

Extrinsic Learning, Corporate Streaming, and Ungrounded Voting:
The role of STEM schooling in the political socialization of Asian
Canadian Youths

by

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Abstract

This ethnographic study analyzes a collection of schooling, childhood, and migration narratives from Asian Canadian youths who have entered careers related to Science, Technology, Engineering, and Mathematics (STEM). The study centres on a group of Asian migrant engineering alumni from a major Canadian university, and unpacks the relationship between their STEM-based scholastic socialization and their political consciousness in civic life. Through the use of qualitative methods involving semi-structured interviews supplemented by neighbourhood walking tours, the data provides a humanizing portrayal of the classed and gendered dimensions of petty bourgeois migrant life. Employing a Bourdieusian framework, analysis of the data reveals that symbolic homologies related to the fundamental tension between economic and cultural capital underpin many of the mundane tensions found in the participants' life narratives. This tension between economic and cultural capital exerts effects across multiple phases of the participants' formative years, including high school as well as university and beyond. The side that one takes in this clash of capitals is homologous with their decision to enter STEM, the subjective meaning of their discipline, the learning styles they adopt within the discipline, and the political tendencies they develop upon entering the workforce. Psychosocial analysis of their homological schema suggests that conservative political tendencies amongst the voters in this demographic stem from the inaccessibility of civic engagement, especially the inaccessibility of grounded politics in which one can see oneself represented in one's cause.

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Introduction

Nature of the topic

This study is an ethnography of the lifeworld in which I once lived during my undergraduate years. The participants in my study are Asian Canadian alumni from my undergraduate program, which is a general engineering program in a large urban Canadian university. The study intends to offer a glimpse into the lives of what I call “STEM-bound Asian Canadian youths” – Asian Canadians who migrate to Canada in their preteens as part of skilled migrant families, whose parents are employed in sectors related to STEM (science, technology, engineering, mathematics), and who are themselves streamed towards the same range of jobs in the Canadian schooling system. ***My main interest – and my main research question – is to explore the kinds of relationships that exist between their STEM-based scholastic socialization and their political consciousness in civic life.***

As a further pre-emptive clarification, the study is devoted to a small group of highly situated individuals. As such, this study is not aimed at making definitive generalizations about all STEM-bound Asian Canadian youths. Rather, the idea here is to name this demographic, and study one particular instance of this demographic. The “conclusions” drawn in this thesis are meant to serve the purpose of theory generation. Propositions that emerge from this study can then be verified or challenged by future studies of this demographic, which might involve a different urban setting or a larger sample size.

Significance of the topic

While there is a body of research on “skilled migrants” in the social sciences and particularly in political economy (e.g. Reitz, 2005; Li & Lo 2012), qualitative sociological studies on Asian Canadian experiences are sparser. It is rarer still to see class analyses that methodologically differentiate between the lived experiences of Asian Canadian skilled migrant parents and their children, given the heavy emphasis on reproduction in traditional studies of class. Amongst the studies that do have this level of nuance (e.g. Pang & Mu, 2019; Cui, 2015), the discussions usually do not extend to the question of whether those children can access and navigate civic participation upon becoming adults. Equally rare in sociological literature is any discussion that pinpoints STEM education as a major factor in the political socialization of those Asian Canadian youths. In light of the above considerations, it is reasonable to suggest that, at least on the topic of political socialization, STEM-bound Asian Canadian youths constitute an understudied group. Ethnographies of understudied groups also have additional significance. These ethnographies can be a rare outlet for marginalized groups to share their narratives; such ethnographies can offer mainstream audiences a better glimpse into how ethnic choices reflect ethnic circumstances.

General argument

The overarching substantive argument of the thesis has to do with a repeating motif that I call “capital clash”. There are other arguments in each analysis chapter, but the clash of capitals is the one theme that strings those chapters together. My argument is derived from the Bourdieusian idea that many social conflicts, especially those related to the seemingly apolitical

domain of subjective tastes, can be explained using a model where holders of “economic” and “cultural” forms of capital struggle against each other for dominance (e.g. Bourdieu, 1984). I argue that for my participating sample of STEM-bound Asian Canadian youths, this conflict between economic and cultural capital is present throughout their schooling years, informs many of their seemingly apolitical choices in daily life, and is a promising explanation for the uncanny match between their scholastic leanings as teenagers and their political leanings as adults.

Overview of thesis contents

Before diving into the thesis, I want to give a brief roadmap of its contents. Broadly speaking, the thesis can be viewed as having two parts – a preliminary part that conveys the frameworks and presuppositions underpinning the thesis, and an analytical part that contains the bulk of my analyses and arguments.

The preliminary part includes chapters 1 to 4. Chapter 1 introduces the key theoretical terms that are used throughout my thesis and explains how I interpret or use those terms where such explanations are warranted. Chapter 2 reviews various genres of academic literature that contain facts, approaches, concepts, or arguments that relate to my research context. Chapters 3 and 4 outline my methodology. The emphasis in chapter 3 is on methodological paradigms, while chapter 4 involves nuts-and-bolts discussions on concrete research methods.

The analytical part includes chapters 5 to 9, with each chapter emphasizing different aspects or phases of the participants’ life trajectories. Chapters 5 and 6 examine the undergraduate phase of the participants’ lives from two different angles. Chapter 5 reveals how classed tensions and capital clash fuel the symbolic rivalries between rote learning and

philosophical learning. Chapter 6 examines how the symbolic rivalry between ease and effort takes on a gendered meaning in an engineering environment, thereby allowing gender to co-constructively “blend” rather than merely “intersect” with class. Chapter 7 departs from the undergraduate period, focusing instead on the high school phase of participants’ lives. The chapter is meant to unpack the relation between racialization and capital clash, demonstrate the lifelong durability of an individual’s capital orientation and argue that the capital clash observed in engineering undergraduate spaces should be viewed as life-course effects rather than institutional effects. Lastly, chapters 8 and 9 focus on explaining the political leanings of the participants in the present. Chapter 8 notes the correspondence between the sides they currently take in political clashes during elections and the sides they previously took in capital clashes during their formative years. Chapter 9 delves more deeply into this correspondence and unpacks the links between economic capital, extrinsic schooling, disciplined selves, and forms of political participation that bypass the need to see oneself represented in one’s politics.

Chapter 1 – Theoretical Framework

Chapter Overview

In this chapter, I will outline the major theoretical terms I will be using in the thesis, and then give some additional background on the theoretical tradition from which they are drawn. In the first half of the chapter, I will define a collection of terms including habitus, field, capital, class, and homology, all of which are taken from a Bourdieusian lexicon. In the second half of the chapter, I will discuss at some length the reasons why I selected a Bourdieusian framework, and anticipate some of the caveats that may arise.

Habitus

Habitus is a central concept in Bourdieusian theory. In chapter 2 of *Outline of a Theory of Practice* (Bourdieu 1977, 72-95), habitus is defined as systems of durable, transposable dispositions produced by the structures constitutive of a particular environment, and are understood as something that tends to aid in the reproduction of the conditions that initially produced them (*ibid*, 72). These systems of dispositions are embodied, often starting from a very young age, and what is being embodied is the set of transferrable patterns behind everyday postures and norms in the environment in which the social agent is embedded (*ibid*, 87-89).

