in contrast to some other form. The economic theory of markets from Adam Smith to Keynes in the former case, and colonialism up until World War II provide the basis for the birth of development in 1949 via Harry Truman's Point Four.

Briefly, Keynes contribution to the advent of development theory arose due to the manner in which the Great Depression was the first realized event that challenged the idea that a non-interventionist market economy (predicated on Adam Smith's laissezfaire notion of market capitalism) Before this, economic theories were more concerned with the details of how such economies would function and could be assessed. Smith,

for example, suggested that the main reason for government intervention was to prevent anti-competitive behaviour via the establishment of monopolies and oligopolies and price-fixing, as it constricted market freedom by artificial boundary conditions on the laws of supply and demand. Say's contribution was to suggest that restrictions on market goods and market conditions (e.g. tariffs and rules governing business) should be reduced and / or lifted completely whenever possible. Importantly, John Stuart Mill, (in accordance with an idealized utilitarian reality), suggested that achieving an ideal stationary point of a market economy, wherein populations and capital stock are maintained at a certain level was not only possible but necessary. According to Mill, it is only so-called "backwards" countries that require increased production as the reality he observed was that capital accumulation allowed some to make fortunes while condemning a greater population to a life of "drudgery and imprisonment". Such self-interest should be deemed immoral as it went against his greatest happiness principle.

The advent of the Great Depression brought with it the realization that supply-side economics had its faults. Although market economists since Adam Smith suggested that oversupply would reduce prices (and convince more consumers to make purchases) and undersupply would increase prices (reducing purchases), the Great Depression demonstrated a reality where the reaction to oversupply was not to reduce prices, but to reduce costs by laying off workers. The result would mean not only that prices would not go down, but that more workers would have less money to make purchases, creating a positive feedback loop that could perpetuate indefinitely. This had two consequences for post-war capitalist policy, the first being that state intervention was now deemed necessary when an economy was in a recession, and that economic growth was the answer to any conceivable economic situation (i.e. either it is already growing due to demand being met, or it state intervention is needed to make it grow again). Both the principles of state intervention in the economy and the necessity of growth are hallmarks of development policy.

Although Keynesianism seems to suggest that some intervention may be required and indefinite growth is expected in one's own economy, it still leaves out justification for Truman's fourth point about intervening in other economies. Such an idea was enacted on the principles of colonialism, but took into account the geopolitical reality at the end of World War II.

Because of the legacy of colonialism, the idea of intervening in countries of so-called "backwards" countries was not new. However, during the colonial period, colonial powers were in positions of dominance over their former colonies. By the end of the Second World War, all of Europe was destroyed and the United States not the only country with money, but also had a limited colonial footprint. On the one hand, this meant that the United States could largely dictate economic policies, while on the other hand it was in the best interest of the United States to further disempower European countries by convincing them to repeal their colonial control. Further, the publication of the Universal Declaration of Human Rights in December of 1948 gave further impetus for the independence of former colonies. Seen in this light, Truman's suggestion of developing "underdeveloped" countries satisfied several goals of the United States. First, it provided investment opportunities for its excess capital in raw materials—since this was largely what former colonies had to offer, having had the development of their economies suppressed under colonialism—and did so with the potential of extremely

high returns due to the low costs of operation and labour in such countries. Second, it broke up colonial monopolies on said goods largely enjoyed until that point by European competitors. Third, it provided cheap materials with which to rebuild Europe under the Marshall plan, since these had to come from somewhere. Fourth, it gave the United States a head start on any ensuing Cold War scramble for global influence vis-àvis the Soviet Union while the latter was still reeling from the heavy cost of the War.

A description of the preconditions of development as global faith is thus complete. One can conceive of the existence of *some* single linear historical narrative based around the primacy of science that could be upheld with religious zeal once all of the metaphysical preconditions were achieved by the early twentieth century. Moreover, the basis of Leninism of Marxian dialectics implies that the Soviet Union would have been directly beholden to Marx's materialistic version of historicism. Although overt appeals to Hegelianism within capitalist theory are rare (Francis Fukuyama's *The End of History* and the Last Man being one of the most prominent examples), it is argued that both classical (e.g. via Adam Smith's invisible hand and John Stuart Mill's notion of an inevitable stationary ideal) and Keynesian economics (via a combination of Keynesian business cycles and indefinite growth) appeal to historical necessity. The final cue, that of Taylorism, could be considered to have been taken up by both American capitalism via Henry Ford and the Soviet Union through Lenin by the end of World War I. The form that this historical narrative took can be predicated on the socio-political reality at the time of its conception shortly after the end of World War II. Keynesianism was the dominant form of capitalist economics and the Soviet Union was attempting to develop at a frenetic pace due to Stalin's proposition that it was well-behind Western countries having missed out on the Industrial Revolution, and must "make up that time in ten years or perish". Thus, on both sides of the Cold War, state intervention and growth were economically paramount. Meanwhile, both the United States and the Soviet Union had interests in exerting their influence over developing countries for a number of reasons immediately following World War II. The opportunity to do so was provided by their former colonizers having to relinquish control due on the one hand to the devastation they faced at home at the end of World War II, and on the other hand to a push from the newly-formed United Nations to grant greater (socio-political but not economic) autonomy to human beings.

The Implementation of Development

Forms of socialist struggle and some subsequent development backed by the Soviet Union and, later, China were implemented in several countries, such as in Vietnam. Others were part of the non-aligned movement, and looked to develop autonomously without taking sides. These included Nehru's India, Nyerere's Tanzania, Nasser's Egypt, and Sukarno's Indonesia. However, many countries had little choice but to ally themselves in some form with American capitalism in order to secure capital either by direct assistance from the United States or through international financial institutions such as the World Bank and the International Monetary Fund. These two institutions had originally been set up at the Bretton Woods Conference in 1944 to make capital available for developed countries during the post-WWII rebuild and to provide excess capital for any Keynesian stimulus that might be required in the future to prevent a second Depression. As with a standard credit system, member countries would pay into

the bank during Keynesian boom cycles, and withdraw money during any Keynesian bust cycles. However, as Europe got back on its feet and interest shifted to Truman's development program, the World Bank and IMF increasingly provided loans to developing countries to facilitate their development. With the election of Margaret Thatcher in the United Kingdom in 1979 and Ronald Reagan in the United States in 1981, and the influence of the Soviet Union steadily declining, most developing countries had little choice but to embrace market capitalism systems or risk being ostracized from capital being made available through loans and / or from the larger global community via Western sanctions. Indeed, it was in 1992 after the break-up of the Soviet Union and the ascendancy of Western liberal democracy and capitalism that Francis Fukuyama declared that humanity had reached the end of history via a consensus around the tenets of Western liberalism and faith in a monolithic conception of development can be said to have reached its zenith. Thus, it is development under the guise of capitalism that is specifically of interest.

Rise to the Zenith

The implementation and subsequent modifications of development theory and policy went through a number of progressions between Truman's Point Four and Fukuyama's declaration. These were based on a combination of changes in macroeconomics, geopolitics, and reflections on the consequences of implementation. Rist maintains that there were two features common to all of the public declaration that ushered in changes in policy, namely overconfident declarations of a vastly better future world couched in messianic language of benevolence, and a lack of imagination beyond—or criticisms of—the central tenets of development faith as described previously. That is, policy and implementation continued to appeal to (i) the necessity of capitalistic economic structures legitimized by mathematical and positivist analysis, (ii) a paternal-infantile power asymmetry inherited from colonialism, (iii) the blaming of setbacks and faults on specific models, theories, and assumptions, and (iv) improvements predominantly in the form of more data and better management. Such a reality reflects attitudes similar to those encapsulated by religious fervor, i.e. the untouchability of the core ideology, the propensity to make grandiose predictions about the future, and the explaining away of difficulties and contradictions within reality through appeals to a more nuanced interpretation of scripture, modifications to its methods of administration, and a renewed zeal and commitment to the cause.

Of these progressions in development over a span of just under half a century, just three will be touched on briefly here. The first was the release of American economist Walt Whitman Rostow's *Stages of Economic Growth* in 1960, former American Secretary of Defense Robert McNamara's World Bank Presidency beginning in 1968, and the structural adjustment policies of the 1980s that culminated in the English economist John Williamson coining the term "Washington Consensus" in 1989.

For the purposes of the present argument, the importance of Rostow's treatise is less about its repercussions in development implementation, and more about its effect on development ideology. He suggested that there were five stages of growth that every society must pass through (though each is of varying length depending on conditions): (i) the traditional hunter-gatherer society, (ii) "preconditions for take-off", suggested by increased management, commercialization, and demand for raw materials that goes

beyond subsistence, (iii) "take-off", when urbanization and industrialization occur, (iv) "the drive to maturity" characterized by diversification of industry and large investments in social and transportation infrastructure, and (v) an age of mass consumption. A sixth phase beyond mass consumption, entitled "the search for quality" was added in 1971, in part due to the difficulties implied by an ontological conception of "man as mass consumer".

Although Rostow was an economist and based his model on economic liberalism, it was a natural outcome of the rise of structural economics and anthropology . The "three-sector theory" (primary, secondary, tertiary) of economics had been suggested by Allan Fisher in 1939, had been expanded upon a year by Colin Clark in *Conditions of Economic Progress*, and further developed in Jean Fourastié's *The Great Hope of the Twentieth Century* published in 1949, with the addition of a quaternary sector suggested about twenty years later. On the other hand, cultural anthropology had progressed from Lévy-Bruhl's primitive-modern mind proposed in 1910 in *How Natives Think* to Evans-Pritchard's applications of Spencer's structural-functionalist theories of modern society to "primitive" societies, to Levi-Strauss's notion that the "primitive mind" contains functional attributes and attitudes that are common to all human beings (in contrast to Lévy-Bruhl's dichotomy). Thus, a Rostow's theory can be interpreted as a structuralist intersection of the "natural" progression of society and economics.

The effect of Rostow's theory (and the entire structuralist framework of the post-War period) was to provide both the justification for the hegemonic conception that development consisted of helping other countries to "catch up" to the West, and a quantitative means of measuring the economic progress and distance from modernity. It further entrenched the single linear model of the evolution of social reality from "traditional and backwards" to "modern and developed".

McNamara's tenure as President of the World Bank is notable for its shift in policy from a general notion of "development" (i.e. catch-up) to specific emphasis on *poverty*. This had two major effects on development theory. One is that it underscored development as addressing a *lack*, thereby re-entrenching the traditional, backwards, and infantile characterization of the underdeveloped nations and the benevolence inherent in Western countries trying to address it, and the other is that it refocused development policies on the microeconomic goals suggested by trying to reach the *most* lacking. The consequences were thus that development was no longer collaborative, since emphasis was placed on what was missing rather than what was present and thereby *necessitated* intervention to reach and evaluate such individuals, and it re-energized a technoscientific scramble for data and solutions.

The paradigmatic shift to neoliberalism as a solution to the stagflation crisis of the 1970s due to the loss of post-War boom momentum and two OPEC oil shocks was announced by the elections of open market acolytes Margaret Thatcher and Ronald Reagan in the United Kingdom and United States respectively. It rested on the neoclassical economics of the Chicago School of Economics, which suggested that the omniscient, objective market would work everything out for the better so long as the State only intervened to keep it functioning at maximum capacity, coupled with Friedrich Hayek's appeals to personal freedom as the most sacred ontological characteristic of humanity. The result was a shift in Western economics to an extreme form of laissez-faire capitalism. The

effect on development was a set of ultimatums levied on the Global South (summarized by Williamson's "Washington Consensus") that they had to open up their economies to competition completely via the removal of market barriers and privatization of public goods or be denied access to capital and (within geopolitical foreign policy underscored by the Reagan Doctrine's attempts to "fight communism") possibly face economic sanctions or political and military interventions. The glut of capital that followed the OPEC crisis also implied that the international lenders like the World Bank and the IMF were willing and able to give out loans with little oversight, resulting in perpetual debt for many countries. Thus, by the time Fukuyama declared the End of History in 1992, the Soviet Union had collapsed leaving the United States and Western capitalism unrivalled, and much of the developing world had been forced to open their countries up to unfettered pillage by multinational corporations, being so far in debt that they had little recourse to leverage. Indeed, Western modernity seemed unassailable.

The Consequences of Development

By the early 1990s, cracks had already begun to appear within the neoliberal fortress itself, with increasing levels of poverty and inequality suggesting to former neoliberal enthusiasts that some State intervention might be required to prevent markets being dominated by the held capital of local elites and multinational corporations. In addition, the environmental consequences of development were facing increasing scrutiny leading to the publication of the Bruntland Report in 1987, which appealed to *sustainable* development, defined as development in the present that would not jeopardize future generations. Thus, serious questions were starting to be asked about the Holy Trinity of infinite growth, market-based historical necessity, and Western paternalism that formed the basis of development policy. It is deemed irrelevant to weigh in on criticisms and suggestions of modifications coming from within the development camp, as their aim is to simply move the goalposts of development and not consider taking them down. Instead, the question "why resist?" will be addressed in accordance with the central appeal to *secularization* from the development faith.

[General themes to continue to work with in the future]

Augustine, Hegel, end of history, linearity, single trajectory. Keynesian growth. Rostow, Maslow, neoliberalism, sustainable development.

Kowalski's four contradictions. Time's cycle, time's arrow and indigeneity. Horizontal and vertical space. Unwilling participants / not in my name. Ontology: culture versus profit and the instrumentalization of human beings. Teleology: what makes a good life? Multinational corporations, World Bank. Corporate social responsibility and Milton Friedman. De jure versus de facto law. Environmental damage. Reification through sanitization and symbols of power. The harvest of the past in the present (e.g. old growth forests). Short-term gain, long-term pain. Colonialism, neocolonialism, postcolonialism.

Reality and its Discontents

Introduction

Having considered in the previous chapter the more objective, metaphysical macroscopic facets of the current place of humanity and where it is headed in terms of notions of "development", "progress", and "civilization"—those such as history, ideology, and power structures—this chapter will focus on the subjective underpinnings of personal agency towards certain ends. In particular, it will look at theories of how and why these ends are defined the way they are. Because the overarching narrative has to do with the underlying unequal power distributions of development between "the West" and "the Global South", the observations herein are based on subjective differences between the peoples and cultures of these two groups. Two themes are central, the first follows Kojin Karatani's *Architecture as Metaphor*, which claims that striving towards an ideal—a will to architecture, in the words of the author is the "foundation of Western thought" (Karatani, 1995, xxxv). The second arises from observations of the different conceptions of time and space between colonizers and colonized described by Michael Adas in *Machines as the Measure of Men: Science*, Technology, and Ideologies of Western Dominance, with the colonizers belittling the lack of urgency or reduction of labour power by machines—in short, a Western will to optimization—in the colonies. It will be argued that both facets are, in fact, linked in some sense to Platonism, which is fitting given Alfred North Whitehead's oft-cited quip of the entire canon of Western thought being best-summarized in a series of footnotes to Plato.

Ideals, Architecture, Surplus Value

Long ago [Man] formed an ideal conception of omnipotence and omniscience which he embodied in his gods. To these gods he attributed everything that seemed unattainable to his wishes, or that was forbidden to him. One may say, therefore, that these gods were cultural ideals. Today he has come very close to the attainment of this ideal, he has almost become a god himself. Only, it is true, in the fashion in which ideals are usually attained according to the general judgement of humanity. Not completely; in some respects not at all, in others only half way. Man has, as it were, become a kind of prosthetic God.

-- Sigmund Freud (1930)

Plato's Theory of the Forms accorded that within physical reality, all we see are approximations of an ideal, timeless, abstract realm of perfection, and that within this realm is contained not only perfect conceptions of physical phenomena, but also the Truth and the Good. In this sense, Plato laid the foundations of a worldview that accorded a top-down authority to any form of what could be termed "civilization". The trajectory of development as discussed in the previous chapter may be seen as one manifestation of this asymptotic striving to an ideal—an ideal, it must be said that may be attained only "according to the general judgment of humanity", as Freud notes. In other words, although one can suggest some obvious manifestations of what this ideal might consist of, they are only extrapolations of our own lived experience, and their achievement or lack thereof can only be qualified based on human conceptions of them. For example, it can be noted that the historical ideal was constantly changed

throughout history from Augustine's Christian ideal to Hegel's Spirit ideal to Fukuyama's liberal capitalism ideal. Which of these (if any) is "correct" or "achieved" is always open to debate.

Based on this conception, Kojin Karatani notes the manner in which architecture can be considered as a metaphor for the conception of and striving towards this ideal. A building does not exist in the physical world until it is created, and until this happens it only exists in the architect's mind. Moreover, the picture that is conceived of as the final manifestation of this building may undergo a number of changes due to various economic or physical limits. In this way, architecture as façade and the engineering that assures that it will not fall down when it is erected can be seen as "bounded rationality" or "satisficing" (Goldman, 2004) rather than an external empirical search of something that is already "out there", such as occurs in the natural sciences. Similarly, goals that we choose to pursue for ourselves have a similar ideal conception and we can often envision what they look like in the future, but no matter how much we plan, the actual path that we follow in order to get there may be extremely convoluted and the outcome may not be as hoped for.

On the other side, Michael Adas notes time and again the exasperation that colonizers particularly the British and the French in his studies—constantly felt regarding the lack of ingenuity and ability of the colonized—Chinese, Indians, and Africans—to see the inherent value of time and seek to strive towards creating better tools and the mechanization of various aspects of their labour. Although the colonizers noted the quality of many of the skills, technique, and details of the artisans and often the quality and uniqueness of the goods that they produced, there was a sense of bewilderment at their lack of "progress" in terms of the rate and development of the production process. This, he suggests, is connected to the lack of importance that they placed on time. Colonizer accounts tell of Chinese heads of state seeing gifts of clocks as "playthings", Indians as changing their schedules to arrive three hours early for a train that they knew would not wait for them instead of scheduling their arrival to coincide with that of the train, and Africans as having villages of meandering streets and lackadaisically "preferring to step around a rock in their path rather than moving it" and thus not inclined to seek the most direct and efficient path between two points. This Western obsession with what Adas calls "time thrift" can be linked to striving for the most optimal solution to a problem in terms of time and space. However, this can also be relate to the Platonic ideal by considering it as putting priority on *surplus value*: if time is a treadmill, then the only way to get ahead is, figuratively speaking, move faster than time. Similarly, in order to accede to a higher level of being such as is required when one is chasing an ideal, one must be willing to put in as much energy as is required to maintain one's present state, and then a little bit more.

Time, Space, and Finitude

During the last few generations mankind has made an extraordinary advance in the natural sciences and in their technical application and has established his control over nature in a way never before imagined. The single steps of this advance are common knowledge and it is unnecessary to enumerate them. Men are proud of those achievements, and have a right to be. But they seem to have observed that this newlywon power over space and time, this subjugation of the forces of nature, which is the

fulfilment of a longing that goes back thousands of years, has not increased the amount of pleasurable satisfaction which they may expect from life and has not made them feel happier.

-- Sigmund Freud (1930)

Adas speaks of not only the difference in perceptions of time, but also in perceptions of space. One can suggest that the foundations for a geometrical conception of space were laid by, on the one hand Pythagoras, and on the other hand Euclid. A story (whether true or not) goes that Pythagoras was being chased and decided that he could reach the opposite corner of the square that he was on by taking the diagonal that represented the shortest path. However, because the length of that diagonal had already been shown to be an irrational number and those chasing him were deeply suspicious of values that were not pure integers, they prefer to go along the sides and thus Pythagoras escaped. Similarly, the parallel postulate of Euclid remained essentially unquestioned for over 2000 years until the work of Riemann on the one hand and Lobachevsky and Bolyai on the other on non-Euclidean geometry in the 19th century. Indeed, before the work of Lobachevsky, mathematicians were trying to deduce the parallel postulate from Euclid's other axioms, and when he suggested that further assumptions were required in a submitted article, (i.e. that Euclidean geometry only held on a flat plane) the article was rejected. However, whether Euclidean or non-Euclidean, the essence of much of analytical geometry is straight lines and what they represent in terms of optimization.

Further, notions of projective geometry had been developed by Leonardo da Vinci allowing three-dimensional structures to be drawn as two-dimensional structures. Before this, architectures tended to be drawn in a much more inexact and haphazard fashion. In the 18th and 19th centuries, science, technology, and production were assuming the mantle of religion and morality in terms of the European self-image of dominance within the context of colonialism. At the same time, the British were busy optimizing energy from the engines of Newcombe and Watt, while the French had saturated their polytechnics with mathematicians of the highest calibre, such as Gaspard Monge (the inventor of descriptive geometry) and Lazare Carnot (with his ground-breaking theoretical analysis of engineering mechanics). Meanwhile, cities were becoming increasingly gridded to allow for the optimization of production and distribution of goods, hence the Western world was growing up in a highly geometric, analytical, and regulated world that was also increasingly *predictive*.

In China and India, however, Confucianism, Hinduism, and Buddhism reflected views more in tune with the Greek Stoics, who maintained the highest praise for discipline and the ability to control ones emotions from within. This implied a lived reality that was far less about regulating the environment and far more about regulating the individual and the community and how they react to and interact with an environment that they may not be able to control. Although information is far less available regarding Africa, recorded observations suggest a similar aloofness to hurry and optimization, one could say that the focus more on *quality* than *quantity*. The charges of despotism and meekness of the colonized could be suggested to be a natural outcome of there being a lack of reliance on the

environment to regulate individuals (i.e. via geometrization of space and optimization of time schedules through work), thus with greater emphasis on individuals to keep other individuals regulated. Here one sees a tension between Chatterjee's (2004) dichotomies between sovereignty and governmentality, homogeneity and heterogeneity. In Western countries, one could conceivably boast of the sovereignty and heterogeneity of the self within an increasingly governing and homogeneous environment, whereas in Eastern countries the roles played by the individual (governed and homogeneous) and the environment (sovereign and heterogeneous) would have been reversed.

Based on these two dichotomies, it is possible to see the Platonic origins of both the will to architecture and surplus value. The Forms suggest an ideal point of the governed, homogeneous environment: abstract perfect entities in a timeless reality. One may suggest that Hegel's dialectical conception of Spirit is the embodiment of a Platonic historical Form. More specifically, since lived reality is not like this, it suggests a *built* environment and some form of *intervention* to bring it about, or in the case of the Truth and the Good, it suggests a process of theoretical discovery and construction in order to conceive of and formalize it, and political intervention in order to implement it. The manifestation of agency then arises regarding the *possibility* of an ideal environment and the inherent desire to see such an environment within one's own finite lifetime. In such a case, individuals may be driven to maximize the value that they can get from the time that their given (e.g. create as large a *surplus* as possible) in order to also maximize the extent to which this ideal can be embodied before one ceases to exist.

Again, it is possible to contrast this with Eastern philosophy, where it can be suggested that the governed, homogeneous point is within the individual. In this case, there is also a drive to creating surplus value, but this is on an individual and internal basis. Those seeking it out will be satisfied with a sense of subsistence in within the outer environment so that excess energy and meaning can go into achieving the ideal point of the self through discipline and meditation. Within such a conception of reality, external deadlines within the environment are less important, so long as the process toward bettering the individual is maximized.

From here, one can conceive of a cerebral model of self-environment interaction based on the Euler-Bernoulli theory of bending. Within materials engineering, there are elastic bars where, when a force is applied the bar physical bends. If the force is removed, the bar (largely) returns to its original position. Yet if the force is strong enough to cause failure, the bar makes an approximately clean break along a single plane. Contrasting this with a plastic bar, when a force is applied, the bar does not bend and if the force is removed there is a small amount of permanent internal damage, though it cannot be seen. If the force is strong enough to cause failure, catastrophic failure occurs and the bar shatters into a myriad of fragments. Similarly, one can surmise that a more homogeneous self within a more heterogeneous environment will act more like a plastic bar refusing to bend until the force is strong enough that catastrophe occurs. On the other hand, one can suggest that a more heterogeneous self within a more homogeneous environment will act more like the elastic bar and be more likely to bend towards the more uniform external using a greater variety of internal techniques, and be overall

more credulous to changing the internal to fit with the external simply as an evolutionary psychical mechanism of survival. Thus, a rapidly changing external environment foisted on one who is not used to it may elicit illogical behaviour: a train that is predictable in the external environment can be adapted to if we are used to modifying are own heterogeneous self, but to an Indian who exists in a culture where surplus value is afforded to the internal in order to adapt to an unpredictable external, there may simply be a lack of credulity that the outside world can be homogenized, or the three hours spent waiting for the train may be seen as surplus value to work on the self.

The Search for Meaning

There is no golden rule which applies to everyone: every man must find out for himself in what particular fashion he can be saved. All kinds of different factors will operate to direct his choice. It is a question of how much real satisfaction he can expect to get from the external world, how far he is led to make himself independent of it, and, finally, how much strength he feels he has for altering the world to suit his wishes.

-- Sigmund Freud (1930)

"One can hardly be wrong in concluding that the idea of life having a meaning stands and falls with the religious system" is what Freud wrote in 1930. A few decades later, Albert Camus would take this further. Life, Camus declared, is inherently absurd, "born of this confrontation between the human need and the unreasonable silence of the world" (Camus, 1942). Those who attach themselves to monotheistic religion live *inauthentically*: their use of God as a supreme organizer allows them to circumvent the reality that life has no meaning except the meaning that each individual creates for him or herself. It is possible from this to extend the idea of sovereignty and governmentality to a metaphysical domain. Above all, monotheism provides reality with a governed structure, whereas if this dichotomy is accepted, the absurd implies that we are all sovereign: "If God does not exist, then everything is permitted" as Ivan Karamazov explains to his kid brother Alyosha in *The Brothers Karamazov*. In this sense, one may again connect Platonism to Christianity via the ideal point. Those who reject such notions, such as the eternal pessimist Arthur Schopenhauer, found solace in art, music, and the Indian *Vedas* and *Upanishads*. There is therefore this added element of Christianity that the colonizers attempted to foist onto the colonized, another form of ordering and governmentality that was largely foreign to them in both historical ideology (e.g. Confucius, Buddha, or paganism in Africa) and social culture in placing sovereignty as internal rather than external. Within the Western paradigm, then, the Tower of Babel becomes architecture as metaphor *par excellence*: a physical tower that can be built up to Heaven.

Meaning, too, can therefore be placed within these two dichotomies. Whether one is subscribing to the Truth and the Good as in Plato, or to the City of God or self-realization of Spirit as in Augustine and Hegel, respectively, by suggesting an *externally verifiable* ideal point it stands to reason that meaning in terms of a group implies working collectively towards that point. This may be on the scale of a community, a polis like Athens, a collective political entity like "the West", or civilization as a whole. Yet because this goal is defined externally, anyone within the collective can judge as to

whether any individual at any time is working towards it, and there is nothing from stopping this point from constantly being altered, moved, or redefined by whomever assumes authority. It is not necessarily the case that one *must* work towards this collective, but by regulated the built environment (e.g. by necessitating a geometric configuration of the city or, as is common with modernity, to promote the building of ever-grander structures), one is led to at least work within its confines and to rationalize through regularity, that such a formation—and, therefore, direction—should be accepted as implicit and therefore normalized.

When the ideal point is placed within, however, it is only one's personal judgment that can decide the direction and extent to which this sense of meaning is being pursued. Moreover, by being internal, such a sense of meaning does not have a particular physical manifestation and therefore cannot be placed within the physical environment. Whether the environment is highly regulated or entirely chaotic is of little difference if meaning is personal and entirely found within. Thus, the exasperation of Western colonizers when finding that the non-West (particular India, China, and Africa in the case of Adas) had no particular interest in time or the regulation of space. To this day, chaotic scenes within large Asian cities are still seen as a source of pride by the locals while Western authorities generally find them distasteful (Lim, 2012). It would be interesting to consider what the pre-Columbian Mayan, Incan, or Aztec cultures which were built around large and highly geometric pyramids like the Egyptians. Indeed, from the Spanish conquistadors, these were by far the most advanced societies that they encountered and their mythologies celebrating celestial bodies would also suggest a greater interest in time than what was found in India and China, with their astronomical predictions found to be both inexact and largely abandoned and incomprehensible to their present-day inhabitants.

A suggestion of a way to hybridize these two forms of meaning can be found in Marx's materialism as the Subject-Object ontology. Although Marx espoused a collective notion of the "species-being" and a communitarian way of life, he suggested that an underlying individual poverty existing due to alienation of labour. This, he suggested, was due to the fact that the object that is being produced through work is the only possible representation of the internal progress of the individual. In contrast to Plato, whose notion of humans was predicated on them as thinking beings and who suggested that the greatest form of government would be that of the philosopher-king vanguard that could lead his people to the Truth and the Good, Marx suggested that humans are separate from animals because of their ability to mould Nature through work. Further, the only powers that an individual (or collective) had that were demonstrable were what could be produced physically to be judged by others. In this sense, Marx like Hegel suggests an ideal point through a dialectical process that humanity moves to via a thesis-antithesis-synthesis progression, but unlike Hegel who prioritized the State as the highest entity, progress is based on the extent to which work reflects the powers of the individual and, transitively based on communitarianism, the community at large. One can suggest that the sovereign individual artisans of India, China, and Africa would be better developed towards such an ontology due to their careful craftsmanship as opposed to the alienation of mass production wherein the goods produced on an assembly are, for the individual, always incomplete (as a worker only does a partial job) and cannot be claimed as a power (since they are taken by the owner and sold en masse.

The Disease of the Infinite and Auxiliary Constructions

What we call happiness in the strictest sense comes from the (preferably sudden) satisfaction of needs which have been dammed up to a high degree, and it is from its nature only possible as an episodic phenomenon. When any situation that is desired by the pleasure principle is prolonged, it only produces a feeling of mild contentment. We are so made that we can derive intense enjoyment only from a contrast and very little from a state of things. Thus our possibilities of happiness are already restricted by our constitution. Unhappiness is much less difficult to experience.

-- Sigmund Freud (1930)

The potential negative connotations of the two central notions in the Western approach to reality thus far discussed—the will to architecture and surplus value—can be brought together via the notion of Durkheim's "malady of the infinite": anomie. Durkheim develops the term from Jean-Marie Guyau's *Esquisse d'une Morale Sans Obligation ni Sanction : Essai Philosophique*, who suggests it as opposed to Kantian autonomy or Benthamite interest (the two main ethical theories at the time): a disinterest and detachment from the surrounding world. The etymology of the term *a* + *nomos* means "without law", nomos being one of the three principles for the physical and ethical world cited in the *Gorgias* (the other two being order and reason, (Cassirer, 1946, 65)). The loss of one of these three principles of the Platonic ideal thus implies a discordance, an existing outside of the axiomatic norms depicted by the ideal state. Durkheim suggested that anomie occurs due to an unchecked striving towards the infinite, which cannot be satisfied within a finite world with finite time.

While anomie can be seen as a pernicious state regarding the Platonic ideal and the construction of the True and the Good, a direct connection can also be made to surplus value via David Levine's analysis in *Pathology of the Capitalist Spirit: An Essay on Greed, Hope, and Loss* wherein he devotes an entire chapter to the manner in which greed—an obsession with surplus value—can be conceptualized within Durkheim's "disease of the infinite": by predicating one's sense of meaning entirely on wealth and / or physical goods, the law of diminishing returns applies and the individual eventually ends up "running to stand still" and becomes utterly consumed by accumulation. Karatani suggests a more subtle connection between an obsession with capital within the will to architecture, namely that it embodies and ever-present need to avoid the "seller's position", since the actual worth of a commodity is only decided based on its value in exchange for a different commodity, particularly money (satisfaction from an episodic phenomenon—and only one of mild contentment—as Freud maintains). He suggests that credit can eventually become an extreme form of this "malady" as it signifies the potential to defer the seller's position (i.e. settling one's credit) indefinitely:

Under the credit system, then, the self-movement of capital occurs not so much because of its desire for saving, but because of its desperate need to postpone the settlement indefinitely. From this moment on, the self-movement of capital surpasses the will of individual capitalists and becomes a compulsion. (Karatani, 1995, 179).

It is thus possible to suggest that something may be inherently amiss with the massive movement of transnational capital that distinguishes the current "globalized" age from a century ago when foreign capital and immigration are suggested to be greater than now (Chatterjee, 2004). Yet on the other hand, the lack of drive towards a notion of the infinite within the non-West (at least an *external* one, though may one suggest that Hindu sadhus have reached a different form of anomie by expunging the external completely as meaningless) is entirely in keeping with Adas' observations. Valéry's Chinese companion in "The Yalu" sums it up by suggesting "knowledge must not increase endlessly. If it continues to expand it causes only endless trouble, and despairs of itself. It halts, decadence sets in" (Adas, 350).

The consequences of being caught up in such an insatiable desire may not only cause anomie within the individual due to suspending interest in the machinations of society to pursue profit at all costs (e.g. "Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible" (Friedman, 1982), but also the eventual turning away from society as "the vanity of suffering of life" sets in where "the first task is to gain something and the second to become unconscious of what has been gained, which is otherwise a burden" (Schopenhauer, 2000). When life becomes unbearable, so says Freud (quoting Theodor Fontaine), auxiliary constructions are required: of deflections to make light of our misery, substitute satisfactions to diminish it, or intoxication to makes us insensitive (Freud, 1930). Everything in moderation would therefore seem to be a mantra, lest the mania of the ideal (internal or external) tear society apart.

People, Profit, and Expectations

The last, but certainly not the least important, of the characteristic features of civilization remains to be assessed: the manner in which the relationships of men to one another, their social relationships, are regulated — relationships which affect a person as a neighbour, as a source of help, as another person's sexual object, as a member of a family and of a State. Here it is especially difficult to keep clear of particular ideal demands and to see what is civilized in general.

-- Sigmund Freud (1930)

As Adas notes, the colonial enterprise was gaining ever more adherents in the early 20th century, especially with the surge in scientific racism that had occurred in the second half of the 19th century with the rise of positivism (Comte and Saint-Simon), sociology (Durkheim) and various theories of evolution (e.g. Darwin, Wallace, Spencer). This was reinforced in the popular environment by a newfound popular obsession with phrenology and craniometry, and all else that the invincibility that science and technology seemed to accord for the European position. Departments of anthropology were being set up in universities to further the study of ethnology as theories of human stages of development came to prominence (with Europe at the pinnacle, the Arabs, Chinese, and Indians below them, followed by Africans, and lastly the aboriginals of the Americas and Oceania), and these were given a boost with Levy-Bruhl's publication of *How Natives Think* in 1910.

Yet amongst this momentum, dissident voices began to grow louder questioning whether development at all costs might not have some consequences in terms of placing so much emphasis on production and mechanization and so little on humanity itself. The sudden outbreak of the Great War in 1914 that led to four years of senseless slaughter placed a major check on the claims of moral superiority of Europe, and also allowed the United States and Japan to begin to occupy markets vacated by the European powers. By the end of World War I, the US was in a position of ascendancy that would only be reinforced after World War II (with Japan's progress severely curtailed). The rapid rise of the United States as a young nation placed the majority of emphasis on science and technology at the same to as the anti-State sentiment from the Civil War was being reinforced. This caused a substantial shift to private technology as the objective metric of progress with the US firmly in command. This is reiterated by their obsessively technocratic policies in the Philippines. With the moral emphasis on business rather than government to delegate, the stage was set for ever greater emphasis on laissez-faire markets and profit as being of key importance, which one could say is still the case over a century later.

As Chatterjee maintains, it is the increasing mobility of transnational capital and the *speed* in which it can be transferred from one location to another that gives transnational capital the greatest advantage within a world of shifting interest and trajectories (Heyman and Campbell, 2009). Moreover, both the will to architecture and an emphasis on surplus value legitimizes attracting as much capital as possible, especially in the Global South where a prevailing trend of the unabated march to modernity is taking hold in many "global cities". As with any attempt to compete—especially for capital on a global scale—advertising and assurances of returns on investment are paramount, especially regarding the façade of "a good place for business". As Huchzermeyer (2013) explains, although the emphasis tends to be put on attracting the best and the brightest, in parallel (but not advertised, as it may detract from popular humanist opinion) is also increasing efforts to de-incentivize the poor and uneducated. This can be seen, for example, in the manner in which the poor have been cleared from areas of major international events like the Olympics (Littlefield, 2016) and the 2010 World Cup in South Africa (Huchzermeyer, 2013).

In addition, the greater the emphasis placed on attracting investment, the greater are the demands placed on a society by the environment, and the more that sovereignty internal sovereignty makes way for governmentality because of the extent to which the environment of capital has little governmentality and hence unbounded sovereignty. Bound up in the increasing power and externality of capital, one not only sees the anomic manner in which it remains increasingly above the law (i.e. within Agamben's "state of exception"), but also the growing infrequency by which it has to stop and take on the seller's position wherein its inherent value is questioned. One can therefore see the pathopsychological effect of capitalism within the increasingly ungovernable scope of transnational capital.

In this sense, the constant drive towards bigger and better (via both more capital investment and greater ability to "attract the best"), which can be seen in increasing attempts to build taller and more massive structures as we compete to show off the extent of our power over nature, also displaces those that cannot compete within the milieu and bigger and better. One may suggest that this is the price to pay if one wishes

to compete like a business, but an inherent problem as Huchzermeyer (2013) points out is that unlike businesses that fail and are subsequently dissolved or taken over within the market economy, cities must continue to exist as the home for many individuals. Yet perhaps an even greater critique of such an approach is not to look at the consequences of an inability, but rather the historical conditions of what this inability is predicated on. Neither an individual born into a well-to-do family or an individual born into an extremely poor family in a poor or war-torn country has chosen their historical conditions, and yet these conditions will have a large part to play in their level of opportunity and the probability of their transcending their condition and living a life that external actors "competing" over would select for. In other words, we are held to conditions that we do not choose (physical, economic, and geopolitical). In a similar manner, with few exceptions the cities that we are born into have existed over many generations through historical conditions that are often beyond their control. This is especially true of cities in the developing world that have largely been bereft of capital and the sort of opportunities to make good on the qualities that transnational capital would compete for.

One could therefore see this obsession with building towards the ideal as inherently reinforcing of those with historical momentum and disempowering those without, and thus the existing gap between the "haves" and the "have nots" should only expect to widen. In tandem with Freud's suggestion of what it means to be civilized, Achille Mbembe notes that it is unclear especially in the postcolonial world amongst many structural changes of networks—slavery, colonialism, post-colonialism and neocolonialism—of notions of ownership, rights, and reasons for exclusion (Mbembe, 2001, 43). This leads him to suggest a fundamental question to be asked regarding policy predicated on markets within Africa in particular but that can be asked regarding the Global South in general, namely "who has the right to live and exist, and who has not, and why?" (55).

Conclusion

Beginning with the Platonic ideal and two implied Western psychological obsessions—namely the "will to architecture" and a precedence being placed on surplus value—it is possible to separate the mindset of the colonizer from the colonized, and in so doing explain the West's befuddlement of the habits of the cultures of the non-West, who are observed not to behave in ways that have long been normalized in Western culture. The theoretical underpinnings of this observation are bound up in several similar dichotomies that follow from Chatterjee's notion of "the governed, namely sovereignty and governmentality, and homogeneity and heterogeneity.

Yet as opposed to a view that often dominates, namely that sovereignty is found in the West and is lacking in the East, a further qualification made regarding internal-external, i.e. individual-environment. The sovereignty of the individual trumpeted by the liberal rights of the West is balanced by an increasingly regimented and regulated external environment of homogeneity, whereas in the East the governed individual can move freely within a frenetic, chaotic, and unpredictable heterogeneous environment. Moreover, the regulated external environment of the West can be explained by an *external* Platonic ideal that is strived for, while the ideal point of the more spiritual cultures of Confucius, Buddha, and Hinduism see an internal ideal point. This, in turn,

suggests that the slow process of artisanship maintained by Chinese, Indian, and African craftsman reported by Adas and their obstinacy towards taking up a Western conception of time thrift and spatial geometry reflects a need for surplus value to be spent on the inner workings of the individual rather than the external environment.

Yet with the growth of capital and its self-enforcing structure (i.e. more than likely capital begets capital), there is an increasing shift of the governmentality of the individual as capital finds increasing sovereignty in the external with the city having to constantly take up the seller's position. The consequences of this are increasing competition for transnational capital, which implies incentives for the best and wealthiest, and disincentives for the uneducated and poor, despite no individual in having chosen the historical conditions which he or she is held to. As the increasingly anomic mechanization of capital gains further legitimacy, the historical momentum of those that enter the market ahead will increase their lead over those that already had less. In such a situation, it may be suggested that the unquestioned juggernaut of profit over people may be impoverishing humanity as a whole, and in such a situation a reality check like the Great War may be required.

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Intraregional Trade and its Relation to Quality of Goods Traded by East African Community
Countries From 1999 to 2018

Introduction

Proponents of globalization and free trade suggest that there is a positive correlation between trade and economic growth (Lofchie, 1994, 171). Therefore, policies should be favoured that maximize the probability of high volumes of trade, with "overwhelming evidence" cited that trade openness and internationalization produces faster and greater economic growth (172). Yet the promise of free trade and structural adjustment has generally failed to deliver results for Africa with increasing criticism beginning in the early 1990s from a variety of sources including noted economists like Paul Krugman and Joseph Stiglitz, and the United Nations itself (Ohiorhenuan, 2011). Dependency theorists of the 1970s suggested that problems are based on a continuation of colonial and exploitative policies, and that foreign ownership and lack of trade protection implies capital flight and the perpetuation of dependency of developing nations on developed (Rodney, 1983, 31).

Chatterjee (2004) points out that in quantitative terms (e.g. trade volumes and migration), the world may have been more global in the pre-WWI era. What sets apart the current era is the flexibility of capital and the centralization of multinational corporations in metropolitan "global cities" (87-90), reducing net benefits for the economies in which they operate. Indeed, supernormal profits created by transforming Third World raw materials into manufactured goods, with low returns for the exporting country "continues today" (Nafukho, 2013). Much of African exports are raw materials, hence the majority of capital, production, and value is added elsewhere resulting in dependency on commodity prices and markets. Further, studies have shown that trade in raw materials increases capital flight through misinvoicing by the exporting country or by malpractice by foreign companies that dominate the sector (Ndikumana, 2016) or a collusion of both. Asmah et al. (2020) report average misinvoicing trade gaps between 2008 and 2017 of between 17.4 (Uganda) and 23.2% (Burundi) of total trade for the (then) five countries of the East African Community (see below). Rivie (2020) provides compelling statistics to suggest that illicit financial flows (IFFs) from Africa to transnational mining corporations centralized in tax havens like Switzerland and Singapore are crippling.

Intraregional trade provides a potential means to circumvent some problems associated with a primary economy and underdevelopment. It implies that the benefits

of goods, capital, and production are maintained regionally, generally reducing capital flight, increasing local labour opportunity, and lowering consumer costs.. This may be particularly important for Africa due to its historically communitarian identity (Maqoma, 2020, 1). Value is also added locally through processing in contrast to raw material exports (Gnimassoun, 2019). Adom (2012) positively correlates intraregional trade in West Africa with growth versus aid being an impediment. Moreover, Na (2019) accords that technologically developed products make up a consistently greater portion of intraregional goods than extra-regional goods imported / exported within the EAC (though Ethiopia is substituted for Burundi in Na's study), promoting industry development. Meanwhile Gnimassoun (2019) maintains that increased wealth creation in Africa has failed to translate to wealth distribution and alleviation of poverty in part due to lack of diversification and opportunity reflecting continued dependence on raw exports and an inability to develop local industry, infrastructure, communication, and the knowledge economy.

This study will look at trade quality of East African Community nations over the period 1999-2018. First, increases in overall trade value should reflect growth while proportion of raw, intermediate, consumer, and capital imports and exports as well as top export commodities and their general destinations (e.g. Europe or Africa) will suggest changes in diversification and local trade. Shifts away from raw exports to consumer and capital exports, as well as reductions in dependency on single commodities will be seen as evidence of diversification. These temporal patterns will then be compared to temporal changes in trade within the EAC to see the extent to which changes in intraregional trade reflect changes in diversification.

EAC Countries

The East African Community (EAC) is a regional trade agreement (RTA) signed in 2000 that currently encompasses six countries: Kenya, Tanzania, and Uganda (original signatories), Burundi and Rwanda (joined 2007), and South Sudan (joined 2016). Jerven (2014, 48) notes the inherent unreliability of GDP in Africa and the overemphasis trade growth is likely to have on GDP (Kenya and Tanzania currently about 70% reliable and Uganda above 80). However, GDP is a simple quantitative parameter to provide a cursory comparison of the five EAC countries (excluding South Sudan) within the

world. Table 1 shows GDP per capita (current \$US) in 1999 and 2019 (World Bank), as well as land area and population (United Nations via Wikipedia). Although these are only point GDP calculations, all five countries have increased fairly linearly in GDP from about 2002; a multiplier is provided to compare the difference in degree.

Country	1999	2019	x \$	Area	Pop	Density
Burundi	\$129	\$261	2.0	142nd	84th	21st
Kenya	\$414	\$1,817	4.4	48th	27th	95th
Rwanda	\$242	\$802	3.3	144th	76th	15th
Tanzania	\$400	\$1,122	2.8	30th	25th	121st
Uganda	\$261	\$777	3.0	79th	32nd	53rd
World	\$5,396	\$11,429	2.1			

Table 1: EAC rank and GDP per capita (PPP) in \$US in 1999 and 2019 (World Bank: data.worldbank.org), and area and populations (United Nations: www.wikipedia.org)

Economically, all five countries are poor relatively speaking, with Kenyan the highest ranked, and improving against the world average from a factor of 13 in 1999 to a factor of 6.3 in 2019. Assuming that the GDP is an accurate reflection of economic strength, four of the countries had a greater factor of increase than the world average save for Burundi, which is consistently ranked as one of the poorest countries in the world. Geographically, Tanzania and Kenya both have long coastlines with one major port (with several smaller ones) while the other three are landlocked. Both Burundi and Rwanda are small, dense countries with both having seen violence between Hutus and Tutsis (Burundi in 1993, Rwanda in 1994); Burundi still has tension with Rwanda having largely reconciled; both are also affected by ethnic relations to the ongoing conflict in the Democratic Republic of Congo (DRC) on their western borders, and the three are involved in some joint development projects such as a major hydropower project on the Ruzizi River to address increasing power demands and further boost the local economies (African News Bulletin, 2016). Tanzania and Kenya meanwhile are larger and more sparsely populated with Uganda somewhere in the middle. The growth in political factions and historical ties to business suggest Kenya is highly

susceptible to business lobbying, while Uganda's conflict in the 1980s instigated by the fall of Idi Amin and Tanzania's closer adherence to socialism has meant that these two countries have maintained greater public-private separation (Bünder, 2018, 7).

The EAC Common Market

Cooperation in the East African Community (EAC) goes back to colonial times with the construction of the Uganda Railway at the beginning of the 20th century (Obura Aloo, 2017, 305). Prior to the official signing of the current EAC Treaty in 2000—unique in Africa as the only RTA that has established both a common market and free trade agreement (Na, 2019)—an earlier version was established in 1967 then dissolved ten years later. Reasons for the dissolution include differences in economic development levels, i.e. that the benefits overwhelmingly went to Kenya (Obura Aloo, 2017, 305) and differing Cold War ties, but these were largely resolved "after Uganda settled internal conflicts and Tanzania moved away from socialism in the 1990s" (Bünder, 2018).

Duty-free access is accorded to EAC products going to Kenya, but not from Kenya (Obura Aloo, 2017, 310), perhaps reflecting lessons learned from the original collapse of the agreement. A precursor to the EAC Treaty was the establishment of a Mediation Agreement in 1984 that allowed for some sharing of assets and liabilities between the original three EAC countries (Odhiambo et al., 2015, 10-11). The original three countries of the EAC—Kenya, Tanzania, and Uganda—were joined in 2007 by Burundi and Rwanda, and South Sudan officially joined in 2016. The groundwork has also been laid for reviving an idea originally floated in the 1960s—that of a single sovereign East African Federation nation of the six countries—with a constitutional committee appointed in 2018 (Havyarimana, 2018). Theoretical and policy difficulties have been cited, chief of which may be their neocolonial past and the resultant differing realities and power relations between states (Ikuya, 2017, 199). However, a monetary union at least has been described as "feasible" due to increasing intraregional currency exchange and business cycle integration (Caporale and Gil-Alana, 2020).