A similar discussion of habitus can be found in chapter 3 of *The Logic of Practice* (Bourdieu 1990, 52-65). Here, Bourdieu frames habitus as both a ‘product of history’ and an ‘embodiment of history’. Firstly, it is a product of history that produces individual and collective

practices (*ibid*, 54); secondly, it is an embodiment of history, an embodiment in which history is internalized as second nature and forgotten as history (*ibid*, 56).

The two passages I have referred to above can serve as starting points for discussing the meaning and implications of habitus. Notwithstanding Bourdieu's general admonition to keep concepts "open" (c.f. Bourdieu & Wacquant, 1993, 96-96) and avoid reified definitions, to the extent that we do need definitive clarity, those passages are places to which we can fall back. In both passages, habitus is framed as something embodied in the agent, but what is being embodied is the set of structures surrounding the agent. In this sense, the concept of habitus encapsulates the Bourdieusian way of synthesizing the dialectic between structures of society and the experiences of agents. Beyond those dry basics, there are other canonical ways to understand habitus and use the concept, and I will go over a few additional understandings in the space below. These additional interpretations are not mutually exclusive nor contradictory; they are different ways of viewing the same idea.

One other way to understand habitus is to see it not just as a sedimented collection of patterns or histories, but of lay epistemologies.¹ This is more apparent if we look more closely at what Bourdieu is trying to accomplish in making habitus a central concept. In *Invitation to Reflexive Sociology*, Bourdieu remarks that the main purpose of introducing this concept is to repudiate rational choice theories and the account of human action that they imply (c.f. Bourdieu & Wacquant, 1993, 120). We can see the finer nuances of this repudiation if we refer back to *Outline of a Theory of Practice*. One of Bourdieu's original aims is to stress the importance of

¹ This understanding, in which habitus is framed as an ingrained result of practical learning, squares readily with many of the ways in which Bourdieu has framed habitus elsewhere in his oeuvre – for example in *Logic of Practice*, as a repository of strategies for dealing with (or profiting from) various occasions and encounters (Bourdieu 1990, 16).

the time-dependent aspects of everyday social action (Bourdieu 1977, 8-9). At the start of his career, Bourdieu was critical of dominant trends in sociology that favoured time-independent models of human behaviour, which in turn encouraged mechanical, law-like accounts of human action (*ibid*, 9-10). Implicitly, Bourdieu was working against a disciplinary climate that, in its attempt to emphasize lay logics, neglected lay epistemologies. This was especially the case with lay epistemologies that hinge on predictions, memories, and other social processes that involve time (*ibid*). This way of understanding habitus is especially pertinent in situations where we want to oppose and avoid ahistorical models that reduce human motivation to a matter of rules and natural laws.

Yet another way to understand habitus is to see it as a kind of ‘embodied society’. This understanding comes from a much pithier definition taken from *Sociology in Question*, where habitus is defined as “the durable ways of being and doing that are incorporated in bodies” (Bourdieu 1993, 15). The context of this passage is that Bourdieu, in the process of unpacking the supposed differences between psychology, social psychology, and sociology, is trying to argue against the commonsensical view that psychology explains what is inside individuals while sociology can only explain what is outside and between them. In contrast to that common sense, Bourdieu argues that:

The self-evidence of biological individuation prevents people from seeing that society exists in two inseparable forms: on the one hand, institutions that may take the form of physical things, monuments, books, instruments, etc., and, on the other, acquired dispositions, the durable ways of being or doing that are incorporated in bodies (which I call habitus). The socialized body (what is called the individual or the person) is not opposed to society; it is one of its forms of existence. (Bourdieu 1993, 15).

This gives us another perspective on the role “habitus” is meant to play in Bourdieu’s theoretical system. That is, as a way of naming the socialized and socializing aspects of individuality. On the whole, this particular take on habitus is the most relevant in situations where we need to philosophically clarify our ontological assumptions about how individuals relate to society.

While we are on the topic of individuals and groups, an important caveat is how the habitus of individuals relate to the shared habitus of groups, and whether one can avoid essentialism when, at first glance, group habitus sounds suspiciously like a commonality shared by group members, and in turn sounds like a group ‘essence’. Canonically though, Bourdieu is careful to frame habitus strictly as dispositions embodied in individuals. The shared habitus that unifies class groups or status groups are instead framed as collections of ‘homologous² habitus’ (Bourdieu 1990, 55) that share similar ways of perceiving social surroundings, and similar ways of reading and reacting to expected or unexpected social encounters – all of which result from the internalization of similar social structures, and hence does not imply references to an essence.

One more way to understand habitus is to see it as a contextualized system of dispositions attuned to particular social contexts with particular hierarchies of power. The relevant passage is, once again, taken from *Sociology in Question*. Here, Bourdieu remarks on the contextual nature of habitus:

Investment is the disposition to act that is generated in the relationship between a space defined by a game offering certain prizes (what I call a field) and a system of dispositions

² Homology is another key term in Bourdieusian lexicon and is arguably the most important concept in the context of my study, but I will defer that tangent to a later point in this chapter.

attuned to that game (what I call a habitus) – the feel for the game and the stakes, which implies both the inclination and the capacity to play the game... (Bourdieu, 1993, 18).

This particular framing of habitus can be useful to invoke in situations where we need to simultaneously emphasize a set of dispositions as [1] the product of an environment and [2] the product of capital accumulation. From here, our discussion can flow readily towards clarifying another key Bourdieusian concept, which is the notion of field mentioned in the passage above.

Field

Field, along with habitus and capital, constitute the three core conceptual components of Bourdieusian social ontology, respectively describing the contexts, dispositions, and powers that are active in social reality. Unlike habitus, the concept of field is seldom named explicitly as a concept in Bourdieu's earlier works, but it is no less important. In Bourdieusian accounts of social reality, field, habitus, and capital are always assumed to operate in tandem with each other, even if some of those components are not always explicitly named. This is not the least because any kind of habitus or form of capital must operate within some context, and the notion of field gets at this contextuality.

One concise and direct definition of “field” comes from *Invitation to Reflexive Sociology*, where it is defined as “a network, or configuration, of objective relations between positions” (Bourdieu & Wacquant 1993, 97). On top of this, there are other moments in Bourdieu’s oeuvre that further furnish how one might understand this pithy definition.

In Bourdieu’s early works, particularly in *Outline of a Theory of Practice* (Bourdieu 1977), the notion of field seldom appears directly, but manifests implicitly through the more

general term “structure”, which is placed in a dialectical relationship with the habitus (c.f. Bourdieu 1977, 72-95). By the time *Logic of Practice* (Bourdieu 1990) was written, this dialectic between habitus and structure became a dialectic between habitus and field (c.f. Bourdieu 1990, 66). Thus in a Bourdieusian worldview, “field” can be understood as one of the primary ways in which social structures manifest and operate. The idea that social structure manifests as a configuration of relations between positions carries important methodological implications. To put it intuitively at the risk of oversimplification, it means that in any contextual social world, how social archetypes relate to one another says a great deal about how that social world works.