Bünder (2018) maintains that the common market has opened up the EAC to greater special interests and lobbying of governments since member states negotiate tariffs of non-member states amongst each other, and external parties may have influence and / or favourable trade relations in some countries but not others (2018, 1).

The EAC may be particularly susceptible to the promotion of third-party interests as over 70% of EAC funding comes from external sources (Odhiambo et al., 2015, 47) as remittances in aid tend to go to countries that maintain trade ties favourable to the client state (Younes, 2008, 672). 0% (raw materials and capital goods), 10% (intermediate goods), and 25% (final products and local agricultural goods) make up the three tariff bands. Companies can be derogated based on EAC needs and a steep increase occurred in derogations in 2014 (Bünder, 2018, 5) likely contributing to negotiations around a new Non-Tariff Barriers Act in 2015 (Obura Aloo, 2017, 317). Bünder (2018) notes in particular that derogations on cheap wheat, sugar, and barley are commonly provided to food-processing industries (7), while paper, cement, and iron and steel are most common for industrial products (5). Moreover, derogations tend to be dominated by Kenya, with less for Tanzania and few for Uganda due to differences in political ties between public and private (8).

EAC Country Composite Sketches of Trade

The following section will present a composite of the trade patterns for each of the five countries between 1999 and 2018 with data from the World Bank via the World Integrated Trade Solution website (wits.worldbank.org). It is important to note that World Bank data only includes *formal* trading and that informal trade plays a substantial role in total trade (Peberdy and Crush, 2015, 4). However, informal trade is extremely difficult to capture in official statistics (also contributing to GDP uncertainty, Jerven, 48, 2014). The composite consists of i) import and export per capita, ii) breakdown of raw, intermediate, consumer, and capital products for imports and iii) exports, and iv) top export types as based on wits.worldbank.org. Percentages in brackets will always refer to means over the period in question.

Burundi

Burundi's imports peaked in 2011 at \$126 per capita while exports peaked at \$30 in 2006 with another local maximum occurring at \$26 in 2012 (Figure 1, upper left). The large import deviation between 2010 and 2013 corresponds to the repatriation of tens of thousands of refugees with the closing down of various refugee camps in Tanzania

(Schwartz, 2019, 124), likely requiring substantial increases in resources. The breakdown of imports (bottom left) is fairly consistent over the period with some local variation: category averages over the period are 6, 25, 46, and 21% for raw, intermediate, consumer, and capital products respectively. A noticeable increase in raw materials can be seen in the period 2011-2012, suggesting the need for increased foodstuffs and basic necessities for returning refugees.

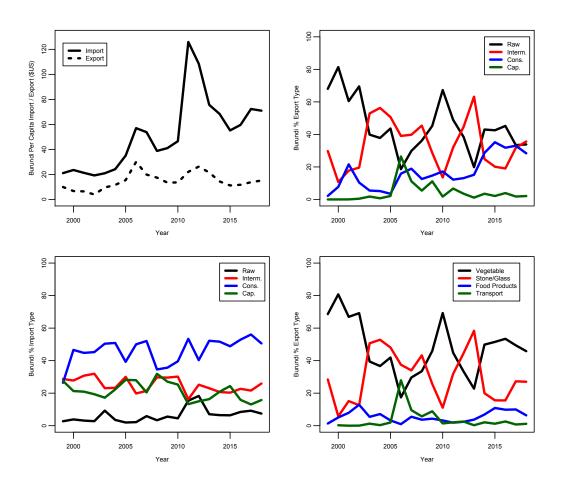


Figure 1: Burundi import and export trends for 1999-2018 (TL: per capita import and export (\$US), BL: import breakdown, TR: export breakdown, BR: primary export goods)

There is a very close correspondence between vegetable (mean 48%) with raw (45%), stone / glass (30%) with intermediate (34%), and transportation (3.7%) with capital products (4.3%). A peak in capital goods is identified as predominantly to Pakistan and secondarily to Japan with reports of (fraudulent) sale of presidential

aircraft in 2006 by the incoming Nkurunziza government. In 1999, 70% of vegetable products were going to Europe and just 4% to Sub-Saharan Africa (SSA), while in recent years vegetable exports to Europe have been between 30 and 50% versus 20 to 30% to SSA. Food products predominantly (>60%) go to SSA while the majority of consumer products (>80%) also went to SSA up until 2017, when Pakistan became a major (25-30%) partner. Almost all stone / glass is international, going to Europe in the early period and the Middle East in the latter.

The observations of Burundi's economy are a useful reference point for analyzing the other four countries, with none of them having nearly as rigid a correspondence between trade categories and goods types. That being said, the continued depression of Burundi's economy may be in part due to this rigidity of trade structure (Gnimassoun, 2018), though the increase in consumer goods starting in 2014 may show improvement. For example, there is a noticeable disparity between vegetable and raw materials in the later years and a larger increase in consumer goods that do not correspond with food product increases. This points to an increase in more value added to vegetable goods before export, supported by increased SSA trading.

Kenya

No data was available on wits.worldbank.org for Kenya for the years 2011-12 and 2014-16. Per capita imports (Figure 2, upper left) peaked at 2013 at \$360 in 2013 and \$125 in 2008, suggesting a substantial and sustained trade deficit. Import breakdown (bottom left) is much more even (outside of raw materials), with averages of 13, 27, 33, and 26% for each of the four categories. There is far less variation than in Burundi, with intermediate and capital goods remaining particularly consistent. A steady increase in consumer and decrease in raw imports since 2009 suggest an increasing need for finished products.

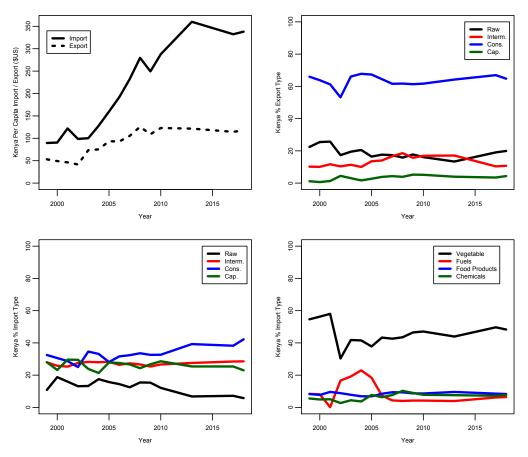


Figure 2: Kenya import and export trends for 1999-2018 (TL: per capita import and export (\$US), BL: import breakdown, TR: export breakdown, BR: primary export goods)

Comparing Kenya's export breakdown to Burundi's explains the difficulty of deciding what exactly "raw" materials entail, as Kenya also relies predominantly on vegetable exports (45%), but these appear to correspond far more substantially to consumer goods (63%), as vegetable exports are consistently above 40% while raw exports are rarely above 20% (19%) and food products are consistently closer to 10% (8.5%). The noticeable increase in fuel exports between 2002 and 2006 (9.0%) appears to be sold as consumer products. Chemical exports (6.5%) round out the top four exports, while capital exports are consistently low (3.3%). Consistently over the period, about a third of consumer exports and about half of food products are to SSA while about half of vegetable products have gone to Europe and about 10% to SSA. This suggests that value is being added to Kenyan vegetable exports and / or that they are not necessarily sold as foodstuffs (as opposed to unroasted coffee, a top export), for example flower

and fermented tea are consistently amongst Kenya's top exports (the former unlikely to be in demand in SSA). About two-thirds of Kenya's fuels has gone to SSA over the period, though in 2017 and 2018, this dropped to about a third, with another third going to the Middle East.

Rwanda

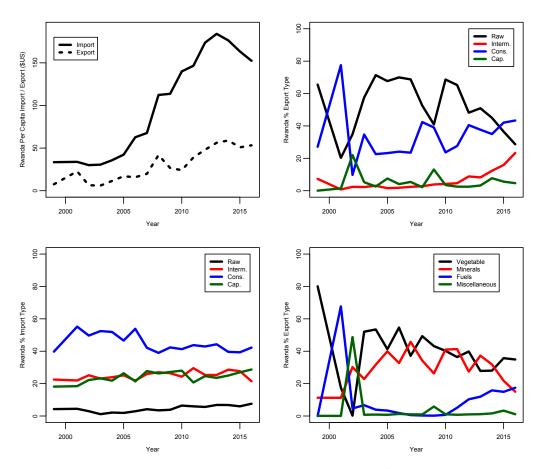


Figure 3: Rwanda import and export trends for 1999-2018 (TL: per capita import and export (\$US), BL: import breakdown, TR: export breakdown, BR: primary export goods)

No data was available on wits.worldbank.org for Rwanda for the years 2000 and 2017-18 (hence the graphs end at 2016 rather than 2018). Rwandan per capita imports (Figure 3, top left) peaked at \$184 in 2013 and exports at \$59 in 2014, also suggesting a trade deficit of a factor of three like Kenya. Import breakdown (bottom left) is consistent with Burundi, with low raw (4.5%), high consumer (45%), and similar intermediate and

capital imports (25 and 24%), but with less variation. Since 2008, there has been a decrease of about 10% in consumer imports.

Rwandan exports are less ambiguous to match between type and category than Kenya but more so than Burundi. For example, the large increase in consumer goods in 2001 (38%) most certainly corresponds to fuel exports (9.7%). Vegetable (40%) and raw (52%) exports do not correspond directly as mineral exports as raw materials second (30%). Miscellaneous products are the final top export (4.1%), though they only occur in 2002, and correspond to the increase in capital products (5.5%) for that year. This went to South Africa, and is likely connected to the conflict resolution between Rwanda and DRC hosted by South Africa that year (no statistics are available for DRC to corroborate whether a similar capital expenditure occurred).

The destination of Rwanda's exports varies considerably from year to year (see Figure 6). For example, in 2007, 5% of minerals went to SSA, while in 2009, 25% went to Eswatini, in 2011, 76% (47%) to Europe, 2012-14, the majority (88, 83, and 58%) to Tanzania, and in 2015 and 2016 just 5% again went to SSA. Although metal prices may be a factor, similar erratic trends occur in vegetables. For example, in 2007-09, about 75% went to SSA, in 2010-11, about 45% went to each of SSA and Europe, 2012-13 over 95% to SSA, and then 2014-16 saw vegetables exports back to about 75%. Many factors may contribute, including prices and domestic affairs, but there are no clear patterns.

Tanzania

Tanzania's per capita exports peaked at \$286 in 2015 and imports peaked at \$118 in 2012 and a second local maximum of \$114 in 2014. Thus, its trade deficit is less than the three times seen in Kenya and Rwanda. However, with the election of John Magufuli in 2016, this deficit was brought below two (\$148 versus \$89) though this has widened above two by 2018 with decreasing exports (\$152 versus \$65). Again, a similar import breakdown to Burundi and Rwanda with intermediate (22%) and capital (27%) similar, raw low (4.4%) and consumer imports higher (46%). Since Magufuli's election, greater focus has been placed on intermediate and capital imports over consumer imports.

In contrast to the previous three countries (and Uganda), stone / glass (31%) and not vegetable exports (22%) primary. Stone / glass corresponds very closely with intermediate export trends (41%). In contrast to Burundi, about 40% of Tanzania's stone

/ glass remains within SSA, but the vast majority go to South Africa, showing a benefit of its SADC membership. Vegetable corresponds to raw trends (41%) with a deficit of approximately 20% made up predominantly by minerals (10%). India replaced Europe as the majority destination for vegetables starting in 2010 (20-35%) though 2018 saw a majority (55%) going to SSA in about equal parts to Kenya and DRC. East Asia (China and Japan) had been the major destination for minerals until 2017 when SSA accounted for 40% and then 96% in 2018. Both consumer (14%) and capital (3%) exports are low.

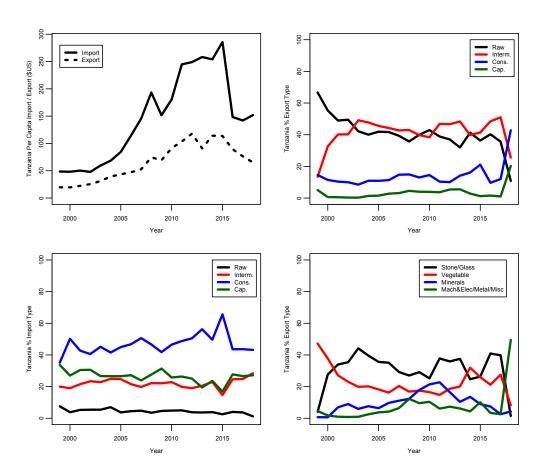


Figure 4: Tanzania import and export trends for 1999-2018 (TL: per capita import and export (\$US), BL: import breakdown, TR: export breakdown, BR: primary export goods)

Although food (8.3%), animal (7.2%), and textile (6.7%) exports are all above the three categories (machine / electrical, 3.3%, metals 2.2%, and miscellaneous 1.8%), the latter three are combined to demonstrate the trade surge seen in 2018, where they combine for 49.5% of all exports. These have predominantly gone to Rwanda (with

exports there surging from 1.5% to 19%), corresponding to the timing of an agreement between Rwanda and Tanzania to share costs in a railway line connecting Dar es Salaam to Rwanda and Burundi, which also threatens Kenya's preeminence in the region (Kiruga, 2019) as the latter appears to be turning towards closer ties to the United States (Reuters, 2020). The nature of the products all correspond to those that would appear to be useful for railroad construction (and Magufuli's background as a transportation engineer may have contributed to this overall idea of developing logistics). Increases to Zambia (which shares the TAZARA railway, 17% of total minerals), DRC (60% of total minerals), and Uganda were also up appreciably, suggesting Tanzania may be able to break into a new manufacturing market based around logistics. This would also potentially bode well for improving intraregional trade given the importance of infrastructure and transportation Gnimassoun (2018).

Uganda

Uganda's per capita imports peaked at \$175 in 2012 while exports have steadily increased to a maximum of \$72 reached in 2018. In 2012, the deficit was almost three times (\$175 versus \$68) but substantially reduced imports in 2015 as well reducing the deficit to below two times (\$122 versus \$63) though this has since widened with import increases (\$158 versus \$72 in 2018). Imports follow the other three countries (i.e. not Kenya) with raw, intermediate, consumer, and capital imports at 22, 47, 25, an 4.5% respectively. As with Tanzania, there is a noticeable increase in intermediate goods and a decrease in consumer goods since 2015.

In contrast to the other countries, Uganda's export categories show more consistent trends with raw materials steadily decreasing from 70% in 1999 to 42% in 2007, and then remaining fairly consistent. Consistently, 50-60% of raw materials have gone to Europe and about 20-30% to SSA. Raw material decrease corresponds to steady gains in intermediate (24%) and consumer (23%) exports (the majority of the latter consistently going to SSA) while capital goods peaked at 12% in 2007 and 2012 and declined almost symmetrically before and after. By value, the second-highest export in these years is listed by wits.worldbank.org as "transmission apparatus for radio-telephone incorporation". Vegetable (39%) decreased from 66% to 40% between 1999 and 2001, and has since held steady, though the steady decrease in raw materials would

suggest that output products are mixed (unroasted coffee is a top export), supported by the consistent performance of food and animal products (both 11%). An approximate 45-35% split of vegetable products between Europe and SSA was reversed in 2015 with an increasing proportion going to SSA. The surge in stone / glass products in 2016 (7%) from 2 to 14% corresponds to intermediate overtaking consumer products in the same year though this has almost all gone to UAE.

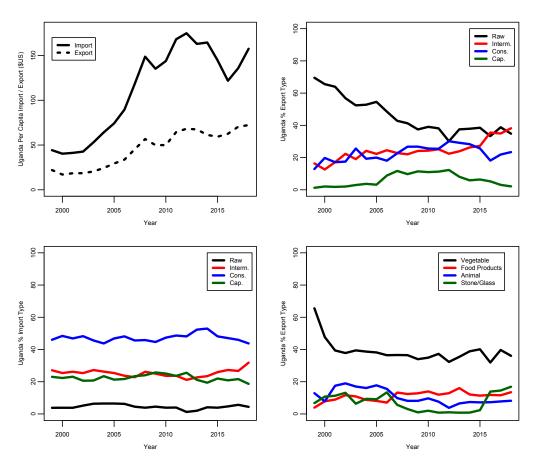


Figure 5: Uganda import and export trends for 1999-2018 (TL: per capita import and export (\$US), BL: import breakdown, TR: export breakdown, BR: primary export goods)

Intraregional Trade

In light of the findings for individual countries regarding their overall distribution and specific changes to SSA exports, a comparison of intraregional trade between the five

countries is provided in Figure 6. The top left (right) shows percentage of total imports (exports) from African countries while the bottom left (right) shows the percentage of African imports (exports) that come from within the five EAC countries. Overall, a substantial increase in African imports has not materialized within the EAC, especially amongst Uganda (a steady decline punctuated by a drop from ~40% to ~20% between 2005 and 2006), Kenya (12% mean with little variability), and Tanzania (a decline from 24% in 2000 to 12% in 2018 with little variation). However, while import percentage is similar between first and final years for Rwanda and Burundi (38 and 32 about a mean of 35% for the former and 24 and 25 about a mean of 30% for the latter), large deviations have occurred with Rwanda peaking at 55% in 2006 and Burundi 48% in 2003. There may be various local, regional, and larger geopolitical reasons for this, but given the substantial difference in economic performance between Burundi and Rwanda over the period, their similarities—being small, dense, landlocked countries—may play a role as is their cultural and ethnic ties to the Kivu region of the Democratic Republic of Congo across the border (below), which has remained one of the most unstable regions of the world over this period.

When looking at EAC imports, Uganda follows a trend more similar Burundi and Rwanda, suggesting lack of coastal access to shipping trade may create greater dependency on neighbouring countries. Burundi, Rwanda, and Tanzania have largely remain consistent with some variation around means of 70, 78, and 29% respectively. Meanwhile, Uganda steadily declined from 80% to 60% between 1999 and 2008, before remaining consistent around a mean of 61% between 2008 and 2018. Kenya has steadily increased from 4% in 1999 to 33% in 2018, which may suggest there is a convergence of economies with the steady shift from raw to intermediate and consumer goods of the other four countries over the period.

Regarding exports, Kenya has remained steady about a mean of 43% while both Uganda and Tanzania have steadily increased over the period from about 30 to 50% for Uganda and 15 to 40% for Tanzania. Burundi has also increased over this period, though in a far more erratic nature from almost 0 to 30%. Rwanda's trend appears to also be slightly positive, though it is more erratic than even Burundi, possibly for similar reasons to its African imports. Within the EAC, Burundi and Rwanda have both steadily decreased in erratic fashion. Much of this is affected by trading with DRC. On the other hand, Kenya and Uganda have remained relatively constant (about means of

57 and 54% respectively) while Tanzania (which is a member of the SADC and trades a lot more with South Africa) returned to pre-2005 levels with the surge of exports to Rwanda especially.

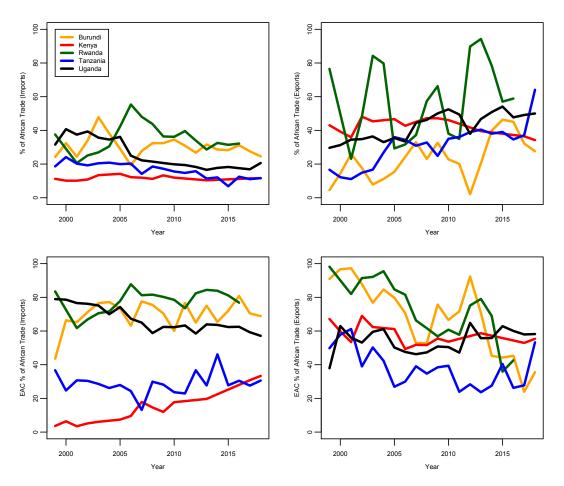


Figure 6: Intraregional import and export trends for 1999-2018 (left (right): import (export); top (bottom): % African trade (EAC % of African trade))

Summary

The emphasis on intraregional trade for improving economies seems to be reflected by overall trends in trade quality. These broadly correspond proportionally to increases in overall trade and GDP growth with the most rigid economy, Burundi increasing by the smallest factor and Kenya's more flexible economy by the largest. This would appear to reflect the importance that Gnimassoun (2018) places on economic diversification.

Further, only Kenya had consumer imports close to intermediate and capital imports, with the other four countries placing much more emphasis on importing their consumer goods. Import type proportions changed minimally over the period. Overall, while Kenya has remained largely proportionally steady in its export category and primary types (as well as destinations), the other four countries have been slowly increasing consumer products—which predominantly go to SSA—adding financial value but also local labour opportunity and goods quality. Geographically, Burundi and Rwanda have far more erratic changes over the period, probably in part based on their small, dense, landlocked nature, but also influenced by the DRC. Meanwhile, all three landlocked countries depended far more on EAC countries for African exports than Kenya and Tanzania. All countries have increased their proportion of exports to SSA, though stone / glass (unrefined ore) remains an extra-regional export.

The latest signing of the railway agreement between Rwanda and Tanzania has also allowed Tanzania to substantially increase its value-added goods related to railway products, and the corresponding shift in metals from East Asia to Zambia and DRC may imply an attempt to open up a new regional hub for railway production knowing that regional demand will be steady. In addition, the slow increase in Kenya's EAC imports over the period suggests a slow convergence of all five economies as the others "catch up", though other geopolitical aspects of calls for greater African economic independence and the increase in regional trade agreements are also likely to have an effect. Improvements to infrastructure especially via improvements to internet access and other communications technology over the years are also likely to play a part (Bankole et al., 2015) allowing for easier transactions. It will be interesting to see if and to what extent these trends promoting greater local production and trade will continue.

4597 words

Appendix (Data from wits.worldbank.org): Burundi Data

Product cate indicator Product cate	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
Animal Espore(US\$ NAnimal Espo	80.0	60.0	0.18	0.22	0.35	0.34	0.2	0.23	0.19	0.23	0.33	0.31	0.21	0.25	0.35	0.21	0.16	0.19	0.14	0.16
Capital good Export(US\$ N Capital good	3.57	2.7	4.83	2.42	4.98	2.3	8.57	13.27	2.07	12.59	7.73	17.47	60.37	2.44	9.0	1.18	0.12	0.02	0	0.01
Chemicals Export(US\$ NChemicals E	3.2	1.47	5.17	90.00	8.09	8.35	6.22	4.47	1.53	1.42	1.19	0.86	0.35	0.15	0.16	0.15	0.01	0.02	0	0
Consumer @ Export(US\$ N Consumer @	47.98	49.36	39.15	40.04	40.51	31.25	31.82	24.12	20.34	16.58	17.84	29.58	36.23	3.97	4.27	3.6	2.76	9.11	3.31	1.37
Food Produi Export(US\$ N Food Produi	10.75	14.92	12.1	12.39	9.72	7.65	5.85	3.63	3.8	4.88	5.22	9.6	2.14	3.69	5.92	3.58	3.42	3.34	2.17	0.84
Footwear Export(US\$ N Footwear Exp	0.01	0.01	0.71	0	0	0	0.01		0.05	0	0	0.01	0	0	0	0				
Fuels Export(US\$ A Fuels Export)	6.88	0.35	2.19	0.44	0.73	0	0.53	0.67	2.44	1.58	1.13	5.91	0.35	0.04	0	0.21				
Hides and Si Export(US\$ NiHides and Si	1.49	0.62	1.07	4.38	3.21	2.58	7.02	6.43	3.62	1.91	3.32	3.96	1.74	0.42	0.26	0.04	0.03	90.0	2.9	0.13
Intermediate Export(US\$ Nintermediate	60.28	47.42	23.44	22.92	35.12	130.01	108.34	63.25	15.99	32.36	64.37	62.14	89.31	57.63	46.57	34.86	5.2	7.47	4.6	18.58
Mach and B Espont(US\$ N Mach and B	1.15	1.33	3.08	1.53	3.36	1.72	3.04	10.95	1.1	2.93	2.8	5.73	5.35	0.38	0.51	9.0	0.1	0.01	0	0.01
Metals Esport(US\$ N Metals Espor	1.53	1.5	2.03	2.63	4.25	7.32	2.75	2.52	2.28	2.17	2.02	2.58	0.79	0.67	0.22	90.0	0	0	0.01	0.01
Minerals Esport(US\$ Ninerals Esp	14.36	8.11	3.94	1.37	2.22	9.9	17.26	10.52	3.43	2.01	5.49	1.87	2.85	66.0	0.47	0.37	0.79	3.69	0.31	0.62
Miscellaneo Esport(USS A Miscellaneo	2.47	1.32	0.88	1.31	0.84	1.56	4.1	0.92	0.68	1.94	1.25	8.09	22.25	0.14	0.14	0.07	0.02	0.08	90.0	0
Plastic or Ru Esport(US\$ N Plastic or Ru	1.48	3.56	3.3	4.55	6.37	0.17	2.63	0.42	0.12	0.56	0.55	0.16		0.24	0.17	0.13	0.26	0.16	0	90.0
Raw material Export(USS N Raw material	57.21	49.92	55.64	48.41	60.85	40.83	93.29	96.83	79.51	51.1	51.31	46.62	42.6	49.65	31.29	26.27	18.47	25.49	34.88	42.46
Stone and G Esport(US\$ 1 Stone and G	45.7	40.77	19.12	17.74	28.26	120.08	108.19	63.06	13.07	29.01	61.31	53.11	85.66	54.71	43.73	33.39	3.34	6.38	2.48	17.74
Textiles and Export(USS A Textiles and	0.35	0.27	0.19	0.15	0.47	1.82	0.2	0.84	1.86	2.06	1.17	3.43	1.97	2.15	0.13	0.2	0.02	0	0.02	0.01
Transportatio Export(US\$ N Transportation	1.98	1.09	3.2	1.37	2.94	0.58	6.2	4.06	1.65	10	8.12	14.94	63.78	2.22	0.28	0.82	0.01	0	0.11	
Vegetable Export(US\$ A Vegetable Eq	77.47	73.82	65.75	58.62	70.53	46.83	80.87	88.74	81.85	51.9	47.51	46.28	39.8	47.69	30.34	36	18.38	28.22	34.61	42.84
Wood Esport(US\$ N/Wood Espor	0.16	0.17	0.15	0.28	0.15	0.15	0.33	0.37	0.48	0.33	0.38	0.35	0.26	0.04	0.03	90.0	0	0	0.03	
All Products Exports (in L.All Products	169.07	149.41	123.06	113.79	141.5	205.75	242.7	197.84	118.16	112.93	141.79	156.2	228.52	113.76	82.72	62.9	26.56	42.16	42.85	62.41
Capital good Import/USS (Capital good	125.13	102.35	99.37	136.56	140.6	117.68	150.65	149.38	102.12	93.37	100.45	86.53	121.25	72.76	38.54	24.91	24.94	29.07	31.98	36.33
Consumer @ Import(US\$ Consumer @	401.53	439.23	330.81	273.78	347.54	376.85	404.29	602.27	160.01	123.01	109.02	220.29	216.99	101.38	87.88	72.94	58.3	62.17	86.69	34.81
	205.8	169.08	141.76	113.76	139.29	166.29	252.81	183.28	121.92	101.96	93.63	90.47	85.92	77.56	40.21	33.39	41.18	42.7	41.73	37.93
Raw material Import(US\$ Raw material	80.65	72.14	52.95	35.84	43.64	96.05	183.68	173.71	18.3	19.31	10.56	24.89	9.48	5.07	6.11	13.41	3.57	4.37	8.5	3.59
All Products Imports (in (All Products	793.51	783.3	625.33	560.59	672.58	721.66	1003.12	1127.65	404.05	344.8	315.16	423	433.64	258.15	172.73	144.65	128.84	138.9	150.22	131.97
Animal Espert Produ Animal Espo	90.0	90.0	0.14	0.19	0.25	0.16	0.08	0.12	0.16	0.2	0.23	0.2	60.0	0.22	0.43	0.32	9.0	0.46	0.33	0.26
Capital good Export Produ Capital good	2.11	1.81	3.93	2.13	3.52	1.12	3.53	6.71	1.76	11.14	5.45	11.18	26.42	2.15	0.72	1.79	0.45	0.04	0.01	0.01
Chemicals Export Produ Chemicals E	1.9	66.0	4.2	86.8	5.72	4.06	2.56	2.26	1.3	1.26	0.84	0.55	0.15	0.13	0.19	0.23	0.04	0.04	0.01	0
Consumer & Esport Produ Consumer &	28.38	33.04	31.81	35.19	28.63	15.19	13.11	12.19	17.22	14.68	12.58	18.93	15.86	3.49	5.16	5.46	10.38	21.6	7.71	2.2
Food Produi Esport Produífood Produi	6.36	9.98	9.83	10.88	6.87	3.72	2.41	18.	3.22	4.32	3.68	5.51	0.94	3.24	7.16	5.43	12.88	7.93	90.5	1.34
Footwear Export Produ Footwear Exp	0.01	0.01	0.58	0	0	0	0		0.04	0	0	0	0	0	0	0.01				
Fuels Export Produ Fuels Export	4.07	0.23	1.78	0.38	0.51	0	0.22	0.34	2.07	1.4	0.8	3.78	0.15	0.03	0.01	0.32				
Hides and Si Export Prody Hides and Si	0.88	0.42	0.87	3.85	2.27	1.25	2.89	3.25	3.06	1.69	2.34	2.53	0.76	0.37	0.32	0.07	0.1	0.14	6.77	0.22
Informaciate Export Produ Informaciate	35.65	31.74	19.05	20.14	24.82	63.19	44.64	31.97	13.54	28.66	पं.	39.79	39.08	20.66	56.29	52.89	19.57	17.72	10.73	29.76
2	0.68	0.83	2	33	20 0	0.83	9	4	0.93	2.59	1.57	10.0	2.34	0.34	0.62	16.0	0.39	0.03	0.01	0.01
Т	0.00	10.0	00.0	7.31	7	0 0		2.50	200	76.	24.0	00.0	0.00	0.00	0.57	000	0.00	0 0	20.0	000
Microfilmon Spoot Pool Microfilmon	9.44	0 0	0.10	91.1	200	0.76	0 00	0.47	0000	1 20	0000	7 0	0.74	0.00	0 44	200	000	0.00	0.00	9
Minds on the County Sector States of the Sector Sector	000	0000	0000	*		000	9 0		7	0.40	0 0							000		
Section of the County Property Property of the County County of the County Coun	0000	0 7 0 0	90.00	40.04	7 2	000	0 7 0	200	00.00	46.96	00.00	30 00	1000	43.64	00.00	90 00		9 40 00		0000
Some and of French Proof, Some and of	27.03	27.29	15.53	15 50	19 97	58.36	44.58	31.87	11.06	25.69	43.24	34	97.49	48.09	52.86	50.67	12.58	15.14	5.79	28.42
Total for and Denote South Total for and		0	200	0	000	0	0000	0.40			000		900		9 4 6	0	000		900	000
Transportation Second Proofs Transportation	1 1 1 2	0.73	9 6	1 3 1	2.08	80.0	200	2.05	95	000	5 73	956	27 41	1 95	0 34	1 36	200	0 0	90 0	
Vegetable Percet Produ Vegetable For	45.82	49.41	69 65	61 63	49.85	32.76	88 85	44.86	69 27	45.96	99.65	29.63	17.42	41.93	36.68	39.45	69.3	66.93	80.76	68.64
	60.0	0.12	0.12	0.24	0.11	0.07	0.14	0.18	0.41	0.29	0.27	0.23	0.11	0.03	0.04	0.07	0.02	0.01	90.0	
9000	15.77	13.07	15.89	24.36	20.9	16.31	15.02	13.25	25.28	27.08	31.87	20.46	27.96	28.19	22.31	17.22	19.36	20.93	21.29	27.52
Consumer in Import Prod Consumer in	50.6	56.07	52.9	48.84	51.67	52.22	40.3	53.41	39.6	35.68	34.59	52.08	50.04	39.27	50.88	50.42	45.25	44.76	46.59	26.38
Intermediate Import Prod Intermediate	25.94	21.59	22.67	20.29	20.71	23.04	25.2	16.25	30.18	29.57	29.71	21.39	19.81	30.04	23.28	23.08	31.96	30.74	27.78	28.74
Raw material Import Prod Raw material	7.45	9.21	8.47	6.39	6.49	7.06	18.31	15.4	4.53	9.6	3.35	2.88	2.19	1.96	3.54	9.27	2.77	3.14	3.86	2.72

Kenya Data

Product cate Indicator	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
Animal Econ(USS N	94.82	83.65				76.29			89.4	73.41	84.9	83.8	71.02	72.43	60.53	63.2	28.61	\$*\$5	43.48	37.12
9000	264.05	198.1				218.89			265.91	234.55	194.28	175.91	134.25	92.31	44.66	977	62.8	19.61	10.11	18.86
Chemicals Esport(USS A	465.23	415.42				419.51			402.62	400.1	513.86	313.15	221.41	264.04	98.49	112.61	37.62	76.72	77.08	91
Consumer @ Esport(US\$ A	3917.04	3847.22				3555.4			3188.29	2737.48	3086.7	2513.02	2257.47	2302.37	1818.4	1685.77	745.18	930.84	1002.36	1089.34
Food ProductionalUSS N	502.26	490.03				530			445.36	387.86	466.31	383.02	295.9	234.41	184.99	199.49	123.61	145.75	120.95	137.39
Footwear Esport(USS N	42.26	41.83				59.19			44.68	38.36	42.06	48.52	34.19	28.32	24.35	21.59	4.65	16.14	15.48	16.4
Fuels Esport(USS N	386.74	353.72				218.38			218.04	189	200.29	176.41	256.66	629	616.35	489.77	232.98	2.1	127.38	137.9
Hides and Sk Esport(US\$ N	46.17	51.62				102.19			55.28	30.88	55.02	48.19	37.21	34.1	30.05	23.26	11.09	15.69	12.97	10.09
Intermediate Export(US\$ N	648.65	594.78				946.02			875.62	699.57	928.72	679.47	491.75	463.16	268.92	290.44	145.18	177.33	158.29	168.36
Mach and B Esport(USS N	155.94	126.95				128.77			179.6	139.88	146.79	110.3	86.91	54.54	28.58	48.66	35.44	12.08	6.65	11.76
Metals Esport(US\$ N	244.52	240.22				328.02			298.24	256.02	933.59	262.42	230.85	194.74	149.98	116.1	51.85	75.56	59.4	70.2
w	288.16	266.41				169.56			140.4	142.46	194.43	120.14	88.94	70.27	119.2	85.14	42.7	61.24	59.29	57.58
8	76.15	71.09				154.42			80.43	69.79	54.7	57.36	50.18	43.03	24.19	29.27	217.22	18.85	13.15	18.2
Plastic or Ru EsperatuSS A	123.67	137.37				189.34			156.03	131.3	151.55	118.13	109.79	91.96	62.33	55.58	17.47	44.4	41.17	42.35
Raw material Espera/USS A	1205.63	1094,43				740.08			832.87	791.78	791.1	706.57	618.1	561.97	551.27	496.77	242.89	391.15	399.99	369.94
Stone and Gi Boom USS A	46.05	39.28				129.07			153.54	69.46	50.62	95.13	39.9	35.22	29.17	29.62	18.7	25.53	18.37	15.03
Tealies and Essent/USS N	427.98	398.72				377.06			279.54	243.64	326.64	325.74	318.07	256.64	99.99	60.98	36.47	42.67	43.82	52.77
Transportatio Esport/USS A	90.48	59.97				93.6			85.21	89.69	66.48	76.54	50.64	43.74	15.51	30.07	39.88	4.92	1.78	3.65
Vesetable EconoMSS A	2922.54	2854.65				2432.87			2432.62	2075.1	2175.01	1738.7	1516.15	1292.83	1114.42	1066.3	424.95	881.84	884.13	901.69
	137.44	116.49				138.67			108.13	126.49	138.71	123.26	93.84	74.62	58.51	119.5	77.48	42.22	45.95	47.77
duck	6050.42	5747.41				5536.95			5169.11	4463.44	500003	4080.8	3501.66	3419.9	2683.31	2551.15	1400.7	1520.12	1571.04	1650.92
Capital good import/USS	3994.35	4234.22				4163.21			3458.66	2727.89	2706.07	2396.2	1989.82	1628.14	973.17	829.09	981.94	1186.21	670.14	780.62
Consumer a Importable	7940.41	6384.61		-		6436.15			3948.76	28 2025	9796.99	2909 99	2288 63	1645.37	1013	1203.2	890 99	1151 68	884.71	904 93
Intermediate Importable	4963 94	4748.04				4616.38		İ	2000000	0000000	3969 6	3459 68	1008.7	1654 15	1337 11	100	016.10	1019 31	746.5	238 62
Raw material important SC	997 64	1197 84				1112 44		İ	1462 63	1564.53	12201	1130 73	1044 67	917.83	799 97	461 59	497.9	840.48	540 47	300 01
All Products Imports for t	17476 72	16690.0				16394.47		İ	12042 44	10000	11137.83	8989 36	7343 95	5846 17	4563.49	9475 18	3437.36	4007 96	2841 53	2785.61
Animal Boost Produ	1.57	1.46				00			1.73	1.64	1.7	2.05	2.03	2.12	2.26	2.48	2.04	00	2.77	2.25
9000	4.36	3.45				3.95			4	5.25	80	4.31	3.83	2.7	1.66	3.05	4 4 6	1.29	0.64	41.1
Chemicals Boont Produ	7.69	7.23				7.58			7.79	8.96	10.28	7.67	6.32	7.72	3.67	4.41	2.69	5.05	4.91	5.51
	64.74	66.94				64.21			61.68	61.33	61.72	61.58	64.47	67.32	67.77	66.08	53.2	61.23	63.8	65.98
Food Produi Esport Produ	83	8.53				9.57			8.62	8.69	9.32	9.39	8.45	6.85	6.89	7.82	8.82	9.59	7.7	8.32
Footwear Esport Produ	0.7	0.73				1.07			0.86	0.86	0.84	1.19	0.98	0.83	0.91	0.85	0.33	1.06	0.98	0.99
Fuels Export Produ	6.39	6.15				3.94			4.22	4.23	4.01	4.32	7.33	18.39	22.97	19.2	16.63	0.14	8.11	8.35
Hides and Si Export Produ	0.76	6.0				1.85			1.07	69.0	1.1	1.18	1.06	**	1.12	0.91	0.79	1.03	0.83	0.61
Intermediate Export Produ	10.72	10.35				17.09			16.94	15.67	18.57	16.65	14.04	13.54	10.02	11.38	10.36	11.67	10.08	10.2
Mach and B Boom Produ	2.58	2.21				2.33			3.47	3.13	2.94	2.7	2.48	1.59	1.07	1.91	2.53	0.79	0.42	0.71
Metals Boont Produ	4.04	4,00				5.92			5.77	5.74	6.67	6.43	6.59	89.5	8.59	4.55	3.7	4.97	3.78	4.25
Minerals Boom Produ	4.76	4.64				3.06			2.72	3.19	3.89	2.94	2.54	2.05	44.4	3.34	3.05	4.03	3.77	3.49
Miscellaneo(Esport Produ	1.26	1.24				2.79			1.56	1.56	1.09	1.41	1.43	1.26	6.0	1.15	15.51	1.24	0.84	1.1
Plastic or Ru Esport Produ	2.04	2.39				3.42			3.02	2.94	3.03	2.89	3.14	2.69	2.32	2.18	1.25	2.92	2.62	2.57
Raw material Export Produ	19.93	19.04				13.37			16.11	17.74	15.82	17.31	17.65	16.43	20.54	19.47	17.34	25.73	25.46	22.41
Stone and Gi Esport Produ	0.76	0.68				2.33			2.97	1.56	1.01	2.33	1.14	1.03	1.09	1.16	1.33	1.68	1.17	0.91
Textiles and Export Produ	7.07	6.94				6.81			5.41	5.46	6.53	7.98	9.08	7.5	2.48	2.39	2.6	2.81	2.79	3.2
Transportatio Export Produ	1.5	1.04				1.51			1.65	2.01	1.33	1.88	1.45	1.28	0.58		2.85	0.32	0.11	0.22
Vegetable Export Produ	48.3	49.67				43.94			47.06	46.49	43.49	42.61	43.3	37.8	41.53	41.8	30.34	58.01	56.28	54.62
Wood Export Produ	2.27	2.03				2.5			2.09	2.83	2.77	3.02	2.68	2.18	2.18	4.68	5.53	2.78	2.92	2.89
Capital good Import Prod	22.99	25.37				25.39			28.6	26.74	24.32	26.66	27.51	27.85	21.33	23.86	29.51	29.6	23.18	28.02
Consumer & Import Prod	42.24	38.25				39.26			32.65	32.58	33.58	32.37	31.64	28.14	33.16	34.62	25.02	28.73	30.6	32.49
Intermediate Import Prod	28.56	28.45			1	27.55	1		26.64	25.34	26.63	27.36	26.39	28.29	27.99	28.23	27.54	25.28	25.82	27.95
Raw material import Prod	5.74	7.18	+	+	+	6.79		1	12.1	15.34	15.46	12.47	14.44	15.7	17.52	13.28	13.14	15.97	18.76	10.84

Rwanda Data

Product case Indicasor 2018 2	2017 2016	5 2015	L	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999
Animal Espera(US\$ Mil)	10.79	12.75		10.69	9.12	6.17	6.72	2.89	3.78	2.34	0.3	0.47	0.18	0.14		0.07		0
Capital good Esport(US\$ MII)	28.95	5 32.39		19.51	12.48	10.09	8.45	34.18	89.0	9.92	5.87	11.27	2.6	2.7	11.91	2.64		0.03
Chemicals Espera(US\$ MII)	8.19	95.56		45.4	3.39	3.51	2.27	1.84	1.97	2.44	1.03	0.83	0.23	0.23	0.21	0.25		0.17
Consumer @ Esport(US\$ MII)	269.5	5 243.31		229.14	205.33	110.76	57.26	101.81	168.71	43.09	34.56	34.82	22.49	17.79	5.27	144.73		15.35
Food Produi Espora(US\$ MII)	21.82	2 20.47		45.77	19.24	7.74	6.14	3.43	31.79	1.92	0.26	0.4	0.53	0.35	0.34	0.14		0.13
Footwear Export(US\$ MII)	3.69	9.1		1.54	6.88	1.82	1.72	1.5	1.02	0.64	90.0	0.01	0.01	90.0	90.0	0.03		0
Fuels Espera(US\$ MII)	108.41	1 86.36		72.59	52.33	20.52	1.72	0.55	1.2	1.03	2.63	5.02	3.89	3.43	2.53	126.34		0
Hides and Si Espora(US\$ MII)	9.43	3 9.29		16.1	11.86	7.63	3.9	2.05	3.01	3.57	1.96	4.87	3.16	3.3	2.34	0.78		0.51
Intermediate Espera(US\$ MII)	144.86	6 91.84		49.9	44.72	18.6	10.09	10.07	10.9	4.4	2.61	2.39	3.05	1.16	1.29	1.46		4.14
Mach and B Espera(US\$ MII)	24.88	8 21.09		11.74	4.37	4.4	5.86	12.95	4.99	5.99	2.28	7.39	1.87	1.85	1.63	0.78		0.01
Metals Esport(US\$ MII)	8.42	2 6.85		12.09	15.55	3.77	3.33	6.75	3.24	2.56	0.46	0.55	0.76	0.3	0.17	0.36		96.0
Minerals Espera(US\$ MII)	93.24	4 126.07	207.82	226.63	138.99	165.79	99.23	68.51	136.31	83.97	46.86	59.85	31.54	11.71	16.34	20.99		6.38
ŝ	6.91	19.26		89.99	5.05	3.01	2.59	15.26	3.78	1.89	1.82	17.11	0.88	0.4	26.36	0.11		0.05
Plastic or Ru Esport(US\$ MII)	1.83	3 2.22		4.95	2.83	1.74	1.01	0.73	1.56	0.67	0.37	0.21	90.0	0.03	0.11	0.12		90.0
Raw material Espera(US\$ MII)	178.3	3 211.16		309.55	244.29	261.86	166.03	106.65	209.43	126.1	100.27	101.44	71.03	29.51	18.86	37.87		37.08
Stone and Gi Esport(US\$ Mil.)	84.06			1.99	0.89	4.06	0.47	1.26	2.5	0.21	0.65	0.03	0.04	0	0.04	0.03		2.53
Textiles and Export(US\$ MII)	7.15	5.42		7.44	1.46	4.24	2.32	3.64	1.67	1.07	0.74	1.75	1.52	1.19	2.16	1.71		0.25
Transportatic Export(US\$ MII)	11.65	5 21.42		13.83	32.07	19.96	5.19	26.54	4.68	6.87	5.28	un	1.49	1.6	1.67	2.14		0.01
Vegetable Esport(US\$ MII)	216.91	1 206.73		169.3	201.94	146.03	97.31	112.48	196.35	68.17	78.23	61.84	53.2	26.69	0.12	32.73		45.32
Wood Esperi(US\$ MII)	4.22	2 2.72		2.09	1.03	6.0	2.04	0.27	0.48	0.16	0.38	0.57	0.2	0.02	0.03	60.0		0.21
All Products Esports (in US\$ Mil)	621.61	1 578.69	653.36	608.1	806.99	401.31	241.83	260.66	398.31	183.51	143.31	149.91	99.54	51.28	54.11	186.71		56.59
Capital good Import(US\$ Mil)	510.7	7 501.2		468.51	451.4	312.25	393.55	302.24	281.3	174.15	121.1	98.81	67.65	60.83	56.17	51.36		45.54
Consumer (a) Import(US\$ Mil.)	751.26	730.84		880.75	786.46	660.21	580.05	470.99	417.11	264.4	305.34	174.34	161	137.18	125.55	153.78		99.78
Intermediate Import(US\$ Mil.)	381.38	8 514.69		504.02	464,49	445.89	341.07	293.86	289.07	162.89	124.09	93.99	74.26	60.55	63.55	61.15		56.51
Raw material Import@US\$ Mill)	134.82	2 111.12		135.87	102.67	89.96	90.49	42.75	37.38	26.39	16.6	7.12	6.61	2.97	7.51	12.39		10.68
All Products Imports (in US\$ Mil)	1778.28	8 1858.09		1989.15	1831.96	1508.3	1405.16	1112.02	1070.04	627.85	567.13	374.28	310.14	261.65	252.82	278.68		251.02
Animal Esport Product share(%)	1.74			1.76	1.8	1.54	2.78	177	96.0	1.27	0.21	0.31	0.18	0.27		0.04		0
Capital good Esport Product share(%)	4.66			3.21	2.46	2.51	3.5	13.11	2.18	5.41	4.09	7.52	2.61	5.27	22.01	1.42		0.05
Chemicals Export Product share(%)	1.32	2 0.96		0.75	0.67	0.87	0.94	0.7	9.0	1.33	0.72	0.55	0.23	0.44	0.39	0.14		0.31
Consumer (a) Export Product share(%)	43.35	5 42.04		37.68	40.5	27.6	23.68	39.06	42.36	23.48	24.11	23.22	22.59	34.69	9.74	77.52		27.12
Food Produi Esport Product share(%)	3.51	3.54		7.53	80.00	1.93	2.54	1.32	7.98	1.04	0.18	0.27	0.53	69.0	0.63	80.0		0.23
Footwear Export Product share(%)	0.59	9 0.28		0.25	1.36	0.45	0.71	0.58	0.26	0.35	0.04	0.01	0.01	60.0	0.11	0.02		0
Fuels Export Product share(%)	17.44	4 14.92		11.94	10.32	5.11	0.71	0.21	0.3	0.56	1.84	3.35	3.9	69.9	4.67	67.67		0
Hides and St Esport Product share(%)	1.52			2.65	2.34	1.9	1.61	0.79	0.76	1.95	1.37	3.25	3.17	6.43	4.32	0.42		0.89
Intermediate Export Product share(%)	23.3	•		8.21	8.85	4.63	4.17	3.86	2.74	2.4	1.82	1.59	3.06	2.26	2.39	0.78		7.31
Mach and B Export Product share(%)	1	3.64		1.93	0.86	-	2.42	4.97	1.25	3.27	1.59	4.93	88:	3.6	3.02	0.42		0.01
Metals Export Product share(%)	1.35			1.99	3.07	0.94	1.38	2.59	0.81	1.39	0.32	0.37	0.76	0.58	0.32	0.19		1.69
Minerals Export Product share(%)	15	5 21.79		37.27	27.41	41.31	41.03	26.28	34.22	45.76	32.7	39.92	31.69	22.85	30.2	11.24		11.28
Miscellaneo(Epport Product share(%)	111	3.33		1.12	**	0.75	1.07	5.85	0.95	1.03	1.27	0.74	0.88	0.77	48.71	90.0		60.0
Plastic or Ru Export Product share(%)	0.29	9 0.38		0.81	95.0	0.43	0.42	0.28	0.39	0.36	0.26	0.14	90.0	90.0	0.2	0.07		0.1
Raw material Export Product share(%)	28.68	m		50.91	48.18	65.25	68.65	40.92	52.58	68.72	69.97	67.67	71.36	57.54	34.85	20.28		65.52
Stone and Gi Export Product share(%)	13.52			0.33	0.18	1.01	0.2	0.49	0.63	0.12	0.45	0.02	0.04	0.01	0.07	0.02		4.47
Textiles and Export Product share(%)	1.15	5 0.94		1.22	0.29	1.06	96.0	1.4	0.42	0.58	0.51	1.17	1.53	2.31	3.99	0.92		0.44
Transportatic Export Product share(%)	1.87	7 3.7		2.27	6.33	4.97	2.15	10.18	1.17	3.75	3.68	3.33	1.5	3.12	3.09	1.15		0.01
Vegetable Export Product share(%)	34.9	9 35.72		27.84	39.83	36.39	40.24	43.15	49.3	37.15	54.59	41.25	53.44	52.05	0.22	17.53		80.08
Wood Epport Product share(%)	0.68	8 0.47		0.34	0.2	0.23	0.84	0.1	0.12	60.0	0.27	0.38	0.2	0.04	90.0	90.0		0.38
Capital good Import Product share(%)	28.72	2 26.97		23.55	24.64	20.7	28.01	27.18	26.29	27.74	21.35	26.4	21.81	23.25	22.22	18.43	1	18.14
Consumer (i) Import Product share(%)	42.25	ď		44.28	42.93	43.77	41.28	42.35	38.98	42.11	53.84	46.58	51.91	52.43	49.66	55.18	+	39.75
Intermediate Import Product share(%)	21.45		28.61	25.34	25.35	29.56	24.27	26.43	27.02	25.94	21.88	25.11	23.94	23.14	25.14	21.94	+	22.51
Raw material import Product share(%)	7.58	86.5		6.83	9.6	5.96	6.44	3.84	3.49	4.2	2.93	1.9	2.13	1.14	2.97	4.45	-	4.26

Tanzania Data

Uganda Data

	Product cate Indicator Typ Indicator	Typindicator	2018	2017	2016	2015	2014	2013	2012	2011	2010	5009									
Anima	Boont	Espera/USS N	253.19	225.35	180.68	162.91	167.65	156.41	89.45	164.34	156.62	127.62									
Capital	Capital good Export	Espera/US\$ N	68.39	88.85	129.73	145.07	132.88	195.06	290.01	243.32	177.75	179.4									
Chemic	Chemicals Export	Espera/US\$ N	91.04	80.62	98.11	85.6	84,49	84.59	79.21	62.54	47.87	54.12									
Consun	Consumer in Export	Espera/USS N	722.06	635.25	450.28	582.13	640.34	702.35	710.25	549.32	414,43	419.65									
Food Pr	Food Produi Baort	Espera/US\$ A	416.55	335.85	293.16	257.68	273.49	386.16	303.93	257.77	226.49	200.78									
Footwear	ar Boont	Esperijuss n	9.52	4.46	3.78	4.25	6.81	5.62	4.61	6.4	6.2	17.56									
Fuels	Boont	Espera/US\$ A	166.82	186.86	28.7	149.05	184.03	153.81	156.38	124.06	88.42	115.95									
Hides	Hides and Sk Export	Espera/USS N	46.6	53.64	52.19	64.33	74.17	64.88	42.83	34.72	17.69	5.34									
Impam	Intermediate Export	Espera/US\$ A	1179.42	1013.34	880.92	617.42	594.28	575.2	527.74	542.84	392.97	378.01									
Mach	Mach and B Export	Espera/US\$ A	40.97	41.12	801.80	94.12	81.78	129.66	227.36	196.82	138.06	133.59									
Metals	Beant	Espera/USS A	130.35	99.85	102.98	121.68	133.89	151.89	151.47	141.77	105.03	113.21									
Minerals		Esperatus A	63.12	49.43	68.73	87.56	98.64	108.55	117.3	99.54	80.51	96.51									
Miscel	8	Beson/USS A	15.05	22.6	218.23	78.96	999	57.58	141.81	26.39	22.86	16.82									
Plassic	Plastic or Ru Broom	BoomUSS A	39.27	30.18	27.46	37.62	39.84	36.89	30.67	22.37	12.83	13.26									
Raw	Raw material Export	Besontuss A	1074.97	1125.63	827.11	872.99	856.93	903.19	710.07	823.44	632.39	587.04									
Stone	Stone and G Boom	BoomUSS A	521.1	421.74	344.61	53.31	19	18.69	24.07	17.58	32.57	15.43									
Texas	Teofies and Boost	Besontuss A	66.65	73.46	51.76	37.14	36.98	53.13	100.56	106.76	39.36	40.54									
Trans	Transportatio Boort	BoordUSS A	56.57	80.79	89.25	77.04	75.5	105.67	96.37	70.37	59.41	71.54									
Vesser	Vesetable Book	BoomUSS A	1113.98	1152.02	792.71	910.08	879.24	853.39	761.46	805.27	565.4	532.81									
Wood		BoordUSS A	56.58	43.48	48.07	45.67	39.85	40.82	30.01	23.89	19.22	12.55									
- R	950	Boorts (in L	3087.36	2901.47	2482.31	2267.01	2261.96	2407.74	2357.49	2159.08	1618.6	1567.61									
Capit	Capital good Import	Import/USS	1256.38	1210.9	1007.59	1215.84	1178.08	1231.63	1545.45	1330.21	1169.57	1093.86									
Cons	Consumer a Import	import/USS	2945.38	2573.94	2273.72	2661.77	3218.16	3044.39	2908.83	2740.77	2209.2	1896.87									
Inter	Intermediate Import	Import(US\$	2141.79	1493.06	1318.53	1434.37	1424.15	1320.75	1278.88	1334.81	1102.53	1062.66									
Raw	Raw material Import	(SU)mport(USS)	296.46	317.27	226.34	215.03	251.32	116.28	75.55	224.06	182.09	192.84									
e w	All Products Import	Imports (in	6729.44	6.5655	4829.46	5528.12	6073.53	5817.51	6044.15	5630.87	4664.34	1247.37					-				
Anima	al Bport	Espert Produ	8.2	7.77	7.28	7.19	7.41	9.9	3.79	7.61	9.68	8.14									
ð	Capital good Export	Espert Produ	2.12	3.06	5.23	6.4	5.87	8.1	12.3	11.27	10.98	11.44									
Chem	Chemicals Export	Espert Produ	2.95	2.78	3.95	3.78	3.74	3.51	3.36	2.9	2.96	3.45									
Cons	Consumer in Export	Espert Produ	23.39	21.89	18.14	25.68	28.31	29.17	30.13	25.44	25.6	26.77									
Food	Food Produi Esport	Espert Produ	13.49	11.58	11.81	11.37	12.09	16.04	12.89	11.94	13.99	12.81									
Food	Footwar Eport	Espert Produ	0.31	0.15	0.15	0.19	0.3	0.23	0.2	0.23	0.38	1.12									
Fuels	Boont	Espert Produ	5.4	6.44	1.16	6.57	8.14	6.39	6.63	5.75	5.46	7.4									
Hde	Hides and Sk Export	Espert Produ	1.51	1.85	2.1	2.84	3.28	2.69	1.82	1.61	1.09	0.34									
Inter	Intermediate Export	Espert Produ	38.2	34.93	35.49	27.23	26.27	23.89	22.39	25.14	24.28	24.11									
Mach	Mach and B Sport	Espert Produ	1.33	1.42	3.3	4.15	3.62	5.39	9.64	9.12	8.53	8.52									
Metals	s Boort	Espert Produ	4.22	3.44	4.15	5.37	5.92	6.31	6.43	6.57	6.49	7.22									
Minerals	rals Boort	Espert Produ	2.04	1.7	2.77	3.86	4.36	4.51	4.98	4.61	4.97	6.16									
Misc	Miscellaneo Esport	Espert Produ	0.49	0.78	8.79	3.48	2.94	2.39	6.02	1.22	1.41	1.07									
Plass	Plastic or Ru Esport	Espert Produ	1.27	1.04	111	1.66	1.76	1.53	6.1	1.04	6.79	0.85									
Raw	Raw material Export	Boort Produ	34.82	38.8	33.32	38.51	37.88	37.51	30.12	38.14	39.07	37.45									
Spore	Stone and Gi Esport	Espert Produ	16.88	14.54	13.88	2.35	0.84	0.78	1.02	0.81	2.01	0.98									
Text	Teofies and Export	Espert Produ	2.16	2.53	2.09	1.64	1.63	2.21	4.27	10.4	2.43	2.59									
Trans	Transportatio Export	Espert Produ	1.83	2.78	3.6	3.4	3.34	4.39	4.09	3.26	3.67	4.56									
Vegetable	ble Egort	Espert Produ	36.08	39.7	31.93	40.14	38.87	35.44	32.3	37.3	34.94	33.99									
Wood		Espert Produ	1.83	1.5	1.94	2.01	1.76	1.7	1.27	1711	1.19	0.8									
Capi	Capital good Import	Import Prod	18.67	21.64	20.86	21.99	19.4	21.17	25.57	23.62	25.07	25.75									
å	Consumer @ Import	Import Prod	43.77	46	47.08	48.15	52.99	52.33	48.13	48.67	47.36	44.66	45.85	45.59	48.15	46.84	43.75	45.63	48.27 46	46.87 48.43	43 46.04
Inter	Intermediate Import	Import Prod	31.83	26.68	27.3	25.95	23.45	22.7	21.16	23.71	23.64	25.02									
Raw	Raw material Import	Import Prod	4.41	5.67	4.69	3.89	4.14	2	1.25	3.98	3.9	45.4									

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THEORY OF MY MIND: FIRST PERIOD

As far back as I can remember after my family moved to _____, I would have occasional petít mal seizures. Triggers (for whatever reason) were the bathtub and putting my laundry basket at the top of the stairs to be brought down by my parents into the basement. The feeling was that I was completely aware of my surroundings but I couldn't properly access my mind to act or react to stimuli. I recall that it something brought some mastication or lip smacking. It would usually pass after a minute or two. In one instance, was talking to me and a petit mal seizure came over me, disrupting my ability to react. Being a rather impatient individual, he started yelling at me to try to get me to react, and all I could do afterwards was try to explain that it felt like my mind was being controlled for a short interval. My first grand mal seizure occurred (if I remember correctly) in the summer between Grade _ and _ in 19_. I remember going up to the top of the stairs where ____'s university office mate, a _____ with experience in SCUBA and hence first aid experience was visiting. I started talking to him and the next thing I knew, I was in an ambulance on _____ Drive below the _____ flyover. I was told later that I had been in the middle of talking to him and suddenly I started making weird faces and he had started chuckling in amusement, but with his first aid experience, he was the first to recognize that I was having an epileptic seízure. At the hospital, they saíd it could be a one-off and that if I had a second one I would have to go on medication. I did have a second one and went on Tegretol. I got a rash and they put it down to the medication and switched me to Clobazam. That essentially how things began. At some point I was switched to the new (at the time) medication Vigabatrin / Sabril. At some point I had to go in for a visual fields test because this was apparently identified as a síde effect. Fínally I got put on Dílantín as my fínal medication. Seizures eventually subsided around 22 when I moved to Edmonton to begin my first year of university. My experience with epilepsy had its usual "problems" associated with social perceptions. I had a _____ friend who (along with his mom) kept telling me that taking pills was not good for me. At one point, I had promised a girl that was a bit unpopular that I would be her gym partner the next morning. I woke up that morning feeling extremely out of touch. I was given an apple and it tasted like sawdust. Despite caution that maybe I should miss the school day, I dídn't want to let down this girl by breaking this promise so I went to school. In gym class (first period) we were playing badminton and I was partnered with this girl as promised. The next thing I heard, the gym teacher, Mr _____, and the learning disabilities resources teacher, Mr _____, were bent over me lying on the gym floor. Of course after that, the secret was out and occasionally kids in my class who had been witness to this incident would make offhand comments like "better not include _____, he might have a seizure." And so it went.

As I got used to my epilepsy, I would forget or skip medication doses because of the stigma attached having something "wrong" with me. My auras became easy to recognize to the point where I would go to sleep when I knew I was going to have a seizure and would wake up with the feeling of tetanic muscle spasms and possible pain in my tongue from my teeth clamping down. But this was all part of my strategy to make it look like I was "two years seizure-free" so that I could get off my medication.

The last couple of seizures I'm pretty sure I had both occurred in	when I was on my
working holiday stint. I spent one period of about 2-3 months living in	a backpackers hostel
in and I recall one instance where I was in the kitchen cookin	g pasta and the next
think I remember, the pasta was all over the place and I had a gap in my	memory. But no one
else seemed to notice anything or react. The second time, I was staying l	ong-term in the
backpackers and was invited out to do a painting job with one of t	he other long-term
individuals in That time, I went to sleep and knew I had had a	seízure. I belíeve that
would have been in the autumn of 20_ before I began university in 20_	. I moved to
in 20_ and it was agreed that I could go off my medication.	

SECOND PERIOD

Although I dídn't have any further seízures, I slowly came to understand that my mind worked differently than others. I came across the idea of Norman Geschwind's work and saw in the Geschwind-Gestaut personality type my own idiosyncrasies: hypergraphia, hyperreligiosity (in terms of interest in metaphysics and big questions), circumstantiality, intense mental life.

I connected this to the notion of having a much more developed sense of narrative construction as a means to organize information efficiently (e.g. see Arthur Schopenhauer's short essay "On Thinking for Oneself). My teaching and learning style is all about anticipation and making connections and promoting that in others. I cannot retain discreet facts very well. Instead during a university lecture, for example, I will follow the direction that I believe the lecture is going and try to anticipate the next logical (to me) step. If my reasoning is correct, then I have a pathway that I can use to logically access it again. If my reasoning is incorrect, I have to ask many questions to figure out the flaw in my reasoning so that I can correct this pathway in my mind and traverse the correct logical chain of reasoning.

In this sense, I tell people that I see acquiring knowledge like building the optimal city of information in one's mind. If you simply collect discrete facts, it's like living in rural farmland and where it targets large leaps to move from one place to another. Or if you established your acquired knowledge simply in chronological order, it would be like living in a city with one long road. Some buildings are closer together and there's no real order. Instead, when acquiring new orts of knowledge, it is important to sort it properly, by

connecting it to as many things as one can that one already knows. To incorporate knowledge into a "ribosome," as Deleuze / Guattari call it. See, again, Schopenhauer

"Just as the largest library, badly arranged, is not so useful as a very moderate one that is well arranged, so the greatest amount of knowledge, if not elaborated by our own thoughts, is worth less than a far smaller volume that has been abundantly and repeatedly thought over. ("On Thinking for Oneself")

This hypergraphia and circumstantiality makes sense within this context as a reflection of projecting a certain mode of teaching and learning: as a pathless deposit of information makes no such in such an epileptic mind, so it becomes difficult to believe that a bit of info presented without context should be useful to others. The hyperreligiosity can then be seen as an epileptic manifestation of Karatani's notion of the "will to architecture" (Architecture as Metaphor), i.e. to what end is this deliberate construction of knowledge directed? Especially within a monotheistic history, we can make a connection to Augustine's <u>City of God</u>, and a reflection on a single history to a single of end. What of abnormal sexuality? Clearly such an intense mental life provides plenty of distraction from the Freudian Oedipus Complex and everything about sex, but also there is the manner in which one cannot help but calculate forward the consequences of any relationship and the Catch-22 of being linked to one that one ends up not fitting with or causing heartbreak within one, the other, or both. This explains the hyposexuality. The occasional hypersexuality may be explained by validation of one's feeling of being an outsider within.

This intense mental life and its consequences can be seen in the life and works of two historical individuals who were thought to suffer from this epileptic personality: Fyodor Dostoyevsky and Friedrich Nietzsche. As explained by science popularizer Anil Ananthaswamy ("Ecstatic Epilepsy: How seizures can be bliss," New Scientist), Dostoyevsky wrote in his own diary as well as projecting onto the character of Prince Myshkin in The Idiot of a feeling of oneness with everything (the feeling I felt in the _____ airport). Furthermore, Nietzsche disappeared from view and slowly went insane after the incident with the old nag being whipped in the street. According the Frederic Gros's A Philosophy of Walking, Nietzsche's major problem was his failing eyesight and physical debilitation no longer allowing him to go out in the world, a major problem for the man who William Barrett described as "the loneliest man in the world" in Irrational Man. It is said that Hunter S. Thompson also blew his brains out because of a combination of depression and the breakdown of his physicality and not wanting to face being confined to a wheelchair.

THIRD PERIOD

But let me get back to the topic at hand. It is difficult to describe this ecstatic seizure, except that I felt like the ubermensch; that all of life from the first archaebacteria was to culminate in my transhumanist form because a made a leap that no one else could on Kant's intractable problem of the back door to the thing-in-itself. The basic idea is simple, one of

complementarity, i.e. that if I look at things that are not-me and exhaust all possibilities of the not me, then not-not-me must be me. Thesis-antithesis-synthesis, as Hegel maintained. What is the tree-in-itself? It is simply everything that is not the not-tree within what we can observe. This likely seems tautological and useless, but there is a means by which this can help. The only major problem with this is its application. As finite beings with finite time, we cannot possibly check all that is the not-x to identify the x-in-itself. So a shortcut must be found through a process of logic and categorization. As the WTF may now be starting to kick in, let me move to how _____ was triggered and the ideas that helped me make this flying leap. This will probably be an easier language to translate. The main trigger for my episode in _____ has to do with an individual in my life that I was texting with regarding mental health. She has an extreme form of bipolar disorder and it is very debilitating regarding her ability to interact with the world. She tried to explain it to me as she gets really excited about the prospect of doing something, but when the time actually arrives, she feels no real sense of accomplishment or fulfillment or meaning. I can understand it in terms of what I think CBT and DBT is supposed to address based on deduction.

I think about it this way. Imagine someone trapped in a burning vehicle. You go in and using some amount of Herculean courage and strength you manage to somehow open the door and wrench the person out and safe their life. Everybody cheers but you feel nothing. And the reason why you feel nothing is because you look at this arm that performed this feat and you do not recognize it as your own, as if still a baby with a mind-body division. This, I understand, is what CBT is supposed to address, namely reinforcing this mind-body connection so that one can say to oneself "yes, YOU did this."

Or, the way I understand DBT because "dialectical" strengthening the subject-subject Master-Slave dialectic in a healthy manner. In this sense, I feel that there is an essence of stoicism involved (of course, I may be wrong my assessment). The idea would seem to be to refuse the feeling of enslavement by the world to one of mastery over the self. To be able to wake up in the morning, assess the things you do have control over and how you can make progress, and look at the things you have no control over and put them out of your mind, "que sera sera". In this sense, there is a sense of goal-setting based on thesis-antithesis-synthesis and reinforcing that progress is both possible and within reach. With my friend's condition, it would be an extreme form of slavery within the external world as if everyone is enjoying this fun game of accomplishing and you can never understand the rules.

The reason why this struck a chord with me is because I realized that I could induce this feeling in myself by _____ with high ____ content. The resulting feeling—when I'm already feeling anxious—is to begin to focus on the time period in the future when I will no longer exist as myself (because who knows what will happen after death? I can only conclude that because I don't have access to memories of a previous version of myself, that "I" will either exist as someone or something else, or not at all. But the true anxiety lies in my inability to access the narratives that justify my continuing my projects, which have always been the lifeblood of my existence. Instead of being able to draw a line from myself to what

I'm doing, all I can see is all of the negative disruptions that have gone with that as my incorrigible need to exchange information in ways that others can comprehend (note: hypergraphia and circumstantiality) and my at times solipsistic impatience in trying to collaborate on a project with supervisors, partners, friends, etc gives me a feeling of embarrassment and guilt when the bigger picture and importance of the goal is sheared away by the effects of _____ on my epileptic brain. However, my saving grace is always the knowledge that this too shall pass and when it does on the comedown, it reinforces the role that these projects play in bringing meaning to my life.

So what does Anil Ananthaswamy have to say about ecstatic seizures? Well, aside from the stuff about Dostoyevsky, he talks at length about the insular cortex and how we don't understand what it does but that it is implicated in ecstatic seizures. In a section of the wikipedia article on the insular cortex, the clinical significance of the insula is implicated in expressive aphasia, addiction, and "subjective certainty in epileptic seizures". Quoting Fabienne Picard, it suggests a hypothesis that "during ecstatic seizures, the comparison between predicted states [based on risk and uncertainty assessment] and actual states no longer functions, and that mismatches between predicted state and actual state are no longer processed." Ambrosí et. al. (2017) maintain amygdala and insular functional connectivity in the resting state differentiate bipolar disorder from unipolar. Numerous other studies connect insular deficits to bipolar disorders and not unipolar. A comprehensive survey of the role of the anterior insular cortex in ecstatic seizures was done by Geschwind and Picard in 2016 ("Ecstatic Epileptic Seizures: A Glimpse into the Multiple Roles of the Insula"). They note the rarity of such auras can be attributed to the "need Lof1 the activation of a vast region of the anterior insula". As with Anil Ananthaswamy, the authors quote the example of Prince Myshkin from Dostoyevsky's The Idiot.

OVERTIME

What was the trigger this time? I suppose the cascading really started when I made the historical connection between capitalism and slavery. I realized that the number of slaves had to depend on available work. Otherwise, you simply have more mouths to feed. The other connection I made was to the Existential Comics frame "We must imagine Sisyphus as having met Camus". I saw Sisyphus as the point at infinity of capitalism. Then everything else start to fall out. I deduced a simple dichotomy of human behaviour, then pondered some things about theoretical physics. The thing is, however, I went about this is the most scientific way possible, challenging individuals around me to find flaws in my argument and putting it into the context of principles like Heisenberg and the Big Bang. The details are unimportant.

What may be more of interest is the connection I made to music. I had found on the Sunday before that I could just give myself over to whatever made sense. I would ask ______ to download an album and listening to that album and who I associated it with made me think of other things and led me to pursue other "natural" actions associated with other individuals.

An interesting thing, however, was that earlier in the week I had come up with the idea to write a book that could summarize all my ideas underneath a bunch of layers. This is how the book was to be set up

TITLE: PARABLES, PARABLES, PARABLES

Part 1: Ch 1: Probability and Measure

BEFORE Ch 2: The Konigsberg Bridge Problem

Ch 3: Mr. Crowley

_Ch 4: A Happy Death

Part 2: Ch 5: A Harsh Reality

DURING Ch 6: Foot-and-Mouth Disease

Ch 7: It is You Who Are the Zombies Ch 8: Something about Everything

Part 3: Ch 9: "Here I Am, How Can I Help?"

AFTER Ch 10: Césairing Souls

Ch 11: The Future Lasts Forever

This would probably mean nothing to most, but here's the general subject matter:

Ch 1: Optimal Stopping and Life

Ch 2: German Idealism (Kantian freedom)

Ch 3: Psychoanalysis and Freedom

Ch 4: Sisyphus, Zarathustra, and Private Languages

Ch 5: Origins of Society and the First Man

Ch 6: Slavery as an Optimization Problem

Ch 7: Formalization (UN/World Bank) vs Informality / Decentralization

Ch 8: Two Types of Freedom

Ch 9: Development Engineering Ethics

Ch 10: Investing in People

Ch 11: What Would a Post-Capitalist World Look Like?

One of the things I found particularly interesting about this list is that it seemed like I had a friend perfect for writing every chapter, and I started to see more correlations between the numbers and where they fit into certain albums that I like to listen to and associate with certain friends, suggesting that perhaps there's a certain way that people order music that reflect the way they order stories (e.g. theme, mood, etc. then rising action, climax, falling action, denouement).

My tíme ín	was excellent. 1	l feel like I slowed	down pretty	quickly and o	ne of the
reasons why I wo	as able to get into	my stride fairly	quickly was	because of the	way in whic
showed	genuine interest i	n my case and m	y interests. I	'n partícular, th	ne one
(who was never i	ny) who re	eads an exception	al amount (1	thínk ít ís	?) asked
me about books,	and I put my tím	e into writing up	a list of book	e títles that had	x some

reaning for me. Hopefully she gets something out of the photocopy of it that she took.
alking to, I felt I was a positive presence but also it helped to develop an
nderstanding of mental health and various topics I touched on in conversations with them.

THANK YOU!!

MUSINGS ON SCHIZOPHRENIA

My understanding / theory about myself in relation to my friend with bipolar leads me to a certain interpretation of mental health, bipolar, and schizophrenia. As Gabor Maté speaks of "The Realm of Hungry Ghosts" (which I have not read), I posit an idea of "identity dissonance", namely to deal with trauma requires connection to an incomplete past self that is either overdetermined (schizophrenia) or underdetermined (bipolar). One is simply trying to connect Person B (present self) to Person A (past self) that bypasses and / or edits out the period of trauma. So in the case of schizophrenia, the mind acts as a sort of echo chamber, distorting the original "signal" of what the self is as recorded in the memory / hippocampus. In the case of bipolar, the mind becomes distracted from correctly identifying the past self, and over time the signal becomes weaker rather than distorted.

Given the presence of hallucination (visual and audio), there may be a number of similar effects to taking psychotropic substances (psilocybin, LSD, etc) that cause a "slippage" in perception. One possible explanation (which is little more than a wild guess) is that the two temporal lobes begin to record different singles and get confused as to what is real, and what is simply created (that is, hallucinations and other phenomena must be modifications of ideas already held in the mind, it is unlikely that they are created anew) such as when speaking of a hypothetical or imagined scenario that did not actually occur.

As Kojín Karataní wrítes in <u>"Architecture as Metaphor"</u>, Plato (vía Socrates) maintains that only propositions that pass through dialogue should be considered rational, and that dialogue (to be considered dialogue) must follow a set of rules. Otherwise it is a monologue. The fragmented communication that reflects fragmented identity possesses only partial rules if part of it exists only in the mind and is thus inaccessible to an interlocutor.

Karatani's argument maintains an important link to the master-slave dialectic of Hegel in that he (correctly) points out that it is not the teacher in the teacher-student dialogue that is the master, but the student. The teacher is the slave. This is easily seen by his observation of language teaching that rules of grammar are only useful when one needs to teach the student to communicate without the student, language maintains a use-value alone. The student, until fluent maintains the "methodical doubt" until he / she can be convinced of a set of language rules that are coherent via use-value within society. The burden of proof is therefore on the teacher, if teaching correctly.

In a similar manner, the psychiatrist-patient relation can be seen as a similar asymmetric master-slave dialectical situation and, again, if done correctly, it is actually the psychiatrist who is the slave, as it is his / her job to communicate the rules of our shared reality to the patient exuding methodical doubt about the slippage between imagined and shared reality. Here we can come back again to the insular cortex and the work of Picard and Geschwind, and this idea of a malfunction between imagined reality and our shared reality ("real" reality, whatever that is grounded in): "mismatches between actual and predicted reality are

no longer processed." Here I could volunteer the general observation that while bipolar disorder flips back and forth between negatively predicted reality that can no longer be processed visa-vis real reality, and a positive one, in my case the negatively predicted reality is exceedingly rare, i.e. my perceived reality is always extremely optimistic, and one may see hypergraphia and circumstantiality as part of a quest to communicate and translate that opinion to others.

The importance of the teaching-learning metaphor is that a <u>leap</u> is necessary for teaching not to simply be algorithmic training and the tension that exists is that of the psychiatrist positioned in real reality trying to leap into the patient's imagined reality, and the patient trying to make the leap out of imagined reality into reality and hence being "cured". Of course, there always remains the problem that real reality is subjectively and historically contextualized; there is no "view from nowhere" as Thomas Nagel termed it. Since there is no ultimate grounding within reality, we must take Alexander's strategy (as quote by Karataní, í.e. "In any organízed object, extreme compartmentalization and the dissociation of internal elements are the first signs of coming destruction. In a society, dissociation is anarchy. In a person, dissociation is the mark of schizophrenia and impending suicide." But as I mentioned earlier, the form of this dissociation is due to an overdetermined system of echoes of reality that cannot be discerned between actual occurrences and constructed occurrences, e.g. within language constructions of described approximations of hypothetical realities. In contrast, bipolar individuals may partition the reality space via their emotional intelligence and see through the lens of a positive-negative dichotomy that determines their assessment of objects and processes.

Specifically, Karatani maintains that schizophrenics exist in a "double bind" situation not of their choosing, a state of perpetual undecidability where all roads lead to ruin; his example being the Zen master stating to his pupil "I have a stick and if you it is real I strike you, if you say it is not real I strike you and if you say nothing I strike you." Again, the undecidability of the situation can be attributed to overdetermination of reality to excape the single reality of historical trauma: "meta-communication [communication about communication] is collapsed.... and there is an inherent inability to decipher the truth-value of one's own statements," thus the methodical doubt is perpetual, as is the double bind. Karatani therefore suggests the use of the metaphor to coax out the "true" value of statements because metaphor maps onto so many actual scenarios. Herein lies the slavery of the psychiatrist to system without discernible rules except by proxy.

"Bateson's analysis of schizophrenia is provocative for two reasons. First, far from the conventional phenomenological accounts of of schizophrenia, he shows that the behaviour of schizophrenics is organized as a strategy to confront the double bind in communication. Second, he points out that the communication between the doctor and patient forms a double bind." [p.78]

I will now attempt to summarize and situate myself within a sliding scale of bipolar-schizophrenia that I envisioned the first time I had a euphoric seizure in _____.

In his <u>Prize Essay on the Freedom of the Will</u>, Schopenhauer describes the decision making process thus: imagine you are in a desert and you have the option of sitting on a chair to your left or a cactus to your right. You will weigh the pros and cons of sitting in the chair or the cactus and (likely) choose the chair, however "if you heard me philosophizing behind you, you might sit on the cactus to try to prove me wrong." This is the double bind and the search for "hidden meanings" that exists within the schizophrenic. Situations too often end up in situations reminiscent of Buridan's ass, but not because two options are exactly equal in content, but because content cannot be deciphered at all. The bipolar individual, depending on modd, may think of it as "today is a chair day" versus "I deserved to sit on this cactus". In contrast, those considered "normal" on this spectrum of human reality will take the chair without a second thought and wonder why there is even a decision to make, or choose the cactus just for laughs.

For me, I'm already looking past the chair and the cactus to a future predicted reality and wondering which chess move in the tactical game of life best facilitates a future that I desire. For that reason, there would seemingly be no reason to sit on the cactus because I could convince myself that I'm already one step ahead of Schopenhauer philosophizing behind me. Where the breakdown may occur is if the chair-cactus dichotomy has deep and far-reaching consequences that I can't yet fathom, in other words that I am in a situation where contingency rules and I might, in an extreme possible reality have to report in the future to the cactus cargo cult and tell them how it felt to sit there. When the topic is sitting on a cactus, this idea is quite absurd. But when the content has to do with politics or metaphysics, sometimes I just have to see where the breadcrumbs lead. And I have confidence that they will lead to something important, hence why I choose to follow.

The Importance of Being Other

Introduction

The suggestion of indefinite growth and progress in production for humanity is fraught with problems, chief of which is the problem of finite resources and a single world that cannot be replaced should a point of no return be reached. Postdevelopment critiques such as Arturo Escobar's Encountering Development, Wolfgang Sachs' Development Dictionary, and Gilbert Rist's The History of Development suggest inherent problems with humanity's fixation on "development" and "progress", especially given its hegemonic and neocolonial implications for the Global South. Although such criticisms are justified and provide food for thought, their suggestions of alternatives to development, largely founded on turning away from "progress" entirely are easily criticized as being neoprimitivist fetishizations of tradition. Yet a more intractable problem within the sphere of *realpolitik* mirrors Zizek's quip regarding capitalism that an alternative reality cannot even be conceived of. Thus, the ability of such an approach to shift policy based on a theoretical alternative to a hypothetical catastrophe is questionable. This difficulty is circumvented here by taking up a Santayanan position, namely that we have already lived this reality within the developed world and, transitively, at least a rudimentary "archaeology of the future" (Jameson, 2002, 215) may already be available by excavating the correct connections to the past, and learning from the future of that past.

Formalization in Past and Present

'He who would be free,' says a fine thinker, 'must not conform.' And authority, by bribing people to conform, produces a very gross kind of over-fed barbarism amongst us.

-- Oscar Wilde (1891)

For the purposes of this narrative, the most important recent event in development per se was not Truman's original Four Point speech, but rather than decision by former US Secretary of State and then-President of the World Bank Group Robert McNamara, who leveraged his approach of policy analysis to launch a "fight against poverty" albeit related to security. During the McNamara years, US influence on the World Bank grew and became more closely related to US geopolitical interests and the focus on poverty provided justification for increasing neoliberal intervention in the domestic affairs of developing countries (Pereira, 2020). This eventually led to leveraging World Bank authority towards structural adjustment policies whose economic results were questionable at best (Schatz, 1996, 239).

Yet the specific focus on poverty by a transnational economic body also entrenched a view of the developing world as *lacking* something. In other words, it emphasized what was missing rather than what was available, and it did so within the narrow Western economic view of society subsumed to the economy rather than the other way around, and a "running of society as an adjunct to the market" (Polanyi, 1957, 57). Part of this intervention necessitates destroying traditional social relations of kinship and other noncontractual relationships, especially in developing countries (Polanyi, 1957, 163), e.g. removing informal structures of social debt to the community (Mbembe, 2001, 41)

and a general historical communitarian identity (Maqoma, 2020, 1) in Africa. One continues to see a push for the "formalization" of the informal, e.g. the United Nations advocates "support in formalizing MSMEs [Micro-, Small, and Medium Enterprises] would be a step to achieving Goal 1 ["End poverty in all its forms everywhere"]" (UNDESA, 2020, 5).

Although this is presented as having positive outcomes, the focus on addressing poverty by international agencies continues to reduce a social problem (subsistence and the growing of foodstuffs) to an economic one (wages and the poverty line) in line with a similar forced transfer of labour power from subsistence to wage work at the advent of modern capitalism in England. Undermining the informal economy of subsistence farming, hunting, and usufruct within England via the Enclosure Acts (Polanyi, 1957, 37) and Game Laws (Perelman, 2000, 47) was precisely the means by which bourgeois industry was able to create a large pool of lumpenproletarian workers that would have no choice but to sell their labour for low wages to facilitate primitive accumulation and allow the English economy to rapidly develop during the Industrial Revolution (Perelman, 2000, 93). The logic is as follows: working on the land within the household industry required less labour time to create the required amount of commodities required to live comfortably (foodstuffs, shoes, clothing, etc.) than the equivalent of wages working in the industrial sector. Allowing such a subsistence economy to continue independently of wage labour (in fact, once wage labour was established, a small amount of husbandry was favoured to justify even lower wages) would not provide surplus value to be sold as profit to others. The consequences would be that those without land could not be fed (except via imports), surplus value through sales would not be possible, and industry would have to raise wages in order to attract people from subsistence, which was undesirable.

As Tawney (1938, 267) and Polanyi (1957, 157) maintain, there are striking resemblances between Africans under colonialism and post-colonialism, and English labourers after Puritanism won out in England during the Reformation thanks in part to the Calvinist influence of John Knox in the 16th century, and a sudden interest in the newfound riches of the New World that were being (Tawney, 1938, 141). It is the reconstruction of this connection and the consequences of the past version of events that is the central goal of this chapter.

Breaking into Modernity

And so Individualism exercises no compulsion over man. On the contrary, it says to man that he should suffer no compulsion to be exercised over him. It does not try to force people to be good. It knows that people are good when they are let alone. Man will develop Individualism out of himself. Man is now so developing Individualism. To ask whether Individualism is practical is like asking whether Evolution is practical. Evolution is the law of life, and there is no evolution except towards Individualism. Where this tendency is not expressed, it is a case of artificially-arrested growth, or of disease, or of death.

Following Jameson (2002, 40), "modernity" (or any form of periodization) is interpreted as a tool by which one may establish a historical narrative, rather than a concept in and of itself. That is, depending on what one wishes to give precedence to (e.g. technology, capitalism, art, culture), one can identify any number of "beginnings" of modernity. For the purposes of the present narrative, this rupture encompassing two world historical events, that of the European discovery of the Americas by Columbus (1492), and the triggering of the Reformation with the publication of Luther's *Ninety-Five Theses* in 1517. It is these two events that triggered a schism in the idea of a homogeneous preordained Christian historical reality that humans were mere spectators to.

On the one hand, the discovery of the Americas implied objectively that there were humans outside of previously the assumed notions of "progress" fought over by Europe, Islam, and the Far East. More importantly, the existence of such groups was the touchstone for political theories of the "noble savage" largely beginning with Thomas Hobbes, as well as the motivation for the conception of international law under Francisco de Vitoria (1483-1546) and later taken up by Hugo Grotius (1583-1645) (Bowden, 2009, 15). On the other hand, Luther's espousing of a break with the Vatican brought the first vestiges of cultural individualism to Europe. Luther, who had taken up the life of the monastery advocated for "simple Christian virtues" that had been lost to greed and corruption (Tawney, 1938, 100), and thus espoused a return to a simpler Augustinian world where each individual knew his place in the social hierarchy and toiled for God. However, this initial break and the focus on discipline and knowing one's place was the impetus for the more urban and worldly John Calvin to espouse discipline towards worldly economic affairs: whereas Luther preached to the peasantry to turn away from the secular world, Calvin advocated for production so long as its fruits were not used for self-indulgence but benefited all (Tawney, 114). It would only be a further step to the Puritan interpretation of Calvin that rightly found favour with the upper classes and aristocracy to bring England into a mode of religious justification for the gifts of wealth to be a sign of being "chosen" (227)

The choice of choosing the discovery of the Americas and Luther as ushering in modernity is, as accorded by Jameson, based on the choice of narrative. Yet both events brought about a substantial rupture in the framework of medieval Western society, which was only beginning to rediscover the Ancient Greeks (and the Muslim interpretations of them) on a wider scale in the 13th century due to the work "Doctor Universalis" Albertus Magnus and his pupil Thomas Aquinas. The fundamental importance was that both events introduced *the possibility to be Other* in their own way, not only Other to vis-à-vis society, but Other also vis-à-vis history in general. Augustine had accorded for a single historical trajectory along the path espoused by the Catholic Church, with Reason always a servant to Faith. Luther suggested that religion must be interpreted as an individual duty and responsibility, largely because of the corruption and indulgences he saw of the clergy. In this sense, a certain level of autonomy was placed in the hands of the individual to choose one's own interpretation and hence one's own path regarding one's duty to God.

The discovery of the Americas had even farther-reaching effects in that it set the stage for what is arguably the most ruthless stage of colonialism via the purging of large swaths of indigenous populations and the accumulation of large amounts of land, labour, and capital (Columbus: "Gold constitutes treasure, and he who possess it has all

the needs in this world, as also the means of rescuing souls from Purgatory and restoring them to the enjoyment of Paradise" (Tawney, 1938, 98)) and, later, the creation of enterprises in the United States and West Indies with labour provided by enslaved Africans. Ideologically, there was the hegemonic advantage of the indigenous being protohistorical, i.e. unable to contest the histories written of them by European occupiers. Thus, their discovery gave rise to various versions of the primitive man (e.g. Hobbes and Rousseau) and stages of growth (e.g. Smith,) hypotheses, bringing about a new phase of ahistorically constructed political philosophies.

Othering the Poor and the Primitive

Starvation, and not sin, is the parent of modern crime. That indeed is the reason why our criminals are, as a class, so absolutely uninteresting from any psychological point of view. They are not marvellous Macbeths and terrible Vautrins. They are merely what ordinary, respectable, commonplace people would be if they had not got enough to eat.

-- *Oscar Wilde* (1891)

C. B. MacPherson's *The Theory of Possessive Individualism* is a groundbreaking analysis of Hobbes to Locke in maintaining that various criticisms of Hobbes arise from reading it ahistorically, i.e. not taking into account that the period Hobbes was writing in predates the "post-Hobbesian critiques" of logic and morality that are often leveled at him (12). Based on his analysis of Hobbes necessitating a possessive market system, MacPherson suggests that Hobbes' theory — dissociated from religion and inspired by Galilean mechanics of movement projected onto humans (which one could suggest as an early precursor to positivism and rational self-interest) — "to attempt to persuade men to behave differently from which men have hitherto behaved" (105). MacPherson maintains that Hobbes' single great mistake (which he cannot be blamed for) was to assume the need for a self-perpetuating sovereign outside of society because the bellum omnium contra omnes was the natural outcome of a fragmented struggle for power, and without such a sovereign, society would necessarily collapse. Posterity showed that class-based striation of society between owners and workers maintains this balance of power since it is in the best interest of the minority in power to collude to maintain that power over the majority.

Although Hobbes was indeed writing at the time of the Puritan turn in England, it is interesting to note that MacPherson fails to consider a possible connection to the discovery of the Americas and the increasing interest in its resources, e.g. his quip that the "savage people in many places of America" are not at war despite no government, but "dependeth on natural lust" and "live at this day in that brutish manner" (Leviathan, Ch. 13) because there is no power to fear suggests that he is aware of "primitive man". Locke goes further in the Second Treatise speaking of the "common consent" of those who give up their "pretense to natural right" due to having more land than they can or are willing to improve. Clearly, however, the application of these Lockean principles is highly selective, as the monopolization of unimproved land as a "future investment" is one of the primary sinks for excess capital, as well as a means to maintain artificial levels of land scarcity.

Indeed, Braudel (1995) maintains, for example, that the history of Latin America is entirely predicated on its perpetual occupation by European settlers for prospecting and resource extraction. The advent of the mining and export of silver and other precious metals from Latin America to Europe by the Spanish and Portuguese signaled a new, more ruthless stage of primitive accumulation of capital than Europe had ever seen. Despite being a later arrival to this new age of colonial theft, this accumulation eventually paved the way for the English to develop its weaving and dye industry to rival that of industry via mass production usurping artisanal craft, and the use of surplus labour made available by the squeeze on subsistence living within the United Kingdom and Ireland. The effects on Latin America are still apparent: indigenous peoples still have limited access to land, which is owned and monopolized by European descendants. Moreover, the original settlers of Latin America found a continent with great distances between established settlements and little means of efficient transportation and mobilization from one location to another. The result was the construction of towns around resource extraction, and railways and roads to port facilities erected on the coast that would facilitate quick export to Europe, whether it be mineral or agricultural. Once a given natural resource was exhausted or market prices rendered further extraction impractical, these towns were then largely abandoned for the next location that would provide resources that could be sold in Europe. Such a process continues today, for example in the mining communities of Zacatecas and San Luis Potosí in Mexico: once thriving cities are now finding capital hard to come by as their mineral resources become unattractive. Bolay (2019) notes that Argentina's difficulties stem in part from its perpetual reliance on agricultural exports to Europe to maintain its economy.

Slavery: An Optimization Problem

The fact is, that civilisation requires slaves. The Greeks were quite right there. Unless there are slaves to do the ugly, horrible, uninteresting work, culture and contemplation become almost impossible. Human slavery is wrong, insecure, and demoralising. On mechanical slavery, on the slavery of the machine, the future of the world depends.

Oscar Wilde (1895)

Although slavery goes back to at least the Greeks, the first truly transnational slave trade that has direct links to today occurred during the Muslim Golden Age, which began around the 8th century and reached its heights before the Crusades of the 11th century, and the eventual collapse of the Abbasid Empire in the 13th century. The Muslims occupied North Africa and the Persian Gulf, which connected Europe to Africa and Asia. Thus, they were in the ideal position to begin the first vestiges of modern transnational capitalism by trading for European items that were rare and in demand in Asia, and vice versa. Although Western societies generally credit Adam Smith with founding modern economics, the Muslim scholar Ibn Khaldun has been increasingly recognized as making important contributions to socio-economic thought 400 years before Smith in his *Muqaddimah*, published in 1377.

Because of the harsh realities of the desert through which the Muslims had to pass from one end of their empire to the other, they built settlements and cities sparingly, as well as establishing oases and trading posts at regular intervals for those traversing the

Sahara. Today, the locations of grand historical cities like Timbuktu and Gao seem oddly inaccessible in the middle of the Sahara, but they were important settlements at the outer fringes of the Muslim Empire, especially to facilitate trade in goods and slaves with "Black Africa". They were occupied by the Mali and then Songhai Empires as the Abbasid Empire weakened and then collapsed. The "backwardness" of Sub-Saharan Africa historically is attributed by Braudel (1995) largely to its isolation by the Sahara, which required the domestication of camels to traverse safely. Thus, the exchange of goods and knowledge between Europe, India, China, and the Muslims bypassed those living south of the Sahara, and the topography of Africa—heavily forested, hot, and humid—meant that the natives had no real source or impetus to develop their capacities further than those needed for subsistence living.

Yet observations of the Muslim slave trade versus the European and American slave trade—both in terms of its timing and volume—are telling. As with wage work, slavery is also, at heart, an optimization problems. Slaves must be kept alive and sufficiently healthy to do the work asked of them. If there is insufficient work, slaves are a cost in terms of food and shelter, however harsh these the realities of these conditions may be. The death of slaves during a period of reduced work implies that new slaves must be bought when there is another upsurge in work. Conversely, if there are not enough slaves, work remains undone and profit is not maximized. The Muslim trade in slaves would have been far lower in volume due to the harsh desert conditions in which they lived. Slaves might be recruited to carry water and other goods from one location to another, but they too would require food and water during a long and dangerous trek, and their deaths could imperil the mission. However, once the capital of the Americas reached Europe and the Industrial Revolution was in full swing, the need for slaves and cheap labour was almost unlimited, and the minimal cost of keeping them, i.e. basic amounts of food, water, and shelter conditions, would have helped to maximize surplus value from production.

History is Written by the Liberals

With authority, punishment will pass away. This will be a great gain – a gain, in fact, of incalculable value. As one reads history, not in the expurgated editions written for school-boys and passmen, but in the original authorities of each time, one is absolutely sickened, not by the crimes that the wicked have committed, but by the punishments that the good have inflicted; and a community is infinitely more brutalised by the habitual employment of punishment, than it is by the occurrence of crime.

-- Oscar Wilde (1891)

Historically, "liberalism" is associated with a long list of individuals, much of them associated with the development of British economics. To these, one should add the influencers of the French Revolution: the Encyclopedists, Voltaire, Rousseau, Thomas Paine, and others. Yet the striking difference between the French liberals and the British liberals is that nothing akin to the French Revolution occurred in Britain. Karl Polanyi (1957) puts this down to the implementation of the Speenhamland laws beginning in 1793, which provided an allowance of relief for the poor to prevent a popular workers revolution. By this time, the fantastical abstractions of Smith's *The Wealth of Nations* that prevented it from becoming popular vis-à-vis James Steuart's *Principles of Political*

Economy had gone from a liability to a strength as the business world sought to neutralize the negative realities of the push towards a full-fledged classist wage labour society (Perelman, 2000). On the other hand, British Puritanism and the idea that "those that do not work should not eat" became a mainstay in British economics. This tension would lead to the eventual introduction of the Poor Law amendments in 1834 (Polanyi, 1957).