There is a philosophical difference between saying that a field “contains” a configuration of relations versus saying that a field “is defined as” a configuration of relations. Bourdieu’s definition of field implies the latter, which very importantly suggests that a “field” does not refer to a disciplinary field in a lay sense, which is premised on some disciplinary knowledge. In other words, insofar as we are talking in terms of Bourdieusian sociology, a field of STEM does not mean a social world organized around STEM knowledge, but a social world involving a long, fluid roster of meaningful STEM archetypes, such as various socially constructed types of school students, school instructors, school administrators, co-op interns, business managers, etc. Thus a field can be understood as – again at the risk of oversimplification – a contextualized power hierarchy.

Meanwhile, there is yet another aspect of how one might understand a “field”. Bourdieu sometimes refers to fields as contextualized “games”, with contextualized “stakes”. These moments explicitly come to the fore in *Invitation to Reflexive Sociology* (Bourdieu & Wacquant 1993, 98), and can also be seen in *Logic of Practice* (Bourdieu 1990, 66). In short, a field can be understood as a “game” with goals, logics, stakes, and accompanying practices that are

contextually bound to the specific “game” in question. The players in a game, regardless of how antagonistic they are towards each other, are already in unconscious agreement about the fact that the competition is worth their effort, just by the mere fact of their continued participation. Bourdieu refers to this ingrained belief in the worthiness of the competition itself as “*illusio*”, which can be more rigorously defined as one’s investment or invested-ness in the competition (Bourdieu 1990, 66; Bourdieu & Wacquant 1993, 98).

The contextualization aspect of the concept is also worthy of some discussion. It is fair to say, without any fear of having sacrificed rigour for bluntness, that field as a concept represents the Bourdieusian take on contextuality. As Bourdieu says, in societies with high degrees of labour division, the social fabric can be divided into “relatively autonomous social microcosms” (Bourdieu & Wacquant 1993, 97). Moreover, the needs and logics within each microcosm are more or less unique, being irreducible to the needs and logics found in other microcosms. This microcosm-based understanding of fields offers another intuitive way to grasp what the concept is meant to get at.

A major significance of this take on contextuality can be gleaned in a passage from *Logic of Practice* (Bourdieu 1990, 53), where Bourdieu criticizes the post-structural currents in anthropology and linguistics for maintaining a false dichotomy between universal models and particular contexts, as well as the accompanying dichotomy between rules and exceptions. The thrust of the critique, as I see it, is that these dichotomies implicitly position those unaccounted for by theoretical models as untheorizable. In this way, Bourdieu’s take on contextuality seeks to avoid something that I too, am seeking to avoid. In my case, what this means is that I can analyze the particularities of class and capital within the context of a field, without just naively asserting

that dominant models of class and capital “do not apply” to particular contexts simply because they are “universal”.

In Bourdieu’s formulation, it can be said that any capital only has power when it is embedded in a social field that recognizes its value (Bourdieu & Wacquant 1993, 98-99). Furthermore, the contextual difference between fields implies that depending on which field one is in, the relative mileage they get out of each form of capital will vary. In this way, different fields can be seen to “favour” different forms of capital. Moreover, there are two further nuances to this. First, the dominant capital in any given field may shift as a result of internal struggle. In other words, the players in the game are not just fighting over the prizes, they are fighting over the rules which can themselves be considered a prize. Secondly, clashes between two forms of capital in a given field are never wholly unrelated to clashes between the various other fields that favour the different forms of capital involved.

Having now brought out the notion of capital through our discussion of fields, our focus flows readily into a discussion of capital.

Capital

For a cut-and-dry Bourdieusian formulation of capital, we can fall back on one of Bourdieu’s chapters in the *Handbook of Theory and Research for the Sociology of Education* (Bourdieu 1986, 241-258). In this chapter titled *The Forms of Capital*, Bourdieu’s definition of capital is provided very directly at the onset:

Capital is the accumulated labour (in its materialized form or its “incorporated”, embodied form) which, when appropriated on a private, i.e. exclusive, basis by agents or

groups of agents, enables them to appropriate social energy in the form of reified or living labour. (Bourdieu 1986, 241).

In other words, labour-as-capital is something that, when privately amassed, can be used in turn to amass other people's labour or the products thereof. At first glance, other than the emphasis on embodied capital, this definition does not depart too much from Marxism. How Bourdieu departs from Marxism is an important topic worth coming back to, but for now, I leave that tangent to one side and focus instead on the explanatory role played by capital in a Bourdieusian framework. In other words, why did Bourdieu decide to keep the notion of capital around at all? What role does it play in his general account of social life?

In the same passage, through a caricature of interactionism in which agents are 'treated as interchangeable particles' (*ibid*, 241), Bourdieu is saying that some concept of capital is needed, first and foremost, to account for inequality and the effects of accumulation. The nuance here is that capital, in the Bourdieusian worldview, can function as a critique of time-independent models of social life and that the accumulation aspect of capital is a means of re-sensitizing sociological outlook to temporality³. We can notice here that this is consistent with Bourdieu's methodological aims throughout his oeuvre, such as his emphasis on temporality in *Outline of a Theory of Practice* (Bourdieu 1977, 8-9). In the context of my research, it turns out that capital does resuscitate temporality in some ways, by allowing me to show that the political trajectories of my participants are not reducible to time-independent critiques of the university-level institution.

³ I am aware of a potential for debate here about whether Marx also did the same, and whether the emphasis on temporality alone is sufficient to separate Bourdieu from Marx. I do not want to take sides in that debate.

Just as importantly, Bourdieu says in *The Forms of Capital* that beyond being a force inscribed in structures, capital is moreover “the principle underlying the immanent regularities of the social world” (Bourdieu 1986, 241). To suggest that capital, associated as it is with inequality, actually underlies the orderliness and predictability of the social world, is quite radical. The relevance of this idea manifests very starkly in my dissertation, as will become plain in my data chapters.

A discussion of the Bourdieusian take on capital also requires acknowledgement of Bourdieu’s idea that there are multiple forms of capital. In *The Forms of Capital*, Bourdieu discusses four major forms in which capital can manifest, including economic (ibid, 242-243), cultural (ibid, 243-248), social (ibid, 248-252), and symbolic (ibid, 245).

Given how Bourdieu frames capital as being inherently contextual in other parts of his oeuvre (c.f. Bourdieu & Wacquant 1993, 98-99), one might want to be careful about taking these categories of capital as transcendental. One question here is how the context-bound nature of capital squares with his typological division of capital into different forms. We can provide an answer to this by first looking at how Bourdieu frames economic capital. Economic capital, even in the Bourdieusian formulation, is acknowledged as something that lies at the “root” of other forms of capital (ibid, 252). It is important to stress that his emphasis on different forms of capital is not made in opposition to the finality of economics but in opposition to the reductionism that uses this finality as grounds for dismissing the importance of explaining why other capitals work, how they work, and why they work in the ways they do (ibid, 252-253).