Importantly, however, British "liberal" economists such as Locke and Smith made way for the liberal philosophers associated with utilitarianism: Jeremy Bentham and James Mill, and later Mill's son John Stuart Mill. Yet Bentham conceived of the Panopticon, a workhouse that had a single tower to monitor the factory floor with as little labour as possible. This, he suggested, would be the cornerstone of a means by which all of the "freeloading" poor and peasants could be put to work in order to maximize the national output using all available labour. He maintained that even children as young as five might be put to work to prevent them from falling into the sin of sloth and alcoholism, and that such workhouses could be connected within a national corporation with himself at the helm (Polanyi, 1957). It is important to remember that Bentham's hedonistic calculus consisted of "maximizing pleasure and minimizing pain" in the sense that greatest happiness for the greatest number was the determinant of a correct action. Through these workhouses, Bentham could argue that on the one hand the workhouses were in the best interests of the poor to save them from descending into sinful and desperate behaviour, while at the same time contributing to the happiness of everyone else through adding labour to national production.

James Mill, another advocate of utilitarianism and a close ally of Bentham is perhaps best-known for his close association with the British East India Company (as well as being John Stuart Mill's father, who after telling his father that Plato's *Republic* was not understandable to him at the age of seven was told to "read it again", probably contributing to his son's eventual mental breakdown at eighteen). James Mill's *History of British India*, published in 1817, rapidly became the most trustworthy authority on the Indian colony throughout the 19th century (Adas, 2014). The problem was that Mill had never actually set foot in India, and the book promoted and propagated the worst stereotypes of Indians and Hinduism, contributing to severe Indophobic and Orientalist attitudes within England. It may be that Winston Churchill—who famously declared that history would be written by the victors—had James Mill's history in mind when opining that Indians were "a beastly people with a beastly religion" while diverting food away from India and contributing to the Bengal famine of 1943, wherein two to three million Indians perished.

We Must Imagine Mill Unhappy

It will, of course, be said that such a scheme as is set forth here is quite unpractical, and goes against human nature. This is perfectly true. It is unpractical, and it goes against human nature. This is why it is worth carrying out, and that is why one proposes it. For what is a practical scheme? A practical scheme is either a scheme that is already in existence, or a scheme that could be carried out under existing conditions. But it is exactly the existing conditions that one objects to; and any scheme that could accept these conditions is wrong and foolish.

Oscar Wilde (1891)

Although John Stuart Mill continued to be associated with the British East India Company, he did so under the guise of its existence as a benevolent dictatorship, suggesting that it was for the Indian's own good that the British were developing their economy even though it was done from a largely extractive point of view: the crisscrossing of the Indian subcontinent by railroads designed primarily to facilitate the rapid extraction of natural resources to ports (Adas, 2014). Closer to home, however, he argued for much more progressive labour laws in his *Principles of Political Economy* while writing *The Subjection of Women* jointly with his wife. In addition, both his *On Liberty* and *Principles of Political Economy* focused on the emancipation of the individual from simply being an extension of mass society. In *On Liberty*, for example, he states "to conform to custom merely *as* custom, does not educate or develop in him any qualities which are the distinctive endowment of the human being" (Mill, 1859), and that too often, when confronted with a decision

the mind itself is bowed to the yoke: even in what people do for pleasure, conformity is the first thing thought of; they like in crowds; they exercise choice only among things commonly done: peculiarity of taste, eccentricity of conduct, are shunned equally with crimes: until by dint of not following their own nature they have no nature to follow: their human capacities are starved: they become incapable of strong wishes or native pleasures, and are generally without either opinions or feelings of home growth, or properly their own.

In addition, in the *Principles* chapter "On the Probable Futurity of the Labouring Classes", Mill envisions a future of shared capital within cooperative societies, maintaining in such a state of affairs "owners of capital would gradually find it to their advantage ... to lend their capital to the associations ... [and] the existing accumulations of capital might honestly, and by a kind of spontaneous process, become the joint property of all who participate in their productive employment" (Mill, 1848). Smith, too, suggested that profit "is always highest in the countries which are going fastest to ruin" (Smith, 1937). Within the current neoliberal reality, where the United States appeals to Smith to justify an entirely profit-based market system, lessons have not been learned from recent "ruinous" economic collapses. Further, any appeal to a more equitable distribution of resources or even the establishment of a universal healthcare system within the United States continue to be stalled and rejected. It can also be argued that the establishment of the Patriot Act as a consequence of the September 11 attacks and continued conformity to nationalism in the form of a historically customary American exceptionalism may suggest that Mill's principles have fallen on deaf ears.

More specifically, however, it can be suggested that *formalization* is a dominant force in reifying this adherence to custom, a force that accelerated with the nationwide integration of Fordist principles of mass production in the United States and further abroad, itself a natural evolution of the principles of mass undifferentiated labour that brought the Industrial Revolution to Britain. As pointed out by Lim (2012), the informal, chaotic city environment of Asia tends to be seen as problematic and aesthetically displeasing to Western architects. It may reflect a discordance with the "will to architecture" as described by Karatani (1995), but it also confounds widespread neoliberal intervention in trade and the job market. Formalization is designed to increase the predictability of a given economy, and it can only do this by implementing

customs and expecting people to follow them. Of course, a degree of efficiency can be seen as necessary in creating a functioning economy, the point of contention lies in the *hegemonic* nature of leveraging formalization only towards neoliberal marketization—a system geared towards socialism and redistributive justice is also a means to formalize, but is not seen as advantageous to neoliberal and/or neocolonial interests. In other words, formalization in this sense promotes individualism and competition, which do not reflect the historically communal nature of Asia and Africa, but is advantageous to divide and conquer economic schemes of external corporate or geopolitical interests.

Either / Or

What Jesus meant, was this. He said to man, 'You have a wonderful personality. Develop it. Be yourself. Don't imagine that your perfection lies in accumulating or possessing external things. Your affection is inside of you. If only you could realise that, you would not want to be rich. Ordinary riches can be stolen from a man. Real riches cannot. In the treasury-house of your soul, there are infinitely precious things, that may not be taken from you. And so, try to so shape your life that external things will not harm you. And try also to get rid of personal property. It involves sordid preoccupation, endless industry, continual wrong. Personal property hinders Individualism at every step.'

-- Oscar Wilde (1891)

Yet it is possible to go further than a capitalism-communism impasse that is predicated solely on "opinion". As the argument goes (e.g. Fukuyama's declaration of the end of history), communism was tried in the Soviet Union and failed spectacularly, and we are now (arguably) in a situate where "an alternative to capitalism cannot even be perceived" (Zizek, 2006). Here I turn to a rather unlikely source, namely the Existential Comic "We Must Imagine Sisyphus as having Met Camus". In it, Camus is viewing and commenting on Sisyphus's eternal punishment, upon which he utters the famous line from *The Myth of Sisyphus* "we must imagine Sisyphus happy", whereupon Sisyphus comes down the mountain to remonstrate that his punishment is "literally the worst". Camus tries to explain that Sisyphus can "rebel against his absurd condition", and Sisyphus makes him a deal to switch places, "pushing the boulder up the hill forever", to which Camus replies "actually I just remembered I have to be somewhere". A particularly sharp interpretation of this comic as parable would imply the caption "God meets Satan", if Sisyphus and Camus are interpreted as points at infinity depending on which of two monotonic strategies of living that humanity would follow for the Hegelian Spirit to realize itself in one form or another. First, the assumption is made of a "selfish gene" as put forward by Richard Dawkins (1976) as a way to conceive of gene-based evolution. The goal of this selfish gene is to try to guarantee that one has lived the best life possible in space and time.

In this sense, adherents to capitalism follow a strategy of maximizing external surplus value (i.e. "profit-in-representation"). The anomic capitalist beset by the "disease of the infinite" will continue to push for greater profits, usurping the world to him / her, in an attempt to "win" the game of life . The selfish gene attempts to bring the world to the individual, by owning things and spending wealth on the biggest and fanciest commodities. The zero-sum game of scarcity implies that the wealth obtained by such an individual is not at the same time owned by others, the opposite of Mill's

suggestions of a future of cooperatives that capitalists wish to invest in. In those that die are no longer contenders, nor can they bring offspring into the world that may threaten one's position versus future generations. Here one sees echoes of monotheism: the existence of a Judgment Day implies that the game is over in time and space, and one's score can be tabulated against all others who have lived or will live, so that a "winner" may be announced.

One may now consider this strategy of maximizing external surplus value to its extreme: a future scenario occurs where just two people still exist, the others dying off due to being destroyed or deprived of commodities in a Hobbesian bellum omnium contra omnes, where life is nasty, brutish, and short. Both individuals (wishing to win the game of living the greatest life in space and time by owning all) must now decide on what has value, since no other individuals exist to contend with said opinion. They may either choose or inherit the valuation of a single rock (imagine it is the largest diamond or brick of gold in all existence). One of the two dies in the struggle, leaving a single individual as the victor. This individual is Sisyphus. As Camus maintains in the *Myth of* Sisyphus, on the one hand the question of suicide is what "one must answer" first, and on the other hand, we must imagine Sisyphus happy the moment he struggles with the boulder and lets it fall back to the bottom of the hill. From a Marxian point of view of the importance of the subject-object relationship, work is the primary incarnation of meaning, and so the last individual must do something with the last thing that was declared valuable in order to address the doubt that all was for naught. In that sense, he pushes the last rock of value to the top of the hill, symbolizing himself as the victor. At every instance that he gets near the top, he must make a decision, to finally put the boulder at the top of the hill, signaling the end of the game, and kill himself (for there is nothing left to do), or let it fall back to the ground and work himself to exhaustion. This torture exists "eternally" because with no other individuals able to procreate, the notion of time will end with the death of this final individual. Taking the capitalist strategy of maximizing surplus value in relation to the self to its extreme thus takes us to Sisyphus being eternally tortured by myself, i.e. Hell as parable.

The selfish gene allows for an alternate strategy, that of maximizing internal inherent value of others. The idea is that instead of attempting to bring the world to oneself, one attempts to develop the world and maximize the probability that those that one meets in the future will have developed into their authentic selves, thereby optimizing the world that one throws oneself into. The objective here is to maximize life as *process* rather than the world as *objects*. In such a scenario, it only makes sense to use one's excess surplus goods to promote others, to "give until it hurts" as Peter Singer puts it, but not out of any moral principle of social justice (though this could contribute), but rather because it is the best strategy to maximize the desire of the selfish gene to live the best life in space and time by making the most important contribution to a world-historical paradigm shift for the better. Here, Camus comment that he remembers that he has to be somewhere reflects a world where he has maximized the inherent value of other individuals by contributing to their opportunity to find their authentic selves. In such a world there is always somewhere to be and always someone of value to spend time with and / or empower and try to urge forward.

Taking this communitarian strategy of maximizing the inherent value of others to its extreme takes us to an ideal of Heaven, not one of perfection without evil or tragedy,

but one of perfection wherein everybody has been encouraged to discover who they are and to be that person. Moreover, there is an evident contrast between the ideal points of the two approaches. Towards Sisyphus, an *objective* notion of price is decided and everything has one. In this sense, everyone has the same target: commodities, ownership, and power over the external. The other direction presents an entirely *subjective* notion of "the best life in space and time". It appeals to the fact that all are situated uniquely within the context of society and their own history. The discovery of an authentic self and one's attempt to probe this authentic self for what one *really* wishes to do and where one *really* wishes to spend one's time within the world imply that "perfection" depends on the individual and is, for the most part, anti-competitive so long as the opportunity to pursue such a journey is available and open to the individual. One direction leads to a zero-sum game. The other opens up a journey of self-discovery.

A City is Not a Tree

Art is Individualism, and Individualism is a disturbing and disintegrating force. Therein lies its immense value. For what it seeks to disturb is monotony of type, slavery of custom, tyranny of habit, and the reduction of man to the level of a machine.

-- *Oscar Wilde* (1895)

"Because architecture is an event, it is always contingent" (Karatani, 1995, xl), and Karatani (1995) maintains that *Architecture as Metaphor* is "not aimed at architects in a narrow sense. I would be honored, however, if it were read by those who, though denying architecture with a capital A, strive to be architectonic, and those who, denying subject with a capital S, choose to be subjects of and as difference" (xlvi). "Architectonically", he works from Christopher Alexander's essay "A City is not a Tree" (1965), a tree in this case as the graph theoretic object where all points are connected by exactly one path (so there are no loops). Equivalently, the definition that Alexander employs is that in a tree, any two subsets of points are either disjoint or one is wholly contained in the other, whereas in a semilattice (a more general set of points) the intersection of two sets is always also in the set. From Alexander's definition (and his definition), the consequences of a tree-like city as one where all areas in the city (e.g. neighbourhoods) are either contained in a larger neighbourhood or separate from all other neighbourhoods. As a consequence of the other definition of no loops, there is exactly one sequence of areas to get from any area A to any other area B.

Alexander has a useful means by which to conceive of the tree versus semilattice distinction. In traditional society or small village, he notes, the closest friends of an individual are likely to also be the closest friends of those closest friends: friend structures are more likely to form a closed group. However, in modern society and in large cities—especially those with very diverse populations—and with many projects to occupy us, we tend to have many groups of friends that may intersect but only to a limited extent: if I ask my close friends who their best friends are, some of these individuals might be my close friends also, but many of them are likely to be people who I have met only in passing or may not know at all. The friend conception also

allows one to gain a better understanding of what a tree-like city would have to consist of: it would generally involve a lot of barriers, partitions, and a means of isolation to keep parts of the city—including the people in them—as disjoint as possible.

In a market system especially, this disjointedness is maintained except in areas where the market process of "freely" exchanging goods is carried out. Such a location may be referred to as a *transactional* zone. The increasing formalization of transactions—particularly financial transactions—within the neoliberal rubric promotes a parallel increase in the centralization of capital (Simone, 2020) and thus the dependency of cities on competing for the recognition as a "global" city, i.e. a sufficiently important node of centralized capital accumulation within the global framework. In addition to increasing rural-urban migration as more individuals see their future as necessitating inhabiting these urban transactional zones, so within cities themselves this narrowing of transactional spaces is seen as important to maximize efficiency and hence maximize the attractiveness of the city to global capital. Yet the more this centralization is promoted, the more tree-like the city becomes: inhabitants are indentured into a job ontology that instrumentalizes life as predominantly traveling from residential zones to transactional zones and back, with the interstitial spaces acting merely as transportation corridors.

Of course, these transactions are by no means equal. As Karatani (1995) maintains, a major psychological component of credit is to be able to put off being put in the seller's position for as long as possible, for once something is sold, its value can no longer be negotiated. The poor are increasingly pushed from the centre to the periphery of cities in the Global South so that the city may attempt to attract global capital by offering this central land of high value to prospectors (ref?) while at the same time clearing the streets of vendors, touts, and poor residences that bring irritation to a middle class desiring to live within (at least the illusion of) a burgeoning modernity (ref?). The result is often long commutes into these increasingly centralized transactional zones in order to survive. On the other hand, wealthy individuals may also choose to move to the periphery for a sense tranquility and natural beauty, making the same longer commutes into town. The difference is that the poor are always in the seller's position: their value is immediately commodified as their labour power, which is perpetually bought and sold as low a price as possible. This is not only a transaction of a few coins, but also of psychological denigration. On the other hand, the wealthy are rarely sellers and maintain the dignity of their ephemeral value, reflected in their purchasing power (i.e. their ability to decide on the worth of other things or other individuals through the completion of transactional purchases), and/or in their selling of instrumental qualities and proficiencies that go well beyond the simple schlepping of commodity goods or the providing of other services by the undifferentiated labour of the poor.

While Alexander's "A City is Not a Tree" focuses on tree-like *objects* in the form of the city. It is equally important to consider the extent to which tree-like *processes* occur in these transactional zones. Although the neoliberal mantra is for free exchange in a market, this is seldom the case when power or capital is distributed unequally. Monopoly can be considered a tree-like process because subsets are either disjoint or entirely contained within the monopolistic entity. Hegemony is also a tree-like process since its instrumentalization requires that the hegemon convince the other that the hegemon's interests are shared by both: the subset of interests of the other is entirely

contained within that of the hegemon. In both cases, therefore, transactional spaces are tree-like, and the more formalized financial transactions become, the more dominant and centralized they become in people's lives.

The Fully Contingent Rhizome of Informality

We are often told that the poor are grateful for charity. Some of them are, no doubt, but the best amongst the poor are never grateful. They are ungrateful, discontented, disobedient, and rebellious. They are quite right to be so. Charity they feel to be a ridiculously inadequate mode of partial restitution, or a sentimental dole, usually accompanied by some impertinent attempt on the part of the sentimentalist to tyrannise over their private lives. Why should they be grateful for the crumbs that fall from the rich man's table? They should be seated at the board, and are beginning to know it.

Christopher Alexander suggests that "natural cities" follow a semi-lattice while artificial cities that are instrumentalized to maximize efficiency of transactions follow a tree structure, but this is dependent on the lens one uses, as "whatever picture of the city someone has is defined precisely by the subsets he sees as units." In this sense, the neoliberal planner will see transactional (market) spaces as primary units, as these are entirely the basis of neoliberalization. From there, the secondary unit of importance is where the individuals that will conduct these market transactions reside, and how they will get to and from these transactional spaces. The tree-like nature of the neoliberal city thus becomes evident by considering a tree as having no loops: there need only be one path and/or one sequence by which a participant in the market arrives with goods to sell and leaves with purchases made. Capital and commodities are the only things that need be heterogenous, whereas the paths and the participants may be as homogenous and predictable as possible so long as they are involved in transactions.

Karatani (1995) suggests that it is possible to go beyond Alexander's semi-lattice, citing Jane Jacobs' contention that intervention in the city necessitates maximizing the differentiation of centralized nodes, or as Frantz Fanon (1961) puts it, a call for *decentralization in the extreme*. The rhizome is the non-hierarchical system that developed by Deleuze and Guattari in *A Thousand Plateaus*. What it suggests is the overcoming of the structuralist ideal of putting place (or object) above what occupies it (or process) (Karatani, 1995). The consequence of such an approach for neoliberalism becomes an inability to centralize and accumulate undifferentiated land, labour, and capital in order for buyers to decide the value of what is sold. Fundamentally, it requires expanding the notion of transaction beyond those of a financial or monetary nature to any encompassing a gathering of individuals to achieve a certain aim. Parks and playgrounds may be seen as a transactional space where the currency is recreation and play. Schools are transactional spaces where it may be argued that the currency that should be emphasized is knowledge, not instrumentalized training via examination, which will only contribute to the tree-like nature of a highly regimented city.

By expanding and redefining the very notion of *transaction* and its importance in underpinning a rhizomic—rather than tree-like—city, it is therefore possible to declare in essence a "war on formality", as the main attempts to "formalize" practices and processes especially in the Global South specifically focus on financial transactions (e.g.

the United Nations Sustainable Development Goals) or transactions having other quantifiable economic importance (e.g. the carbon offset of tree planting). This is not to say that the quantitative or instrumental value of a process or object is not true (e.g. the added impetus to planting trees because of their environmental contribution is welcomed), but rather that objectifying everything *entirely* as a commodity with its price—a price largely dictated by those with accumulated capital—creates a reality where unquantifiable processes or objects with intrinsic properties that cannot readily be monetized (such as those based in culture) are almost entirely emptied of value and, in turn, are more likely to be lost to society.

Informal and contingent processes, on the other hand are to be valued precisely because their values and outcomes are not predetermined or at the very least subsumed within a predetermined boundary, i.e. they are not tree-like. They allow a type of interplay and organic growth, especially within the interstitial spaces passed over in a formalized economy, one can say that they transactionalize these spaces that formalization would leave as means to a more centralized end. William Lim notes for example how the chaotic backstreets of Asian cities are a source of pride for locals while Westerners may see them as "ugly" (ref?). This ugliness is due to a lack of order and a value that defies inherent quantification, or more importantly, a value that defies *subordinating it to a* common objectively defined and valuated reality, i.e. the Sisyphean approach to being. On the contrary, it is only within and about these private transactions where the very notion of object, process, and price are inherently fluid that allow for an expansion of subjectivity, especially of the poor who are attempting to escape their objectification by the wealthy as merely a commodity with a price. It provides a means by which the oppressed can define the parameters of their own lives outside of the concerted attempts to wholly contain them within a larger structure.

Conclusion

This essay has attempted to trace formalization back to its roots in the ruthless objectification of the labour supply in England towards capitalist primitive accumulation to its continued means by which it attempts to integrate workers (especially those that are poor and forced to sell their labour) into an objective reality of shared valuation that tends to be highly dependent on a preconceived instrumentalist notion of price and worth. This is connected to the idea of tree-like structures (e.g. certain interpretations of cities as primarily facilitating financial transactions and centralizing capital) or processes (e.g. hegemony where the interests of the other are entirely contained within the interests of the hegemon). In contrast, the informal and contingent is argued to be a means by which subjective realities that attempt to authenticate the individual away from a preconceived sense of worth that is defined by others and towards the exploration of a personal history and sense of self-worth that transcends the instrumentalized world of marketization and buying and selling.

It suggests that current trends in the Global South towards "modernization" as a means by which a city attempts to become "global" by enticing sources of capital contributes to this objectivized and objectified form of living. Everything has its price and the transactional spaces largely promoted are those where buying and selling occurs, facilitated by paths *through* interstitial spaces in the city but seldom engaging with them as they are increasingly seen as points of access rather than places themselves. In

contrast, the alternative rhizomic and subjective reality is presented as a means by which a city and its population can bypass the attempts by neoliberalization to indenture both rich and poor into hierarchical worlds that that place financial transactions above all else and stymy personal growth and subjective forms of valuation and personal interest for the sake of attracting capital.

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Constructing Agency in the Global South

Introduction

The Platonic and Kantian idea of rationality centers around the idea that we need to bring particular actions under general principles if we are to be moral. Freud suggests that we need to return to the particular... He suggests that we praise ourselves by weaving idiosyncratic narratives—case histories, as it were—of our success in self-creation, our ability to break free from an idiosyncratic past. He suggests that we condemn ourselves for failure to break free of that past rather than for failure to live up to universal standards.

Richard Rorty, Contingency, Solidarity, and Irony

Richard Rorty's quote about Freud's attention to the particular in contrast to the universality of Plato and Kant provides an ideal jumping-off point to discuss the idea of Agency, for Agency can only be contextualized within a particular historical reality. If two individuals had achieved similar objective outcomes (say some form of educational certification) but one had been born under "average" conditions in an affluent country in the Global North and the other had been born into "average" conditions in a former colony in the Global South, there might be more praise for the latter over the former because predicted outcomes for such baseline conditions would generally be different. In the Global North, there is more likely to be food security, social programs, and generally a larger social safety net that allows one more flexibility in what risks can be taken towards a specific future dream. In the Global South, incomes are lower, social services may be lacking, civil unrest and conflict may occur, and not having access to amenities that many of those in the Global North take for granted—food, potable water, shelter, formal work, and educational opportunities—implies that, all things being equal, more time, energy, and financial resources must be spent on the mundanity of getting by. The reality is therefore that in the Global South there is a smaller pool of resources for pursuing more ambitious goals without constant mental anxiety that everything could collapse at any moment, with the very real possibility that all progress would be lost. It is within this context that the different between Agency and agency is defined: the former is of the transcendent nature that Freud speaks of, "breaking free of the past", and the latter encompasses all of the more mundane hedging that must be done in order to keep running, if only to the point of standing still.

Yet on a more general level, the process of *doing*, especially within the ontological context of *work*, is central to all human beings in order to generate some sort of meaning. It is only by perturbing something to create something new—something that would not have existed without intervention—that one can reveal to oneself and others what is really within one's powers as a human being. It is an external representation of one's creative output and at the same time allows for extrapolation to predict one's further creative potential. On the other hand, there is also the notion of an end-goal, which according to Karatani, is built into Western minds as "the will to architecture" following from the Platonic ideal, but may not be as central to other cultures. In such cases, contingency and the creative *process* is far more central to the idea of *success* than the finished product may be. What then is at stake when one considers the difference between the transcendent Agency and the mundane survivalist agency outside of Western modernism and a telos that is ever-increasingly tied to wealth and consumption?

There are two key components, one being the inner satisfaction and confidence of having created, and the other is the outer representation of the created component to others. The first may provide the emotional confidence for one to continue to pursue such a trajectory further inductively hedging that a future scenario will be sufficiently like the past to suggest that the risk is worth it. The second is how the object is related to the subject by others not only in terms of their emotional confidence in whether such an creative act might duplicable, but also about whether this subject-object relation lies within the bounds of the system of external permission. There is therefore an *ontological* component, a *representational* component, and a *judicial* component to every creative act. It may be suggested that within Global North countries where modernity and legalism as private property tends to dominate major facets of living, and educational, vocational, classist structures are more standardized, the greater potential for Agency presented by greater access to opportunity and resources is stymied by greater social control and heightened competition, reducing the creative potential to go beyond what already exists in a thoroughly commodified and seemingly saturated world. In contrast, although resources may be harder to come by and opportunities highly informalized, the more traditional structures of community coupled with more flexible and informal legislative and socio-political networks can provide more means by which to conceive of Agency. Moreover, considering again Rorty's interpretation of Freud, the potential for transcendence of one who is poor and shackled to miserable historical conditions can be considered to be much greater than one born into an affluent country. Something as simple as being the first in one's family to graduate from high school would be a major achievement in an impoverished country while being dismissed as the minimum one should be expected to accede to in an affluent country.

Ungrounded Assemblages and Ahistorical Actor-Networks

The value of postmodernism as 'theory' is that it mirrors the prevailing trends. Its misery is that it simply rationalizes them through a high-brow apologetics of conformity and banality.... [Postmodernism] is the latest case of intellectuals abandoning their critical function and enthusiastically adhering to that which is there just because it is there.

Cornelius Castoriadis (1997)

Because of the non-linear and highly Western interventionist histories of Global South countries, theorists of the intersection of infrastructure and political economy have begun to integrate various postmodern approaches to conceptualizing their areas of study, two of the most popular being assemblage theory, first suggested in Deleuze and Guattari's A Thousand Plateaus, and actor-network theory (ANT), popularized especially by Bruno Latour. The point of both of these theories is to provide a constructivist rather than an essentialist conception of the interaction between the built environment and its inhabitants. In both cases, the central idea is that the system should be non-hierarchical. The unit of assemblage theory is the rhizome, which "ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances related to the arts, sciences, and social struggles." (D&G, 21, 1987). It is made up of plateaus, defined as "any multiplicity connected to other multiplicities by superficial underground stems in such a way as to form or extend a rhizome." (D&G, 22, 1987). Similarly, Latour maintains that it is the "Big Picture" that is problematic about any system because it

necessarily centralizes a view from nowhere (a "root" in Deleuze and Guattari) that "nicely solve[s] the question of staging the totality, of ordering the ups and downs, of nesting 'micro', 'meso', and 'macro' into one another." (Latour, 2005, 188).

In other words, it takes Foucault's criticisms of history as trying to cohere a period into a "face" (Foucault, 1972, 9) that can derive and be derived from a network of causality, and then extends it to the object-relation domain of the here and now as a means to deconstruction. For Deleuze and Guattari, the primary requirement for an assemblage is that although it allows for a map of elements, there is no room for a tracing of direct causality of elements through a tree structure to a root. For Latour, ANT theory is also topological, but is posed by the question "What would happen if we forbade any breaking or tearing and allowed only bending, stretching, and squeezing? Could we then go *continuously* from the local interactions to the many delegating actors?" (Latour, 2005, 173). Both approaches therefore requiring a flat topology, one that does not admit to a beginning or an end, and one where boundaries are not determined externally but only by the experiment and experimenter in question. Deleuze and Guattari use the metaphor of a book and its reader with the act of reading as embodying "a deterritorialization of one term and the reterritorialization of the other" (D&G, 1987, 10) (i.e. the book becomes defined by and defines the reader's frame of reference and interpretation), while Latour maintains "As every reader of relativity theory knows, absolute frames of reference generate only horrible deformations.... Either the sociologist is rigid and the world becomes a mess or the sociologist is pliable enough and the world puts itself in order." (Latour, 2005, 184).

As mentioned, because of the highly non-linear, disrupted, and Eurocentrically hegemonic constructions of Global South cities both in terms of the real and the semiotic, the constructivist approach that simply looks at the socio-physical environment as "given" and then tries to intra-and interconnect the social and the physical based on what can be gleaned from the here and now is quite useful. Local interactions and ethnographic interviews establish that the particular reality of the actors tends to stand in stark contrast to the spatio-temporal "face" of the location in question given that the latter is always "written by the winners". In the present period, the writers tend to be those that are best at parroting the soothsayers who maintain that the future cornucopia will be created by staying the course of capitalism and growth, amplifying and reifying "the sense of exigency to deploy infrastructure as pathway to stability" (Simone, 2020).

Yet missing from any ahistorical and decentered account of reality as posed by the lens of assemblages or actor-networks is any conception of momentum. When speaking specifically of Agency, it is necessary to have some idea of what *impels* and *compels* actors to do one thing and not another, or indeed to do anything at all. Deconstructing webs of relations within a living laboratory in order to reconstruct relational structures can be useful, but it is necessary to have some inclination of where to look and how to look. Otherwise, one either quickly gets faced with cherry-picking from a sea of factors reflecting competing interests and contested spaces, or scoping down to the lowest common denominator wherein any findings are so specific as to be essentially useless. In either case, one can document acts *descriptively* but comes no closer to understanding the preconditions for someone to act from a *prescriptive* point of view, implying that everything is seen not as *action* but as *reaction*. A *coordinate system* is therefore proposed for the map rendered by the constructivist lens. It does not propose a root but merely an *origin*, nor does it propose tracing or any sort of path-dependency, but merely *coordinate axes* that, it is

argued, dovetail nicely with the real-semiotic methodology of assemblage theory and ANT, and provide a scaffold for plateaus and actor-networks.

Coordinating the Real and the Imaginary

Of course there is not, and could never be, either biological of social "solipsism". The living being organizes for itself a part or stratum of the physical world; it reconstructs this part or stratum to form a world of its own. It cannot transgress the physical laws of nature or ignore them, but it posits new laws of its own. Up to a point, the situation is the same with society.

Cornelius Castoriadis (1997)

There have been many versions of what can be called the "general mind-body problem", i.e. the attempt to situate freedom within a reality governed by physically deterministic laws. The most famous comes from Kant, who posited the noumena, which contained the so-called "thing-initself" that bypassed the physical laws of thinghood within the phenomenal world. Post-Kantian German idealism then tried to identify what exactly this vague noumenal world consisted of. The two most important of these suggestions were those of rivals Schopenhauer and Hegel. Schopenhauer suggested that this force was something he called "Will", which he maintained was suggested by everything from somnambulism to wet dreams. This notion would not only be taken up by Nietzsche as a positive driving force (the will to power), but was also the first semblance of a notion of the unconscious taken up by Freud. Hegel suggested that this force was something he called "Spirit", which was semi-religious entity that existed in a parallel historical domain that both drove and was driven by the evolution of society. Hegel was later reinterpreted by Marx to suggest that this ontological driving force was not to be found in the domain of the subject (idealism) but in the domain of the object (materialism). In either case, whether "will" or "spirit", this underlying extra-physical entity constitutes a *force*, rather than sitting passively by to be interpreted and reacted to, as is the case with the semiotic component of assemblages and ANT. Although there is a reason to begin in the middle (as assemblage theory and ANT do) and that one cannot—and should not—posit a root or first mover that any sign can be traced back to, it is necessary to have some idea of how and why signs are created and interpreted in such a way.

Following Cornelius Castoriadis' essay "The Imaginary: Creation in the Socio-Historical Domain", the coordinate axes that provide a scaffold for the topologically flat plateaus and actornetworks are what he calls the "ensemblistic-identitary" real, and the strictly or properly imaginary. In the former, "[t]he requirement here is that everything conceivable be brought under the rubric of determination and the implications or consequences that follow therefrom. From the point of view of this dimension, existence is determinacy", while in the latter "existence is signification. Significations, though they can be 'pointed to', are not determinate. They are indefinitely related to one another in the basic mode of *renvoi* [referral]." Here it may be argued that nothing has actually been achieved except the substitution of one duality (real-semiotic) for another (deterministic-imaginary) via some philosophico-linguistic sleight of hand. Yet the significance of this new coordinate system is that it allows for the conception of two active forces, namely *determinism* and *myth* to situate socio-historical tensions, while suggesting the difference between Agency and agency: the former being defined by a force of *autonomic impulsion* and the latter by a force of *heteronomic compulsion*.

Autonomy, Heteronomy, Anomie

There is no society without myth. In today's society, arithmetic is, of course, one of the main myths. There is not and cannot be a 'rational' basis for the domination of quantification in contemporary society. Quantification is merely the expression of one of its dominant imaginary significations: whatever cannot by counted does not exist. But we can go one step further. There is no myth without arithmetic—and no arithmetic without myth.

Cornelius Castoriadis (1997)

To understand the schizophrenic society engendered by capitalism in the Global South, one can look at Henri Lefebvre's trisection of the production of space as a social product into representation (real) and representational (semiotic), bracketing the active component of praxis. Again, as an assemblage, this is sufficient, but it does not do work. For this, a force must be applied to connect the agency needed to engender practice to representation and the representational, and for this one can deploy a certain form of myth as pulling the socio-historical imaginary towards a specific form of determinacy, summarized as "modernity as a project to discipline the future" and impose a form of Foucauldian governmentality (Alvarez, et al., 2019 quoting Ewald, 1991 [I don't have online access]). It is therefore this idea of myth as a selfreferential means of disciplining the social imaginary that is being considered, and not as a means to trace a history, but rather simply as the key otherworldly element (instead of will or spirit) that acts outside of but on the deterministic world as force. In this sense, as Castoriadis maintains, myth is not necessarily inherently logical as the structuralists would use it as an explanatory device, but simply a means by which the instituting society nudges the individual in a particular direction to order the world. The greater the repetition and the stronger the likelihood of recall due to both deliberate (as a social force, e.g. propaganda) and coincidental (as the optimal means for an individual to actively order assemblage components through their semiotic representations) significations, the more likely it is that a given individual will integrate the social imaginary into his or her own. Currently, one can suggest that the strongest myths are those of the colonial imaginary (racism), the bourgeois imaginary (classism), and, thanks to the advent of neoliberalization, rational choice (quantification) though the latter is simply a more extreme version of positivism, which is at least 150 years old.

Again, borrowing from Castoriadis, it is now possible to define the ideas of heteronomy and autonomy—"nomy" coming from the Greek *nomos*, i.e. law. In the case of heteronomy, one has the most extreme form of *closure*, wherein one's reality becomes completely defined by the set of external maxims and laws that are deployed by society to discipline it to accept the idea of a certain deterministic trajectory towards a certain inevitability, the "tracing" that the assemblage theory and ANT are supposed to be deployed against. In contrast to this, one has the principle of autonomy, wherein some degree of openness remains, the means by which one can *transcend law and hence transcend myth*. To this, one may add a third state of being that of anomie, which Durkheim characterized as the "malady of the infinite" where an individual is detached completely from any sort of finite governing structure—Sebastian De Grazia maintains that this comes from our propensity as infants to see our parents as our infallible keepers, and upon discovering their fallibility, needing to extrapolate to an infinite body (e.g. God or its Puritanist

interpretation as symbolized in the capital that God chooses to bequeath). Thus, there become three types of order engendered by myth—closed, open, and infinite—and it is through these tiers of myth that it is possible to scaffold the flat topologies of assemblage and ANT, and give a rigorous notion of the difference between agency, a *compulsion*, and Agency, an *impulsion*.

Megacomplexes, Gentlemanly Cities, and Autoconstruction

Capitalism is not just endless accumulation for accumulation's sake: it is the relentless transformation of the conditions and the means of accumulation, the incessant revolutionizing of production, commerce, finance, and consumption. It embodies a new social imaginary signification: the unlimited expansion of 'rational mastery'.

Cornelius Castoriadis (1997)

Let us consider Ananya Roy's idea of Kolkata as the "gentlemanly city" governed by a striving not just for Global North cleanliness and order, but also by politics continuing to be dominated by the masculine "energy" required for male representatives of slums to "sit around and play cards" while discussing means by which to maintain the political connections required by informal settlements to get anything done. Such a gentlemanly city manifests itself in the desire for upward mobility symbolized by the high-rise condominiums and men in suits and ties, and the end of the "hawkers and beggars" that challenge this order. This nicely combines the three dominant social imaginaries of racism (in the reflexive feeling of impotence seen in Indian society by its own dwellers), classism (inherited from the caste system and reified by Eurocentric patriarchy), and quantification (nothing outside of the order of society towards cleanliness and formalization will do). This then imposes a heteronomic architecture on those individuals that are willing to buy into it, which tend to be those who stand to gain from its social hierarchies (those with greater wealth first, and then men in general)—that is there exists a *closure* around how society should be structured and operate within the imaginaries of individuals as projected by certain significations—both propagandized and coincidental—of society.

But even beyond this, one can suggest that the observations of Roy around informality as facilitating flexible states of exception for those in power can be interpreted as the flexibilization of heteronomy. That is, the system deliberately remains underdetermined so that it can maintain closure in the face of contestations and contradictions. However, it is not only society that maintains these states of exception, but individuals as well as described for example by Schindler in the use of private waste pickers by gated communities and hawkers in markets to get better deals that seem to go against the principles of this heteronomic structure, but not against its myth. That is, exception is deployed when informal workers can be integrated into its final goal (cleanliness and order via optimal quantification of resources) so long as they merely help to produce the space but are not part of its representational value.

Contestation implies that society goes both ways, however. That is, the myth of a closed system is not the real determined structure, which maintains a degree of openness. Again, this applies to both the individual and society in that as Roy suggests in particular for India, it cannot plan its cities because it does not contain the preconditions to do so that the cities in the Global North do (even though they also maintain a certain degree of openness, but less so) because they are

protohistorical rather than historical, i.e. at some point (during colonialism), their history was disrupted and rewritten by an outside force, but also because their society is about internal discipline rather than external discipline, the latter principle being largely inherited (see the Chatterjee paper). Thus, contingency is a necessary component of development in the Global South, implying that society is underdetermined in the autonomic sense as well.

It is only the individual level, however, that it is possible to speak of Agency versus agency. The former, Agency, requires on the one hand an autonomic imaginary—an imaginary that is inherently underdetermined to the advantage of the individual. But an act of Agency must be an act of *impulsion* within this imaginary, an ontological push to *work* as creative process, and hence representative of the powers and proficiency of the individual. That is, it must be based on myth as a force of initial momentum into a contingent future. Simone calls this practice in Jakarta "hedging", and describes such acts as "communicating that movement is underway" even if the outcomes of this movement is not determined, the result being areas of "autoconstruction" wherein the built environment is heterogeneous because there is no prescribed path for any one project. The latter, agency, is heteronomic in that it falls within the prescribed norms of the mythologized closed system. In this sense, it is an act of *compulsion* and deterministic, because it is defined not by its initial but by its boundary conditions. Here, the work performed does not represent the powers of the individual to create, but rather the power of the society to constrain, and hence the actor is alienated from its seeing her unique skills and attributes in its outcomes.

Conclusion

Setting:

Landowners as European settlers (Americas) or local elites (Africa, Asia) Patriarchy, reproductive labour / "feminization of poverty" Poor as aesthetic problem to modernity

Ontological

Agency:

Women as breadwinners, in politics, men as contributing to reproductive labour? Poor as creating something through Simone's "hedging", committees and political movements?

Opportunity and the Representational

Performing tasks provides trust and ability to demonstrate to other potential for work / collaboration

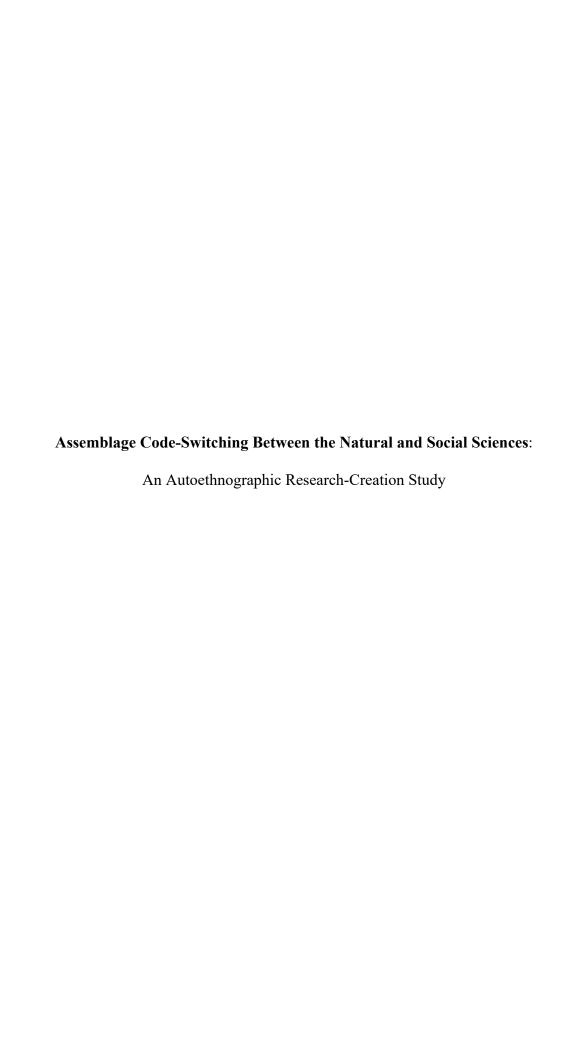
Community "leaders" to rally around

Activism and "troublemakers", "encounter" killings, Latin American gangs and druglords?

Exception and the Judicial

Arguing for states of exception and informality, greater awareness of law, system, rights, challenging status quo

Latour, Bruno. Reassembling the Social an Introduction to Actor-Network-Theory. Oxford University Press, 2005.



Summary

As Sawchuk and Chapman (2012, 22) maintain, research-creation requires a different regime of truth, where instead of asking "how might this be considered knowledge?" we might ask "how can this be called an intervention?" This experiment sought to test how well I would be able to "code-switch" between regimes of truth applicable to the natural sciences (my background) to regimes of truth applicable to the social sciences. I take an assemblage approach: I look at the information having no fixed grounded spatial context of what can be seen as "true" or "real" and try to discern the relations, and it was an rhizome *par excellence* because of its temporal non-linearity, i.e.

It is composed of plateaus. We have given it a circular form, but only for laughs. Each morning we wake up, and each of us would ask himself what plateau he was going to tackle, writing five lines here, ten there.... Each plateau can be read starting anywhere and can be related to any other plateau. To attain the multiple, one must have a method that effectively constructs it; no typographical cleverness, no lexical agility, no blending or creating of words, no syntactical boldness, can substitute for it. (Deleuze and Guattari, 1987, 22)

The winter term saw me take a directed reading course of political economy of infrastructure, planning, and regional case studies, and a qualitative methods course. Having done a directed reading course in the fall-term on wider, more general topics, we had already spent a term codeswitching between my macroscale quantitative views interspersed with stories on the individual level with his mesoscale theory, and this term I was focusing on the mesoscale. In the qualitative methods course, since I had the contextual background, my question was specifically focused around the question "under which conditions can quality have a scientific truth-value that exceeds that of my usual interpretation of quantitative as superior?" Having to do a project, I saw that Yasmin Jiwani had been thinking through a similar political (qualitative) lens, so I got interested in her as a potential translator. My project presentation consisted of my trying to communicate a quantitative study with a qualitative attempt at explanation, but it was very disjointed, and I wasn't sure what conclusions I could reach. However, after reading an ethnographic text on Sylhet versus Chevron called *Discordant Development: Global Capitalism and the Struggle for Connection in Bangladesh*, something clicked:

When told of ongoing poverty in Duniyapur those in charge of the community engagement programme expressed surprise. How could this be, they asked, when so many NGOs had been funded to provide the people with so many benefits and programmes? Posed as a technical problem leading to a technical solution (income generation projects, micro-credit, etc.) rather than a political problem (inequality, lack of rights and justice) needing political solutions, the gulf in ways of knowing and forms of analysis seemed during this conversation to be insurmountable. (Gardner, 2012, 234)

Thus, I realized a way to construct a mental map from the natural sciences to the social sciences. The results of the *decoding* phase have now started me into the *recoding* phase wherein I now have to translate the way I see the world to others in a language that they can sufficiently

understand in order to check my work, and either find faults in or share this map so that qualitative people can try to code-switch to quantitative.

In the morning, I had my meeting with my supervisor where I talked to him a bit about these ideas and located the tensions. I thought that I had dug as deep as I could when I made the connection back to music the night before, and I thought of Nat and she had emailed me this morning. So I tried my best to translate my theory into facets of music by a corroborative process that we can independently check (album songs seem to follow a similar progression), and tied it in with her project (the tension between top-down musical pedagogy and bottom up jamming). But when I went for another walk, I think I made the last connection and have dug as deep as I possibly can (there are personal physical reasons for this, as I didn't think the moment I felt like I got stabbed in the brain suddenly a few years ago was not coincidence based on how I was "back-calculating" at the time. So I sent an email to Chris Burn giving him the gist of things knowing that he's a busy man but also knowing that he sees everything I have to offer as having some meaning even if it is indecipherable at the time.

My hypothesis: nature naturally follows a progression of global, local, 1, 0. For a baby, discerning first space and measurement, then discerning the other, then understanding the self, then contemplating a "dream". We can look at this as space / existence / quantity, communication / other / quality, self / individual / mind / ego, and denouement / death / nothingness. In the natural sciences, nature cannot cheat. It does not have self-consciousness to trick us (that we can detect violates physical and natural laws). If I say something about the global, it will apply to the local, it will apply to the individual, and it will apply down to nothingness. And that is our strategy: I want to know something about all ocelots because they are animals and cannot work for or against me: their agency does not affect my world. Society turns this into objectification: I want to know about all blacks because they are simply labour to me. Quantity summarizes. But within the social sciences, there is agency so there is interpretation and deception. We may call hegemony "the discursive majority", which usually does not intersect with the "urban majority", and this is based on the weight of whose story is believed by whom. In this case, it is neoliberalism where quantity is meaning. Firstly, if we then believe that *quality* is meaning, then we must go in the reverse order: 0, 1, local, many. That is, if a statistic tells me something about a general population, then to *corroborate* the statistic, I have to go in the other direction: I have to start from nothingness and ask "does this claim have meaning?", then go to "does it apply to an individual?", then "does it apply to a group?", and final "does it apply to the total?" This is what Gardiner showed, that qualitative data is required to *corroborate* the quantitative narrative. And this is why a quantitative person from the natural sciences will struggle, they are used to a system where there is no conscious agency, and thus there is no deception or constantly contested notions of meaning. Quantitative big picture trumps all: we have physical constants that apply everywhere but not human constants. Secondly, there is an inverse sliding scale in the mesoscale between the individual and the many: the greater the quantity, the smaller the intersection. The individual also has probability 1 or 0 of having a property, whereas the population is always dictated by trends. This is therefore the second difficulty from the quantitative, structural natural science: because there is no self-conscious agency or deception, there is a different process to corroborate "the number of people helped by Chevron is X" and "the number of penguins living in Antarctica is X". Penguins can't consciously deceive you (at least in a language that you understand, and you couldn't ask them

anyway), and you trust scientists as far more likely to interpret penguin data truthfully than of Chevron interpreting its own quantitative data. Qualitative data is therefore when we want to describe the few better or when we want to corroborate the quantitative summaries of the many. Social sciences must take into account deception, and that's why we must analyze the discourse. A conceptual behaviour model for human behaviour is therefore an optimal stopping model with tensions between the known and the unknown, the relative interpretations of values, and fate or death as the starting point to recalculate self, other, and space (usually in that order). You therefore have a human-reality model where freedom can exist in a determinate system: freedom to interpret values, freedom to make judgments of the known and unknown, and freedom to change the ideal that you compare yourself to (when a child we naively look at our interpretation of perfection, when an adult we tend to compare to death... and one hopes that we are not confronted by death as a child) based on sampling. Also, only you can interpret the samples (yours and others, either communicating assistance or deception) and only you can decide how many times you sample before you commit to something that you think cannot be superseded in the future.

Future work: continue to try to translate between quantitative and qualitative and see if it helps bridge the gap and where there are contestations. (Work can be checked below.)

Grounding Morality in Work and Agency

Broadly speaking, moral systems can be separated into two camps, those that make moral judgments based on an assessment of external conditions (e.g. Mill's greatest happiness principle) and those that rely on subjective intentionality (Kant's notion of duty). The technical nature of physical infrastructure tends to rely more on the calculable consequentialism of the former (Bowen, 2008). However, this is insufficient for the highly unequal communities of the Global South that have inherited a postcolonial reality of hegemony and are occupied by a paternalist-infantilist colonial imaginary that renders them "governed" (Chatterjee, 2000), i.e. passively accepting the consequences of decisions made by those existing outside of their condition. Hegemony occurs when the powerful convinces the disempowered that a shared goal is mutually beneficial when in fact its benefits are heavily skewed towards the powerful, while the paternalist colonial imaginary suggests a view of the disempowered as impotent and therefore requiring an agent outside of their condition to act on their behalf (Mill made such an argument to justify the British occupation of India). Both cases describe a reality where one party is completely stripped of any means to define its own future, thereby strongly disincentivizing developing the knowledge and proficiencies that would be required to transcend its disempowered nature. Subjective moral theories that appeal to "higher" pursuits, such as those grounded in virtue (Aristotle) and duty (Kant) are also inapplicable because most do not have access to the conditions (such as disposable time / income) that would allow for such a pursuit.

Instead, it is necessary to appeal to a principle that reflect the conditions that the disempowered actually find themselves in, and are therefore motivated to act on. A moral system is proposed that hinges on the following two mutually exclusive statements:

- 1) I will work harder so that you can work less hard.
- 2) You will work harder so that I can work less hard.

The second statement is the principle that has produced the oppressive conditions under which the disempowered already live, so judging it to be good would be contradictory. Further, the second statement is only universalizable in the trivial case where only one individual exists (as hierarchies will naturally form between those leveraging power to avoid work at the expense of others), whereas the first principle motivates an optimal deployment of group resources naturally optimize available skills and knowledge, reducing the overall amount of work for everybody. More than this, though, the second principle does not actually reveal anything within the individual who is benefitting and therefore does not motivate empowering the self through agency, the adherent remains passive and therefore "governed" by the actions of others.

Theoretically, this principle can be grounded first and foremost in a Marxian ontology that maintains that Work is the source of meaning through the Subject-Object relationship: the subject's powers are entirely defined through what can be externalized and judged by others. More than this, however, if one source of disempowerment is the lack of favourable physical conditions and the inability to meet physical needs, then work is the only conceivable way to fulfill those needs that is entirely within the powers of the community, and not dependent on external asymmetric transactions, and work is

also the only means to transcend external stereotypes of infantilism by demonstrating greater power. It is therefore only natural that working hard oneself under a pact of mutual efforts from others is the best strategy.

Yet it is useful to go further than this and ground it within Christian morals as a means to give it broader appeal. Augustine and Luther both advocated work as the supreme reflection of an adherence to God, while Calvin maintained that there may be more to life than agrarian reproductive labour, but any surplus must be reinvested in the community. Thus, "work" is not completely physical but can and should also include cerebral and organizational contributions that reduce the workload of others. In fact, if one replaces "God" with "work", it is indeed work that creates humanity (ontologically and socially), and each human being has free will to choose to commit to working in turn or turning away from working and relying on the surplus labour of others. Kierkegaard maintained that Faith is the Absolute Paradox because it requires a direct relationship with God, which cannot be deduced. One can make a similar argument regarding adherence to a principle of working for others. Through this lens it is possible to suggest that rational choice theory is problematic precisely because it is true. Reason suggests an adherence to the second principle because it results in obligations and responsibility to oneself, and a means to deduce how one can achieve this. The first implies a responsibility to everyone else, and at the same time uncertainty about how this can be achieved, since one has no control over the contributions that another will make in turn, nor how using one's harder work to work less with be interpreted or brought about. Thus, each individual's autonomy is maintained.

Finally, it is possible to appeal to a democratic principle that underlies the former and not the latter because the former is universalizable and preserves autonomy. The individual benefiting from the second principle must define the means and extent of work that brings about "working less hard". For example, an individual with a farm who does not wish to labour will necessarily define alone that others must labour, while an individual selling apps will define alone that others must program. There is no democracy. On the other hand, in a group where all individuals adhere to the first principle, optimizing outputs so that everyone maximizes working less can only come from consultation and mutual agreement on process. Furthermore, adhering to the first principle is demonstrably better for everyone within a working group to any external interpreters, implying that the "conversion" of others is not forced, preserving not just the autonomy of adherents but also that of potential converts. As Kierkegaard notes further, if one has faith due being convinced by another, then one's faith is not in God but in that other. Similarly, the Faith that is required to accede to the first principle and therefore to work is ultimately not brought about through rational discussion, but rather from observing that it creates the most equitable conditions under which to work (preserving autonomy and democracy) and allows for goals to be achieved with least amount of excess work due to the optimization of resources that naturally comes from mutual adherence to the principle of everyone striving to reduce the workloads of all others involved. Adhering to the first principle is always rendered precarious because it is a mutual informal contract that can be broken at any time but any other worker, and therefore it is by faith and not reason that one continues to adhere.

Formalization and "Global Cities"

Through this moral lens, the problems with both formalization and the Global Cities model fall under the second principle and not the first. If the first principle is governed by an informal mutual contract that is always precarious, then formalization is incompatible with it, because formalization defines a specific predictable means by which a given goal should be reached: there is no autonomy as the means by which each individual can define what working harder for others and using the hard work of others to work less hard no longer exists. The Global Cities model is incompatible in both directions. If external capital is being provided completely philanthropically ("no strings attached"), it implies that those providing the capital (the others) are working harder so that those receiving the capital (the subjects) are working less hard, an example of the second principle. More likely, the capital is being provided so that there is some return on the investment, so that those providing the capital (the subjects) are forcing those creating the investment (the others) to work harder so that they can work less hard.

Agency, Ontology, and Doing Other

Four Ontological Values and Agency

In my philosophy master's thesis *The Ontologization of Practical Man*, I argue that how one defines "humanness" implies how one defines freedom. I maintain that from Plato onwards, philosophy had unanimously declared a human being to be a "thinking thing", and hence the notion of freedom should reflect this, namely freedom of thought. I then offer two subsequent challenges to thought as ontologically precedent, namely Marx's ontology of a material precedent through work, and Arendt's ontology of a political precedent through action. Yet, I have missed the postmodern turn, and it is only from my suggestion of a fundamental tension between the natural sciences and the social sciences as being bounded up in a progression of how reality is constructed that I can complete the picture.

I maintain again that when we are born, our perception of the world is follows the progression from Space (a consciousness of the world that bounds us) to Other (a consciousness of our parents that sustain us) to Self (a consciousness of our ability to influence others) and then to Negation (a consciousness of the potential to be not who we are in the form of dreams of a different self or in the form of death). But here, it is possible to match these stages of progression in an equivalence relation to meaning. The realm of Space corresponds to an ontological precedence put to thought as with Plato. Thought is essentially unbounded, and also unverifiable because it is impossible (as of the present) to get inside someone else mind and see what they see, both empirically and ideologically. Thought gives one the freedom to construct a world in any way that one sees fit, even egocentrically and narcissistically so. The realm of Other pertains to politics and action. In its most brutal form, such as in conflict and colonialism, one attempts to deal with this tension by *erasing* the Other through domination and eradication. The realm of Self pertains to materialism in that the material goods that we surround ourselves with, and capitalism is the ontological precedence given to the Self. The postmodern turn then goes beyond these three conceptions by giving ontological precedence to relations between objects and not to objects themselves. To go beyond these four ontological conceptions is difficult, though Richard Rorty makes an attempt with neopragmatism by suggesting that meaning is entire found within language, and that humans evolve through recreating language. Although interesting, it is difficult to put value on language in and of itself (and there are few if any instances of societies that do this exclusively), so here, categories of ontological value will be limited to space / thought, other / politics, self / materialism, and negation / postmodernism.

Within the postmodern world, then, more and more emphasis is put on relations than pure material wealth, in part because relations are a new form of exclusive wealth, via the stock market (wherein only a connection to a commodity entity via investment at a common trading post is required) and / or the speed at which capital can now circumvent the globe (as Chatterjee notes). Thus, the simple hoarder of wealth is no longer en vogue because this is neither conducive to recognition, or a means to gain more wealth. Relations are of two kinds, one being a relation *to* and the other being a relation *from*. Currently in our capitalist system, we can summarize the dominant ontological values as embodying freedom *from* the Other—which descends directly

from monotheism as the annihilation of Otherness by God—and freedom *to* the Self—which, in its current form, largely descends from the Weberian "protestant ethic" that justifies greed within an ideological framework of Christian pious selflessness.

This is indeed a natural progression based on an evolutionary development ever since consciousness. Consciousness is often considered as an "awareness of the self". However, within the context of agency, consciousness can be defined as the uniqueness of human beings to *do other*. That is, within the natural world, there is an expectancy and predictability to ecosystems, and any attempt to perturb the system entirely from a naturalistic struggle. Human beings are the ones that have been able to break this trend, emerging from the natural habitats of caves and jungles to be able to control and manipulate the physical environment to their own ends. Thus, before we can consider space as the first awareness of a human child, there must first be a sense of agency in the form of one's awareness that one can recognize one's ability to consciously *do other*, whether through manipulation of one's parents for additional rewards, or by changing the position of learning blocks to make patterns that are reinforced as "correct". One must be aware that one is able to consciously create and interpret a world before one can actually do it. When as humans we emerged from our caves in a hostile natural environment and were forced heteronomically into a survival of the fittest, it was only natural that Freedom-from-Other—as tribal cooperation and monopolization of scarce resources—and Freedom-to-Self—as scavenging resources and establishing power relations to guard against an anarchical collapse of survivalist societies that would threaten the entire tribe—should dominate.

Yet now that humanity has emerged into state of being where ontological values go beyond simply survival, the opposite relations come to threaten the established power structure, these being the Freedom-to-Other and Freedom-from-Self of theoretical communitarianism. I speak earlier in the short essay "The Importance of Being Other" of the two strategies, and the parable of Hell and Sisyphus is the point at infinity of the Freedom-from-Other / Freedom-to-Self strategy that construct heteronomic power structures to justify extraction of maximal surplus value from others, whilst the existential approach of "inventing souls" (Aimé Césaire) provides the free resources to the Other to autonomously discover the authentic Self. Within this context, then, instead of discerning between agency and Agency as I attempted to do before, one can speak of Work versus Agency, where Work is *doing* and Agency is *doing other*. One can consider this within the naturalistic paradigm. A beaver building its lodge or a bird building its nest or foraging for food is *doing*, but it does not have the consciousness to understand a higher level of being wherein it can excise itself from this naturalistic progression. In a similar manner, one can take the ontological Subject-Object relation of Marxian materialism and suggest that this Work that is of ontological value is indeed doing, because it is only through this predictive gathering of resources that a society can survive, whether in today's complex world or the world of living in caves. On the other hand, doing other is transcending the mundane field of reproductive work to act in a way that is not in keeping with historical or naturalistic trends. Agency, then, becomes about doing other within the context of whatever is "natural". Agency for the poor man is to Freedom-from-Other (heteronomic restriction) and Freedom-to-Self (autonomic creativity) whereas Agency for the rich man is to Freedom-to-Other (heteronomic creativity) and Freedom-from-Self (autonomic restriction). This is precisely because

doing for the rich man is maintaining the value of the self, and doing for the poor man is maintaining the value of the other, as in Hegel's master-slave relationship.

The Role of Infrastructure

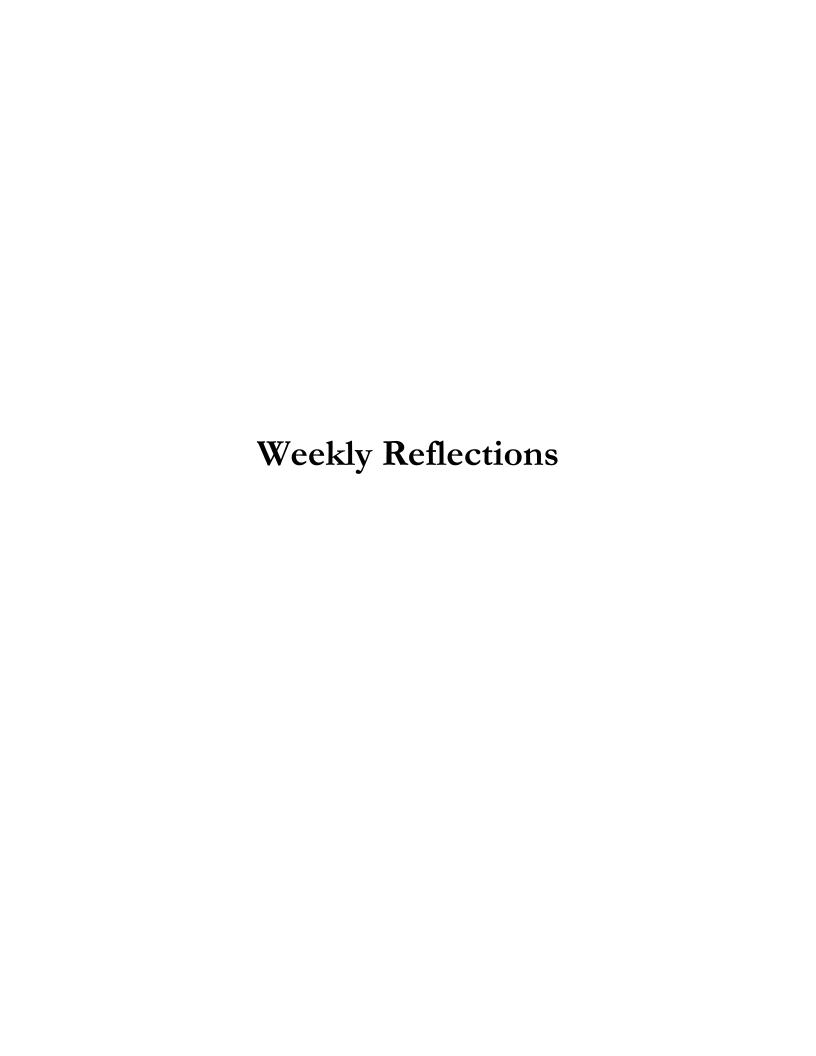
As maintained by Lemanski, the primary contact-zone between the poor and the State is the realm of infrastructure. Because the poor are so heavily heteronomically restricted by historical power structures and a lack of capital, they must rely on the State to intercede on their behalf in order to gather the resources that they need to survive. More generally, however, infrastructure is the primary ground of contestation for Agency between Freedom-from-Other / Freedom-to-Self (denoted "capitalist") and Freedomto-Other / Freedom-from-Self (denoted "communitarian"). One may see this in the most basic infrastructural component—the wall. A wall is a capitalist structure because it keeps the Other out and keeps the Self in. Of course, for reasons of privacy and protection from natural elements, walls are essential, thus there is no value judgment against walls per se, everything is contextual based on the *relation* that walls play between human beings, and the values contained within the doing-act of construction (materialist) and the semiotic symbolism of its completion (political). On the other hand, the construction of community infrastructure such as electrical grids and water and sanitation systems is inherently communitarian, because it involves a sharing of resources with the Other and precludes monopolization by the Self. Established power structures can then be interpreted as Self-Collectives and Other-Collectives. So, for example, when it comes to monotheism, the idea is not that there should be one Self that rules all, but that one Self-Collective rules all by eradicating the Other through establishing universal Faith. A far more pressing issue of Other eradication is racism, because unlike religion or any other ideology, race is not something that can be renounced, i.e. "true racism does not permit others to recant" (Castoriadis, 27, emphasis original): while the religious Other can be eradicated by conversion drives, the racial Other cannot and therefore racism "does not want the conversion of other—it wants their death." (Castoriadis, 27). The modern infrastructural Self-Collective of Mike Davis, for example, would be the proverbial fortress around the archipelagos of the wealthy and surrounded by the slums of the poor (Other-Collective). In this sense, then, *doing* (Work) for the wealthy is perpetuating the status quo via continuing the capitalist strategy because it is through such Work that the representation of the wealthy within their infrastructural greed reinforces the anomic "disease of the infinite" as the quintessential ontological value of the wealthy, while *doing other* is taking up the communitarian strategy of trying to free others. The construction of infrastructure both as construction-act and political semiotics therefore generate meaning as a relation between those defined as Self and those defined as Other, and the boundaries of these groups depend on specific context: the walls of a house imply a Self-Collective of the family, while the fortress walls on a State border imply a Self-Collective of the Nation. Similarly, a tube well in a private compound imply a Self-Collective within that compound, while a city-wide sanitation system implies the Self as the city, or at least those citizens that have access to it.

An Ethnomethodological Inquiry

As maintained by C. Wright Mills, a problem cannot be formulated within the sociological sphere without being able to formulate and identify the values in question

and the threats to those values. As the Global South has inherited lopsided and hegemonically conceived infrastructure formations, legal systems, and power relations, there is greater extra-legal force in deciding what individuals can and cannot do especially when it comes to *doing other*—than what their socially defined roles are expected to be based on the heteronomic apparatus of restrictions imposed by power structures. In particular in South Asia, patron-client networks abound, some inherited directly from colonialism and some reconstructed during the postcolonial history of semi-autonomous forms of national independence—the extent of the autonomy dependent on details of particular colonial and neocolonial overtures in the postcolonial period. Rather than being interested in the *what* of these relations, as a more naturalistic lens would entail, what is of primary interest is ethnomethodological questions of *how* the ontological values of these patron-client relations are constructed and perceived from the point of view of both the patron and the client, and the primary threats to these structures that prevent greater communitarian collaboration, i.e. doing other than maintaining the capitalist status quo. The importance of doing this within the context of infrastructure is that it is possible to evaluate the evolution of these patron-client relations by evaluating acts of future construction and the semiotic symbolism of what the constructions *mean* that connect resource-rich patrons and resource-poor clients. Moreover, the possibility of actually perturbing these relations through perturbing the reflection of those who hold them would allow for a potential *change* to the world, rather than simply an interpretation (Marx's eleventh thesis on Feuerbach).

... People think meaning in job, but meaning is still in history—requires the negation of the Self.



The overall engineering history picture is nicely summarized in Channell, who divides up the history of engineering into three "science and engineering models": the independent period encompassing the ancient and medieval times, when science and technology largely proceeded independently of each other, the modern period through the 19th century where science and technology were dependent on each other, and the 20th century and beyond, when the two were interdependent. This was also a useful lens to retroactively look at the two books through.

Generally Channell traces a similar path to Armytage and Rae/Volti, but with less space the details are more important. For example, there is no mention of non-Western contributions (e.g. Islam and China and the Middle Ages). A few interesting points are the underlining of the Italian "artist-engineer" (e.g. da Vinci) which included the fixed-point perspective that allowed 3D structures to be drawn in 2D and also da Vinci of "mechanistic components" that broke down the machine into parts that could be analyzed and combined separately. He also suggests that the lack of application for the "ideal" laws of Boyle, Newton, Bernoulli, etc. necessitated the rise of "engineering science" that worked more from an applied perspective of trying to understand real interactions within the world. Other points largely missing from the two books was the importance of thermodynamics (e.g. Clausius' first and second laws) and, as with the fixed-point perspective, graphical methods of Rankine, Maxwell, Whipple, et al. He also follows the rise of the multidisciplinary approach to engineering required for electrical and chemical engineers, and the progression to the corporate model of collaboration and, after the Cold War, the "militaryindustrial-academic complex", wherein engineering focused on "units of technology" rather than trying to solve more broad-based problems, especially due to the demands of state and corporate interests on the one hand, and the increasing complexity of the problems to be solved.

As Bix's paper is on the rise of women in engineering, the story is a markedly different one that is inherently political rather than technical. Social norms stemming from hands-on craftmanship and "dangerous" work maintained stereotypes that women could not do engineering (except during WWII with a shortage of manpower when women with a reasonable math and science background were taken through a year-long crash course to join the engineering ranks). The rest of the paper charts the tension between these stereotypes and the women's liberation movement, a cornerstone of which regarding engineering was the increasingly activist nature of the Society of Women Engineers in both political messaging and recruitment drives. Not only were women deemed "not fit for engineering" but also their ambitions were maintained to be primarily family and companies "wouldn't take the risk" on them leaving. Women were also increasingly self-conscious of being representatives in classes ("doing anything stupid was ammunition for the men"). Purdue was the standout university in recruiting women engineers, and this was helped by the passing of the Civil Rights Act in 1964, with a "critical mass" of enrollment and support systems from women mentors. The conclusion is (unsurprisingly) that despite the overtures that society has made to women, deep inequalities remain and men are generally oblivious to them.

In sum, the first week has filled a useful gap in my lack of knowledge of the history of engineering and got me thinking more about cause-and-effect, i.e. that engineering has been dictated by needs, (social, military, political), and this extends to women, recruited out of necessity during WWII labour shortages, but then excluded afterwards. This reflects the broad scope of the PhD in that the needs of developing communities are not necessarily the needs of developed communities and development engineering education must reflect that.

For the second week of readings, the focus is on the current contemporary state of engineering. As opposed to last week when only the Bix article deviated from the main narrative, the four pieces this week focus on different aspects of this question of the current status of engineering. The Auyang article provides an overview of the various fronts of contemporary engineering, especially underlining the exponentially increased levels of complexity and collaboration involved in contrast to the more "lonely inventor" model that dominated the history of engineering. There is some overlap with De Weck in that systems engineering is suggested by Auyang to be extremely important, and De Weck does well to go into more detail about systems, especially regarding the increasingly "technosocial" treatment of engineering problems.

Auyang's treatment of engineering history focuses on the evolution of epistemic knowledge from Aristotle (causality) to Galileo (experimentation and reproducibility) to the French school of Coulomb, Navier, etc (applied mathematics) to Watt (machine tools, precision, process, duplication). He then ties this into the growth of modern and contemporary facets of engineering such as chemical, electrical, communication, aerospace, and the role that materials engineering plays in all these both as cause (airplanes bodies, nuclear energy, semiconductors) and effect (chemical, electrical, solid state physics) of advances in knowledge and production. He then talks of the treatment of engineering knowledge from self-education and hands-on learning to Bacon's knowledge to some end but also searching for knowledge as some end. For both authors, Liebig's lab is seen as pioneering the spirit of engineering discovery, but that the industryacademic relationship faltered in the US when profit was put before scientific application and "the physics PhDs took over from the electrical engineers" during WWII due to creative rather than limited procedural thinking, and this sparked a rethink of engineering education where in technology rather than products becomes the commodity. The last two chapters nicely bring in ontological context of what is an engineer and what are they for. This includes notions of meaningful work and "the existential pleasure of engineering" but also the manner in which minds must be prepared to solve problems especially with concurrent components and projects by applying more predictive thinking (models, stochastics, etc.) combined with regulation, lobbying, standardization, environmentalism, safety and the wider technosocial context that engineers are both working for (improve society) and within (profit, risk, law, responsibility).

De Weck goes into more detail about systems thinking, describing it as the nexus of engineering, management, and the social sciences, and begins the story with *Silent Spring*, Nader's *Unsafe at Any Speed*, and the Club of Rome's *Limits to Growth*, quoting one individual as saying 21st c. engineering challenges involve fixing 20th c. problems. Most of the text is about describing and giving examples of systems, starting with the defining of a systems boundary and looking at i) scale, ii) function, iii) structure, and iv) temporality. Systems change engineering problems into those that must consider long-term effects and a larger context than simply creating a technical artifact. Chapter 4 is about "ilities" (flexibility, sustainability, safety, etc.: properties that should be inherent in the system), Chapter 5 describes the framing and analysis of systems, Chapter 6 talks about the need for flexibility in systems and the idea of "partially designed / partially evolved" in that reformulating problems as systems requires fitting them to present realities (i.e. upgrading current situations), and allowing designing for future upgrades rather than starting every time from scratch, Chapter 7 is about systems and education and the importance of modifying the thinking of students (important!) and Chapter 8 is an interesting treatment of the future within the context of systems engineering.

The two articles pertain to contemporary engineering, but within the context of present conceptions of engineering rather than the present status of engineering in terms of performance and outputs. Davis's question of whether there is a profession of engineering replies to the continual tension (underlined by both the books) that exists regarding whether the engineering profession should be accorded the same prestige as law or medicine. He comes at it from a philosophical standpoint, largely responding to a paper by another author who maintains from a conceptualist framework that engineering is not on par with law and medicine. Although one could conceivably skip such a paper, there are a few things of note, for example the stress is placed not on what engineers do do, but rather what they should do, as in a certain conception of a moral ideal. Arguments against engineering being on par with medicine and law include it being procedural ill-defined (there is nothing on par with "make you healthy" or "win your case") and lack of authority for individual engineers to define the parameters of their craft (since it is largely collaborative). The counterarguments are interesting, but not of particular relevance. What is relevant is the author's suggestion of how a profession should be defined, namely i) involving a number of individuals in the same occupation ii) coming together in voluntary organization iii) to earn a living iv) grounded within a moral ideal. His definition of a moral ideal is useful: "a state of affairs which, though not morally required, is one that everyone (that is, every rational person at his rational best) wants pursued, wanting that so much as to be willing to reward, assist, or at least praise its pursuit if that were the price for others to do the same."

Downey and Lucena's piece is extremely relevant in its postmodernist treatment of the evolution of engineering focusing not on a vision of technological determinism and relations dependent on capitalism and production, but rather by comparing how engineers react to relevant social forces between countries and social histories. The notion of a "code" rather than using "discourse" or "narrative" is to ground the approach within a more easily comparative categorization. As mentioned in my email, I have a lot of thoughts about how their descriptions of the main facets of engineering development in Britain, France, Germany, and the US mirror similar trajectories of law and reflect the dominant philosophical school in each country. In Britain, there is the notion of the "gentleman" distancing himself from manual labour, which reflects Whiggism and Lockean theories of private property and Smith's laissez-faire capitalism. Meanwhile, the French "scaled-up progress towards an ideal state" reflects Rousseau's social contract theory, the shift in Germany of social progress being reflected in techne rather than reason reflects Kantian universalism and the Hegelian phenomenology of spirit, and the American fear of centralized government (due to the previous hold of the British over the country) and the "shifting of power from workers to managers" and "advancing private industry" reflects the nuances of Thomas Paine's The Rights of Man, which placed individual liberty above all and became manifested in ultracapitalism and corporate structures as reflecting the free market as a final objective arbiter of justice and platform of equality. In this sense, I believe that the social evolution of engineering can be decoupled from technological determinism and coupled to philosophical determinism on a broader and more abstract scale. The interplay of cause and effect (i.e. what is created in the world) could then be interpreted within this theoretical framework.

One of the main things that I took from the second week is the importance of having the first week material to ground discussions of major names, events, discoveries, and process within the historical background of contemporary engineering practice. Although the Davis piece could conceivably be switched out, I think his discussion of "profession" and "moral ideal" is useful.

For the third week of readings (and the last of Part 1 regarding "What is engineering?"), the focus shifts away from engineering as a discipline to the specific role and context of engineers. Layton provides a powerful (and extremely dense) account of the preconditions for the rise of the anti-progressive American engineer based on a 19th c historical background and early 20th c social forces. Though unintentional, Baillie actually focuses more on establishing a context for engineering within development by critically interrogating the concepts of development and globalization within the context of reexamining engineers' social responsibility.

The main thrust of Layton's book is the tension that engineers face between social responsibility and corporate loyalty. On the one hand, this was particularly exacerbated in the US with the rise of the importance of corporate governance as an alternative to state governance, which was largely rejected with the British during the War of Independence. On the other hand, the rise of positivism and the influence of Herbert Spencer's Social Darwinism contributed to a sense of chauvinism on the part of engineers as representing an enlightened elite that could solve social ills that were increasingly thought to be predicated on natural laws. In this sense, he maintains that the internal struggle for the engineer was between "scientific materialism and business idealism". This was also at the heart of the politics of status wherein engineers were looking to be put on par with doctors and lawyers for the recognition of their role in society, and this only increased when World War I ended and engineers saw the opportunity for a reformulation of society under scientific principles. The main struggle within the establishment was between progressivists who were against corporate interests dictating engineering interests through the various engineering societies, at times appealing to Taylorism to concretize management as scientific, and the business magnates who attempted to monopolize engineering decisions and interests to serve their aims. A major force in quelling progressivism around 1920 was the election of Herbert Hoover as president of the newly formed Federated American Engineering Societies, who reformulated engineering responsibility towards restoring the individualist ideology of American moral philosophy (with the rise of bolshevism), and that the role of engineers should thus be to exploit their connections to unite business and large interest groups towards needed planning and control of the new society. This model only started becoming questioned in the 1960s when engineers formed a new alliance with science, but here too engineers saw themselves as being seen as inferior which led to a new split between engineering scientist and anti-science business-engineers.

Baillie's piece looks to set the stage for a critical context to decide on the social responsibility of engineers, especially within the context of development. She maintains that a major barrier is the manner in which language is enmeshed with common sense as equivalent to profit. She suggests at least nine possible definitions of development and seven interpretations of globalization, and spends a chapter on Stiglitz's book criticizing the motives of the World Bank and IMF as being in the interests of finance ministers and western capitalism. She looks at notions of public dialogue and attempts at increasing openness to try to underscore the importance of policy focusing on needs analysis of communities rather than market analysis of growth factors. The point of consultation should be to try to collaborate to define problems that engineers can solve rather than viewing the a role solely towards the development of technical artifacts that signify progress. Before concluding remarks, she closes with a case study that she participated in in Lesotho, drawing on Ferguson's criticisms of policy and underscoring the fact that most previous forays have only addressed donor concerns and do not seek to understand actual realities.

The two articles are meant to consider in particular the notion of ethics in a critical manner and how this relates to the identity of the engineer via commitments (or lack thereof) to the theme of social responsibility. This is especially useful within the context of the two books, which essentially maintain that although engineering codes of ethics explicitly underscore the social responsibility of the engineer, the reality is that this tension between responsibility to the public and corporate loyalty is always at play within the sphere of the practicing engineer, a reality generally not faced by the doctors and lawyers that they wish to compare themselves to. Coeckelbergh's article is especially interesting in that his argument eventually leads to the problem of alienation within the engineering profession, a problem underscored by the ontological repercussions of outer manifestations of engineering (e.g. buildings) not being able to be "claimed" by engineers as are doctor's patients or lawyer's cases.

Coeckelbergh's piece, though not quite what I was expecting, is very interesting in its notion of first using the contrasting conceptions of engineering as top-down and scientific versus bottomup and practical as metaphor to look at moral systems. The top-down approach, he argues, can be considered on par with the Platonic conception of morality and politics, and his general argument for an ideal vanguard of philosopher kings to lead society for its own good, wherein "the good" is something to be *calculated* or *attained* rather than to be *performed*. His approach to the bottom-up approach looks especially at John Dewey's pragmatism and conception of even epistemology that is inherently discovered through experimentation and *performance* ("the truth is what works") rather than as something to be cogitated over as an abstract theoretical concept. He suggests that with this one can conceive of a moral strategy that implies flexibility and adaptability to approach an uncertain future that must be moulded and, transitively, conceiving of engineering not as the construction of technical artifacts, but rather as concrete people facing concrete situations to find solutions to hard problems. From here, he suggests an association with open source software and wikis, structures that are open-ended and self-regulated, as a symbol of the potential for decentralization of engineering from the application of technical enlightenment to an informed agent of problem solving. Within this context, he also suggests that this can help overcome the "double alienation" of engineers as both producers (distance from consumer) and as consumers of products (distance from producers, but with some understanding of the complexity involved between creator and consumer. The solution, according to him, is instead of seeking to undermine bourgeois structures directly, society can be changed from within by setting up radically decentralized production models, which would be a novel, non-collectivist, technology-friendly solution to alienation. He maintains that problems of quality and safety can be overcome by the establishment of a framework of rules and self-regulation.

As with week two, the Davis piece is not particularly relevant. His argument again is to attack as inconsistent the idea that engineers should be able to avoid responsibility by appealing to any number of types of excuses, especially technological complexity and distance. The details are not particularly relevant, but at the end he suggests that engineers actually tend to take responsibility because they exist within a context of public trust and by doing so they gain more than they lose.

After these three weeks of readings, I feel that I have a good foundation for contextualizing development within the main thrusts of history, contemporary practice, and issues of identity and social forces / externalities that dictate the way that engineering is conceived of and practiced, including various deterministic and ontological tensions of engineering and the engineer.

The fourth week of readings begins the Part 2, bringing engineering into the context of development. Both of the books are extremely pertinent: Rapley provides the historical backbone of the socioeconomic phases of engineering and various critiques, while I would suggest that Lucena et al. is THE development engineering textbook that any engineer who wants to think beyond working for corporations and industry should read (I have already recommended it to several individuals to have a look at as there is a copy online; my friend in San Luis Potosi said he thought it was excellent and would recommend it to engineers that he works with).

Rapley traces the development of engineering from the post-war reality of Bretton Woods and the gold standard as well as the formation of the World Bank and IMF to assist with lending to countries devastated by WWII. He maintains the importance of the Keynesian context wherein the classical economics of Locke and Smith based on free markets had to be augmented with the need for state intervention if Depression-like conditions signaled the potential perpetuation of unemployment and economic despair. Despite independence, former colonies were increasingly exploited for raw materials and the Prebisch-Singer principle of "declining terms of trade": more raw materials had to be traded to maintain the same import level. Dichotomies of "modern" versus "primitive" arose, and many developing countries were unable to move forward. A phase of protectionism (import substitution industrialization) was tried with varying degrees of success, but the stagflation of the 1970s brought upon by two OPEC scares and the waning of the postwar boom brought the rise of neoliberalism and the argument towards radical freeing of markets and withdrawal of the state. The desperate state of countries caused a debt crisis with the IMF and World Bank (populated by finance ministers) dictating inflated repayment terms and forced structural adjustment to open up markets. This caused capital flight as foreign companies took their money home, and rising inequality as there were few opportunities to progress for anyone outside of the "labour aristocracy". Many things (cause and effect) went wrong (I have a list) over the next twenty years when the IMF and World Bank started admitting the state was needed as long as they didn't interfere with markets. Various "protectionist lite" models (Infant Industry Model) were tried, and Rapley leaves us (in 2002) with "what now?" and some suggestions.

Lucena is a book designed to critically engage engineers in unlearning their fixation on their western education, built on colonialism (Chapter 2, a mixed summary of Rapley and Part 1 with an emphasis on the rise of "desire to help" and "entitlement to intervene"), heavy on the over technical and procedural nature of engineering education (Chapters 3 and 4), and then trying to emphasis the importance of community listening (Chapter 5) as the beginning of overcoming technical top-down bias and chauvinism. Chapter 6 and 7 have actual case studies for readers to cogitate over what went wrong and what could be done better in order to maximize community involvement, while Chapter 8 finishes with a summary of the main points, reasons, and need for this approach within development engineering as social, political, and economic context is far more important than technical problems solving. Throughout the book, questions and exercises at regular increments to get students to try to think critically about their engineering education, identities, assumptions and biases, and what they are trying to do. There are also plenty of excellent examples of the failures of development projects and their reasons. I was particularly struck by the El Cajon Dam in Honduras: a white elephant that the World Bank insisted on in 1980. This project appeared (to me) to have been used by the World Bank and the US to get Honduras heavily into debt so that the US would have leverage to use Honduras as a military base for conflicts against leftist resistance in Nicaragua, El Salvador, and Guatemala.

The two papers are both quoted in Lucena et al. as supporting his view, the first of which he is a co-author of, and the second of which appears to involve a second faculty member at the Colorado School of Mines (Dean Nieusma). Both papers argue for the importance of a different approach to engineering education when it comes to development, especially underscoring the need for a better understanding of the sociopolitical and community context in which one is supposed to work. Downey and Lucena focus on what educational experiences can help to prepare the engineer for better "global competency", and Nieusma and Riley focus on how better to apply one's knowledge in the field.

As with Lucena et al., Downey and Lucena begin from the assumption that engineers are likely to emerge from their educational experience with a highly technical and problem-oriented approach to engineering (in the US in particular). They suggest that solving hundreds of exercises by a rote procedure not only creates the impression that there is only one way to solve a problem, but also that engineers will come to think in terms of "right" and "wrong" approaches to a given problem. D and L therefore suggest that what is needed is what they term "global competency", which goes beyond an understanding of ways to solve problems in different global environments, instead focusing on creating an appreciation in engineers for those who define (and solve) their problems differently. This is not only designed to help engineers work with engineers from other countries (as they point out that even European engineers are going to be biased in ways that reflect where they have been educated), but also to better understand the communities in which they work. Both papers maintain a similar stance to Lucena et al. (and Rapley to a minor extent) in that they stress the importance of moving away from the deficiency approach (what is *needed* in the community) versus a proactive approach (what is *present*), and they maintain that greater context is essential. D and L suggest five approaches to improving global competency, with their strengths and weaknesses: study abroad, project abroad, work abroad, field trip abroad, and an integrated class experience (this last one, involving research and immersion in the destination, including language where applicable) is usually in preparation for direct exposure via one of the other four experiences. The authors highlight the fifth due to a major shortcoming in the four, namely that there is no guarantee that the individual will actually be open-minded towards the new experiences, since they all tend to be temporary and may in fact steel the close-minded individual towards his/her own way of thinking.

N and R focus on two case studies—one in Nicaragua involving a student exchange, and one in Sri Lanka involving a well-trained local NGO—two highlight the susceptibility for engineering projects to either maintain an approach that is too technical (Nicaragua) or not inclusive (Sri Lanka). Nicaragua highlights the extent to which students assumed a neoliberal economic situation similar to the US where the end goal was to create products that could be marketed in the community and create entrepreneurs, while Sri Lanka highlighted the fact that even the well-trained NGO defined "participation" as essentially the community supporting their pre-defined project, which they would be unable to waver from due in part to other interests (e.g. business).

This first week of Part 2 has given me a proper historical context (Rapley) and provided with several different (but connected) ideas about the inherent problems in development engineering, especially as it relates to the way in which engineering students are trained. The latter three pieces provide useful context for thinking about deficits in educational training within the context of development engineering and how teaching can be modified to address them.

This week shifts the focus from development engineering per se to the intersection of engineering and society, predominantly looking at engineering ethics, justice, and the consequences of the acts of engineers. As a last-minute change, Lim's *Incomplete Urbanism* was substituted for a book that seemed to have too much overlap with Week 4. Lim's book also makes teleological claims, but instead of speaking of how engineers should act, it suggests a difference focus on the direction that the evolution of society should take.

Lim situates his book into the context of what he calls "the shifting of the New World Order". By this, he maintains that western capitalism and imperialism has dominated ever since the colonial era but with the rise of China and other Asian powers (he often groups Japan in with the west) as having real political and economic power within the global arena, there is the possibility of a shift in urban values away from western dominance. Key to this western dominance is the symbolism of modernist architecture and urbanism, with its high degree of geometric regularity reiterating order and dominating skylines a constant reminder of western capitalism, growth, and consumption. Lim cites the Orientalist attitude of the west as having imposed a way of thinking on urbanism that is both hegemonic and monopolistic in that it not only presents itself as the only option, but also co-opts existing cultures to accept this model as in their best interests as well, inhibiting cultural memory, practice, and methods of organization and imposing a sense of righteousness and universality of western values, in line with colonialism. This, he suggests, is also in keeping with economic models that prioritize and legitimize capitalism, and with it rampant overconsumption and inequality. Lim suggests that the decline of the west in terms of its dominance in reality presents an opportunity to argue for multiple modernities, including those of Asia and Africa, and the implementing of e.g. Asian principles of backstreet markets, chaos, and dynamism in future urban planning. Incompleteness stresses not "unfinished" but contingent: principles of indeterminacy, inconsistency, and changeability, and part of the strength of these principles is that they prioritize creativity over duplication and make cityscapes interesting, in demand, and promote social engagement in contrast to the predictable, sterile, artifact-like approach of western capitalism, and sustainability and tempering demand over overconsumption.

Vesilind's book is an excellent overview of the theory of ethical responsibility and its relation to sustainability within the military-civil dichotomy, eventually maintaining that sustainability and social justice is part of "positive peace", promoting the conditions that move military engineering towards being obsolete and unnecessary, the ultimate goal of peace engineering. The book includes many profiles of military, civil, and (eventually) peace engineers not all of them in the best light. Within this context, he situates moral theory within engineering codes, discussing what is meant by the "public" that engineers are responsible and questioning why this does not extend to all of humanity when the military-industrial complex is so dominant, especially in the US regarding employing engineers and federal funding. He discusses various theories of ethics, approaches to war (Augustine's "just war theory", realism that anything goes, and pacifism that nothing goes), as well as the difficulties in extending social responsibility to nature and future generations without reciprocity. He notes inherent collusion between academic institutions and industry and military establishments to actively promote military engineering a shift in education is of major importance when attempting to de-legitimize engineers pursuing projects that directly or indirectly result in harm to others. Finally, he notes that in the current reality, (western) engineers have a choice because they are not under financial pressure, professional responsibility is emerging as important, and survival through violence is no longer necessary.

The three papers all deal with approaches to engineering ethics, each with a different approach.

Bowen's main point is to stress that codes of ethics do not go far enough in terms of establishing an aspirational ethos as opposed to simple regulating behaviour. He notes that both utilitarianism and consequentialism, both classic engineering approaches to ethics due to their positivist roots in analysis and quantification merely suggest strategies to make choices. Part of the reason for the reason that these appeal to engineers is also because of a general distance from those that are affected by their work, (in contrast to doctors) and the manner in which technical preoccupation distracts from social considerations. In contrast, he cites the importance of moral systems that are designed to bring about a way of being: Aristotelian virtue ethics and Kantian universalization are the classic ones (also mentioned in other texts this week) as well as the virtue signaling of religion as having universalizable values such as "the Golden Rule". On top of this, however, he stresses looking beyond this first two, first to Martin Buber's contrast of the I-It (experiencing / using objects) versus I-Thou (meeting people) as being useful to underscore the engineer's duty to objects and people, and then to Paul Ricoeur's notion of equivalence (justice) versus superabundance (love, respect) and the way in which it can be summed up by the taking the approach "here I am, how can I help?" He suggests (as do others) that commonly in the "realm of the organizational", only means and not ends are negotiable: educational promotion is vital.

Cockelbergh's approach hinges on regulation versus autonomy, suggesting that the two are actually not incompatible if the context is reinterpreted. As with Bowen's talk of the moral distance of engineers and the automated nature of codes of conduct, emphasizing creating an ethos that an engineer can aspire to, Cockelbergh maintains that an inherent problem with codes is they merely provide an engineer with a means to be only passively aware of ethical duty. He suggests that inherent alienation can be overcome in part by increasing autonomy, allowing engineers to make their own the principles on which they act, allowing them to actively engage and developing their "moral imagination". This also helps to bridge the gap with the public, who may see the need for codes of conduct as implying a lack of trust in the ethical principles of engineers. He notes that those against "regulation" must accept that structure is required in order for anyone to act towards shared goals, and this should be shepherded towards finding a balance between regulation as minimum and autonomy as active participation in one's moral life.

Herkert prioritizes the dichotomy between micro (individual) and macroethics (societal), stating that engineering does not prioritize the latter, creating a certain sense of banality towards policy, organization, and social strategy. One example he provides is an apparent lack of consideration for overconsumption when only technical and ethic constraint are treated as within the scope of engineering ethics. As with the other authors, he emphasizes the importance of education in attempting to change the way that engineers view social responsibility. He suggests various specific strategies like emphasizing how computer ethics, STS, professional organizations, and corporations can help to shift the focus to the bigger picture with proper willingness.

The readings this week provided several different ways to think about engineering ethics and the basis of moral decision making, and the importance of education in emphasizing the more active role that engineers can take via progressive considerations of what engineering ethics means. On the other hand, Lim provides important food for thought towards the side of the engineer that wishes to engineer a society that is different, more dynamic, and more interesting than the past.

This is the first of two weeks specifically looking at the context of indigenous peoples within the development engineering context. The first book appears to be largely written by affiliates of the World Bank, while the second book *In the Way of Development* is a collection of essays that look very critically at indigenous development issues, most around Canada but also with a few essays from other parts of the world (Southern Chile, Chukotka, US).

The motivation for the first book is to investigate the situation regarding indigenous peoples in countries around the world that have little data on them thus far (outside of the Americas, Australia and New Zealand). It therefore looks at the pygmies in Central Africa, as well as indigenous in China, India, Laos, Vietnam, and a short summary about the current situation in Latin America. For the most part, the book had a lot of statistical analysis showing the levels of poverty compared to non-indigenous, as well as other indicators like education, health, etc. I skipped through most of the numbers, as they weren't of particular interest, but I read the backgrounds to indigenous peoples each country and the commentaries about policies being employed. Overall, however, I would say that Chapter 3 is extremely important reading as it tackles notions of indigeneity within the globalized political spectrum, and has very wellnuanced arguments and explanations about what precisely it means to be "indigenous" outside of the Americas where "first peoples" are not so easily identified. In some instances, the author explains, indigeneity is argued from the basis of patterns of exploitation: the groups argue that just because they are being marginalized and exploited by locals rather than settlers should not make their case any different. There are also important narratives about increasing selfidentification as indigenous because the political relationship has slowly evolved from one of marginalization to one of empowerment due to recent international legislation to protect land.

The second book was long and extremely dense, with nineteen chapters of very critical analysis on a range of topics related to indigenous peoples and development. Many of the essays referred to various contexts of the James Bay Cree and their fight against Hydro-Quebec's attempt to add a second major dam to the area (the Great Whale Project). The strength of this book was the manner in which it presented indigenous claims within the context of their marginalization and the broken promises from government and other national and supranational entities (e.g. the World Bank, where applicable). It also spoke at length about methods of collaboration and resistance of First Nations to incursions on their land by large corporations and the manner in which one could argue that it is only from the point of view of indigenous peoples that one can see the most extreme forms of cynicism from corporatism and development. One also gets a better understanding of the very nature of the relationship between indigenous peoples and their environment and how flooding land for dams and putting industrial plants in their areas are nontrivial given that they prefer to live a subsistence life. In fact, one could suggest that indigenous peoples provide the most dogged and determined resistance to corporatism and neoliberalism in the form of the defense of their land the defense of their sense of community and sharing and their unwillingness to be divided, e.g. by "entrepreneurial training programs" that try to impose an ideology of individualism and competition as underlying "business". Through these economic narratives is also the importance of indigenous spirituality and traditional ecological knowledge, the latter often being commodified or downplayed even their inherent sense of sustainability and knowledge of their land may achieve the same result as e.g. scientific instrumentalization and monitoring of river beds for fish patterns. Underlying it all is, of course, the asymmetric nature of power relations between indigenous and outsiders.

Of the three papers, I found the Booth one to be of less use as it was largely a series of personal narratives taken from individuals in BC affected by development projects. Although it is definitely of importance to understand how affected individuals express themselves, within the context of my research and at this stage in my understanding of relations between indigenous and development, I did not find that it contributed to a lot to my overall lens of the dynamic between the two. The main point that I found interesting was talking about claims that cumulative costs of projects never seem to be taken into account as a means of legitimizing individual projects that essentially gang up on indigenous lands.

The first essay I found to be quite useful as it spoke of both the history and neocolonial context of the Brazilian fight over the Amazon. It also helps to understand where Jair Bolsonaro fits into this narrative and reveals that there is more to this than simply the election of a populist in the era of Donald Trump. The pro-development Brazilian clique stems largely from the military of the 1960s and 70s that had the backing of the United States, and therefore talk about the Amazon often comes down to one of "sovereignty" and "security" because of its overlap with other countries in South America. Hence, Bolsonaro, a former military officer is simply continuing this rhetoric. The other major pro-development plays on the neocolonial narrative to say that proenvironment groups that are demanding a stop to the development of the Amazon are part of an attempt by "Europeans" to secure and then steal the mineral resources of the Amazon from Brazil, evoking historical narratives of colonial plunder. However, the author makes sure to know that when it comes to colonial narratives from Brazil, they are only too happy to invite neoliberal postcolonial bodies like the World Bank and the IMF to help them in the process of development. Once gold was found under Yanomami territories in 1987, these voices of neocolonial exploitation only increased, and the indigenous peoples of the Amazon were now treated as strangers on their own land. Many attempts have been made to divide or marginalize them for the sake of development, and the author speaks of a "chain of significance between signifiers empty of specific meanings", where referrals are made to historically equating environmentalists with communists and those in Rio de Janeiro opposed to Amazon development as "rich naïve idealist southerners" against "poor northerners". In other words, the author underscores the "adverse forces" being invoked as being dependent on history and rhetoric.