Since all forms of capital ultimately have economic roots and are thus not absolute categories (ibid, 253-254), it follows that the typological separation between different forms of

capital is also not absolute⁴. The key here is Bourdieu's point about the disguised nature of non-economic capital, and the trade-off between its concealment and transmission (*ibid*, 253-254).

The contextuality of capital, in its various forms, can thus be conceptualized as the varying ways in which capital is disguised and transmitted, and the varying risks and costs involved in their concealment or transmission. The disguises and risks associated with a particular capital, insofar as the disguises and risks are contextual, give that capital its contextuality.

On the matter of cultural capital, it should be noted that the embodied form of cultural capital implicitly occupies a key place in Bourdieusian theory, given the gradual (i.e. temporal) and often unconscious nature of its accumulation. The two other variants of cultural capital, one related to institutionalized certification and the other related to the possession and consumption of objectified culture, echo this theme of gradual accumulation to varying extents. Moreover, these other forms disguise their economic roots in measure with how slowly and discreetly they are accumulated. For instance, in the case of owning culture without having the full means to appropriate it, such as in situations where the ultra-rich use expensive paintings as currency, we enter an ambiguous zone between economic and cultural capital (*ibid*, 246-247). Calling this an ambiguity is not meant to be an abdication from clear explanation; the ambiguity has to do with the varying degrees to which capital can conceal its economic nature – I will return to this point in a moment.

In a related passage (*ibid*, 247), Bourdieu makes a noteworthy comment on the status of engineers, and how they are in this grey zone by being the “proxy” that allows capitalists to

⁴ To be sure, we do not even need this line of reasoning if we just want to prove that the typological categories are not absolute; that is amply clear in how Bourdieu defines each form of capital, both in *Forms of Capital* and elsewhere. Nonetheless, what I want to stress here is the connection between the field-dependent nature of capital and the contextually different costs of its concealment and transmission.

appropriate the machines they own. If we emphasize the economic aspect of their situation and frame them as sellers of skills, they would appear to be dominated. If we emphasize the cultural aspect of their situation and frame them as holders of skills, they would appear to be dominant. On a self-referential note, it is evident that if a Bourdieusian wanted to highlight the potential affinity between engineers and dominated groups, the way to do so is straightforward: emphasize the economic aspect of their situation.⁵

How do we judge whether this emphasis is convincing? This brings us simultaneously to the topics of institutionalized cultural capital (of which the diploma is the example *par excellence*) as well as my research context. To forecast a topic for which I will go into greater detail in later chapters, one of the questions I pose is, to what extent is a participant's motive for entering the discipline openly extrinsic, and thus, to what extent is the exchange-value of their knowledge more pronounced? If the starkness of exchange-value reaches a certain point, the non-economic disguise of "cultural" capital falls off. This is when we will see, in later chapters, open utterances from some participants about "making money", contrasting them sharply against other participants who proclaim, in various forms, a "love" for learning or "interest" in what they do.

Bourdieu defines social capital as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (*ibid*, 248). Social capital is underpinned by one's membership in a network, and its value is affected by the capital of others in the network, as well as the maintenance of the network itself through relations of exchange (*ibid*,

⁵ Since engineers are not often considered a low-income stratum, bridging them with the margins by emphasizing their economic situation may appear counterintuitive at first glance. Nonetheless, the significance of being a 'seller of skills', especially one who sells skills at lower prices, will become manifest in chapter 5.

249). Bourdieu sees social capital as a “multiplier” for other forms of capital possessed by the agent, and remarks that although it is not easily reducible to economic or cultural forms of capital, social capital is not independent of them (*ibid*). In my dissertation, social capital is not a major focus, so I will leave this topic aside.

Symbolic capital is a more complex topic, the finer nuances of which are not made explicit in *Forms of Capital*. We can find a more detailed definition outlined in *Practical Reason* (Bourdieu 1998, 47-52), where symbolic capital is conceptualized as any legitimized capital – the legitimization of which rests on some form of public consent – that conceals its distributional inequality by way of its legitimization.

Symbolic capital is any property (whether physical, economic, cultural or social) when it is perceived by social agents endowed with categories of perception which cause them to know it, to recognize it, to give it value...

...More precisely, symbolic capital is the form taken by any species of capital whenever it is perceived through categories of perception that are the product of the embodiment of divisions or oppositions inscribed in the structure of the distribution of this species of capital (strong/weak, large/small, rich/poor, cultured/uncultured). (Bourdieu 1998, 47)

Importantly, the legitimization of a form of capital requires a particular way of seeing that capital, a way of seeing that encodes objective structures. In the case of my dissertation, where participants talk of “making money” through schooling or getting a “steady payoff” out of their studies, their invocation of economic capital contains a symbolic dimension that reflects both a familial outlook that connects money-making to honour and the real conditions faced by new migrant families which make this connection seem natural. This structurally-induced association

between money-making and honour legitimizes money in a way that, far from cultivating a critical outlook in the field of civic participation, instead desensitizes them to the unequal distribution of the very capital that they once lacked, and normalizes the right-wing identity of the money-maker. More generally, when we see situations where certain people legitimize certain capitals, and hence legitimize their unequal distribution, we can always ask what outlooks enable that legitimization, what structures can induce that outlook, and finally, what the connections are between the legitimized inequality and the inducing structure.

Position and Class

How Bourdieu departs from Marx is best captured in the last chapter of *Language and Symbolic Power* (Bourdieu 1991, 229-251). In this passage, Bourdieu formally lays out how “class” and “capital” function in his theoretical system. In the Bourdieusian view, a field can be regarded as a “social space” in which different capitals circulate, and where different agents can vie for dominance both by valorizing the type of capital they have and by accumulating the type of capital that is most likely to be valorized. Moreover, an individual’s “class” is understood as a “position” in a given social space, and this position is in turn defined by the volume and composition of the capital they hold in that social space. This capital-based definition of social position will serve as a premise for us as we move onto the next concept, which is that of homology.

Homology

A pithy definition of homology can be found in *Invitation to Reflexive Sociology*, where it is simply framed as “a resemblance within a difference” (Bourdieu & Wacquant 1993, 106). In the same passage, Bourdieu explains that homologies can be both ‘functional’ and ‘structural’, and (thus) a homology can also be framed as a “fit” between positions in different fields (*ibid*, 105). Aside from the above passage, homology is rarely defined explicitly in other parts of Bourdieu’s sprawling oeuvre. Nonetheless, I want to further unpack this term and dwell on its significance, because it is the single most pivotal concept in my dissertation, and serves to explain the subjective coherence of my participants’ worldviews.

The unpacking I do in the space below is a synthesis of my overall understanding after consulting several canonical texts, including *Outline of a Theory of Practice*, (Bourdieu 1977, 72-95), *Distinction* (Bourdieu 1984/2010, 227-230) *Logic of Practice* (Bourdieu 1990, 80-97; 248-249; 261; 293), *Language and Symbolic Power* (Bourdieu 1991, 185; 214-216; 244-246), and *Invitation to Reflexive Sociology* (Bourdieu & Wacquant, 1993, 105-106). As I unpack some of the nuances of homology in the space below, I will not be able to match every interpretive claim to an exact canonical quote; the collection of references given above are a general indicator of where I derive my understanding.