Lowry's paper is written from the anti-capitalist point of view (no surprise given the journal title *Capitalism*, *Nature*, *Socialism*). The main thrust of his argument is underscoring that capitalism transforms everything into commodities, including resources, land, and labour, usually leaving destruction or abandonment. As implied in *The Way of Development*, he maintains that nature of indigeneity as being antagonistic to the "spirit of capitalism" in that it is an attempt to preserve what is in contrast to corporations trying to extract wealth from it. He speaks of Weber's critique of capitalism going in accordance with the Protestant ethic of individual reward in contrast to the indigenous valorization of local knowledge and customs again universalization. He suggests that Latin American leftists are grouped with neoliberal orthodoxy: development with redistribution.

This first week of readings on indigenous peoples reflected a little of the first week of the course in that I found myself taking excessive notes because even the foundations of indigenous politics is fairly unfamiliar to me. There are a lot of major arcs that have developed around the place of indigenous relations and resistance to modernity and capitalist society, and I believe that this foundational material should help me focus more on the nuances of next week's readings.

This week is the second of two weeks on indigenous peoples, focusing specifically on their relationship to the resource extraction industry. Both books cover numerous case studies, the first international, the second mining in northern Canada.

As with the World Bank book last week, the Sawyer book spends a few chapters exploring a robust concept of indigeneity and its relationship to the State and multinational corporations. The major arc of the argument is that indigenous peoples find themselves in a Catch-22 situation in that focusing on indigenous recognition can be both empowering and disempowering, and that often a more extended political arena may be required to get results. This was also the case last week regarding James Bay and Wisconsin. Part of this is because there is little oversight of MNCs by external bodies, so circumventing the law may go unpunished and appeals to public support may be a key component of pressure. It maintains the importance of a historical rather than static interpretation of indigenous peoples (Deleuze and Guattari's assemblage) and that the static interpretation plays into "repressive authenticity", where indigenous groups are required to stay frozen in time or be denied land claims, and "strategic essentialism" where groups may be forced to role-play parochial and colonial version of themselves in order to have their benefits acknowledged. Often laws of recognition are based on universal (and demeaning) interpretations of just what constitutes "indigeneity". They suggest that indigenous peoples pose a threat to neoliberalism in their demand for rights of otherness, and a fundamental desire is to have nonmodernist ways of living conceded to them and validated. The rest of the book focuses on various case studies from around the world. A few highlights are the question of instead of asking what are indigenous peoples looking for, but rather what happens to all of the capital that is extracted from a site before it is abandoned and who benefits from it? Other arcs include the notion that collectivized land may be more difficult to appropriate and strategies that allot land within boundaries may actually be disempowering because recognizes an "owner" implies that that owner can then be undermined, especially by suggesting that a represented group "does not speak for the whole nation" or (in the Philippines case), creating a parallel group amenable to mining that is then negotiated with. The highlight the idea of "legalism" wherein indigenous groups are bypassed by appealing to colonial laws that are already designed to oppress them.

The second book especially underscores the notion of *memory* in Canadian northern mining in terms of the relationship between people and the mining on their land, a lot of the cases being indigenous, including the Alberta Oil Sands, Yukon silver mining, mines in Labrador, Inuit areas, other NWT (including Port Radium), and Schefferville. It reinforces the importance of the process of *rehumanization* especially when dealing with the "erasure" of indigenous peoples not only from the benefits of mining, but also from the entire place where the mine is located. This is especially underscored in the description of the discovery of Port Radium, showing the contrast between the "Horatio Alger" story of Gilbert Labine (containing some questionable claims) vs the story of the Sahtu where a guide knew of the "interesting rocks" and gave him one that he then got rich off of without sharing proceeds and turning the area into a radioactive wasteland, underscoring the contrast between the communal, welcoming nature of FNs, and the selfish, late capitalist mentality of settlers. One chapter is less location-specific and deals with IBAs, which I did not know exist but is the manner in which responsibility for negotiation is devolved to individual nations with corporations. This provides more "neoliberal" autonomy, but usually is shrouded in secrecy and usually contains non-disclosure caveats that neuter the ability of FNs to go public with grievances, which is often their most favourable course of action.

The two articles focus on this Catch-22 situation facing indigenous peoples when it comes to resource extraction. The first suggests a "changing dynamic" by looking at expanded consultation with aboriginals in Western Australia, why the second consists largely of a history of legislation enacted to (supposedly) strengthen indigenous peoples against resource extraction multinational corporations.

O'Faircheallaigh notes a particular example of an offshore LNG project in the Kimberley region of Western Australia that appeared to demonstrate an unprecedented engagement with aboriginal peoples in the area by the territorial government. He begins with a literature describing the general conditions of aboriginals vis-à-vis multinational corporations, noting that the latter are only considering a "vertical" assessment of the location in question, that is that it is selected only insofar as it is deemed to be able to provide profit at that particular time. Note that this "vertical" temporal axis mirrors Blaser's space-time axes also. Based on this assessment, he suggests that there is no reason, then that a MNC should care about what is left in its wake in terms of changes to the community socially and environmentally. This theme is touched on constantly, i.e. that local indigenous peoples are often hired only to save money, and tend to only be appointed to menial unskilled labour jobs rather than investing in training them to be able to do more (since the MNC is likely to just leave when prices change). In that sense, it is at base exploitative and merely causes a temporary distortion of the economy via an appropriation of environmental and human values. An interesting tie can be made to the Sawyer in Chapter 11 regarding the British Columbia case where the argument was that failing to compensate the FNs for their softwood "property" and the environmental aftermath amounted to the Crown involving an unfair subsidy that went against WTO guidelines. Lack of compensation for the appropriation of the location essentially amounts to "subsidizing" the industry. The events describe meaningful engagement with a local council of all affected groups and their freedom to choose a site for the LNG processing plant. This was then hurried through after an election brought in a different territorial government, and there was increased wrangling by the MNC for favourable treatment. The LNG plant never went ahead (as of today according to Wikipedia), but the author maintains that with policy changes, the exploitative results may not be inevitable.

The second article recounts the history of policies enacted by the UN, international mining bodies, World Bank, etc. He suggests that much of these policies are often for PR only to try to scrub the negative views of the mining industry as exploitative. They note in particular that whenever these guidelines are enacted, they perpetuate the unilateral paternalism of settler-colonialism in that there is never any indigenous participation. For the most part, he suggests that there is constant pushback from corporate interests to maintain "guidelines only" that are not enforceable by punishment, and are often used to mask abuses by using self-reporting or private third party verification of conditions. In many cases, protests against extraction are criminalized and intimidated, often with militarization by private companies. He maintains that progress is slowly being made in each increment, by corporate interests push for consultation over consent.

The two weeks of First Nations have provided food for thought about how the indigenous "right to be other" is constantly undermined and bypassed in part because it threatens neoliberal values especially because their historical attachment to the land and community means that land is not easily commodified and groups are not easily individualized. For the most part, governments tend to be in league with MNCs with (ephemeral) profit taking precedence over all else.

The intention this week was to read materials regarding Canada's international development policy, though some changes meant that one of the books (Golah) was on land, gender, and globalization instead. Given that this is the last of the Phase 2 readings, and that land and gender have not been touched on yet, this seemed a useful final piece to read.

Butler's book applying critical race theory to Canadian mining is extremely eye-opening in that it works off of Said's Culture and Imperialism (to be read later) to develop the idea of race as inherently bound up with a Self-Other dialectic that allows non-white labour power to be reduced in value to maximize the amount of surplus value that can be extracted from it. She also spends a lot of time developing a highly accessible understanding of structural violence (Sartre's "Racism and Colonialism as Praxis and Process" is a little difficult at times), and, given that the third chapter is devoted to defending the view of Canada as a white-settler colonial racial state via its historical treatment of First Nations people, it flows easily from last week's readings. As with Said, the central methodology is to focus on the power of rhetoric and discourse to establish a "central cultural imaginary" that allows Canada to sell itself as morally benevolent working "within the law" when the reality is that it ruthlessly uses the Self-Other discourse to paint nonwhites (Africans in this case) as either savage or infantile, thus justifying corporation occupancy and extraction of resources from their lands. Butler notes that Canada as a resource dominant country ("the most developed third world country") relies on mining and therefore sends representatives from Canadian mining bodies and, with the help of government, pressures African governments to change their mining laws, allowing for increased capital flight in the name of "competition" backed by the World Bank and structural adjustment policies. Added to the excellent analysis of law and race is the actual interviews with mining industry personnel that demonstrate that this "colonial imaginary", "colour-blind market rationalism", and "mundane rule of law" is pervasive as a means by which industrialists can "interpellate" (Althusser) their role as being justified and successfully navigate the cognitive dissonance that comes from neocolonial occupation and pillaging of resources. Throughout this reading, one also gets a sense of the strategic value for neoliberalism of endless articles pointing the finger at "greedy, lawless, and corrupt states", and their "inability to help their people", the role of Hollywood in popular interpretations of "jungle savagery" and the criminalization of small-scale miners.

The Golah book provides useful food for thought about challenging the local-global binary and the strength in recognizing and embracing contingency and otherness and resubjectivizing the individual as a local agent with creativity and economic viability and not just a slave to capital. The focus on land rights and women is especially interesting within the realm of neoliberalism for the way in which structural adjustment policies play off traditional (culture-based) and modern (rights-based) notions of land tenure to provide the simplest means of consolidating land for control (as with indigenous peoples with communal land). In several cases, more equitable distribution polices of land between men and women were replaced by male dominance. The other important point was about focusing on the meaning of land and the meaning of gender as a socially dynamic process, and the importance of hearing the reality of women. In many cases, women in neoliberal societies are required to tend land and keep house while their husbands try to find wage labour. There is also the natural gender-based hierarchies for labour work (e.g. mining) that allow for segregation, disempowerment, and sexual exploitation and pressure, especially within neoliberal hierarchies of investors, owners, and managers often being foreigners. The case studies provide compelling reasons to be interested in qualitative studies.

Hyndman's article about Sri Lanka brings into focus the connection between Canada and country that would, on the surface be not counted for much being an isolated, relatively poor island of low population far away. However, Hyndman's claim that (at the time of writing) Toronto is the city with the largest population of Sri Lankan Tamils suggests the "dynamic and recursive nature" of immigrant communities within Canada in terms of rhetoric and financial connections to a native country. As in many conflicts, the moniker of "terrorist group" applied to the Tamil Tigers (LTTE) belies the historical marginalization of an ethnic population starting with structural changes to prioritize Sinhalese in the 1950s and then the disenfranchisement of the Tamils by the Sinhalese elites when Sri Lanka opened up its markets in 1977. The makings of the Tamil insurgency group were unemployed and underemployed youths from rural areas or middle class peasantry. Thus, similarities can be drawn with Central American insurgency groups also defined as "terrorist" such as the FMLN and the Sandinistas. Sri Lankan neoliberalism was also backed by the anti-Communist Colombo Plan of 1950 that still shapes some Asia-Pacific economic policy today. In this sense, Toronto can be seen as providing space for Sri Lankan Tamils outside of the marginalizing effects of neoliberalism within the Sri Lankan economy, and their ability to raise money and contribute to Tamil communities in Sri Lanka provided a means to fund the resistance, though this was deemed "funding of terrorists" and accusations surrounding unlawful conduct and child soldiers was leveled at the LTTE. Sri Lanka became was the target of a substantial level of Canadian aid, but it was the only country to send money through NGOs not the Sinhalese government, and also the only country to contribute to a peace-building fund. This suggests that the entrenchment of Sri Lankan Tamils within Canada shaped both parameters of the conflict and parameters of Canada-Sri Lankan foreign policy.

The Stanley piece brings a nuanced understanding of the reason for the rise of the Idle No More movement as a response to the Stephen Harper Economic Action Plan, which promoted aggressive resource extraction and was seen as a "legislative assault" on the right of refusal for resource extraction on their land. The inherent problem surrounded the expansion of a system of what is called "flow-through share", where investment capital is able to write off as a tax credit (but no company liability) funding for junior exploratory firms to look for deposits in order to attract larger mining corporations if the full mining infrastructure is beyond their funding capacity. This is designed to attract investment by lowering risk in what may be a high-risk endeavor. One way in which this was changed is where consultation with First Nations groups about access to their land could be written off as tax credits. This essentially turns the social condition of First Nations fighting for sovereignty over their land into a financial asset that can be circumvented via risk management, in essence commodifying an ongoing battle within a colonialist-capitalist regime, not unlike government support for mining companies in other countries bypassing sociopolitical conditions (war, apartheid) to continue to reap benefits. In this way, a price is put on FN struggles for clean water and an undamaged environment.

These readings close Phase 2, having touched economic history of development, ethics and society, indigenous peoples, resource extraction, the colonial context, and additional thoughts on the role of gender and land tenure. All in all, there is an underlying narrative of both the notion of horizontal (spatial) and vertical (temporal) space and how the encroachment of neoliberalism on horizontal space may lead those disenfranchised by the dominant colonial discourse to develop the vertical space for their "life projects". In addition, Golah's book about gender and land reflects Lim's view of urbanism as aspects that should be considered fluid and changeable.

This is the first week of Phase 3, where the emphasis is the nuances of critical theories on development. The previous five weeks have laid the groundwork for broad strokes regarding the inherent weaknesses and contradictions of development as theorized and as practiced. This week, Escobar's postdevelopment critique will be paired with a collection of essays on informality, while one essay that looks specifically at the peculiarities of development will be paired with another on the realities of Gulf megacities as "resource-predatory".

Although in some sense Kowalski's meta-analysis of the notion of development provides no new information, he provides a succinct summary of the inherent difficulties of development, beginning with the monopolization of future ideology in the sense that during the Cold War, both the US and the Soviet Union saw development as the means to stake their claim, paving the way for an inability for humans to think beyond development and growth, and its technocratic, paternalistic approach. These are central themes that are reiterated in Escobar. Kowalski's categorization of characteristics and characterizations of development provides a useful "laundry list" of ways to conceive of aspects of development succinctly. First, he considers development with Habermas' types of agency: i) instrumental actions (technocratic), ii) strategic actions (hegemonic), and iii) communicative actions (consensus through discourse). This provides a means to interpret Escobar's historical account of the "development of development", with i) reflecting Keynesian intervention predicated on the Depression demonstrating that a Walrasian notion of perfect equilibrium as espoused by Schumpeter led to problems, and that targeting (perpetual?) growth was necessary. A transition from i) to ii) can be seen in the way that the positivist markers of GNP and the characterization of poverty in the post-War era provided the means for the World Bank and IMF to go into South America and collect reams of data on local populations and "suggest revisions" for suggested development projects that were "more of an idea than a plan" in that the technocratic constraints of scientific management that were at that point alien to the developing world were sold as necessary and allowed for the ease by which hegemonic notions of positivism could be imposed to make hegemonic revisions to the outcome of project suggestions. Further, the WB's first few projects were in Chile and Colombia, both countries that were (and would continue to be) well within the sphere of American influence. The final phase of "communicative actions" follows from this "hegemony through discourse" into the neoclassical phase where consensus is gathered simply by creating no other option once structural adjustment policies took hold. The attempt to increasingly incorporate "participatory" models as espoused by Chambers in 1994, and the "depoliticization of poverty" with its inherent problems can be seen as the last phase in the hegemonic totalitarianism of the World Bank as an actor for Western economic interests. These three phases can be reconsidered within Kowalski's i) management in development, ii) management of development, and iii) management for development in a similar manner, and reflect the transition from colonial to neocolonial forms of control as expounded in Escobar.

A second, and perhaps more interesting list is the five paradoxes of development laid out in Kowalski's conclusion, i) the paradox of self-help (i.e. helping others to help themselves), ii) the Samaritan's paradox (an interest in being disinterested in that starting from the bottom of the Maslow pyramid only increases dependency), iii) the antinomy of free will (autonomy versus conditionality, especially within the Hayekian freedom rhetoric of neoliberalism, a point that I suggested in my first essay), iv) the paradox of the individual creating society and the society creating the individual as espoused by Paolo Freire, and v) the paradox of sustainable

development (consuming to grow through management, which is seized on with vigour at the end of Escobar's fifth chapter). These can be unpacked individually.

The paradox of self-help comes to the fore within the Habermasian conception of phases of development mentioned previously, especially in the final phase of consensus through discourse and participatory development. For the most part "helping others help themselves" is bound up in vested interests and hegemonic power structures, which as Escobar reiterates are hidden via the "objective positivity" of scientific management. The Samaritan's paradox arises as the logical outcome for dependency theorists, especially with the parametrization and depoliticizing of poverty (Escobar). The antinomy of free will becomes a cornerstone of neoliberal preaching using (as with i)) the assertion of scientific objectivity of markets "forcing people to be free" (Adam Curtis). The paradox of sustainable development is dealt with in Escobar and its nuances have been covered in discussions about resource management; it is further considered in terms of the Rizzo's piece on the "sustainability" of Gulf megacities (below).

Although the circularity of society and individual is bound up in previous arguments, it is of particular interest due to MacFarlane and Rizzo's piece on resource-predatory models. As Escobar maintains, much of development actually consists of imposing a regulatory structure rather than a developmental structure, and the universalization of western modernity as "formal" and "forward" versus "informal" and "traditional / backward" is illuminating. A main point of Rizzo is to suggest that the megacities of the Gulf are a means of investing surplus wealth into a future without oil by creating what are essentially at the same time ahistorical (created from nothing) and multihistorical (a pick-and-mix Disneyworld of multiple histories in one place) zones of exclusion for the wealthy to operate within. This ties into the MacFarlane essays, for example regarding the unending desire of modernity to sanitize informality as "unclean" and "disorganized", and the growing hegemonic mindset of decentralized middle class individuals in India and the centralized government in Vietnam seeing hawkers, informal settlements, street vendors, and the like as epitomizing a "backwards" city, especially within the global competition for foreign capital. This reflects Rizzo's analysis of the Gulf megacity's exclusivity, where the labour that it relies on to function is bussed in so that residents of this gated community can maintain their cognitive dissonance about the contemporary nature of their reality even though it is the unseen "informality" that keeps everything functional by doing the jobs (like cleaning toilets) that residents can believe happen by magic. As with several of the MacFarlane pieces (such as Vietnam), Rizzo notes the need to maintain tradition (in the form of plagiarized Arab cityscapes) and modernity (in the form of the removal of informality) simultaneously in a pernicious but contradictory Self-Other form of cognitive dissonance. The last MacFarlane essay by Uwe Altrock does an excellent job of unpacking the "informality of formality" by noting, for example, that "informal meetings" to lubricate formal agreements go on all the time, and in the second-last essay, this "deregulation rather than unregulation" has many explanations, not least the withdrawal of welfare and social spending under neoliberalism ("calculated informality", Altrock) and the need / desire for the state to withdraw to allow for others to step in, echoing Engels' quote "one wonders how the social fabric hangs together". In other words this Freirian circle of society and the individual making each other can be seen in the interplay between informality (individual to society) and formality (society to individual) make each other. The overt desire for development to sanitize away informality (while covertly using the flexibility of informality to its advantage reinforces why iv) is an extremely important and useful paradox.

Despite the apparently ambiguous topic of "ontology" and the randomness of the choice of works, they all came together nicely, with the two books providing extremely useful paradigms of "faith"—one in development and one in architecture as metaphor—that provide a means to underpin an assessment of how we are led to subconsciously buy into development as a single hegemonic historical paradigm. The essay by Goldman intersects nicely with both books and the emphasis on informality by speaking of how engineering tries to place itself firmly in the camp of creating ideal structures when it is actually underscored by contingency, citing Plato in a similar vein to Karatani. Finally, the Alexander piece about "efficiency" and "arbitrariness" was not precisely about a sense of "faith", but it slots in nicely with the greater narrative about measurements against ideals and feverish acceptance of what is an arbitrary paradigm.

Beginning with Goldman as anchoring both books, he notes the inherent tension between science as applying reason to experience, and the manner in which the engineer, through mathematical and modelling exercises, often is led to suspend belief of the inherent nature of the contingency of engineering, instead placing him / herself solely in the ivory tower of science and technology. Yet the reality is that the process by which an engineering project is brought into being is one of constant negotiation and applying value judgments in contrast to scientific practice. Moreover, engineering itself exists within the domains of "bounded rationality" and "satisficing" in contrast to science, which intends to establish predictive laws through reproducibility. To quote Auyang in *The Endless Frontier*, "natural scientists discover what was not known, engineers create what did not exist". In that sense, the goals of science are more in tune with chasing an ideal that exists independently of our pursuit of it, whereas the outputs of engineering take their place in what was a possible future that could be conceived in an infinite number of ways. Thus engineering is *inherently contingent* and only *hypothetically* abstract. Citing Plato, he notes the manner in which the demonstration of technique tends to overwhelm the reason why technique is employed in the first place. An extreme form of this is found in many development projects where the target community is treated merely as a laboratory to facilitate a problem solving exercise for which students will be graded, with little regard for the consequences on the community. It is possible to tie this line of reasoning in to Rist and Karatani in that Goldman notes the manner in which the fragility invoked by uncertainty would require religion or universalizable truths to circumvent. Camus maintains that the inherently absurd notion of reality wherein there is no inherent meaning in life except what we create ourselves results in a choice. To embrace absurdism entirely and to try to discover this personal sense of meaning is to live authentically, whereas those who appeal to religion to necessitate an universalizable ideal of meaning live inauthentically.

Rist's notion of development as a religion and Karatani's idea that the subconscious pursuit of the Platonic ideal while understanding the impossibility of its realization—the so-called will to architecture—as the basis for all Western thought appeal to this attempt to circumvent this fragility of uncertainty by an *inauthentic* denial of the contingent nature of reality. The Alexander essay speaks to this form of inauthentic appeal to an ideal within the realm of efficiency (itself conceptualized beautifully in Janice Gross Stein's *The Cult of Efficiency*) and the slow means by which techno-scientific authority is co-opted by the positivist notion that science can also lead us socially. She starts by describing the manner in which efficiency began as mechanical efficiency as the percentage of work done by an engine based on the theoretical amount of work that should be outputted from a given energy input. However, this then became

banalized in a New York newspaper, which began running an advice column (written largely by one of Gantt's cohort) addressing people's questions about "personal efficiency". The problem in this sense is, of course, the question Stein poses, namely "efficiency in terms of what?" Here there is an appeal to a false and arbitrarily conceived ideal of what an individual should be and how close they are to that. Rostow's Stages of Growth, an important progression in the development notion of faith, comes to mind.

Briefly, Rist maintains the idea of "development as faith" for the manner in which, like a religion, it is appealed to for guidance ritualistically with no one ever questioning the basic tenets on which it relies. For details of the argument, you can read my essay. However, this notion of faith in development sets up a way in which those Other to development and modernity (such as indigenous) can be viewed through the lens of secularization. In this way, it provides greater legitimacy to the inherent contradictions within the neoliberal conception of freedom as modernity (since it also preaches freedom of religion).

While Rist's notion of faith in development can be seen in the natural progression of Western modernity and capitalism to a hegemonic ideal, Karatani's Architecture as Metaphor is much more original. As with Goldman, Karatani notes this tension between the contingency of reality and the appeals to the Platonic ideal inherent in Western ways of thinking (hence, "metaphor"). He suggests in the Foreword that his book is more for philosophers than architects and, indeed he spends only a little time on actual conceptions of architecture, specifically around Christopher Alexander's "A City is not a Tree" essay. This idea of "tree" is based around the sanitized notion of the planned city, tree as in the graph theoretical form of tree that contains no loops and therefore every point is connected to every either point by exactly one path, and, more importantly, every terminus has a unique hierarchy defining its relation to higher levels of structure. By this model, every aspect of the planned city would be necessitated by a single series of connections, resulting in an artificial place of predictability and dependency. In contrast, the semi-lattice is proposed where hierarchies are maintained, but each point in a lower level is connected to every point at the level above it. He describes a typical realistic conception of this either / or of a drug store with a traffic light outside and a news rack inside: as isolated elements, they are simply there, but a human will interact with them in different ways and via different orderings depending on their particular situation. Further, he suggests that the "extreme dissociation and compartmentalization" suggested by a tree suggests coming destructive forces, likening dissociation in the city to dissociation in the individual in the form of schizophrenia. Later, Karatani moves from Alexander and Jane Jacobs, who suggests that the city should revolve around spontaneity and "no definite plan", by which Karatani invokes the Deleuzian notion of a rhizome.

Generally speaking, Karatani's book is incredibly rich, with sections devoted to Husserl's phenomenology, psychoanalysis and schizophrenia, sets and numbers, teaching, Socrates, and Wittgenstein, money, capital, and credit, etc. And quite a bit of Kant and Marx. All sections are bound together around the central notion of this "will to architecture", and the inherent contradiction that comes from trying to invoke the existence of a structure that, at base, has no foundation. For example, an appeal is made to Gödel's Incompleteness Theorem to suggest that even Hilbert's attempt to foundationalize mathematics ended in failure. I believe it will become a central text for me going forward, and one reading is definitely insufficient to capture its power.

The readings for this week are something of an extension from last week, in that Bowden draws a similar picture of the historical impetus of civilization as Rist did with development, but on a much deeper, more nuanced, and perhaps less polemical level. Mbembe provides a look not into the Western mind like Karatani, but into the African postcolonial reality, with a lot of useful lines drawn to sources of denigration by neoliberal development gurus like Anne Krueger. Also in a similar manner to last week, the Smith fits only marginally, but now better because of my Critiques readings of Cowen and Shenton, and Frederick Cooper that describe the rise of development in terms of a transition of industrial revolution class conflicts in Europe to the postcolonial world, while the Straker essay provides an interesting conception of the engineer within the Saidian *Culture and Imperialism* discourse. In a way, Bowden and Mbembe are writing two parallel histories, one of the historical utility of the notion of civilization to ends of benevolence on the part of the colonizer, and the other of the mangled social reality of Africans on the receiving end of the brunt of this narrative. The two essays can fit into these narratives at the proper moment.

Because he is writing to an end that does not have the narrow interests of Rist, Bowden is able to take the time to develop a more robust history of what is meant by "civilization" and the manner in which it has been used along with "progress" and "development" to justify a single historical narrative. Two of the most important conceptualizations in Bowden missing in Rist are i) the importance of Columbus' discovery of America for colonialism and imperialism and ii) the huge role that legal theory played in the justification for occupation and pillage. A first major point of "first contact" is that it made the idea of Rostow's Stages of Growth possible. Only after discovering the natives, described as "primitive" and "savage", that the idea that God had put versions of humans at the infancy of civilization on Earth gained credence. Furthermore, one can see the almost universal paternal-infantile condemnation of the "savagery" and the need for trusteeship by even such liberals as Adam Ferguson, Immanuel Kant, and John Stuart Mill. Another important point that Bowden raises is that this idea of "civilization" started to lose traction after World War II, because the prolonged, bloody internal clashes of Europeans weakened the idea of white Europeans being "civilized", and "developed" came into vogue largely until the work of Fukuyama and Huntington brought grand narratives back into view following the fall of the Soviet Union.

Bowden suggests that international law effectively began with the discovery of the Americas, and part of the role that "civilization" played in the discourse was to establish a logical hierarchy between rulers and ruled, with a three-tiered system of "civilized", "barbaric", and "savage". Using ethological arguments, it was suggested that because the uncivilized lacked reason, the law did not apply to them moreover, although Francisco Vitoria and Hugo Grotius were the main founders of international law, Lockean philosophy played a major role in justifying occupation, namely that the natives had more than enough land and God had bequeathed the land too all and if they were not using it they had an obligation to share it (*Second Treatise*). In Mbembe, the first and second chapters throw light on the manifestations of these civilizing forces in Africa beginning with Bowden's look at western philosophy as characterizing Africa as having a *lack* and therefore as beasts or savage, justifying the civilization narrative as one of i) structural violence declaring a) a right to territory, b) monopoly on judgment, ii) legitimation that provides self-interpreting and perpetuating models of order and regulation, and iii) the establishment of a colonial imaginary allowing Africa to be forever viewed as incapable of following high-minded

legal principles and therefore justifying the use of violence and discipline over reason and an overall animalistic conception of the African.

What is most interesting about Mbembe's characterization of the lived experience of African is how much their means of social organization was disrupted first by the slave trade and then by colonization. According to Mbembe, those "salarized" rent-seekers that neoliberals used as justification for structural adjustments were actually the means by which Africans coopted wage labour remuneration within their system of an indefinite social debt to one's community, in effect a natural community-based "trickle down" network. Yet these community and tribal connections themselves became coopted as Africans became involved themselves in slavery and banditry as it became lucrative and as more and more "citizens" looked for shelter from imperial or mercantile oppression. This reshaping of social relations produced an early penchant for the privatization of governance and violence which was manifested in the results of postcolonial nationalism, and structural adjustment only took this fragmentation further wherein now the realities of informality have gone underground into a parallel economy dictated by dealings in governance, violence, and corporate opportunism via clientelism. The rest of Mbembe's book is an interesting look at the manner in which Africa has learned to live with autocracy (especially under Mbembe's own Paul Biya) by normalizing the myths of power, benevolence, and their own marginalization by participating in public facades of praise and deference, often in highly ironic ways (e.g. substituting gratuitous toilet humour for the lyrics of anthems).

The other two essays bring in the engineering aspect, which has been somewhat missing for many weeks. The first essay adds to the narrative surrounding "code-switching" and the rise of different approaches to engineering within England, France, and Germany. Similar narratives surrounding British artisanship, French social contract theory, and German geist (though not characterized in that way) are seen. However, the author takes a decidedly Marxist spin and so talks about it from the point of view of class, through which a line can be drawn to Cowen and Shenton's development as originating in the industrial revolution class conflict and Cooper's transferring of "we know the worker" to "we know the native". The second essay is much more on point and takes a similar approach to Mbembe by looking at the characterizations of literary discourse surrounding the portrayal of engineers in literature. It is suggested that the tradition is to characterize modernity as a faceless development project of tyranny such as seen in Fanon and Arundhati Roy, even though they both maintain that were the engineer released from the yoke of the colonial mind, they could create change in a positive manner, i.e. Paul Ricoeur's "here I am, how can I help?" rather than the instrumentalist "here I am and this is what I calculate to be the best for you". Yet the author suggests three novels that characterize authentic postcolonial quandaries put to engineers working in development frames of reference, either looking at the transformation of the social and environmental due to intervention (e.g. the dam in China), or humanizing the postcolonial reality through interaction with the community being affected by the development milieu (e.g. the poor in Brazil who are just looking for something to be done "so that jobs").

Overall, Bowden has helped plug a few important gaps in the development history timeline, and Mbembe has helped to humanize the African reality and provided historical context for the necessity of informality and a clientelist systems predicated on social organizational necessity after disruption, while the essay on the colonial engineer also contributes to this humanization.

Because of the emphasis by Said on literary analysis and because I felt he could be sufficiently understood through others, I made a switch to Ahluwalia's *Politics and Post-Colonial Theory* and I believe the choice vindicated itself as it took many of the major arcs that Mbembe put forward but in a much more cogent systematic and less radical way, so it provided a more solid foundation for African post-colonial theory. Mabanckou was an extremely interesting piece and when I first looked at it at the beginning of the reading course, I thought I would end up trashing it and showing how badly he misinterprets Fanon et al., but its autobiographical and honest nature comes across as very much an applied version of what Mbembe and Ahluwalia are preaching in theory. In that sense, I found it very useful (and not very intense because it reads like a story / conversation). Both the Mukerji and Adas pieces are in keeping with essays from previous weeks that try to keep a foothold in engineering during all of the critical theory, but unlike previous weeks, neither one can be said to be a miss.

Although Mabanckou is a controversial figure for his attitude of "the black man has to stop blaming the white man", his narrative everywhere captures the essence of post-cultural theory, and in this way, he emphasizes many positions held by Fanon that are glossed over by those who look at Fanon's main anti-colonial narratives, such as those maintained in the previous weeks analysis of Fanon's narratives about engineering. And in fact, it is a perfect foil for Ahluwalia's discussion of the rise of negritude and its subsequent abandonment, as well as the differently nuanced approaches from Senghor and Césaire, the former emphasizing a coalition with the bourgeois world, and the latter adamantly against it, hence Fanon (and others) making timely references to Césaire in Les Damnes de la Terre, while rarely does one invoke Senghor. In the description of negritude, the term I hit on was Spivak's catechresis, described by Agrarwal (critiquing Esteva and the post-developmentists) as "something that must be permanently critiqued but we cannot (wish to) have" and this is Mabanckou's main look at negritude also, that it provided a means to get the conversation moving, but in the end it falls into "strategic essentialism" (also from Spivak) and can only act as a bridge of deconstruction to something more robust. The main problem that both books speak of is the manner in which African identity and / or triumphalism for many is going back to a precolonial shared identity of "blackness", but there are two problems with this, one being what Senghor and Césaire found out in Paris, namely that a Caribbean black and an African black are two completely different things, especially when the "back to Africa" mantra is maintained for African authenticity, and also that although Fanon also spoke of precolonial rallying points, he acknowledges that there is no pure sense of such since the force of colonialism et al. must have an effect, and Ahluwalia connects this to Escobar's notion of "hybridization" as the only way forward. Here we now have the scaffolding for Mbembe's radical narrative about slavery, colonialism, nationalism, and post-/neocolonialism and its rupturing effect on notions of social debt and communitarianism that had traditionally brought a means of "trickle-down" distribution of wealth within Africa, namely that the historical process and its effect on people must be taken into account, and this (to me) is entirely the central theme of post-colonial theory.

Much of the rest of Ahluwalia's text is about how this historical turbulence has affected Africans for example the notion of mimicry as reflecting a sort of somnambulistic resignation to one's fate in a similar manner to Mbembe's descriptions of Africans co-opting slogans and playing along with the deification of strong men like Paul Biya (or, more locally, the "Native Authority" that acts as the go-between representative for the periphery), it is simply a mentality passed down

from colonialism and the strange form of nationalism espoused by Basil Davidson (I should probably finish reading his book). Ahluwalia also brings in the intersections with capitalism and neoliberalism, narratives of discipline and law, denigration of African states and justifications for SAPs and intervention, etc. He suggests that Africa now exists outside of history since markets were globalized as the exotic, impenetrable dark continent espoused by Hollywood and other western narratives. In this sense, there is the need for a construction of identity rather than nostalgic essentialism, which is the central argument for Mabanckou's "moving on" within his personal approach to life, while everywhere he gets assailed by American blacks, French whites, French blacks, African blacks, etc., all projecting essentialist notions of identity onto him. This is the sense in which I would have completely misunderstood Mabanckou without this postcolonial theory: Mabanckou is *living* the espoused hybridization and speaking about why it's important and about contrasts with others who don't. The final few points that Ahluwalia make that are important relate to capitalism, positivism, regulation, neoliberal reductivism of identity, etc. However, the final extremely important take away is his point about what I have seen referred to as "audit culture" touched on by Escobar in terms of the World Bank going into South America to "edit" their projects, and Ferguson's deconstruction of the World Bank narrative on Lesotho, namely that Africa is on the periphery as a sort of laboratory, where it is heavily surveilled and the amassing of statistics reinforces the ethnocentric universalism of primordial and war-ravaged rather than looking at the historical post-colonial subject as several fluid identities, exactly what is Mabanckou's lived experience.

The two essays fit less into the postcolonial narrative of the two books as they speak more of symbolism in objective reality rather than subjective identity. Mukerji harkens back from the destruction of 9/11 to the mesnagement of XIV's "New Rome" and the notion of morally infused engineering as approximating an "Eden" and allowing for people to live in peace and security as a sign of a Hegelian synthetic progression via an Augustinian interpretation of an earthly "City of God". Further, she notes the means by which the subject-object demonstration of technical prowess in the Canal du Midi effectively "solved" unrest by a sort of de-alienation of the residents. That is, the Canal was of such otherworldly ingenuity and technical skill that they incited a certain awe-infused ontological promotion of the South of France as having inherent importance in the country's grand narrative. Adas also contextualizes the symbolism of depoliticized techne, but as a process rather than an endpoint. And extremely important insight from this is American colonial policy in the Philippines reflecting the US itself as a new historically impoverished civilization bereft of inherent class structures (e.g. the remnants of rule by divine right) where its quick success was founded on its ingenuity and engineering ability, especially during the Civil War when part of the reason that the South were overwhelmed was because of the North's ability to rally its engineering troops so quickly and so creatively to maintain superior logistical access to resources and to and from lines of conflict. In other words, the US applied its American engineering greatness and exceptionalism to its approach to also (supposedly) making the Philippines great as well, and this is buoyed further by Layton's description of Hoover co-opting engineers to cheerlead business. The other thing that was very interesting was Adas' emphasis on the different post-colonial reality to France and England in the way that although there was some racism and a paternal-infantile narrative running through the process, the wholesale transformation of the Filipino to *subject* rather than *citizen* did not occur, and it was generally accepted that Filippinos (mostly men) could accede to levels where they could be engineers also.

The three books and three articles this week were selected based on what was learned this term and what would be good to fill in a few gaps and prepare myself for next term. In that sense, Adas' *Machines as the Measure of Men* could be construed as belonging more to the first phase, Huchzermeyer as a belonging to the second in the spirit of the critical assessments of indigenous development policy, and Chatterjee's in the third as a postcolonial critique of the actual manifestations of development theory and policy within the socio-political realm. Yet they come together remarkable well around a common theme of the theory and practice of repression of the Other. The three articles also slot in nicely.

Adas' book can be considered somewhat standalone, as it is a history that only barely touches on the contemporary world. However, it fills a very large gap in conceptions of the history of engineering within the context of the first article (e.g. the rise of the US in part as opportunism based on the disillusionment of European moral superiority due to World War I and the muted snickering by the colonies), as well as providing a more robust understanding that historically situates the second articles "faith in development" on a much longer trajectory that is not wholly theoretical and legal, but also technologically based. Yet given that Chatterjee is situated within India and Huchzermeyer in South Africa, Adas' retelling of the hugely disparate policies by the colonial powers to Africa and India (as well as China) provides a better inclination as to the difference in disparities of power and organization between Huchzermeyer's and Chatterjee's account. In addition, as a parallel to Karatani's "will to architecture" being "the basis of all Western thought", Adas' description of the different conceptions of time and discipline between colonial powers and the colonized is key. The "savagely" Africans and "barbarian" Indians and Chinese can be seen as having a far more muted interest in *surplus value*. That is, while their handicrafts and artisanship was praised, the colonizers were constantly exasperated by the fact that everything was still a cottage industry with little machinery and primitive tools. In this sense, one can see the urgency of Western nations to "bank" a surplus, not just of a capital, but of time. The final Adas chapter where, in particular Lowes Dickinson's Chinese official asks of modernity "what does it all mean?" and anthropologists speak of Africa as a refuge from the "mechanical prison" of Europe, one gets a certain feeling that history is repeating itself in terms of a rupture due to internal contradictions of production at any cost. However, far superior communication and understanding and humanization of the world via the internet suggests that a World War would be roundly boycotted by the general population. So what now?

A further connection can be made to Chatterjee in terms of his interest in what precisely globalization means when, statistically speaking, there was more foreign trade and more foreign migration during the colonial period then now. He maintains that it is actually the mobility of capital that is the globalizing force, which provides the perfect justification for Heyman's Marxian critique of Appadurai: the equivalence of "scapes" within some fractal, kaleidoscopic, scurrying reality ignores the manner in which capital moves much faster than anything else and dictates much more than anything else. Huchzermeyer points to this predicament within the "cities without slums" policy: globalization has meant that cities are being run like a business, trying to attract transnational capital, and although the central rhetoric is about attracting the best, the hidden consequence is about trying to de-incentivize the poorest. This results, for example, in the "halo" that Roy speaks of where the poor are pushed out to the transitional area between urban and agricultural space to provide a labour surplus but to remain outside the prying eyes of those who desire their "global city". The question from Adas arises again: to what end?

Chatterjee's analysis of citizens versus population accords with Huchzermeyer (the latter quoting the former at many points), but the contrast is interesting, i.e. that the "looking the other way" and bartering over electricity, water, sanitation, etc., in India is depicted as a form of negative welfare. That is, since the state cannot afford to intervene financially (and / or socially due to neoliberal policy), the allowance of free-riders is a means by which the state can deliver some form of equity to those in poor areas. As with Ahluwalia, Chatterjee notes that the issue of governmentality rather than sovereignty has been well-established in the Global South due to the history of colonial policy. Adas allows one to see how that came to be, and not so much because of inherent racism but rather due in some sense of a refusal to be enslaved to the will of capital and machines. This is also spoken of at length by Huchzermeyer, and she relates the increasing emphasis on upgrading less due to negative welfare and more due to lowering costs and averting the critical eyes of third parties who are decrying the conditions and oppression. Yet these third parties tend not to be transnational entities like the World Bank and UN, nor are they those like Slum Dwellers International and SPARC, who MacFarlane also takes to task as emphasizing the what he and MacFarlane emphasize about the marketing of the poor in part to regain aid money (the "cost-recovery principle") via valorizing entrepreneurialism as a means to devolve responsibility and costs. Indeed, Huchzermeyer notes that local slum groups like Abahlali distance themselves from SDI knowing that the latter do not have their real interests at heart, but are simply looking at the "aestheticiziation of poverty" (Roy) so that they can focus on physical fixes (technical) rather than having to understand and face the structural reasons for poverty in the first place.

The last major theme has to do the incongruity between competition and well-being. This is underscored by the removal of slums in particular in preparation for the 2010 World Cup in South Africa wherein routes that visitors would take from the airport to places of interest (e.g. stadiums) should be upgraded so as to shield the visitor from the realities of their poverty in order to make it more appealing for capital. Yet this is an inherent problem of capitalism in that there is a race to the top for those that are historical privileged and in demand (attracting the best for global competitiveness) and a race to the bottom for the labour surplus and "occupiers" of marketable land. The entrepreneurialism spoke of by MacFarlane puts Huchzermeyer's contradiction of cities run as businesses (they can't go bankrupt, so what then) within the local context of "cash-point" toilets: yes, it provides an incentive to empower the poor, but it also places the responsibility on them, and also it means that needs like sanitation become demandbased rather than supply-based and may not be constructed or serviced in slum areas that don't show such "initiative". The reason why they don't show such an initiative is unknown, however, given the disparities in reality, such lack of education, time, organization, demographics, or anything else. As Chatterjee explains, with the end of Keynesian welfare, everything becomes cost-benefit, including the "liberal" policies of Amartya Sen, who puts the freedom above community, and hence the "empty homogeneous time" of capital above the heterogeneous time of culture, reality, and living.

The dominant theme in this final week revolves around a central question of "what is humanity trying to achieve?" In some sense, this emphasizing Karatani's will to architecture in that humanity is chasing some sort of ideal (competitive, regulated, sanitized cities) that are saleable to the population (who doesn't want to live somewhere clean and safe?) but shirk from difficult questions of, as Mbembe put it, who has the right to live and why?

This week, I read the first three books of my winter stack with the primary intention of shoring up some of the comments I made in Essay 3 about East versus West in terms of space and time, belief etc. This would primary fall onto Fernand Braudel's *A History of Civilizations*. I also felt that it was time to read (or, at least, skim) Fukuyama's *The End of History and the Last Man* to get clear on his main arguments as he is the major Right Hegelian theorist of the neoliberal era. In addition, I felt C. B. MacPherson's *The Political Theory of Possessive Individualism: Hobbes to Locke* would help me to understand a little more about the Western side of the colonial conception of social order. At the end of these readings, I had a few hunches from MacPherson that were quite important to corroborate for my rewrite of Essay 2, so I skimmed through Christopher Warren's "Hobbes's Thucydides and the Colonial Law of Nations" as well as Nusrat Sinan Evcan's "Hobbesian Instinctual Reason versus Rousseau's Instinctual Innocence: Backstage logic of colonial expansions and origin of the left-right political dichotomy". The reasons for this will become clear.

First of all, I am again thankful for The Word Bookstore, as I went by to see if there were a last few books to add to my Christmas library on the way to picking up Agamben's State of Exception and Ali Mazrui's political essay collection. I knew of Braudel because my mom had his collection of Mediterranean history I knew that he was highly regarded amongst 20th century historians, so, especially given the gaps in my understanding of history, I scooped up A History of Civilizations and, reading the translator's introduction, understood why Braudel is actually the historian of the twentieth century, as his French school of historians established the notion of "complete" history, namely that history must be understood as more than just a sequence of events but must instead by seen as a process tied to geography, economics, religion, political relations and the like. A History of Civilizations is, for lack of a better term, a life-changing book. His exposition of the Islamic World's evolution as being predicated largely on geography is quite brilliant: essentially the Muslim World was situated in an extremely harsh environment in deserts with poor agriculture in between the main civilizations of Europe, "Black" (Sub-Saharan) Africa, and Asia. Braudel explains that they had no choice but to be transnational capitalists moving goods between civilizations and, moreover the central importance of cities to the long journeys through the desert as stopover points and the need for slaves due to their extremely small population. Africa too suffered from extreme isolation with the Sahara desert being essentially impassable until camels arrived from the Islamic World, and trading was largely done on the frontiers (hence Gao and Timbuktu becoming central cities despite now being illogically in the middle of inhospitable terrain), especially in slaves. His exposition of Confucianism, Taoism, and Buddhism as central to Asia and his recounting of the rise of Buddhism, Hinduism, and Jainism in India provides good references for the claims that I make in Essay 3.

However, in addition to this is again the problem of isolation. One can see that the incessant conflict between small factions in Europe necessitated the rapid development of technology, especially in terms of warfare. Braudel also describes the rise of the city-state and the subsequent transition to territorial states, but with them being built around these previous city-states. Throughout the history, Braudel keeps reiterating the city as the place for centering growth due to the larger markets and mercantilism. One other major difference between East and West to be noted in addition to the religious and political situations (the latter that i.e. in the East there were large empires defending their fronts from barbarians with sometimes wholesale changes for example with the conquest of the Mongols in China and Mughals in India rather than wars

between small factions) was population. The Islamic World, Europe, and the Americas traded in slaves because they had an extremely small population for what they wanted to achieve. In contrast, Asia ("always") had an excess of surplus labour, implying the demand for machines and mechanization simply was not there. In terms of Latin America, he suggests that the main problem is similar to Africa: the nations are and have been predicated on export markets (and, like the Islamic World, cities that are extremely far apart and, at the time, sparsely populated), so cities are built near natural resources by wealthy European immigrants to exploit this export markets and then they are essentially dismantled when demand and / or prices change. Ferguson speaks of this situation in Zambia with the rise and fall of copper. The main difference between Latin America and Africa, one could say, is that Latin America has been continuously occupied by Europeans and therefore landholders are present and established, whereas Europeans do not have a substantially presence in Africa except as outsiders. All very useful things to think about.

The flash of insight that led me to think about reworking my Essay 2 was the description that Braudel gives of the transition between the poor and the mad going from being treated as wards of Christ and therefore worth tolerating to being a burden on the newly devised territory for their lack of industrial output and the fact that they were no longer attached to a "master" and therefore became wards of the state. Braudel maintains this is where Michel Foucault speaks of the rapid rise of prisons and workhouses (and, later "the clinic") to cleanse the cities of "problematic" citizens, thus it seems a direct line can be drawn from the informal settlements as described by Huchzermeyer and this period of transition to Protestant capitalism.

Indeed, MacPherson's analysis of Hobbes and Locke is exceptional for its ability to clarify the underlying "problems" and contradictions cited within their theories as being able to be circumvented by looking at their texts historically and positioning them within the historical context. In this sense, I can now conceptualize colonialism as a transnational class-differentiated society based on the tenets of social contract theory — Hobbes and Locke within the English colonies, and with a Rousseauan flavor in the French colonies. However, the major problem I have with MacPherson is that he only mentions the Americas a few times in question, and tantalizingly so, so I thought from the very beginning that he would suggest how the "states of nature" that Hobbes, Locke, and Rousseau work with for their social contract theory can be made sense of by noting that their theories were conceived up just when the Americas were opening up and therefore they had models of what this "state of nature" would be and their theories would have justified colonial domination, yet MacPherson only makes the historical connection to Cromwell and the Civil War. Hence, the other two essays to make sure I had it right (based on Bowden's hints about Locke developing international law as colonial law) that Hobbes (and Rousseau) were, in fact, not naïve about the New World and made this connection.

Although much of Fukuyama's text is toilet paper in terms of it being weak circumstantial evidence for the triumph of liberal democracy and justification of the American model (his associations with Paul Wolfowitz, RAND, and George Mason University make this no surprise), his theoretical section about Kojeve's promotion of Hegel's theory of *thymos*— i.e. the struggle for recognition—is actually extremely interesting and potentially useful as it also ties into Hobbes, Locke, and Rousseau's state of nature and, in addition, could be leveraged for this "global cities" phenomenon and the competition for transnational capital in a globalized world. I think this may be able to play nicely into Essay 3 as well.

In this section of reading, I've tried to gather together a number of books that will give me an overview of economic history and the rise of capitalism as, after reading the first three books, I believe that there are some strategically identifiable parallels between the transition to market capitalism around the time of Adam Smith's The Wealth of Nations and the general unfolding of colonialism and post-colonialism. The five books are R. H. Tawney's classic Religion and the Rise of Capitalism first published in 1922, followed by Michael Perelman's The Invention of Capitalism: Classical Political Economy and the Secret History of Political Accumulation, then I skimmed through Joseph Schumpeter's Capitalism, Socialism, Democracy as it is a rather dense book and I only wanted to get the main arguments. Following Schumpeter, I inserted my copy of Karl Polanyi's *The Great Transformation* as it seemed to fit the general topic, and I rounded it out with a quick read of Derek Wall's short text The Commons in History: Culture, Conflict, and Ecology. Admittedly, it is a lot to hold in my mind at one time, so I am very happy to have my note summaries to skim through quickly to remind myself of the major points. There are many points of issue in a number of extensive texts, but there are two main ones that I will try to summarize briefly: how did capitalism come about and what are its relations to the developing world, and after that, briefly, what of socialism?

Tawney begins the furthest back and provides a useful beginning to the English-French inherited dichotomy. Essentially, the Reformation brought with it the beginning of Protestantism, which was the first system to challenge the natural that "everyone had a role" in a hierarchy as dictated by God. Under such a system, usury and charging more than what was deemed "natural" and "fair" was heavily punished. However, "freedom" came on the one hand out of the Free Cities movement due to mercantilism and a concentration of traded goods, and on the other hand due to Protestantism as developed from Luther (the common peasant who argued for a return to natural law) by John Calvin (the urban upper class "mathematician" who was connected to trade and industry), who brought in the idea of optimization of work with surpluses going to the State. This was the beginning of justifying a class division along notions of work and production, and the beginning of the demonization of the "homeless, madmen, and beggars" as not wards of Christ but incapable of work to justify being fed. Calvinism was interpreted in England by John Knox et al as justifying riches as God's gifts and the beginning of possessive individualism (e.g. Hobbes and Locke in MacPherson). Within this setting was also the growth of major mercantile centres beginning in Antwerp and then moving to London, which processed and distributed large amounts of precious metals from the New World; thus the world was awash in capital and land speculation and enclosure began particularly in England while France maintained a more agricultural-centred state socialist policy.

Here one picks up the trail of Perelman and Polanyi. With increasing enclosing and privatization of land, Perelman argues (using direct quotes from classic economists) for the deliberate pushing of the peasantry out of the household economy and subsistence farming in order to create a chronic low-wage laboring underclass, since with husbandry they would still be able to provide for themselves better than what working for the same amount of wages could purchase. A central claim of Perelman is that Smith's *Wealth of Nations* is actually a sanitized manual for business to justify a utopian view of market capitalism, whereas James Steuart is the major stalwart of political economy. The importance of the latter (who was also Scottish, about ten years older than Adam Smith, and had lived in France and been around Scotland to actually understand conditions) is due to his uncompromising *realpolitik* approach that argued for intervention to

push people off the land in order to create pasture and a laboring class if one did not want to wait centuries for things to occur naturally. Smith's approach was to suggest that markets were natural and required no intervention and was not widely read (due to criticisms of inaccuracy and the use of "conjectural history" that did not reflect reality) until it was found to be a useful propaganda tool to justify the increasing marketization (and pauperization) of the economy. Steuart, on the other hand, was buried due to his more technical nature and because he was forthright about the brutal realities of capitalism. However, he was read far more by the American Founding Fathers than Smith.

Polanyi's main argument is that the intervention was needed to maintain the fiction of the selfregulating market, and that theorists like Ricardo and Bentham based their views of economic life in England during the Speenhamland years (1795 onward), which accorded a "dole" for the very poorest (to safeguard against influences of the French Revolution), and they became a class of paupers without impetus to work because they would get money anyway. This was then repealed (1834) with devastating consequences for the very poorest, creating the first actual labour market as well as the first major semblance of unions under Robert Owen. The other two fictions of land and capital as being commodities are also explored about at length. Polanyi maintains that the very notion of socialism implies that the economy exists within society rather than the other way around: because labour and land have very important external realities outside of the market, they must necessarily be regulated to a high degree to maintain the fiction of the self-regulating market. Schumpeter argues in a somewhat similar manner though suggests that the collapse and the fiction lies rather in market optimization via maximizing profit due to oligopolies and price dependencies. He also maintains that the increasingly educated population will create untenable conditions for the injustice of capitalism (because it works too well), and socialism should arise in the form of bureaucratic control of production via information and statistical analysis to ensure production optimization and the elimination of waste. Wall's history of the commons suggest that the "tragedy" only occurs due to unregulated commons and that to reestablish the commons (as Marx accorded) is a major weapon against unsustainable capitalism.

Throughout these texts, there is reference to the influence of the discovery of the Americas, the primitivism debates, the legal Lockean precedent to justify taking the land from others because it is not being used to its full potential. There are also numerous references (some direct, as in Polanyi) to the similarities between the development of capitalism in England and the treatment of the poor as a bottomless pool of labour due to the "law of hunger" and the treatment of peoples in the colonies. It gives a much better understanding of the implementation of colonialism, since the ruthless treatment of the poor would be justified by bourgeois bureaucrats who would eventually be in charge of the East India Company, etc. Jeremy Bentham, though considered a liberal, was all about maximizing the production of the poor via the panopticon workhouses and putting individuals to work at primary school ages, justified by their having to be taught a life of work rather than indolence.

Admittedly, this is a bit of a rambling mess of major points, but it is partly due to having to carry so much information in my head at one time. It will be better for me to write these summaries having read less so that I remember the nuances of each text. Given these are extra readings, I was more casual with all the books being generally on the same topic (the advent of capitalism and the manner in which it underpins society), and having my notes to guide me later anyway.

This third section of Christmas readings, Jameson's *A Singular Modernity: Essay on the Ontology of the Present*, Agamben's *State of Exception*, and four early essays of Spivak (actually two essays and two translations of short stories by Mahasweta Devi that Spivak suggests exemplify difficulties in characterizations of the subaltern) makes a temporal shift from history to the present. The final two readings, De Grazia and Castoriadis, will look at the extra-temporal notion of belief and myth within the social reality.

Indeed, one could even say that all three essays attempt to exemplify, in contrast to history, a sort of timelessness of the position of the subjective individual (i.e. the viewer) within the present. Although Agamben goes through the history of the State of Exception from its early manifestations in the Roman era, he eventually argues that it has to be considered as something extra-judicial, i.e. occupying a non-space between the application of power and its being revoked, a "zone of catastrophe between law and anomie". Jameson's piece is not as I had originally expected descriptive of what the world with everything subsumed under modernity looks like—he appears to begin down this road, but declares his abandonment of it early ("conformity to economic constraints", "industrialization of agriculture and mass culture")—but rather how this concept of modernity comes about, it too being maintained in a certain ahistorical stasis in contrast to the premodern. Finally, Spivak's essays (less useful overall but good food for thought), argue for questioning the vanguardism of attempts to specify the form of "subaltern consciousness" due to it being *prescriptive* (e.g. whether or not the subaltern is conscious of class, as for example, in Lukacs' conception) based on merely *descriptive* empirical studies (i.e. observations of subaltern acts, values, and forms of organization.

From the point of view of the current project and how it relates to the PhD, I would suggest that Jameson provides an extremely good method of *framing*. He bases his conception of modernity (in contrast to modernism, which is the second section about Baudelaire, etc.) on four "maxims": 1) we cannot not "periodize", 2) modernity is a narrative category not a concept, 3) modernity is not inherently subjective (a grand narrative) but situational (a specific conception of events), and 4) any theory of modernity must come to terms with what it means to be "postmodern", i.e. the problem of the unending cycling of a self-referential modern present. This will allow me to frame my second essay in terms of "modernity" and the break that is useful to my personal goals of the narrative. For example, it is possible (as one example put forward by Jameson) to consider a technological notion of modernity beginning for example with the French Polytechnics and harnessing of energy within engines, and this might be useful for a purely STS conception of development. However, I will choose my break as two major (and a third minor) events that occurred within the transition between the 15th and 16th centuries: one being the discovery of the Americas, and the second being the Reformation of Luther (the third, which occurred in between, is the printing press, though this will generate less thrust). My logic is based on the fact that together these two events give rise to development by introducing an inherent otherness from history: the one of a linear all-encompassing one of humanity on the one hand, and the deterministic theological one on the other hand.

Yet this initial "break" aside and narrative framing aside, the question of what now creates a notion of the modern blends into both Agamben and Spivak in terms of the impossibility of conceiving of the topics of which they discuss without a separate framing of legitimacy beyond a conceived enslavement to history on the one hand, and the element of what Jameson calls

"autonomization". That is, if one maintains that modernity (and modernism) is characterized by differentiation (from a grand narrative of history towards an autonomous selfhood of both persons and concepts), autonomization attempts to trace the transition of the old concepts into the future generated state. One may take, for example, the "initial incident" of Agamben's State of Exception, the consequences of the 9/11 attacks and the declaration of George W. Bush of an extrajudicial (and extra-temporal, as it presents a catastrophic rupture in our conception of reality and cannot be "undone") set of parameters of national juridical interest. What then becomes of the previously fetishized judicial conceptions of "freedom" and "democracy" as constitutionally espoused as a cornerstone of the United States? Agamben would likely suggest that we are asking the wrong question because the judicial manifestation of modernity is the equating of authority and power, and has been ever since the era of the Fuhrer conceived of an extratemporal state of exception under a cult of personality. Indeed, quoting Benjamin's On the Concept of History, he suggests that as with Nazi Germany, this state of exception should be considered the rule rather than the exception. Although a semblance of judicial legitimacy is maintained within an appeal to Constitution within the "Western democratic world", the state of exception is definitely the rule between the West and the Global South (and indigenous peoples of course): and one could trace this back to the very conception of international law as attempting to explain (i.e. legitimize) the means by which theft and pillage could be maintained in the Americas. In other words, although modernity per se prides itself on a constant reimagining of the present, "modernization" within this paradigm is simply technological progress as innovation rather than invention (to maintain as much as possible a regulation of the bourgeois-friendly "end of history") acting as a blind to maintain society as a subset of the economic rather than the other way around (Polanyi).

One may similarly consider this idea of autonomization and self-referentiality within the context of Spivak. The idea of subaltern studies is to increasingly flesh out the lived experience of the subaltern in order to more adequately characterize it as a subject of resistance rather than simply a bystander being swept forward by progress, i.e. increasingly specific modes of production within an increasingly fragmented society (in order to create the lumpenproletarian desperation for low-wage labour, as with 18th century England). Here the differentiation has to do with taking a previously conceived of passive subject and considering its actual social relationship to its lived reality. However, as stated earlier, this social relationship can only be interpreted under various generalization begot from interpretation of lived experience on a larger scale. Moreover, there tends to be an element of bias to a specific end (e.g. "class consciousness") that puts such individuals under an extremely narrow lens, i.e. "that which seems to operate as a subject may be part of an immense discontinuous network of strands that may be termed politics, ideology, economics, history, sexuality, language, and so on." What, then, happens to these other aspects of reality once the subaltern is reduced to one that must resist but be lacking in the means to do so? And is the approach of Laclau and Mouffe regarding considering multiple fronts and their intersection rather than solely a rigid owner-worker class conception, more fruitful?

Overall, I would say that these three readings have allowed me to transfer the lessons learned from history into something with greater, chiefly from Jameson's central text and consider those of Agamben and Spivak specifics aspects of this larger notion of what precisely are the hallmarks of modernity (and modernism) and what it says about the past vis-à-vis where we are now, but also about devising "an archaeology of the future", which is the point of this PhD.

For the first week of readings, what I notice immediately, in contrast to last term's readings, is the level of familiarity I have with the concepts being presented and the reasonable ease in which I can penetrate and comment on them. Generally, I found that they were predominantly of use in order to situate myself within the current literature whereas the previous term was geared towards learning new things. This may simply be due to the topic in question, but I found also that things there were many things that seemed fairly evident to me that were discussed in great detail in the pieces as well as things that seemed fairly evident to me that were not discussed (at least as much as I would have expected) within the pieces. I noticed that part of the reason for this may be due to my unorthodox reading list last term, which I believe was set up in the correct way to allow me to develop a broad background on a host of topics that I can then apply to the nitty gritty, and part of it may also be due to my first-hand experience and knowledge of a diversity of cities around the world that easily allow me to come up with examples and counterexamples to justify to me inherently why a given "general theory" may not hold rather than reading through a long explanation and many examples. The most obvious example would be the Pow piece, which I thought quite useful, but the manner in which the central claim being criticized, namely that gated communities are "based on the Los Angeles model" and "only contribute to elitist segregation is immediately a ridiculous claim based on the reality in South Africa where private security is a massive industry due to the economy, history, and inequality but on the other hand, as Pow points out that gating communities can actually allow disparate economic groups to live close together is exemplified by the fact that the slum of Alexandra borders Sandton—which has the highest concentration of capital in all of Africa (so I've been told—in Johannesburg.

In the same vein, there are a number of pieces and arguments that I was a little mystified about regarding the inherent arguments. For example, in the Sassen piece she begins by suggesting that others claim that cities are central in a globalized world due to "the need for face-to-face communication" and "creative class inputs" and she plans to critique this. I find it astounding that these would be the two central arguments given the history of the city as centralizing markets and trade going back to the Islamic Golden Age, if one considers this the first model for transnational capital. More recently, if one agrees with David Harvey's claim (writing at the same time) that within the low-wage, low-profit economy, underconsumption is the major problem, then it is clear that cities primarily centralize markets for consumable goods. Indeed, one of the largest disadvantages for African countries, for example, is that except in rare occasions they tend not to have sufficiently large market demand concentrations to develop many of their industries. Further, as Braudel maintains regarding Latin America, their chief difficulty historically was the fact that predatory capitalism created cities near mines and other natural resources to ship to Europe and these would later be abandoned whenever demands or prices would change. So even within our highly globalized world, concentrations of demand and labour or both extremely important, as Sassen points out (Polanyi goes into this in some detail). Also, thanks to my readings in the history of political economy over the break, I connected Sassen's discussion of informalization to the "optimization" of the household industry in with the rise of capitalism in England: you cannot allow so much land so that individuals do not need to sell their labour, but on the other hand allowing some degree of an informal economy means that wages can be kept low because people can still survive through parallel informal transactions. Similarly, the Brenner neoliberalism paper is also rather surprising in its long critique of others' claims of structural and monolithic conceptions of neoliberalism based on topdown critiques. However, it seems evident to me that the bottom-up approach in terms of identified the underlying values of neoliberalism, namely to seek out opportunities for as much profit as possible and then, in tandem with what is termed "liberal constitutionalism", legitimize the exploitation of that profit. It is rather surprising to me that neoliberalism would not automatically be seen as existing in highly varied and ephemeral forms when considered as a value-laden system that puts profit opportunity above all else.

In the Marcuse / von Kempen paper, I have a few similar misgivings. Although I find the framing of a tension between creating greater independence from the laboring class on the one hand and creating greater symbiotic relationships within classes, the critical race theory of, for example, Butler would render somewhat moot the questioning aspect of whether and how race plays a role in new divisions of the city. Leveraging the most extreme Marxist lens onto this question as maintaining that racism allows for the extraction of the greatest amount of surplus value by denigrating the laboring underclass, there is no doubt that this will be a substantial means of division where the "established" race will work at the desks and the immigrants will clean their toilets. I also find throughout most of the papers, the increased mobility of capital often seems to be built up slowly as a difficult afterthought, whereas it seems like it should take centre stage (i.e. in the Sassen piece and capitalism looking for bargains regarding producers on the one hand and consumers on the other): I think this is most clearly developed by Chatterjee, and his argument is always in the back of mind when I read articles about globalization: capital moves much faster than labour (or in the words of the paper, "capital's ability to bargain with labour") and so either one can produce in places of cheap labour within the sweat shop model, or capital can be used to extract a product from a high-wage area and develop it in a low wage area, as Perelman mentions the British with South America: extracting horticultural samples from a higher wage market and developing it in a lower-wage market (i.e. using Indians).

Overall, I found the book a decent collection of articles within which to situate my ideas, but again I found that a lot of the ideas that they are trying to develop come fairly obvious to me just from my own observations across a large variety of cities, and so sometimes I am curious as to the variety of cities that the authors have experienced themselves beyond their development of theory, though I also recognize that they must write for those who may have an extremely limited experience of cities. I found the first five essays good for getting my bearing on the logistics of critical urban theory, but again there were some somewhat surprising claims. For example, the Kratkë piece about creative cities seemed to only cite arguments that were procapitalist and could be easily criticized, though there was no engagement with Schumpeter and his ideas of the natural rise of socialism due to capitalism "working too well" (the author even quotes a different Schumpeter piece, so it is clear that he knows of the origins of "creative destruction"). The actor-network theory piece was similarly interesting to give me a better idea as to why Latour is such an controversial figure: envisioning assemblagist conceptions of cities is fine, but, as maintained in the piece, it can be broad to the point of empty, and criticisms of MacFarlane's ahistorical generalizations of the "planar topography" of the ANT nodes appear to be on point. The essay on grey spacing was good food for thought and reminded me of Cockelbergh's conception of pragmatic "open-source" bypassing of formality.

Generally, I would say I found the Harvey pieces quite useful overall and the Marcuse pieces good for connecting my existentially-conceived ideas to the literature.

This week's readings seemed far more pertinent to the task at hand. The book has numerous case studies, each focused on a differently nuanced issue in a different city. The articles were also useful in that aside for the Simone piece, they were all geared towards ways of thinking that would reorient geography away from the dominant narrative of Global North (GN) cities being universalizable and Global South (GS) cities simply being "data", "cities that lack", or "sites of intervention rather than objects of knowledge". This last point especially speaks to last week's readings. Robinson criticizes Brenner specifically for subsuming everything under neoliberalism.

The final chapter of the book summarizes seven key points that I believe are useful to put urban theory of the GS into perspective: a theory of slums, a focus on the phenomenon of rapid growth, the increasing spatial fragmentation, impermanent infrastructure, the forms of urban governance emerging from neoliberalism, the "right to the city" / social justice lens, and the means by which space is (re)appropriated. Although these can also be applied to GN cities, they are peripheral issues compared to GS cities due to the political economic reality described by Simone. This is a reason why there are a few points that I found a bit puzzling. One was Lombard's statement about "aspirations to capital" being secondary to having a secure place to live, especially among low-income households (2688). I find this a strange thing to have to declare unless the assumption is that one expects all one's readers to subscribe to rational choice theory. The other point that I found a little difficult to understand was Robinson's suggestion that within South Africa "removing the privileges of whites and cutting back on welfare would be a classic neoliberal approach" (604). Although I agree with the cutting back on welfare, my understanding of neoliberalism is that there is no "removing of privilege" that occurs, only removal of barriers within the marketplace, which implies that those with privilege will maintain their position. Further, having lived in South Africa, and understanding the extent to which accumulation has been facilitated within the ANC and in government in general—in part by maintaining existing ownership of resources by whites—I found Robinson a little more optimistic about the ANC than I would be. However, I take the advice of my Tanzanian friend who suggested that overcoming apartheid was already a great leap and South Africa is trying to catch up with itself. Moreover, Robinson emphasizes that it is may be most important to pay attention to where gaps exist that do not follow the neoliberal rubric.

Of all the four papers, I particularly liked the Post article, although it was from a comparative politics lens rather than an urban theory or geography lens. One of the difficulties I find from the readings is that the same themes tend to come up repeatedly, and because there is so many variations on major themes, it can become overwhelming to try to group like terms as they apply to like cases. Post pulls everything apart, and identifies where major gaps remain from a political science point of view, and I found myself actively thinking about the types of questions to pose in my fieldwork in order to try to come away with as much information as possible, especially if there is going to be a comparison between multiple cities. In line with the books summary chapter speaking of horizontal "world cities" rather than vertical "global cities", it seemed possible to consider the agglomeration lens as horizontal and the jurisdiction lens as vertical given the planar structure of "faceless populations" interacting with each other versus both the hierarchies of governance structures and the manner in which jurisdiction borders tend to cause one to envision a birds-eye view a la Google Maps. Either way, Post's very concise treatment of gaps in the current literature suggests specific field questions, such as who represents you, how are your services delivered, how is security maintained, are there particular electoral leanings,

etc. Sure, one has to be careful regarding snooping too much, and such questions are implied from numerous other case studies but Post's presentation brings them to the front of my mind.

Some historical treatment of neoliberalism is useful. Here, "roll-out" and "roll-back" neoliberalism are identified. These are based on the Washington Consensus and the "post-WC". Here, "roll-out" was described within the context of the Communists in Kolkata, who it was suggested used rhetoric to suggest that they were curbing the worst parts of capitalism while accepting its inevitability (130). This resulted in pro-development policies of finding and upgrading land in the eastern wetlands despite its environmental and the destruction of the subsistence livelihood of fishermen and others who have lived in the wetlands for an extended period. "Roll-back" neoliberalism was used to describe the situation in Mexico City wherein the "lost decade" of the 1980s had substantially increased the number of informal vendors in the city centre, and now "entrepreneurialism" was being curbed for the sake of safeguarding El Centro and Mexico City as a safe place for tourists and investment capital. The "problem" of vendors has already been seen for example in the previous discussions of Chennai. For Mexico City, it also described how "the tallest skyscraper in Latin America" was shut down not by lower class protests, but by capitalist elites who say it as an eyesore standing over Chapultepec. In this case, they hired environmental experts to show how damaging such a structure would be, and the plan was eventually abandoned. Still, like the Communists in India, it mentions the bedfellows of probusiness President Vicente Fox, anti-capitalist Mayor Obrador (current president), ultra-rich businessman Carlos Slim (who was to fund the developments), and a top religious representative. It echoes Simone's statement of how no matter one's political leanings, there is an inherent belief in "deploying infrastructure as a means to sustainability. Again this harkens back to David Harvey's identification of underconsumption as the chief problem in our "low-wage, low-profit reality": more must be created in order to move money around.

There were various interesting ideas that came out of the readings that seemed pertinent to potential fieldwork. One I found interesting was in Chapter 4 in Ouagadougou. The author states that research "was conducted on four areas in various stages of development". Although I am not yet certain about how precisely I would select sites I think this is could be possible, and I could try to see if there are some obvious "stages of growth" that can be identified during the process of slum conception. It may also be pertinent to consider the description of Colombia and its mayors' work on providing more public access in Bogota, but only in such a way as behaviour is based on being a positive neoliberal subject competing in the market. It would be interesting to see the carrot-and-stick relationships in the informal settlements with government or even the local representatives and how residents are supposed to act to be "invited to the table". I know this is an ongoing problem with Abahlali baseMjondolo in Durban, wherein they are constantly fighting against targeted harassment and even assassinations by government who are trying to regain regulation of the slums and accuse Abahlali of not behaving properly. Both Post and Lombard identify clientelism as of primary importance to understanding power structures, reaffirming Mbembe's descriptions of "the social debt to the community" broken up by successive phases of slavery and occupation.

Overall, the material seemed more applicable this week and it was much more interesting to read. That being said, I realize that there is going to be a lot of layering of the same issues over the term. It will sometimes be difficult to find the right words within the summaries.

I felt that the third week of books on the specific topic of planning in the Global South was extremely useful, as unlike the first week the main focus is on all of the reasons that the classical planning that largely came out of the positivist movement of the late 19th and early 20th centuries is inadequate in its application to the GS. Yet not only is the discourse focused on why this is true (the difference between levels of stability, inequality, and the colonial history that exists in the GS and not the GN), but also why the classical planning discourse continues to be used to further neoliberal aims in the GS.

One of the most interesting things about the book is that the author deliberately focuses on medium-sized or "ordinary" cities (Robinson). Although the notion of constructing a "globally competitive" city in the Global South is fraught with problems since scarce resources will then be put towards promoting symbols of modernity and wealth rather than improving the poor, there are several added difficulties surrounding these intermediate cities. Regarding resources, they tend to have less financial resources available as well as human resources. This is because of a smaller and often more informal and precarious tax bracket locally and regionally, as well as less funds nationally because of the emphasis on promoting the larger and capital cities. Further the lack of human resources is based on less developed educational and economic infrastructure, the "brain drain" to seek more opportunities in major cities, as well as historical and probabilistic logistical realities: a smaller sample size means less individuals developed towards a given task, as well as less people with parents, family, or friends who may have been able to help them with their development. On top of this, less foreign funding, resources, and interest are likely to be put into such cities due to on the one hand a lower chance of returns and on the other hand the increased ability for those that help to boast of a "legacy" that will be meaningful to others. E.g. boasting of a project in Dar es Salaam or Nairobi would seem to carrying some weight, but working in Babati or Nanyuki is likely to be meaningless to most people in terms of what the project means and what any results might mean for regarding the bigger picture.

Although I will try to be focusing on large metropolitan areas (because that is largely where my interests and experiences lie), I think the fate of intermediate cities is extremely interesting. The reality according to Bolay is that it is small and intermediate cities that are seeing the fastest growth in the world, in part because of more conservativism and larger families, but also because they act as intermediate cities from rural areas in the rural-urban migration but also are increasingly acting as destination cities for those that become disillusioned by the slum life of the metropolis. He speaks of a small city of Argentina in the Buenos Aires province that is seeing an increase in people leaving the congestion of Buenos Aires proper for a less hectic existence. On top of these realities, however, are also *ontological* questions related to meaning for inhabitants of these cities. Some may be locally tied to the city or have migrated in from rural areas, but outside of the glitz and glamour of these main "global cities" with far greater opportunities (in theory) than small provincial towns, is there a way to get an understanding of the long-term hopes and dreams of the inhabitants. Are they looking to eventually move to a metropolitan area? Are they looking to remain and have a family and put the question of "big moves" to the next generation? Are they simply looking to survive? These are questions that strike at the heart of the question of what are we trying to achieve as a species that arises for all cities large and small, but is seen in a different light when cogitating over the reality of "ordinary" cities.

Regarding the articles, again I enjoyed them all and found that they were much more critical and perceptive than those of the past few weeks. I believe that the major themes about the inability to apply classical GN-devised planning methods can be applied more broadly, particularly coming back to questions about what engineers trained in the GN miss when it comes to applying their methods in the GS. In this sense, it gives me a more particular and nuanced vision of where precisely the difficulties lie as opposed to fairly general notions that I have carried with me thus far about history, community, etc. As explained in the articles, classical planning makes certain assumptions about the stability and homogeneity of populations and power structures, in part because the legal precedent in GN countries has converged especially within the past century, but more so because feudal power structures have been able to be maintained historical so that "top-down" has always been relatively predictable: if one king is overthrown by another king, the inherited feudal hierarchy, mercantilism, capitalism, or whatever system prevailed at the time, was not too different in part because conflicts tended to be relatively equal due to the technological advances needed militarily. However, in the GS countries, historical power structures have been disrupted, destroyed, and dissolved by a foreign entity entering the system above the established order and reigning over it through force. Thus, the colonial experience places Western power and knowledge forms over a geography, people, and history, that they do not understand and have no cohesion or coherence with. These assumptions of stability and inherited power structures therefore do not follow. Moreover, beyond the ideological hegemony, there is also colonial and postcolonial action that has occurred over the past centuries that has introduced survivalist informality, deep inequality, and neocolonial states that are beholden to Western interests (either geopolitical allies or transnational monetary institutions like the World Bank or IMF), effectively eliminating any level of autonomy or a resource-based tabula rasa from which to work, given their debt loads.

What does this entail? The approach of all of the authors suggests rethinking planning based on objects in space to political-discursive practices. Watson, for example, suggests focusing on the interface ("contact zones") between the competing rationalities of state and market (governing) and the praxis embodied in survival and how this is navigated through complex and often informal work, power structures, representatives, and community pooling of resources and cooperation in contrast to the atomistic rational self-interest models of the West. Speak suggests the feminist lens can help better understand this survivalist reality by breaking it down into i) making ends meet, ii) sources of support, iii) enjoyment, and iv) having a say. She points out that in contrast to Western lifeworlds where cities are traversed as one chooses to get these things, slums are often relocated to nether regions on the edge of the city where transportation and facilities are not available, so all four aspects must be found locally (somehow!). Both Miraftab and Munoz strike more critical and radical positions antagonistic to hegemonic neoliberalism. Miraftab suggests that insurgent planning can be contextualized by Gramsci's notion of hegemony wherein the weaker partner in a transaction is led to believe that the decision is in both of their interests; this allows him to speak of "the illusion of inclusion", where individuals are given the "freedom to choose" but only among private entities selling their wares, rather than being able to exit the system. This leads him to suggest that GS planning cannot be conceived of by "modernization" professionals "standing outside the space" who know nothing about the actuality of neoliberal inroads but see only "rights and freedoms". In a similar manner, Munoz suggests planning should see past the formal-informal dichotomy and instead look at the fact that socio-economic praxis and not space and objects as the fundamental units of the poor.

This week, the topic was regarding "local power dynamics", centred around Koonings book about social exclusion and violence in megacities, and supplemented by five articles. From Koonings' book and the Davis essay, I was able to piece together a pretty coherent story of Latin America within the context of development, but I was quickly able to understand why the topic of "violence" would be a waste of a week as I found that several chapters on the situation in Rio de Janeiro did not add too much useful content, though other chapters were extremely useful. In terms of the articles, the Keever on San Luis Potosí was included for my own interest as I've been there twice and have an academic/architect friend there who works in a developmental discipline. It had a geolocative approach to local *perception* of crime and instability in areas of the city, but did not add too much content. The other four essays all made good contributions.

The theoretical chapters in Koonings that situated social exclusion and informality within the rise of neoliberalism were useful not only for the content, but also for bringing out the dualistic nature of informality. As reiterated in several parts of the book and a few of the essays, informality is often situated between the apocalyptic view of Mike Davis where slums are a morass of chaos, squalor, and hopelessness, and de Soto's "Panglossian" version of informality as entailing the rise of the new entrepreneur that will lead the country into its neoliberal paradise. In this sense, when advocating for informality, it is important to note that a blanket concept is insufficient, and should be developed strategically keeping in mind Jo Beall's chapter on the creative versus destructive potential of informal systems and realities.

For a synthesis of the main arguments surrounding Latin America from Koonings and Davis, the key insight actually comes from Fernand Braudel's brief summary of Latin America in A History of Civilizations. In it, he notes that from its beginning Latin America has essentially been a (then) sparsely populated resource bank controlled by European settlers that follow resource sector boom-and-bust cycles based on (usually European, but increasingly North American) demand. This allows one to reconstruct the contemporary picture of social exclusion and urban violence based on the rise of Keynesian "industrial take-off" Fordist era economics to American-backed military governments to the neoliberal post-Fordist era of increasingly marginal and tenuous opportunities for employment amongst diminishing manufacturing industries and a return to the resource bank model. As Davis notes, Latin American planning has always been rooted in the modernist "resource development" model of early capitalism that prioritizes housing and transport for the labour bank of undifferentiated workers while those that had no place in such a "modernist" system were pushed out to the margins. As cities expanded, these areas that were now run by cartels in part due to the military regimes, morally bankrupt police and increasing cocaine laundering to Europe via Africa did not want to give up their positions, leading to an uneasy impasse between favela gangs and the military trying to maintain some degree of order in increasingly lawless areas increasingly devoid of opportunity for young males (ripe for recruitment!). The prioritizing of the wealthy and well-connected over actually addressing structural [adjustment!?] problems in poor areas leads to what Roy calls a "privatized disaster structure for the wealthy", which includes ever-more heavy-handed police and military incursions (who are in on the racket) backed by sensationalist accounts of excessive thuggery amongst the civilian population (Duterte?). A key point by Gay in Chapter 2 is that the no-go zones that remind me of South Africa led me to an "oh I get it" moment when he explained that political prisoners under the military regime started organizing common prisoners in jails, leading to widespread gang activity during the neoliberal area, likely similar to apartheid jails.

This Latin American baseline allows for a way to frame the other pieces in terms of historical and conditional similarities and differences. It was already mentioned that there seems to be similarities to South Africa. The main point of difference in the Parnell piece (Chapter 9) is that the prevailing trend of the ANC government to right apartheid wrongs is to maintain the false assumption that whiteness is urban and modern while blackness is rural and traditional even though this is not the case. This is not to say that rural policy is wrongheaded (e.g. Fanon's "decentralization in the extreme"), rather that it fails to recognize current realities. Ghana (Stacey) and the Middle East (Bayat, Chapter 5) are interesting anomalies in their pre-existing sense of order. The Old Fadama settlement outside of Accra is presented as a model of parallel governance alluded to as existing in the Brazil of 50 or more years ago with a central body representing various ethnic groups that manages the settlement and pushes for increased recognition and services from the government. In contrast to Brazil, there is a lack of an established landed colonial class, and the traditional ethnic structures of chiefdoms still hold sway in addition to the inherently communal nature of the population (e.g. Mbembe). The Middle East, too, has well-established structures of order, including Islam and zakat and more community-minded traditions combined with more recent turns to neoliberal cutting of subsidies and NGOs filling gaps. This implies that radical forms of insurgence tend to be fairly rare, so Bayat suggests that "quiet encroachment" on space and resources of the wealthier class tends to be the common approach, which tends to be a common tactic for urban poor e.g. in India.

The Roy piece maintains the contrast of insurgency as a constant means of destabilizing plans to cater to the rich at the cost of the majority. She makes an important point about informality in India being *deregulated* (calculated withdrawal) as opposed to unregulated (failure or absence) and this is likely something to look for within the informality milieu in general: informality as a means by the state and power brokers to establish states of exception or acquiescence as needed for policy. She also maintains that formalization tends to be of a propertied form wherein recognition is seen as a status that pits the achievers against those still fighting, a divide and conquer technique. The Desai piece "speculation on slums" is extremely important especially within the Davis-de Soto dichotomy, which assumes a completely unpropertied or completely propertied class of dwellers. Instead, attempts (e.g. by NGOs or donors) to develop infrastructure can often lead to increasingly tenuous situations for inhabitants due to increased land prices and profit motives for rentiers and landlords. He follows a lot of Harvey's interpretations of Marx and the interesting point he makes about overaccumulation of capital and need for sinks in fixed capital investments (secondary) with the dwindling production of commodities (primary). It harkens back to the claim that part of US attempts to break up the post-war colonies and the implementation of the Marshall Plan and creation of the World Bank and IMF was again find capital sinks for overaccumulation (as the US was really the only country with money at the end of WWII). I believe it was also Harvey who mentions this about the situation in the early 80s and the overleveraging of loans: sinks for capital due to the oil crisis and the end of Keynesianism.

Throughout the longer chapters in Koonings on theory and indeed in the other essays, there are constant mentions of the role that neoliberalism has played in the rise of tenuous living conditions due to unemployment, privatization, "the global war on terror masking collusion with corrupt elites", etc. These major themes grounded in economic inequality, the formal-informal dichotomy, social exclusion and segregation, and other policy decision will be common themes going forward in the future I'm sure. I have them in my notes.

Interestingly, this week starting with the Roy / Al Sayyad book *Urban Informality* dovetailed nicely with last week's readings on power structures and included a lot of overlap of authors and subject matter. As much as the first section on neoliberalism trying to engage with Marcuse and others within the Global North milieu was a bit perplexing and left a lot for me to be desired, the last two sections of readings have started to really dig me into an understanding of the major literature and themes of where I am going with this PhD on the more "intangible" side, while the tangible side of things will hopefully be addressed in a little more detail in the next two sections, with gender rounding out an interesting segment and putting me in good stead to tackle the particular narratives of various parts of the world. Instead of trying to focus too much on the readings per se, let me try to synthesize the major arcs as I see them when it comes to informality and how it works within the literature.

Let me begin with the history. Essentially its presented as evolving from a critique of the formality-informality "dualism" by Castells The City and the Grassroots, Perlman's The Myth of Marginality, and various other texts in the 1980s through the forces of neoliberalism to the tension between the "structuralist" "apocalyptic Marxist critique" in *Planet of the Slums* to De Soto's legalist *The Mystery of Capital*, and then subsequent to trying to find the "reality" within this spectrum of the mass hopelessness engendered by Davis' strong critique of capitalism as the root of all evil to the mass hope engendered by De Soto's strong(?) case for capitalism as the root of all good. In this sense, one can see (via Kudva) the tripartite Lefebvrian abstraction of space (the planning side) to processes in space (the transactional side) to lived realities (the codified side), and the means by which there is a pull by elites towards the modernist aesthetic, which (via Roy's five page summary) "whitens" (condones as necessary) the parts of informality that are in their best interest and "blackens" (criminalizes) the parts of informality that are not in their best interest. Although I found Marcuse and others in the first section rather inaccessible and even Ward's discussion of "colonias" along the Texas-Mexican border to be a little "okay that's interesting but...", it was only from Sheppard's article comparing Jakarta and San Francisco that the cycle of dispossession and repossession made itself known to me in general terms. And within this heightened understanding, there was Kudva's acknowledgement of what I had already started to pick up by thinking about Polanyi: as in "origins in Victorian-era elite concerns" of sanitation and pathologies, especially around 'appropriate behaviour" and "public order". Polanyi's recounting of the manner in which Bentham and the other "liberals" worked extremely hard to put justification for gulag-like workhouse conditions on "preventing sloth and sin from the dross of society". Here one gets the notion of the "gentlemanly city" of Kolkata that Roy describes as the be-all-end-all of the West Bengal communists under the pretense sanitizing the city to appeal for handouts from global capital.

However, situating the "extra-legal" justification for either accepting or condemning informality goes beyond the insider dealings and flexibility that allow the state to change policies as they see fit in order to dispossess and repossess land. On the one hand, there is the importance of the "accumulation by inclusion" (Banks) that comes from the De Soto entrepreneurial approach. It has its "formal" equivalent in the Global North in that instead of allowing garbage pickers and informal handymen to fill the areas where the state should not invest money (neoliberalism) and private business does not want to invest money (precariousness of recuperating costs), we recruit Filipinos to clean toilets and old Sikh men to act as our security detail (at least in Calgary, I don't know about Montreal). In other words, there is a natural striation (growing crack) in society

along the instrumentalizing of roles. De Soto's sale of informality as the hope for the damned to pick himself up by his own bootstraps is not just a justification for neoliberalism's entrenchment of a regulatory framework that maximizes capital accumulation (as Michael Perelman notes, this was already put in place by Adam Smith's Wealth of Nations: he had simply sanitized James Steuart's analysis of the real consequences of capitalism as an easier sell for business), it is also the reification of settler-colonial class divisions that the "critical race theory" of Paula Butler identifies. On the other hand, there is also the "accumulation by inclusion" aspect of the iterative process described by Kudva of "informals" being grudgingly accepted on land to fill a gap in housing (for example)—"the self-help" approach of the 1976 Vancouver conference (Chiodelli) —and then once they have sufficiently recreated a means by which the land can be reimagined by planners, they are bought out or bulldozed to make way for elite constructions and moved farther out into the suburbs, thus entrenching a form of "propertied citizenship" (Sheppard) where the poor toil for years to try to gain a foothold only for the value that they created over the years to be taken from them and reappropriated for the middle or upper class. In other words, it comes down to a classic case of (indirect) extraction of surplus value of the inherent "trickle-up" economics. A "structuralist" portrait of this is given by Kudva quote of Davis: "a shanty-town world encircling the fortified city of the super-rich", yet extreme examples of this abound in, for example, Dubai and Doha. As Sheppard points out, one of the things that helps to entrench this pseudo-reality is the increasing social exclusion and prevention of "cross-class interaction": so long as the Filipinos cleaning toilets in downtown Calgary or the indentured "Third World servants" of the Middle East are quietly bused in at dusk and out at down, we are able to maintain the colonial imaginary of the "gentlemanly city" and the progressive "whitening" of the reality promised to budding Jakartans (Sheppard) who are increasingly captivated by American commodity fetishism. Perlman and other Latin American theorists also speak of this in terms of the greater desire for "things" and the greater desperation in crime needed to get them.

The third major point that resurfaced several times came in part from reading Al Sayyad's other piece from 1993. I was originally going to skip this, but I thought I might as well skim over it and it provides a good look at reality outside of the stronger development of theory (as of 1993). Where I first realized it, though, was in Roy's description of the "gentlemanly city" and the way in which the men of the ghettos increasingly get involved in "political organization" to justify their masculinity while putting greater labour burdens on the women. I am reminded of John Howard Griffin's quote from Black Like Me: "Most often the sex-king is just a poor devil trying to prove the manhood that his whole existence denies." However, the connection that I find much more interesting is Louis Althusser's notion of the "ideological state apparatus" and his declaration (I believe in *The Future Lasts Forever*) that "the family is the most important ISA". One can see this within the chapter on the Israeli ethnostate, but also in Al Sayyad's discussion of how the cultural impetus of Bedouin backing of informal settlements in Alexandria meant that the state was more likely to ignore, but also that in Latin America and also in the Middle East, the nuclearization of the family from conservative patronage to "free" youths also destabilizes classical familial and community connections (Mbembe again comes to mind). One final tidbit that caught my eye was Al Sayyad talking about leveraging traditional Muslim law that says land belongs to God and then to anyone who would occupy and improve it. Is this not also the Christian essentialism to justify Lockean accumulative property law? Interesting.

I believe I've turned a bit of a "synthesis" corner. Given this summary, would you agree?

This week brings the discussion back to a focus on the physical side infrastructure with Stephen Graham's *Splintering Urbanisms*. Admittedly, I was a little intimidated at the thought of a 400-page book and articles squeezed into two days, but what I found after reading the beginning was that it was sort of an "applied" version of the politics I've been reading coupled with a treatment of the history of engineering and infrastructure that I had read at the beginning of last term. Added to this was that there was a lot of material on virtual network connections from 2004, which would have a large amount of obsolescence to them by now plus it predominantly looked at the position of the wealthy and cities of the Global North for its centring point, and I found that I could skim through it for the main arguments rather than do a close reading as I have done for the works in the past. Generally I think this week allowed me to bring in the infrastructural context, which had gone missing with the focus on politics, so this was very useful.

As with the previous week, I will try to synthesize the main arcs of the reading for this week as I see them. Centrally, I think there are two things that are particularly important. One is near the end of the Graham book when he mentions that Chomsky says that there is nothing radically new about the methods employed creating networked archipelagos of the wealthy and splintering of urbanisms, it is simply applying the socio-spatial practices of colonialism in the Third World to the First World. The other is the discussion that Jones makes of the "novel" introduction of financialization to make slums "bankable", tracing this through the self-help to enablement movements of the UN (as mentioned last week by Chiodelli), but also tying it into the work of Arthur Young from 1787 (spoken of as a contributor to justifying the science of primitive accumulation by Michael Perelman in *The Invention of Capital*) and to the subprime mortgage crisis in the US. Here then, we have a Santayana-esque situation, but instead of "those not learning from history are condemned to repeat it", we have that those *disempowered* not learning from history are condemned to repeat it while the powerful engender it again and again to their own benefit. Overall, it seems that there is a simply a switching of historical context.

On the one hand, the lessons from colonialism wherein white settlers had their spaces developed to the detriment of the native population to promote their comfort and whatever allowed for extraction of primary resources are being imported from the Global South to the Global North to allow for this positive feedback loops of the accretion of capital with in spaces that are now entirely about class over race and other norms. On the other hand, the lessons from deregulation and financialization are exported from the North to the South wherein those with excess private capital and nothing to store it in are creating the conditions under which they can bring the poor into financial markets—along the lines of what triggered the subprime mortgage collapse in 2008—so that the wealthy can again walk away with their massive returns, leaving destitution for the actual people that have to live in the conditions that they left. Jones talks at length about how USAID and the US Department of Housing and Urban Development were attending many conferences on mortgage markets and actively promoting housing financialization in Africa as the "final frontier". This stems from the Thatcher-Reagan "dream of owning a house" rhetoric that went with the end of council housing and privatization of space that was begun by Thatcher, embraced by Reagan, and spread to New Labour and Clinton, etc. on both side of the Atlantic. Jones mentions that De Soto's work was not new and mirrors Arthur Young from 200 years before, which also served only to sell the theft of livelihoods by capitalism in a nice way. In addition, he mentions how the US Overseas Private Investment Corporation has sunk massive amounts of capital in the African housing market over the past few decades since the advent of

neoliberalism. Fox (and indeed most of the authors) also tie infrastructure disparities and the rise of slums into the colonial context of building only for the settlers and then upon independence the problem of inheriting this socio-spatial unevenness of physical infrastructure but also the unevenness of capital and power structures. In addition, he talks about how even though cultural contexts across continents in the Global South have been different, the process has had many similarities owing to the "development" rhetoric. So, for example, Silver speaks of the manner in which the Akosombo Dam was this grand symbol of modernization and required Ghana to accede to an American-owned aluminum smelter that drew a large amount of the power from the Dam, which was only nationalized in 2006, likely because they could no longer make profit. Again we see the corporate welfare model of moving in, extracting profit from the misery of the poor, and then moving out when profits dry up.

As mentioned, Graham's book puts the infrastructure part on a firmer footing within the trajectory of what I'm reading. I'm reminded of Roy's notion of the development of the "gentlemanly city" and the gendered nature of Indian slums in Truelove's discussion of water in Delhi, while Roy's position about the way in which informality is used selectively by the powerthat-be to reinforce not only the class divisions but also the ethnic divisions are clear. From Truelove's discussion of tube wells and extra pumps and rooftop cisterns, I can get an idea of what Anand's "Pressure" is likely to be about. Huchzermeyer's analysis of Kenya brings the postcolonial arguments of Fox and Jones into stark reality in that she mentions how the whole UN-Habitat plan of slum upgrading essentially does nothing for the poor because 84% of those in Kibera rent from a landlordist racket of purchase by the middle and upper classes and political patronage. Upgrading of housing, for example, will cause tenants to be bought out. Providing free water will cause the racket of those making huge amounts of money selling private water (including politicians) to see sources of their income dry up and will therefore try to selectively maintain the policies and reality that privilege them. Huchzermeyer tries to bring in the principles of "the right to housing" that are supposed to govern UN-Habitat policies (similar to the "right to the city" in her book) but notes that nobody cares because everything is controlled by the politicians that built up a formidable private presence in Kenya (a lot of it because of the Moi years supported by the US government... e.g. the Goldenberg scandal).

To bring this all back together, as mentioned Graham positions the discourse of splintering urbanisms predominantly in the hands of the rich and powerful. This is good food for thought, and it ties the realities within the world into strategic accumulation of capital and the positive feedback loops that underlie them, which attempt to create the superhighways that allow for the movement of transnational capital (Chatterjee) while bypassing the "poor", i.e. those that do not have the capital to provide maximum profits to speculators. So, as Graham points out, we get this unbundling of central planning (and the "freedom" and "no bias" rhetoric from social and suffrage movements is of course useful for the neoliberal cause) and repackaging for those who have the ability to "let the market decide" how much water and phone plans can be sold for. That's all well and good. But around this contemporary "Mordor" of capital accretion, the focus must still be squarely on how to chip away at these facades of capital and where the weak points lie. Since 2004 when this book was published, there has been the meteoric rise of social media, online buying, download speeds, and other things that cause difficulty engaging with what virtual weapons we're dealing with. On the other hand, he also can say nothing about the financial crash of 2008 and its consequences, hence my feeling I only need to "skim".