I see two complementary ways of looking at homology, and it might be helpful to explain them separately. The first is to concentrate on the actual homologies themselves, be they similarities of structure (e.g. positions of individuals) or similarities of function (e.g. duties delegated to individuals) between two fields. The second is to emphasize the capacity of the habitus to recognize or misrecognize those similarities, especially in situations where the individual is moving from a familiar field to an unfamiliar one.

In Bourdieu's more socially engaged works, such as his critiques of cultural consumption (c.f. Bourdieu 1984/2010, 227-230) or political representation (c.f. Bourdieu 1991, 214-216; 244-246), the first way of looking at homology often comes to the fore. As an example, an analysis of homologies can explain why the fan base of an artist loves the artist, even when the social class of the artist does not reflect the social class of the fans. What happens is that there is a resemblance between the position of the artist among other producers and the position of the fans amongst other consumers. As another example, the constituency of a demagogue is not necessarily from the same class as the demagogue; what happens instead is that there is a resemblance between the position of the demagogue amongst other politicians and the position of the constituency amongst other voters.

On a more technical note, there can be actual homologies between habitus, since habitus is a kind of embodied structure. In analyzing those situations, our focus is still on the actual homologies themselves, not the capacity of the habitus to recognize similarities. In his *Outline of a Theory of Practice*, Bourdieu (1977, 85-86) mentions the idea of homologous habitus. The context of this passage is that Bourdieu is unpacking whether it makes sense to define demographic groups based on the commonality in their habitus. Bourdieu concludes that even if members of a demographic grow up in very similar conditions, the habitus they have would nonetheless not be identical. This is not due to some kind of irreducible individualism, but something more complex. On the one hand, intra-group difference, based on the necessary division of labour within the group, is a key ingredient to how each group member constructs their worldview. On the other hand, the worldviews constructed by different members of the group would share some degree of similarity owing to the fact that they did, after all, experience a similar environment. It is in this context that Bourdieu says, the habitus of individuals within a

group are not identical per se, but “homologous”. This means that each individual in the group is within the ballpark of the collective, but the collective will be diverse enough to reflect the range of conditions that this group is liable to experience. Thus, not only can homology describe a similarity in field structures, but it can also describe a similarity in habitus (i.e. embodied structures).

Generally, emphasizing the first aspect of homology means analyzing a time-independent picture of social life. As we have discussed previously, Bourdieu is not satisfied with just having the synchronic picture; he is also interested in developing a diachronic account. The capacities of the habitus to recognize (rightly or wrongly) old patterns in new situations is what enables an individual to use obsolete coping mechanisms from a familiar field to navigate an unfamiliar one, sometimes with surprising success. This capacity for homological recognition⁶ comes to the fore in methodological discussions where Bourdieu is seeking to provide nuanced accounts of practical knowledge and its diachronic formation (c.f. Bourdieu 1990, 80-97). In his *Outline of a Theory of Practice* (Bourdieu 1977, 87-88), Bourdieu describes the learning process of a small child, and how the child can learn very quickly a series of relations that exhibit similar internal logics. This involves the intuitive, often subconscious grasp of a “generating principle”, which is a pattern that can be used to anticipate new objects or relations that are homologous with the pattern itself. In *Logic of Practice*, Bourdieu argues that this subconscious, pattern-based way of learning is a general feature of practical life and practical epistemologies, which tries to mobilize no more logic than what is required to produce results in everyday pursuits (Bourdieu 1990, 86-87). The homologation capacities of the habitus allow for an individual to approach multiple

⁶ And sometimes, misrecognition

situations (oftentimes new situations) with a similar set of postures and mentalities, thus saving the amount of logic required in the heat of the moment.

The methodological key to this second way of looking at homology is the idea of the “generating principle”. In the context of my dissertation, the generating principle amongst my participants is their internalized position on the dichotomy between extrinsic and intrinsic modes of engaging in school. This generating principle is rooted in different familial strategies of capital accumulation, and ultimately, in the underlying clash between economic and cultural forms of capital.

Merits of the Bourdieusian sociological tradition

The Bourdieusian theoretical lens, in the sociology of education as well as in other branches of the discipline, is as widely challenged as it is widely used. In light of this, I do want to set aside some space to discuss my decision to adopt this theoretical lens, and why I have decided that the benefits outweigh the drawbacks in my context. Here I will divide my argument into two parts.

Firstly, I want to talk about three major types of popular objections against Bourdieu in the existing literature: (1) insufficient predictive power, (2) insufficiently politicized view of capital, and (3) insufficient attention to human agency. Although I do not agree with any of these, I think they are genuine enough to warrant ongoing debate. Secondly, I want to talk about some of the actual challenges of adhering to the Bourdieusian tradition specifically in my context, which has to do with an oversimplifying conflation between cultural capital and “schooling achievement”.

Commonly-held objections to Bourdieu

First, let us look at the three objections. The first type contends that Bourdieu's models are inaccurate in various ways (e.g. Peterson & Simkus 1992; DiMaggio 1997). There is however an unfortunate pattern to some of these critiques. They tend to emphasize the large-scale correspondence studies such as those done by Savage (2015; 2016) if only to challenge such formal models about their inaccuracies. Moreover, they tend to frame *Distinction* as the centrepiece of Bourdieusian theory, and by extension frame Bourdieu as a stratification theorist and a mapper of cultural tastes. All of that however is rather far removed from the qualitative aspects of Bourdieu's theory, and more importantly far removed from some of the key tenets of the theory as a whole. Such key tenets are found in the more theoretical parts of Bourdieu's oeuvre, such as *Outline of a Theory of Practice*, *The Logic of Practice*, and *Practical Reason*. Not by coincidence, in all of these writings he has warned against, in one form or another, decontextualized impositions of large, rigid models.

This retreat from rigidity has also attracted its share of criticisms, from moderates and radicals alike. On the one hand, liberal scholars such as Kingston (2001, 96) contend that the qualitative aspects of Bourdieu, in exchange for having avoided decontextualized rigidity, now have a theory that is too contingent to be considered systematic or general. Meanwhile, on the other hand, theorists from the Marxist tradition have at times been even stancher about the indispensability of a "general" theory and have similar views about the supposed "vagueness" of cultural capital. We can take note, for instance, of Wright's (1991/2019) humorous remark that

the difference between Marxist theories (which aspire to be general) and Weberian⁷ theories (which do not) is the difference between a theory and a non-theory. As for what Wright thinks of the Bourdieusian tradition, in particular, we can at least see that he considers many of the indicators of cultural capital to be too vague (Wright 2015, Chapter 1, EPUB), and that he views the quantitative, large-scale applications of Bourdieu to be an improvement in rigour.