This was the second week on infrastructure, but framed more around the "lifeworld" rather than political economy side of things. In contrast to the Graham book last week, I thought this one was extremely relevant, especially the first two chapters, as they allowed me to connect my own flaneur-like demeanour when I travel to a method of analysis. It made me reflect on how civil engineering had made me look at buildings and infrastructure differently as I travelled, and that taking a similar critical eye to "the homogeneous and mundane" next time I'm somewhere else might allow me to similarly unlock a better understanding of how people live. One thing I do notice is there becomes more overlap in the content. For example, I felt the Nikhil Anand piece had already been told in that I had a good grasp of the Mumbai situation from Graham, Desai, and McFarlane in Chapter 3. Similarly, essay about Mumbai, Delhi, and Cape Town, I felt I already had a good grasp of what McFarlane would say about Mumbai and Truelove would say about Delhi, so it was only the Silver commentary on Cape Town that had new content, and even then because I had lived in Cape Town already and had a good grasp of how the politics worked and its unique historical conditions (and I had been to Khayelitsha a couple times before), it already seemed fairly familiar. In other words, whereas in the first term and the first weeks of this term I was trying to make sure I got all the main ideas down, I am starting to feel like I am getting into terrain that is more familiar.

The main thrust of the Simone chapter is the natural role that contingency plays in the lives of slum dwellers. The comparison to hedging and the incremental investment in multiple contingent projects to progress in or consolidate one's current position in life not only brings to mind the stock market, but my main analogy was to cricket, which seems mundane to so many. However, the main draw of cricket is it is one of the most contingent sports because one side can declare at 700 runs or be all-out for less than 40. In this way, seen from a viewpoint of totality, 120 overs for over 700 balls might seem absurd. However, when watching cricket in the present, every ball has the potential to take a wicket and change the momentum of the match. It also presents slum life not as mundane but as inherently strategic and creative (though De Soto goes way too far and has his own agenda in promoting the creative entrepreneurial savior). As Simone notes, these areas should not be interpreted as static and definitive but rather as fluid and pragmatic especially when it comes to space given the inherent density of people with space at a premium. In a similar vein, Rao's chapter underscores the Mumbai living experience as one of constant negotiation of space and an insurgency against the mega-project reality that Harris speaks of. Just as within previous strategies of identifying failures as being telling, Rao speaks of how the extremely competitive Mumbai became one of magnanimity when all struggled with massive floods. Framing Mumbai in terms of the "effective city" that evolves in the present through finetuning rather than "eschatological end-time psychology" embodies anti-modernist foundations and harkens back to Karatani's "will to architecture" that underlies Harris's piece on transport mega-projects that make elite transactional networks more efficient and frames Mumbai as a "global city" using global materials and global consultants. It is interesting to note Harris' positive (or at least disinterested) description of the McKinsey & Company report that suggested ways in which Mumbai could improve its competitiveness, in contrast to Rao who sees it as wholly negative and disparaging for the city.

A few of the other chapters underscore what may termed this "modernist imaginary" that goes back to gendered roles of "the use of clean water is for women" (cleaning), and the taming of bad water is for men (construction, engineering). In addition to this, the manner in which this

proximal taming goes on within the walls or under the ground allows the perpetuation of the "sanitary imaginary", wherein the house becomes a place of control and predictability, and the presence of mold or cracking or any other imperfection reflects the Freudian "uncanny" and a feeling of disorder and discomfort. This is brought to bear on Uganda with the use of "flying toilets" wherein discarding faeces in plastic bags and throwing them "out of the house" is deemed "unsanitary" and causes discomfort to the modernist vision. However, this act is in fact the best approximation to flush toilets, which isolate its sight and smell and send it outside (magically, apparently) and out of the consciousness and conscience of the upscale inhabitant. In this way, the difference is one of lack of infrastructure whereas the method and the agency involved in it is by all accounts comparable.

The other two articles, those from De Wit and Turok attempt to use analytical methods to decide the current situation of attempts to conceive of and alleviate slum situations. Turok looks at the De Soto versus Davis model using South Africa as a guide, testing employment, income, and social mobility. Overall, he suggests that informal city living does (apparently) provide more labour opportunities than the rural areas, but that the social mobility aspect is lacking in that those who begin in informal settlements tend to stay there. Moreover, I would suggest that it is in theory difficult to look at the rural-urban divide in terms of labour market alone. It is clear that there will be more "jobs" in the city, but if pre-Industrial Revolution England is anything to go by, there may be something to be had in rural subsistence living provided land is distributed equally. It is this last point that is the difficulty wherein patronage and clientelist networks (getting into De Wit's territory) within South Africa imply that the ANC is unable or unwilling to implement any sort of redistribution as Mugabe attempted to do in Zimbabwe. Julius Malema and the Economic Freedom Fighters party maintain that this one of their main campaign promises, but this would disrupt power networks within a country that is already fairly unstable on the ground, and anyone who has followed Malema knows that he has his own living-large patronage following. De Wit's piece reminded me of the Critiques of Development course in the fall in that it attempts to judge the oft-identified problem of clientelist networks in states being replaced by NGOs that are drawn into state mechanisms anyway (and tend to be beholden to donors), and community-based organizations that tend to be that in name only and are instead told what to do with the CBO illusion merely a flag-waving exercise for the UN or World Bank. These issues were covered in detail in my fall course.

With a lot of overlap in the articles (and the discussion we had), there is less new content to report and less macro-level conceptions than in the previous two weeks as things become more familiar and easier to navigate. Within the context of my PhD fieldwork going forward, as we discussed Simone and Rao provide fodder for the use of an ANT / UPE lens on the ground in contrast to an overly analytical one. However, the underlying problem is that it is not particularly clear what part of the Indian story can be applied to Dhaka (if indeed that is where my fieldwork will end up being). From the meso-level view, I believe I have some familiarity with the dada / councilor system of getting stuff done in slum areas and the Hindu-Muslim inequality that comes with the promotion of some interests over others (especially when Shiv Sena has a fair amount of clout in Maharashtra). Although the British India dada system may have a similar continuity in Bangladesh, one would expect that it has been affected by the East Pakistan interval, and that it may hinge around the extent of religious conservatism (e.g. Awami versus Jamaat e Islami) rather than type of religion. In addition, what about individuals coming from different provinces?

The readings on gender were interesting, particularly Sylvia Chant's book. Although many of the details on Gambia, Philippines, and Costa Rica might not be pertinent, the lessons from them and also the methods of personal interviews and the subjective nature of her research all pointed to the extra dimension that qualitative analysis offers, especially when it involves challenging well-rehearsed global narratives. Of the five papers, they all added something interesting, but the one about the use of critical pedagogy in Juarez was particularly interesting. The main thrust of Sylvia Chant's book was to challenge the underlying neoliberal strategies evinced in gendered and notions of poverty, while Alemany and Cervantes-Soon tackle neoliberal strategies in ungendered notions of poverty. The three remaining articles all look at specific aspects of urban life and the way in which gender affects aspects of subjective experiences and lifeworlds.

I read some previous development literature in my political science class about how in the 1970s (when Robert McNamara had declared his "war on poverty" as a means to turn everything into a quantitative, technocratic spectacle) and the 1980s (the "Lost Decade" of Structural Adjustment Programs that gave the World Bank and IMF an excuse to force countries to sell their souls in order to keep the debt collectors at bay), there was a turn to focusing specifically on women in poverty, hence "the feminization of poverty". Narratives included that women were most likely to be poor, and FHHs (female-headed households) were "the poorest of the poor". Chant suggests that the outcome has been good for giving the role of women greater scrutiny, but also has been not so good as women become leveraged as justification for greater intrusive practices in other countries, greater neoliberal attempts to turn women into good capitalists, and an expanded statistic in the attempts to turn everything into markets and numbers. More importantly, however, it contributes to misdirection for ulterior political motives, including not questioning the "rational choice theory" model of the human being as competitive egoist, and the reinforcement of the hegemonic Eurocentric patriarchal views of the aggregated "nuclear family" household that accords that men should lead and women should follow.

From her work in Gambia, Philippines, and Costa Rica, working from both statistics and grassroots work and interviews, she suggests that this "feminization of poverty", [as defined quantitatively, but more on that later] is dubious at best and quite possibly untrue. In general, the reality on the ground is that it is the structural problems of inherited patriarchy that imply that men feel justified in giving women all the unpaid reproductive domestic work while they spend excess income on various forms of escapism. Meanwhile, neoliberalism and the undercutting of social programs means that more women have to supplement daily incomes by finding work themselves, but even in this case it is found that within these conservative patriarchal societies, it is still a case of (according to one interviewee from Costa Rica), "men's egoism and women's altruism", wherein men feel justified to maintain themselves as the head of the household and discount themselves from "women's work", and women not only help themselves but, increasingly, others in precarious situations.

In fact, in all three countries it was found that there was often a "trade-off" for FHHs in that they might lose male income (which would often be less than the money that would be spent on frivolities anyway), but they were without the frivolous expenditures on escapism as well as violence, egoism, and sexual jealousy, so women living on their own were able to cut out this frivolous spending, live more in peace, and allot available labour (such as children or friends) better. Moreover, the more females were given more power in the household, the more these

households became less about the rational-choice-theory competitor and more about pooling resources and reinforcing community bonds. Overall, there was nothing found in any of the countries that said that women or FHHs were necessarily worse off. Chant concludes, then, that gendered poverty is more structural than merely about income, as Chant maintains, there IS a "feminization of poverty" but only if "poverty" is expanded to be a poverty of TIME rather than income. Indeed, although women are not necessarily worse off monetarily, they are burdened with ever-increasing responsibilities and obligations within an increasingly precarious reality of cutting redistribution and social programs while men continue to go into their shells under the guise of "tradition" or "religion", and perpetuating it allows for the continued stigmatizing of women as passive victims without agency, the continued stigmatizing of women outside of patriarchal nuclear families, and the maintaining of said nuclear families as embodying the competition of the rational choice model that is so important to neoliberalism over the communitarianism exemplified by female households.

The Cervantes-Soon piece uses critical pedagogy to contextualize the educational experiences of young women in Juarez—an extremely unequal city on the US-Mexico—as moving away from smartness grounded in IQ, perpetuating neoliberal meritocracy, reifiying existing hierarchies (since inherited opportunity is more likely to be embodied in good grades in school), and knowledge as commodity. Instead, the work of the school attempts to maintain a more holistic view of smartness as including "street smarts" and skills needed to do well in the world, but also critically about class consciousness and awareness of how these classic notions of intelligence are tools of oppression and push individuals into consumerism and individualism in contrast to solidarity with one another. Moreover, the students are able to recognize structural foundations of difficulty in achieving "smartness" and move away from self-blame to hope. The Alemany piece also grapples with neoliberalism in its criticisms of a book by Horner and Hulme about a "convergence of North-South" and justification for ending aid and any sort of favourtist notions of trade. The authors argue from a feminist point of view that the "gains" that may be seen in quantitative statistics are mostly because of China, and do not include the greater burdens placed on women's time and the inability to recognize the substantial increase in unpaid reproductive labour that are increasingly shouldered by women as social programs are cut, echoing Chant.

The other three articles are all specific to the urban context. McIlwaine argues that there are trade-offs in violence with the urban context, and they tend to be location-specific but also context-specific. For example, when women have greater support networks in the city, violence tends to decrease, but where male control is higher, female decision-making is higher, or when women earn more than men, the probability of violence increases. Again, echoing Chant, violence against tends to be far more structural than, and she suggests that in some respect "all violence is gendered" because it comes down to power relations. Salon's article about walking in Nairobi slums and Parikh's article about infrastructure and their effect on women also tend to come down to notions of reproductive labour and gendered relations. For example, those without children are more likely to go outside of the settlement for work than those with and far less women with small children work while this has no effect on men. This is again a reinforcement of gendered roles in addition to fear of violent attacks. Comparing slums that were upgraded to those that weren't, Parikh finds that infrastructure investment tends to strongly benefit women because they save on reproductive labour. In addition, toilets imply less stomach problems because women don't have to hold due questions of safety and dignity of shitting in public.

As mentioned in the email, the first few pages of the book *The Aid Lab* suggested that this book would be little more than a cheerleading effort for neoliberalism in Bangladesh, but the Rahman book on the garment industry—though little more than 100 pages long—provided a succinct background with which to understand the historical power structures and current trajectory of Bangladesh, while the other five papers provided grist for the mill. While I have read much on research in India, the post-colonial history and demographic heterogeneity makes it far too complex to attempt to infiltrate to any reasonable degree, but the Bangladeshi power structures are new and highly centralized, providing a lot of potential for making inroads.

It is not necessary to go too much into the pre-colonial or colonial history. Generally speaking, the Mughals had established Dhaka as the Bengal Empire's capital as it was well-positioned in terms of defensive capabilities. Later this was moved to Murshidabad by an eccentric prince and eventually to Calcutta. Within the colonial history, the British destroyed the Bengal textile industry by disrupting its production process (my friend mentioned that they cut off the thumbs of weavers) but also by flooding the market with cheaper British machine-woven textiles. Following the partition, Bangladesh went through a second period of colonization by Pakistan where again its resources were extracted and it acted as a dumping ground for products. Added to this was the fact that jute was the primary export of Bangladesh but jute mills had been concentrated in Calcutta, and Pakistan had no intention of developing the "East Pakistan" infrastructure so Bangladesh ended up exporting raw jute to Calcutta, losing a lot of its added value, and despite jute mills being built in East Bengal eventually, the demand for jute eventually crashed due to the production of cheaper synthetic material.

Thus we find Bangladesh post-independence in 1971 after the West Pakistani occupiers of a lot of the economy had been chased away. The first leader went on the path of nationalization and socialism but this led to problems in the economy (e.g. unaffordable fixed prices in society and huge deficits from dilapidated and backwards infrastructure), and he was assassinated and replaced by two military regimes, Ziaur "Zia" Rahman (1977-1981 when he was assassinated and replaced by an interim leader), and Hussain Ershad (1983-1990). During this time, the Bangladeshi government sold the nationalized industries to rural landowners and other power brokers at far below cost in order to create legitimacy and appease World Bank and IMF structural adjustment policies. As Lewis mentions, NGOs attempting to work in rural Bangladesh are constantly undermined by powerful landowners that deprive the majority of resources. Within Dhaka, however, the Keynesian import substitution industrialization policy was abandoned for an export-driven economy, and with the "Multi-Fiber Agreement" governing textiles from 1974-1994 that allowed developed countries to have protectionism in the garment industry, Bangladesh leveraged its status as a Least Developed Country to bypass quotas. Apparently, the first big move into the market was a partnership with South Korea's Daewoo, which was able to circumvent textile quotas via production in Bangladesh. Thus, the textile industry grew substantially with demand from East Asia until China undercut Bangladeshi pricing in the early 2000s. The industry grew from a first wave of speculators in the 1970s to a group of spin-off entrepreneurs in 1980s who learned from working in the first wave, and then in 1990 with the textile industry well-established, an increasing number of entrepreneurs with no experience, such as doctors, engineers, academics, politicians, etc. bought into a burgeoning industry that has in many ways held up the Bangladeshi economy and begun to change the demographic due to the rapid increase in female workers.

The power structure of Bangladesh is as follows: since the end of the military regime in 1990, the "democracy" is a duopoly that is in many ways similar to the United States (and India), yet it practices a sort of "illiberal democracy" in that the opposition party tends to spend their time outside of parliament rallying supporters to protest on the streets. The patron-client network is similar to India where the informal bosti settlements are considered as vote banks and work within a power hierarchy of external political leaders connected to parliament, who hire internal local leaders to work within the community, who themselves have their mastaani strongmen to bully individuals in order to implement the "organized encroachment of the powerful" on any sort of public space or resources. There is also the mosques that have their own type of power. As with India, promises are made around election time for vote-buying and some small things are implemented but then once the election is over they are ignored. Moreover, if a local leader is affiliated to the losing (opposition) party, then they essentially have no power because the bosti community will bypass them to a representative of the party in power so that things can get done. Within the bostis, there is a landowning class that rents out rooms and maintains a fixed income from rents, justifying this by "needing time to attend to duties in the community", as those barely surviving on small incomes and incurring deficits and debts to loan sharks have little time for political involvement. As Hackenbroch notes, all land aside from small public spaces (that are slowly encroached on) have private claims made on them even though a lot of the land is supposedly public (informality for patronage). Thus, when NGOs try to install tube wells, toilets, or other "public infrastructure", they must be built on claimed land are eventually clawed into the private network of some owner or patron somewhere.

The status and place of women in Bangladesh is extremely interesting because under *purdah* there is supposed to gender segregation, women are supposed to be domesticated to men and are traditionally there for reproductive labour. The rise of the garment industry, which employs 80% women, has changed this in some ways. It implies that women making some income get a more equitable share of decision making at home and because of long hours, often the men have to take part in domestic work. Yet as Quayyum notes, the garment factories reflect "the home under capitalism" with women constantly harassed and expected to kowtow to the will of the company and male overseers, noting with a nod to critical race theory that worker devaluation is greatest when work can be gendered and racialized. Typically, poor and illiterate women join the garment industry out of desperation, meaning they are easier to manipulate and also live under a cloud of shame (especially from the rural areas) that they must labour rather than be confined to domestic labour under the care of a husband. The empowerment of women as workers with agency is a touchstone of potential insurgency for NGOs and workers' collectives, and it is suggested that because they are used to being docile, they tend to gain consciousness as workers through the creation of communal relations with other women with similar experiences. This gives rise to "group culture rather than individualization" (Rahman).

The garment industry is under constant tension between keeping prices low and ensuring worker safety. Because industry leaders are well-connected to politicians, this is difficult. In addition, logistical costs are high because of bottlenecks, corruption, and poor infrastructure at Chittagong port as well as the need to import much (as much as 80%) of the raw materials needed for the industry because cash crops like cotton tend not to be grown locally. These issues, along with blackouts and load-shedding increase lead-times for potential buyers and reduce competitiveness of the garment industry.

This week for the readings on South Asia, there were two changes. I dropped the Parikh article because it was already in Week 8 and I didn't notice, and I switched out the Bjorkman article as I had already read her chapter in Shatkin, which appeared to be pretty much the same thing and, trying to expand a little on the South Asian theme, went for "Without Water, There is no Life: Negotiating Everyday Risks and Gendered Insecurities in Karachi's Informal Settlements". As there have been many articles on India in other weeks, Shatkin set the stage for this week by underscoring Brenner's idea of "neoliberalization" as an indefinite process of becoming in the Global South, as opposed to "neoliberalism" as the ground state that has generally manifested itself in the Global North. This is especially true in India and South Asia where opposing forces, contestations, and contradictions imply that reaching a ground state is highly improbable unless major changes to its cultural fabric occur. Despite India's implementing of wholesale programs designed to open India up to greater land control and flexibility as well as more opportunities for foreign direct investment, the complex bureaucracy has made it so that these changes have come slowly and in piecemeal form, likely contributing to Roy's assessment of India being dominated by a "flexible informality" that allows paralegal and parastatal decision making that maintains the dominance of capital while appearing the voting blocks and potential resistance of the poor.

Historically, there lies the contradiction between the egalitarian preaching of Gandhi and the socialism of Nehru versus the modernist, globalist class and the drive to capital accumulation and consolidation of economic power. Chatterjee quotes Baviskar's notion that the colonial gaze of separating settlers from natives has been reinterpreted as a bourgeois gaze that sees the poor as a blight to the beauty and order of the modernist landscape. But in Ziipao's piece on NE India (the first I've read), the conquest of India by the British, the nearly complete excommunication of NE India by East Pakistan (now Bangladesh) and incursions by the Chinese provide an interesting contrast to this picture of the poor as an aesthetic problem since previous policies from Nehru essentially gave them independence, and it was only after Chinese claims to Arunachal Pradesh that it has now become essentially a site of military occupation where roads as connectivity are the major funding outlay in contrast to basic infrastructure. In a similar manner, going beyond the water rhetoric of Bjorkman and Anand (referenced by Anwar), the added the "masculinization of security" in Karachi is an added feature of water insecurity. This consolidation of power through fear is seen also in Chatterjee's account of Ahmedabad and the manner by which the BJP appeals to "Hindu-ness" to keep the poor divided in East Ahmedabad while the wealthy have their shopping malls and western lifestyle in the west. He quotes one Hindu saying that the marginalization of Muslims is "good for Bush's war on terror". This also applies to Bjorkman's analysis of Shivajinagar "becoming a slum". A small influx of Bengalis allows widespread dismissal of the area hiding militants and terrorists, hence although the slum was originally planned, it is now a slum based on a lack of intentionality to improve it for a host of reasons, including the "Bengali terrorist" rhetoric. Thus, although previous literature has not looked too much into security, within certain milieus this exercise of power through fear is a cornerstone of order. In contrast, Neema Kudva's chapter on Mangalore and Auerbach's article on slum development committees implies that within smaller jurisdictions away from the poor to contest limited space, there is greater representation and cooperation across ethnicity, class, and religion. It suddenly makes me wonder the potential that's hiding in smaller Bangladeshi cities.

Within the class distinctions of the elite, the middle, class, and the poor, there are interesting observations made by Schindler, who notes the manner in which hawkers and waste-pickers are

coveted by the middle class for their cheap labour, despite the burgeoning rhetoric about them being anathema to modernist beauty. He mentions how the middle class are able to change their landscape to formalize these informal workers by, for example, giving them ID cards to work in gated communities (waste pickers) or in formal markets (hawkers). This then goes back to the idea of neoliberalization as process rather than as finished product, because the physical and social infrastructure is constantly being modified to "keep the peace" as it were and to make sure elite designs on capital accumulation are not torpedoed by their "global cities" falling into disarray. This balance is exemplified by the McKinsey report on Mumbai that is often cited: the Shanghaization of Mumbai requires order to provide confidence for business and investors to park their money, but the constant presence of "pre-modern" slums and informal labourers are seen as detractors. Yet it is not only the "vote bank" phenomenon of the poor, but also their power when they are able to organize (e.g. in slum community organizations or in NE India by blocking roads) that they have the potential to disrupt the global capital interests of Mumbai. As both Ziipao and the second chapter in Shatkin maintain, colonial infrastructure for the poor was largely about sanitation and water to prevent outbreaks of disease. Within the "contemporary western model", outbreaks of cholera, dysentery, or dengue fever are still seen as "pre-modern" and primitive, and are likely to make investors nervous. Water to slum dwellers is therefore of importance.

A final interesting arc this week was the manner in which the machinations of actual business within India were able to be pulled apart a little more. This was facilitated by the chapters on the realities of real estate in India and the comparative notion of "value" between foreign investors and local Indians, as well as the evolution of the Dharavi Redevelopment Plan under the watchful gaze of Mukesh Mehta (who now apparently has moved on from Citibank to the Bush's Carlyle Group and is now with Blackstone). As explained within previous articles on "bankable slums" (Jones) and "investing in slums" (Desai), it is useful to see how difficult such transactions may actually be in a country like India. For example, since everything is so informal and land ownership and mass privatization is a fairly new phenomenon, Searle's chapter on Indian real estate suggests how much Indian developers argue for the land having value added by their work of assimilating disparately owned pieces of land and getting their land titles formalized, whilst from a western point of view where the legal system has been predicated on private property ownership since the discovery of the Americas, land is just land. Hence, global speculators underestimate value while local developers are accused of overestimating it. In addition, the foreign capital largely is always looking at eventually escaping with profit because the use-value in another country is not important. In that sense, the western model of leasing buildings and getting value from occupancy is foreign to India, where it is all really about owning land and "pre-sales" (though illegal) are common. India thus becomes a quintessential example of neoliberalization as process because it is the site of contestation between so many forces of potential investment and profit due to booming markets and an archaic and labyrinthine system of informal land ownership and implementation of services on the ground level.

Because of the centrality of India to the topic at hand, it can become overwhelming to try to continue to squeeze new nuances out of literature. However, in this case, I think the most interesting specific takeaways were from the Kudva article on Mangalore and the Auerbach article on how widespread slum development committees are in terms of how Agency may be more prevalent under the shadow of modernity than one suspects even amongst the poor.

Although the week on Southeast Asia brings is intended to bring to light specific aspects of the region, the major themes around all of the articles were of informality, power, and (in terms of the articles) especially discursive practices that help to implement and maintain given power structures from political regimes and inherited colonial structures. Simone's book spoke specifically about Jakarta in terms of his "flaneur ethnography" within the lived realities of the poor. Two of the articles also looked at Jakarta, while the other three were based on Manila, Kuala Lumpur, and a project in Mandalay, respectively. Unlike South Asia where there is an inherited blanket colonialism over the entire region, various Southeast Asian countries have different colonial histories and different relative strengths (e.g. Malaysia as being an economic powerhouse in the region while Burma remains "trapped in the past"). More than that, however, I am reminded of a discussion I had with Dr Tay, the U of Calgary "shit professor" in my civil engineering program who worked on many water and sanitation projects in Southeast Asia. He had told me that through a concerted effort over recent decades, Southeast Asia had become sufficiently "upgraded" by various technical programs and development interventions to the point where he claimed that it could be generally considered to be able to take care of its own problems, leaving Africa as the only "problematic area" in terms of developmental access. This idea of development intervention came across as a key theme in the articles.

Simone's main theme is the idea of "near" as a quasi-state of being. That is, instead of speaking of the "Global South", he suggests that cities like Jakarta should be considered more "near-South", as they lie in a more interstitial space between the "developed" Global North and the "underdeveloped" Global South, with intersections largely framed around social positioning with respect to modernity. Sarayed quotes Yiftachel's idea of white (accepted), black (criminalized), and grey (deliberately ignored) to describe the situation in KL's Kampong Bharu, but it could equally apply to all of the pieces. In Simone's case, the poor in the areas that he speaks of are those involved in "hedging" and "autoconstruction", while (sometimes) looking for the possibility of moving up into one of the megacomplexes. However, in contrast to the other articles (and most articles in general), Simone privileges an ontological lens in terms of trying to pull apart the "urban majority" that are constantly grey-zoned, and look for meaning in their everyday lives. One of the interesting tensions that comes out of his ethnographic interviews is that although modernity is always beckoning to the underprivileged, there is a certain degree of anomie and meaninglessness in such inhabitants in the manner in which they are "connected to the world but not to their immediate environment". In that sense, there are individuals within poorer areas who have reservations about losing the ontological memory of using their creative powers and existing within a plural network of doing in contrast to the isolationism of life in the megacomplexes. Within the politics of building itself, he comments on the extent to which developers in Indonesia mirror those in India (i.e. Searle's chapter in Shatkin), wherein exchange value tends to be begotten by selling units even before the building is finished, that many shopping malls and other major complexes sit empty, and that those involved in building get deep discounts in subsidies and tax breaks from the government but add little. In contrast, he argues, the assemblage urbanity of the local population provides the backdrop for constantly creative processes where "no plot is the same", and he looks to the possibility that universal basic incomes can become a reality and allow these creative processes to continue and flourish rather than resigning everyone to attempting to "move up" to the megacomplexes, reality is highly individuated and competitive with little "relational value", rather than with hedging that communicates that "movement is underway" and there is potential for collaboration.

This idea of the beckoning megacomplexes is related to discursive strategies of power that are central to each of the five essays. Goh, Sanchez, and Kooy all point directly to the discourse of "technocratic apolitical solutions", with Sanchez helpfully quoting Tania Li's three facets of problematizing so that only a technical solution will do, patronizing local knowledge, and the manner in which the framework is deliberately disrupted to usher in hegemonic opportunism. These three articles relate to situations where external development interventionism is involved, while the other two articles look at internal discursive constructions that maintain that attempt to "problematize the poor" and leverage the selective informality that Roy speaks of. In Manila, a single event of massive flooding was blamed on the poor blocking the channels and seaways by building along them, supposedly clogging the channels and not allowing for their expansion. On the other hand, the wealthy he would build over top of and sometimes fill the channels, as well as industries who were involved in dumping were not implicated at all. Moreover, the poor were seen as "vulnerable" while wealthier neighbourhoods were declared to be more "resilient": affluence was conflated with resilience because costs to fix such problems can (theoretically) be privatized, while the poor are moved into areas with infrastructural deficits and forgotten. In the KL article, the area of Khampong Bharu was created during colonial times at the (then) edge of KL and enshrined into law to be settled only by "native" Malays. Now that KL has massively expanded, it lies on primary real estate and is considered "backwards", but discursively the main interest is (as ever) cashing in on land value.

The three other articles that deal with external projects related to the World Bank, the Asian Development Bank, and other transnational moneylenders are telling in that in all cases profit is the only motivating factor, not just for the international development companies who are already "fixed" to get the contracts, but also to the banks themselves that stand to gain from interest payments. In the case of Mandalay, a French engineering company came in with promises of a decentralized sanitation scheme that was supposed to be pro-poor, then became anti-poor and all about beautification and greenification for tourism. Sanchez does a particularly excellent job bringing in James Ferguson "anti-politics" lens to show how the discursive presentation of modernity as following a linear model of "underdeveloped" to "developed" allows for the ease of multinational to propose solutions that only they can implement, making the contracts noncompetitive, alienating and infantilizing local knowledge and contributions, and moving the goalposts from helping the population (pro-poor) to making profit (anti-poor). One of the interesting things about the Sanchez and Kooy articles is that the projects were both water and sanitation "improvement projects" involving the French company Suez, which acknowledged that, at least in Burma, they were merely looking for a foothold to allow for French engineering companies to come into a new market and make profit. In these situations, there is a Catch-22 element where if a country rejects such projects, it may threaten future loans, while accepting them puts them into debt and in a vulnerable position wherein the company will seek to slowplay its implementation in order to make the country dependent on experts and extract maximum value from it. When those in Mandalay ended up resisting, especially when the promised results didn't materialize (as with Kooy in Jakarta), there never seems to be any responsibility or liability on the part of company. I wondered about the realities of these dealings within the international legal system and the extent to which countries should be owed massive amounts of reimbursements from corporations that have not delivered what was promised and walked away with the profits. In all of Kooy, Alvarez, and Sanchez, it the modernist discourse of "disciplining the future" that allows for hegemonic neocolonialist intervention.

This week on the Middle East and North Africa, the book was a little underwhelming in that although it boasted of trying to take Simone's view of how individuals are affected, much of it was macroscale discussions of neoliberalization, and it was limited to Cairo, Amman, and a little bit of Beirut. On the other hand, the articles were quite interesting, especially the Erman article about the gendered look at Turkey under the forces of neoliberalism and conservatism (a lot of reminders of Sylvia Chant), and the final article by Boodrookas, which filled in the "long durée" of the Persian Gulf states, revealing them as having long been a middleman for colonialism despite the discourse surrounding the pre-oil ascetic Bedouin narrative.

The main thrust of all of the pieces is about how MENA has not been so well-researched, and that it tends to exist under a cloud of authoritarianism, conservatism, and Islam without a particularly nuanced view of how social forces work. In all of the papers, the argument is that was is important to look at is the way in which these authoritarian structures have implemented and adapted to neoliberal policies. Khirfan speaks of this as reflecting "authoritarian bargains", wherein neoliberalism brings the illusion of "greater freedom" (of the market), but that these market principles remain tightly controlled by the state. In this sense, there are a lot of parallels that can be drawn with India wherein pseudo-private entities are created by the state to "manage" public-private partnerships that cater to wealthy elites and foreign capital. In Jordan, the various chapters speak of the way in which as a resource-poor country, the King has focused his efforts on trying to build up megaprojects that cater to the wealthy and tourism, while in Morocco, Zemni notes that there is the illusion that the urban revolution is providing greater opportunity for everyone and that there is an expanded "right to the city". However, the power to control planning and implementation of projects does not lie with the municipality, but entirely with provincial governors who are not elected but appointed directly by the King. In this way, the main projects merely seek to create and link the archipelagos of elite interests more firmly to the state and to foreign direct investment.

The main takeaways from the readings should be regarding what makes the MENA area unique compared to other areas of the Global South. Most of the authors stress the authoritarian nature of the ruling class. The examples, Morocco, Jordan, and the Persian Gulf have monarchies, Turkey and Egypt have essentially one-party rule, and Beirut has had its difficulties with rich elites running the country, in particular during the Hariri (Sr.) years, which the article depicts. One can also note that MENA countries were never forcibly occupied (save for, arguably, Algeria by the French) and have for the most part maintained their independence from occupying forces. From the Boodrookas article, it is possible to historically construct the political economy of the MENA area from colonialism on. Generally, before oil, Gulf ports were responsible for exports of pearls, dates, and slaves up until 20th century oil, which had high demand. In addition, they had their colonial connections to Britain and acted as a go-between for British colonialism in India and East Africa. The royals in the Gulf nations then become heavily influential through the early hydrocarbon companies being British colonial enterprises emulating Indian colonialism by setting up bungalows for Westerners and perpetually temporary labour camps and shanty towns for workers from India and Africa. The major companies like Aramco and Abadan are said to have followed American Jim Crow laws of racial segregation, while the American-style suburb for expat workers was held up in contrast to Soviet communism during the Cold War propaganda era. On top of all this, there was the manner in which British engineering companies would be able to work in Gulf countries during the lean years to turn large profits while selling

the constant discourse of technocratic apolitical "problem solving" that fit the expat engineering specialization (as with the story on Myanmar). Further, due to internal connections, those close to government would know of future planning and buy up land that they knew would be in demand in order to sell it back to the government at inflated prices. In other words, the Gulf countries acted as a lynchpin for the British and American colonial enterprise (to say nothing of the Roosevelt American-Saudi oil deal and the fallout for Afghanistan and the general spreading of Wahhabism, etc.). From the development of the Gulf economies, there is then the capital accumulation in the Arab world that allows for neoliberalization through land speculation and building up for the sake of "the global city". Chapters on Cairo, Beirut, and Amman, and the essay on Morocco describes how Gulf countries are a major source of capital for MENA development as they look for more places to stash excess capital while maintaining the illusion of the Islamic community. Batuman calls this a "politics of convergence" where rich and poor live side by side under the shared values of Islam.

Of the other articles, Bayat talks about the discourse surrounding slums as a breeding ground for Muslim radicals. He is quoted in Zemni's article regarding the Moroccan "cities without slums" program. As with other regions (e.g. the article about the Philippines), the demonizing of the poor and creating excuses for demolishing and "urban renewal" is a common trajectory. The other two articles are particularly interesting though, the Erman one about gender and the Batuman one about "minarets without mosques" in Turkey. They both point to the unique form of myth in MENA surrounding conservativism and religion and their symbolism towards Islamic solidarity that acts as a filter for neoliberalism. Minarets provide the means by which Turkey maintains a connection between the past of "tradition" and the future of "urban renewal". This was also mentioned in the Beirut and Amman chapters: the traditional infrastructure that is bulldozed to make way for neoliberalized land speculation. Part of this is in contrast to other colonial countries because of the manner in which they don't have as much "traditional infrastructure" that citizens desire to be preserved (I think?). Batuman uses Lefebvre's idea of "rhythmanalysis" wherein "everyday life produces rhythms" and to analyze those rhythms allows one to better understand a society as a whole. For example, the minarets signal the call to prayer, which maintain an Islamic ordering to society. By preserving the minarets on urban renewal projects, it connects individuals to the past structure, suggesting the untouchability of the minarets, and they are only destroyed when the project is complete and new mosques are built. This then gives the illusion that neoliberalization has an element of continuing rather than collective amnesia for the sake of profit and capital accumulation.

Erman's article harkens back to Sylvia Chant's discourse about how neoliberalism impoverishes women not necessarily on an absolute scale of wealth but on time where they are expected to contribute to finances while doing household work and working for free in the community out of solidarity. This is especially so because the Turkish government resettled gecekundu residents in apartment buildings and they would then have to pay mortgages, which they often couldn't afford. This would force women into paid work, going against the patriarchal ideal that the husband is required by decency to shelter his wife and take care of the finances. This leads to the increasing propensity for tension and violence as men feel a greater sense of impotence within society, while women are led to carry the myth that they do it for their family and have no other choice. Hence Erman's main point is to show how conservatism is morphed into something else deemed sufficiently acceptable in order to accommodate neoliberalism.

This week's literature was on Dar es Salaam. In addition to the texts in the reading course, I skimmed through Seema Vyas's "Exploring the Association between Women's Access to Economic Resources and Intimate Partner Violence in Dar Es Salaam and Mbeya, Tanzania" because it mentioned Mbeya and built on the gendered narratives investigated previously but also because the Mkalawa ended up being fairly technocratic and uncritical when I went through it quickly. Overall, I found that Rizzo's book was very good in situating the daladala transport reality within the historical and neoliberal frame of reference (Fischer's response alluded to some of these shortcomings a 2014 Rizzo article). Beyond this, Wamuchiru's piece about Chamazi and the agency of the displaced poor to "invent" their own citizenship by developing a tabula rasa parcel of land on the outskirts of Dar es Salaam was extremely interesting, while I felt Degani's article about the *vikonda* who insert themselves modally into an infrastructural framework of mixed logic and morals showed a certain uniqueness about Tanzania's postcolonial and post-socialist reality, wherein a balance is maintained between the interests of the individual and the interests of the community.

Rizzo's essay gives a good account of the neoliberalization of the transport industry in Tanzania, but also puts considerable focus on its historical roots. He maintains that it is important to find a "middle ground" between Davis's pessimism about the structural rigidity imposed on the poor and their inability to act against it, and Simone's overly hopeful narrative about the agency of the poor in terms of their ability to create their own futures. He suggests that the latter derives somewhat from de Soto, but given Simone's criticisms of neoliberalism, I doubt that he would concur. In this sense, the book looks at both historical structure and lived reality. For the most part, Rizzo underlines the importance of questioning who owns what and what are they doing with it, while noting also the importance of recognizing that struggle predominantly exists over (within) a given class (the poor) rather than between classes because of the need for survival within a world of scarce resources. Within this dichotomy of structure and agency, an important point when it comes to labour agency (and this is repeated in the article comparing Dar to Buenos Aires, is the idea of structural (either marketplace or workplace) versus associative bargaining power. Marketplace bargaining power is always quite weak among the poor because of the large pool of excess labour in pretty much all African cities, which, as noted by Pastore, reflects an inability to bring forward infrastructure (and hence labour opportunities) at the same rate as population growth. This is not only in contrast to the temporal aspect of European cities having hundreds of years to evolve, but also a part of the postcolonial reality wherein the city inherited are archipelagos and networks in contrast to a totalizing urban entity. Yet transportation holds greater workplace bargaining power in a place like Dar because private daladala transport is the dominant form of transport (in contrast to the motos of Buenos Aires), and hence they have greater ability to leverage action. Still, the associational power was sufficient in Buenos Aires to get better labour standards for motos, but this is situated within a historical period where appeals to the moral economy of rights, fairness, and justice carry more weight than decades ago.

A major trajectory for the articles reading sanitation and water, Chamazi, and electricity is the manner in which Tanzania appears to have inherited a much more "open society" due to Nyerere and the general resistance even to the SAPs of neoliberalism in the 1980s. In this sense, the Tanzanian citizenry still puts a sufficient amount of credence on the importance of community in general, as opposed to in almost all other countries describing case studies where, at best, the a local community might act in solidarity. This is emphasized especially in Degani's exposition of

provisioning of electricity informally, namely that there is a certain degree of animosity to the provider, but how much electricity one procures still exists within a moral economy wherein theft that will collapse the system is generally condemned. Further, I believe the Chamazi paper shows how much more receptive and willing the government is to work with local communities as a means of national solidarity, and this may be in some sense due to the monopoly on power of the CCM political party and it wanting to maintain legitimacy, but from the readings and from my own experiences there, there is a much deeper sense of solidarity within this Nyererian "post-socialist" reality. Rizzo notes, for example, that despite the new BRT system attracting bids from foreign investors, in the end the government gave a two-year contract to a consortium of local actors inclusive of the former daladala workers that would be displaced by the system. In terms of water and sanitation, they were also quick to push out CityWater and Simon Group when the privatization failed to yield results.

I believe the tone of all of this literature helps to corroborate what I have said about the general communal anti-greed mentality of Tanzania much more so than pretty much any other country I've visited in the world. This is part of the reason why I think it is a country that has a lot of potential for investigating this idea of agency. From the Chamazi article, one can note how "easy" (relatively speaking) it was for a community of displaced individuals to buy up a collective plot of land on the outskirts of Dar es Salaam as a "tabula rasa" and, using local solutions with some extra finance and technical help, were able to install cheap sanitation and water solutions that went beyond what could be expected elsewhere in Dar. Moreover, the community deliberately made sure that everybody had equal provision to the land to avoid the situation descending into owner-tenant power imbalances. In addition, the ownership of small plots of land for everyone meted out by Nyerere (in theory), and the increasing willingness by the government to break up land monopolies from those who are not developing them properly agriculturally and redistributing them to locals provides a substantial opportunity to see Tanzania as a "living lab" when it comes to a more equitable and less hegemonic postcolonial nation. Of course, as Pastore maintains and the other articles allude to, there is a lack of organization when it comes to state and local government domains and services, and this probably is affected by the post-socialist reality and the resistance of Tanzanians to "selling out".

I thought Wamuchiru's article provided an excellent overview of postmodern citizenship modes and the contestation thereof, e.g. "invited" versus "invented" citizenship, and the idea of insurgent citizenship that is connected to the right to the city. It provides an added framework for the idea of agency within the real world, but I believe it also points to the manner in which the extent to which agency can be exercised is necessarily dependent on context and structural factors, as Rizzo alludes to. Further, Degani's article and even Rizzo's description of how the daladala structure of drivers, those on the bench, and call boys reflects a certain fluidity that does not seem to be prevalent in more rigidly imposed systems like in Jakarta or South Asia. There is a tolerance for the work of the *vikonda* in terms of quick fixes of electrical problems, but the discourse surrounding these individuals and their craft point to them being more active players in the way that society works than those that install pumps in India, but perhaps part of it is that because the system is not nearly as dependent on patronage networks to get something done, the individuals who carry out this work are also much more accessible and have a greater ease in terms of sharing the realities of their lifeworlds. Even though there is still the same difficulty of reproductive survival, there appears to be greater hope in Tanzania than in other places.

In this last week, I read the second wave of articles about Bangladesh. I think the strategy of reading about Bangladesh at the beginning and at the end was good policy. I was able to ruminate on a rudimentary understanding of Bangladesh for several weeks, and then I was able to take a second look at it to get a more nuanced understanding of what I had taken away from it in the other week. Given my geography qualitative methods class, I think that this ethnography text of the people of Sylhet versus Chevron was very timely, and each of the articles said something specific about the idiosyncracies of Bangladesh.

First of all, the system of patronage that is unique to Bangladesh has a lot to say how it compares to India. As my Bangladeshi friend told me about his visit to Kolkata, it seemed dirtier and more disordered than Dhaka. But on the other hand, comparing these articles to those on India, some interesting things are important. First is the "party-state" mentioned by Suykens, the history of which was described again in Gardner's book. It is explained that the Mujibur, Ziaur, and Ershad all inherited and solidified existing patronage networks, but because of the division between British rule and Pakistani rule, the networks are new and fairly traceable because the Pakistanis took over from the British and then fled when the Independence war was one, leaving essentially a tabula rasa of land and power relations. Mujibur nationalization strategies would have created patronage networks, which would have been disrupted in content (who occupies what) by military rule, but likely not in form (passing patronage from enemies to friends). AL is the more "freedom fighter" party while BNP is the more conservative party, as exemplified by the approach to rickshaw licenses wherein AL could justify expanded semi-legal freedoms (while cashing in), whereas under BNP there was more police enforcement, and of course ALconnected licensers either shut down or switched allegiances. Beyond this, however, both in Gardner's book and in Braun's article, and to a lesser extent Yeasmin's article, there appears to be a greater sense of "moral economy" in Bangladesh than India, perhaps provided by Islam and the lack of the formal caste system. Braun's article maintains, for example, that most respondents in the slums generally do not fear crime and are trustworthy of neighbours. There appears to be greater social capital than in India. In Sylhet, because of the connection to the *Londonis* that can remit money from their ventures in England, these systems have changed because of remittances and the change in real estate speculation and expat dynamics that goes with it. For example, it is becoming more common for land to be rented for cash ahead of time (rongjoma) instead of sharecropped because those abroad are going to need food returns. Land prices have also gone up as remitted money has allowed their families to buy up land. However, this social capital is based on "proper" patronage networks as in you may ask for a certain amount depending on how close you are to someone, but one is seen as a common beggar and in a different moral category to ask strangers for help. In Yeasmin's article, there was also talk of "leading by example" wherein if the landlord lived on the plot and maintained a direct interest in keeping shared latrines clean, the community was more willing to pitch in (though men maintained that cleaning was "women's work"). They also had access to certain "weapons of the weak" deliberately fouling up the latrines are contributing to blockages if the toilets were not cleaned, and I wonder how much the entire program of education around cleanliness of latrines might be considered an example of a "living lab" intervention.

The ethnography surrounding Chevron is extremely interesting in terms of situating quantitative measurements as the justification for the technocratic "success" of Chevron in neoliberal tokenism of extending microcredit, paying compensation for land and rebuilding a few houses,

but the gas field is an archipelago in that the company hires locals only for manual labour and even then through middlemen. In this way, they practice a "politics of disconnection", and the middlemen are part of a clientelistic network as well. Further, the qualitative investigations of Gardner are dismissed as "hearsay", "as if it never occurred to Chevron that there would be value in *hearing* what people had to *say*. Here too the moral economy centres around Islam and helping neighbours (as best as possible), but also around connections to patronage networks, general mistrust of the state, and a feeling of being cheated of their well-being by the Chevron gas field. Corporate social responsibility is a central theme explored by Gardner, and she always appeals to it within the context of its discursive field, wherein their moral economy naturalizes bringing people into the market economy as a "good", and the "empowerment" doctrine of "helping others help themselves" is the mandate that continues to place the risk on the poorest (e.g. microcredit is still at high-interest loan-shark middlemen) while proceeds go to Chevron. As with Sanchez's article on Myanmar, she appeals to Tanya Li's notions of the formulation of poverty as a technical problem allowing for technical solutions and always ignoring the socio-economic realities.

Begum's article on social exclusion I believe is fairly standard when it comes to South Asia, with poor individual with low education being absorbed into manual labour and low class work while being exploited by slumlords. He notes that there is economic, political, and moral exclusion and I believe, again, that it seems that within Bangladesh there is a greater moral economy and a greater appreciation of what the moral economy contributes in terms of social capital. One thing that he also notes is that "social exclusion" in wealthier countries implies that social cohesion was lost from some time in the past, whereas in Global South countries, it means that those that have never been included, due to the inheritance of certain forms of archipelago infrastructure and patronage networks inherent from colonialism.

The last article, the one from Bryan was "long" but had a lot of tables and a lot of mathematical model details that I skipped through, looking mostly at the results. It is makes various claims about the perception of risk by individuals in Rangpur in their willingness to migrate. They provide only 600 taka at the outset (about the price of a bus ticket) and 200 if they come back successfully. They note that those in the control group are less likely to migrate when they are close to bare subsistence, while those with the incentive are more likely to migrate when closer to subsistence. Overall, migration during the monga inter-harvest period when work is scarce and grain prices increase was found to lead to an overall net gain by families, and they found that those who migrate were more likely to migrate in the future even when the incentive was withdrawn, suggesting an "experiential" component to the study. They talk about how there are other factors that their model cannot account for, but I can't help but wonder what sort of bias is introduced by the very nature of the project. They talk about the problem where their results point to theoretically infinite risk aversion, but when humans are involved of seemingly endless cycles of survival, there is no real incentive to do differently, or believe that doing differently will be beneficial: "better the devil you know". However, if you give someone money, then perhaps they will see it as a divine reward, or there will be a form of perturbation beyond the act of having slightly more money. For example, it mentions that if such an individual finds a job, there is no way to know that such a person is reliable or bondable. But perhaps its makes for a good story for the individual in question, and that the employer sees the person as more trustworthy because it is grounded in a strange social experiment that has markings of "fate".