When it comes to the merits and demerits of contextuality, of particular interest to me here is Kingston's (2001, 89) remark that the definition of cultural capital becomes increasingly vague as diverse research contexts begin to aggregate and that there is an ever-growing list of "variables" being filed under the ever-expanding umbrella of what counts as "cultural capital". When viewed through such a perspective, my research is going to stretch that umbrella even wider. But the absurdity of this ever-growing umbrella monster stems from having a reified view of what capital constitutes in Bourdieu's framework, and more importantly from not using the concept of "field" in tandem with the concept of "capital"⁸. Here it must be stressed that in the Bourdieusian framework "contextuality" is not a frontier that signifies the suspension of theory. Conversely, contextuality itself has already been theorized through the concept of field, which should be invoked in tandem with "capital" insofar as we are dealing with "capital" in a Bourdieusian sense. And insofar as we are invoking "capital" and "field" in tandem in a Bourdieusian system, capital is inherently contextual, and all the more so for cultural and symbolic forms of capital, forms which are tied to the history of the field. Diverse forms of

⁷ To be fair, Wright's remark is related to his stance on the importance of macro-level consistency. It should be noted for the record that he does not actually consider Bourdieu to be a Weberian, but as a "stratification theorist". See Wright (2015), Chapter 1.

⁸ It is no surprise that liberals and socialists alike fall into this trap. As Savage (2016) has rightly pointed out, "class" is one of the very few political words that is frequently passed back and forth between academia and the public sphere, with both sides using, contesting, redefining, but never abandoning the word. The fact that both radical theorists and moderate pragmatists are prone to misreading Bourdieu in the same way is one way in which such dynamics can manifest.

capital, thus conceived, can be understood fundamentally as determinants of hierarchy in a given context.

This leads naturally into the second objection, namely that Bourdieu does not have a sufficiently politicized view of capital accumulation. I do not think for a moment that traditional Marxists will be satisfied with the idea of contextualized capitals. I can foresee two lines of accusation here, and I have some sympathy for both. One possible critique is that by using “hierarchy” as a conceptual underpinning, Bourdieu (or at least my reading of him) depoliticizes a question of capital into a question of status and rank. Another related concern is that a mere critique of symbolic hierarchies does not promise to reveal the fundamental antagonisms that underpin why those hierarchies are there. The questions lying at the root of these critiques are more or less the same, namely that an emphasis on honour-based hierarchies obscures exploitation. This concern about obscuring exploitation comes not just from the Marxist tradition (e.g. Wright 2015), but also more broadly from socialist scholars of cultural studies such as Skeggs (2004), who has criticized Bourdieu’s theorizations of cultural capital for erasing the line between use-value and exchange-value, and more fundamentally for obscuring the exploitative relations between cultural producers and cultural consumers.

My position on these exploitation-related objections is as follows. First, I agree that there are fundamental, antagonistic forces⁹ beneath any hierarchical subculture, and the prospect of obscuring those antagonisms does warrant some alarm. But I am interested in the kinds of antagonisms that occur and how they permeate the lifeworld. Such things can hardly be left to theoretical assumptions, especially if the lifeworld is so undertheorized that any “theoretical”

⁹ But, stopping short of the totalizing presupposition that these forces can be reduced to a single force related to class. I will maintain my agnosticism on this matter.

presumptions will likely teeter on the edge between knowledge and prejudice. Second, I will say directly that I am wary of frameworks that largely reduce oppression to consumption, and downplay the complicities of cultural producers in reinforcing exclusion and existing standards of legitimacy. It takes power and legitimacy to even be a producer, and those who do not have that legitimacy are stuck being consumers because there are no markets for anything they make or say.

Compared to all this class struggle, the third objection to Bourdieu is rather less grave. The idea that his theories are determinist, or that they pay no attention to agency or inner consciousness, is partly a misunderstanding and partly a question of methodological emphasis. To be sure, Bourdieu's aversion to psychology does pose some problems for my research, but ways of rectifying this aversion have been suggested by scholars such as Steinmetz (2006) and Reay (2015), which involve a more open stance towards psychoanalysis. Moreover, Bourdieu and Wacquant (1993) have noted in *Invitation to Reflexive Sociology* that the original intention of emphasizing structure over agency is not to deny that agency exists. Rather, the emphasis is tailored to counteract a mainstream reality where common sense will see agency long before it sees any structure.

More generally, the kind of "determinism" that Bourdieu is sometimes criticized for is largely related to two themes. First is what can be called the reproductive theme, which deals with social dynamics that resist change and renew present inequalities. Second is what might be called the Pascalian theme, which deals with how subjective opinions and tastes stem from the subject's social position. Regarding the reproductive theme, James (2015) has made some noteworthy remarks from within the sociology of education on why determinism, even the most pessimistic and fatalistic type, has its place in our efforts to envision progress. I agree with that,

although I think we may not even have to be that sombre. In a North American context, one possible reason why emphasizing social reproduction can sound conservative, is that it evokes connotations of Parsonian functionalism. But this, I think, is a misunderstanding. Bourdieusian theory has great disruptive potential when applied in contexts that are saturated with doxa, where even descriptive acts can disenchant common sense and expand horizons.

Meanwhile, the Pascalian theme can also come across as determinism of a different kind, one that seemingly denies human consciousness by pegging human opinions to social positions. Critics (and critical sympathizers) of Bourdieu associated with the “Critical Realist” school tend to follow this line of objection in some form or another. The alternative theories they offer and the political stances behind those theories vary, but they all tend to emphasize the fact that Bourdieu seems to ignore situations where individuals strongly feel mismatched with their surroundings, or even more generally, any situation where anybody has strong feelings about anything. In these critiques, we can see authors such as Archer (2007) take significant departures from a class framework, and even a structural framework more generally. Instead, there is a rather responsibilized psychological typology that sorts individuals based on whether upward mobility meshes with their “ultimate concerns”. We also see more sympathetic critics such as Sayer (2005) who retains the commitment to class analysis and repurposes parts of Bourdieu to analyze the psychosocial and moral aspects of class experience. My take on the Pascalian problem is that Bourdieu’s insistence on pegging preferences to positions has been somewhat exaggerated by his readers, (c.f. Bourdieu 1984/2010, 338; 345) but I do not have the space to expand on that here.

The (contextual) drawbacks of the Bourdieusian tradition

Besides the rather contrived avoidance of psychology, which scholars such as Reay (2015) and Steinmetz (2006) have already addressed in some shape or form, there is just one major drawback of using Bourdieu in my social context. This has to do with the overly tight association in prevalent literature between school achievement and cultural capital. More specifically, I argue that in certain disciplinary contexts within the school, as well as in certain ethno-familial¹⁰ contexts based in the home, the strategies and meanings of schooling are so pointedly economic that it makes little sense to view schooling as something cultural. Thus, in an arguably heterodox move, I do not equate cultural capital with a totalizing notion of schooled knowledge, which in turn is institutionally reified into a diploma, and is then, in turn, converted into economic capital when the participant gets a job. I argue that in my lifeworld context, cultural capital is not signified by schooling, nor is it necessarily signified by scholastic achievement. Instead, it is signified by particular ways of doing school, of relating to the curriculum, of choosing electives and careers, of mixing leisure into studying, and of balancing personal interests against familial necessities.

In my project, I do not consider cultural capital in isolation, but always in symbolic tension with economic capital. This struggle between capitals manifests as opposed ways of doing school, opposed ways of relating to the curriculum, opposed ways of choosing electives, opposed ways of relating to the consumerist extracurricular realm, and finally, in an opposition that must necessarily be psychological, opposed ways of managing desire or the stunting thereof.

¹⁰ “Ethno-familial” is not meant to be an essentialist idea here. I do not rule out the possibility that what appears to be an ethno-familial pattern may in fact be the product of a particular class position related to skilled migrant labour. Moreover in turn, I leave open the possibility that publically framing such a position through race has the effect of obscuring labour relations.

Within this lifeworld of STEM-bound Asian Canadian youths, migrant youths of different class factions manifest classed dynamics of distinction that may not appear meaningful at first glance in a mainstream ethnographic horizon but have a profound impact on how they experience social conflict, how they conceptualize social cleavages, as well as how they develop their political identity.

Chapter Summary

This chapter is meant to give a preliminary rundown of the theoretical concepts that I will be using in the thesis, as well as to provide some justifications for choosing the theoretical framework that I have. The discussion in the first half of the chapter is best thought of as a “shortlist” of terms that have overarching significance to the thesis as a whole; less pivotal concepts that see one-off usage in specific chapters are not covered here. Although fundamental Bourdieusian terms such as field and habitus do make their appearance, they are meant to ground how I frame the concept of homology, which is the most pivotal concept in this dissertation. Meanwhile, in the latter half of the chapter, I delve into some of the potential concerns that may arise from adopting a Bourdieusian framework. That discussion is meant to situate my project more clearly within the Bourdieusian tradition and state my position on some relevant debates between Bourdieusians and their critics.

Chapter 2 - Literature Review

Chapter Overview

In this chapter, I will begin by reviewing some of the key existing pieces of literature related to my topical area, organized by the genre or tradition they belong to. These genres or traditions include feminist science and technology studies, migration and diaspora studies, sociology of education, and various studies of political participation from political science.

Feminist studies of engineering fields

Tautologically, any project studying a group of people in a particular environment should have some account of both the people and the environment. Since my particular research context involves an engineering-based social world, some sociological scrutiny of that world is par for the course. My research borrows heavily from the insights of Faulkner (2000; 2001; 2008) and Cech (2014), both of whom have done extensive work documenting the social dynamics in engineering-related lifeworlds. Faulkner's oeuvre contains many ethnographic examples of how class and gender underpin the imagination and discourse of engineers on a variety of topics, such as managerial promotions, the balance between theory and practice, and the divide between technical and social aspects of design work. Cech's research meanwhile is less ethnographic but deals more explicitly with the question of political consciousness. Cech is directly concerned with the political socialization of engineers and the depoliticizing tendencies of their educational and professional lifeworld.

The works of both Cech and Faulkner are situated in the tradition of feminist science and technology studies (feminist STS). Although there are other genres of STS, feminist STS is particularly suited to my purposes, as it specializes in mapping out the social and political aspects of STEM (science, technology, engineering, mathematics) fields. There are four features to feminist STS that make it especially relevant to my project.

First, it adopts a conflict theory approach and has an existing repository of justifications for why a baseline level of political sensitivity should be built into interpretive frameworks (e.g. Wacjman 1991; Cockburn & Ormrod 1993; Berg & Lie 1995; Lohan 2000). This is especially important in social spaces where there is a high pretense of neutrality and low availability of discourse; in such spaces, political moments are less likely to emerge unless the goal of looking for these moments is built into the research design.

Second, it is sensitive to gender but retains the insights from previous theories that employ class analysis. In particular, Faulkner's (2000; 2001; 2008) ethnographic study of engineers exemplifies an approach where insights related to gender are built on top of an existing lens sensitive to class.

Third, feminist STS goes beyond the liberal project of increasing inclusion within technology and challenges the neutrality of technology itself (Faulkner, 2000). Faulkner, for instance, is highly critical of the liberal “access discourse” which assumes that STEM fields themselves are good places to be and that the only problem is how to increase the diversity of the people who are willing and able to enter. The post-access sensibility of the feminist STS tradition is relevant to my project, as it provides a progressive justification for why social problems in STEM should not be reductively viewed as just problems of entry or access, and should instead lead to more radically progressive visions of what STEM could be. One of the implicit

arguments of my overall thesis is that STEM overrepresentation should not automatically be viewed as a privilege, as this renders invisible a demographic whose struggles precisely come from the structuring forces behind their STEM overrepresentation. Although challenging the “neutrality” of technology itself does not quite get at this goal, the willingness to move beyond an access-based vision of progress is an indispensable step.

Last but not least, feminist STS is sensitive to what Faulkner (2000, 86-88) calls “gender symbols in technical knowledge and practice”. This is of crucial importance to my project, which is aimed at mapping out how homologies in a STEM-based lifeworld can link various dichotomies together to form a deeply entrenched political stance. Insights from feminist STS are thus a great aid in identifying the political forces, such as gender and class, behind imaginations, symbolisms, and discourse in the lifeworld.

Migration and diaspora studies

As the study deals with migrants and their experiences, migration and diaspora studies is a natural genre to consult. There are three topics within migration and diaspora studies that are particularly useful for providing the premises for my dissertation. I have designated these topics broadly as ‘skilled migration’, ‘lifeworld practices’, and ‘visibility gaps’.

Skilled migration

If we are interested in the class dimension of racialized experience amongst Asian Canadians, skilled migration can be seen as a major piece of the puzzle. Existing literature on the

experiences of skilled migrant families not only provides us with a general picture (which may or may not speak for each participant) of migrant childhoods but also helps me situate my participants in a specific milieu. According to Li and Lo (2012), during the two decades between 1990 and 2010, China and India have been amongst the top five source countries for immigration into Canada (*ibid*, 12-13). In 2002, when it came to light that Asian Canadian skilled migrants have generally not assimilated economically much less culturally, the Harper administration blamed this on ‘language ability’ and significantly dialled back¹¹ skilled migration (*ibid*, 24).

An important extension of the conversation on skilled migration is the deskilling and declassing of skilled migrants (c.f. Li & Lo 2012, 10; Reitz 2005). It suffices to say, in the context of my study, that declassing causes skilled migrants to be significantly poorer than mainstream settlers with similar levels of education and credentials. Moreover, this disparity does not simply heal with increased time spent in Canada (Reitz 2007, 45); it affects migrant women more than migrant men (Salaff and Greve 2006; Boucher 2007); and it is related, though not reducible, to the general decline in labour conditions (Reitz 2007, 47-54). These convergent structural factors of race-, class-, and gender-based impoverishment give us a fuller picture of what could be going on when the migrant child is *coping with a family that is coping with the world.*

In the context of my study, the vast majority of participants have grown up in skilled migrant families who arrived in Canada some time during the late 1990s and early 2000s. This makes them a very close match with the type of migrants I have described above. This means that my group is moulded, at least in part, by a very particular policy climate, both in terms of

¹¹ As Li and Lo (*ibid*) have noted, this affected Chinese migrants slightly more than the Indian migrants, since the latter group is better acquainted with Anglo-Western language and culture.

their historical period as well as their economic trajectory. That said, this does not mean that their dispositions are solely attuned to the migration policies of the late 90s to the exclusion of other structural factors; their dispositions are also partly attuned to more general forces, such as systemic discrimination, which impact a wider range of groups and not just skilled migrants.

Lifeworld practices

Another set of topics, which I broadly call studies of lived experiences, are qualitative studies of the everyday challenges faced by marginalized groups. These studies often feature ethnographic accounts of how these groups navigate everyday life, and of the coping skills they develop in response to their quotidian challenges. Although the scope of my study does not cover the full range of these coping practices, existing literature on these practices, both inside and outside my immediate context, nevertheless sheds light on aspects that are important to my study.

There is a range of literature on Asian Canadian and Asian American survival strategies, such as Ong's (1999) account of flexible citizenship¹² amongst Southeast Asians of Chinese descent in the United States, and Pratt's (2004) account of economic docility¹³ amongst Filipino migrants in Canada. Although much of this literature does not directly relate to the skilled migrant families who landed in the late 1990s and early 2000s (let alone the children within this group), it is interesting that similar subsistence or mobility strategies do occasionally show up

¹² This refers to situations where the migrant does not stay in the host country to work, and instead travels internationally to places that offer better opportunities. In my study I see this in participants 02 and 13, both of whom now work in the US despite not having American citizenship.

¹³ By this, I mean the ostensibly puzzling (from a mainstream liberal point of view) refusal to ask for better pay and the refusal to engage in or even support unions and strike action. In my study I see similar outlooks in 04, who has internalized alienated labour as a racial niche and a racial destiny.

amongst my participants. The implication here is that although my participants are partially products of a specific policy era, that is not the whole picture. Since their coping mechanisms overlap with Asian Canadians and Asian Americans from other milieus and other social strata, we must entertain the possibility that there are common features in the environment of my participants and the environment of the people depicted in the existing literature. Seeing as how flexible citizenship and economic docility are both, in part, strategies for minimizing the harms of discrimination, the common feature between those environments and my own could indeed be discrimination.

Cui's (2015; 2019) studies of Chinese Canadian youth reveal further examples of these kinds of coping mechanisms amongst not just skilled migrant children, but descendants of migrants more generally. Some of her participants tried to avoid appearing studious in front of white peers in fear of appearing foreign. Others tried to distance themselves from other Chinese migrants who arrived more recently, or those who are less willing or able to assimilate (Cui 2015, 1163-1165). Some of her participants cite school experiences where they take on extra work in group projects to secure social belonging. Cui identifies these coping mechanisms as manifestations of a 'racialized habitus' and argues that this habitus is geared towards navigating structures of discrimination. These structures manifest in the attitudes of teachers in the classroom, the bullying from peers in school, and the racist punditry from mainstream media (Cui 2019, 74-78). Cui argues that these moments are reflections of a wider structure rather than individual incidents owing to racist teachers, peers, or pundits. The bystanders (i.e. the classmates, teachers, or audiences) in those scenarios unconsciously side with the perpetrators because they, in a Bourdieusian sense, have a doxic "feel for the game" (*ibid*, 80) which point to the existence of a wider structure.

Visibility gaps

It has been argued, both in the Canadian and American contexts, that the Asian diaspora has to contend with visibility gaps in both public and academic discourse (Museus & Kiang 2009; Cui 2019; Mu & Pang 2019). In much of the existing literature that criticizes this visibility gap, ‘model minority’ stereotypes are said to be the culprit. These stereotypes downplay Asian diasporic struggles, exaggerate their privileges, expose them to resentment, and lower the perceived need to collect data on their communities. In the American context, Museus and Kiang (2009, 7-11) argue that the model minority myth is associated with five harmful misconceptions: [1] Asian Americans are all the same, [2] Asian Americans do not require the same attention given to Black, Latinx, or Native groups, [3] Asian Americans do not encounter major challenges due to their race, [4] Asian Americans do not want or need resources and support, and [5] post-secondary degree completion is equivalent to success.

A key throughline in all five misconceptions is that they all have something to do with the experiences of the Asian diaspora in *schooling*; this is also why they are all related to the ‘model minority’ stereotype which frame Asian minorities as docile, upwardly mobile, and whose mobility and docility are causes and effects of each other. Counternarratives related to schooling are thus of extra importance in the Asian diasporic context; they do not just raise awareness about Asian struggles in schooling, but also awareness of Asian struggles in other fields by way of challenging the stereotypes that impede institutional support for the data collection on these groups in general. Indeed, Cui (2019, 72) points to a lack of data concerning analogous issues happening in Canada and has called for more research on the harms caused by model minority stereotypes in the Canadian context. Cui (*ibid*) notes the hostile portrayals of

Chinese Canadians in the mainstream Canadian media, and points out that such forms of racism, much like its American counterpart, draw on stereotyped imaginations about Asians in schooling.

Pang and Mu (2019, chapter 9, EPUB) offer a slightly different perspective on why data collection on the Asian diaspora has been so lacking. Speaking specifically about the Chinese diaspora in both Canadian and Australian contexts, Pang and Mu (*ibid*) identify two major reasons, the first being the lack of a cohesive research community and the second being the lack of pedagogical continuity. This adds up to a situation where there is research being generated, but this body of research is atomized. The insights gained from the scattered studies are not pooled together, and the methodological experiences distilled from doing this work are not being passed on.

In terms of inserting my study into the existing conversations on diasporic visibility, this dissertation does provide some counternarratives to each of the five assumptions that Museus and Kiang have (2009) criticized. Beyond this, however, the issues raised by Pang and Mu (2019) are not easy to resolve, and no single dissertation can come close to improving the status quo. The visibility gap is a complex challenge, and for the moment, I must leave to one side what I cannot change.

Sociology of education

To the extent that the education-based model minority myth is an ideological culprit for undermining data collection on Asian Canadians, sociology of education holds the lock and key to political visibility for not just Asian Canadians in school, but Asian Canadians more broadly.

The discursive visibility of Asian Canadians in the sociology of education is a litmus test for how much the model minority myth is being challenged, and thus, how easy it is to justify and conduct studies on Asian Canadian communities in general.

In the sociology of education, there is already an ongoing discussion about the presence of general inequalities in schooling, as well as a related discussion about the role of schooling in the reproduction of those inequalities. These discussions have a robust history, and foundational works in this regard include Willis (1978), Bourdieu & Passeron (1990), and McLaren (1989/2006). Other major texts include Bourdieu (1996), Wotherspoon (2009/2014), and Reay, Crozier and James (2012), amongst many others.

In the Canadian context, the comprehensive description from Wotherspoon (2014) represents one of the most recent metanarratives in the sociology of education. It is worth hashing out where and how Asian Canadians fit into this metanarrative, and we can take this as a first approximation of how much visibility Asian Canadian issues receive in a liberal political environment. I will also preface this by saying that this review is not intended to be polemical. The metanarrative is intended to be an accessible textbook, and it follows a format that compels the author to present a wide breadth of views without explicitly inserting his own. Thus, his metanarrative is more so a reflection of aggregate opinions in the field, and less so a reflection of the author's own opinions (which cannot be inferred based on the text).

First, there is an awareness in the text that South and East Asian students are disproportionately streamed into STEM disciplines (*ibid*, 135), though an explanation for this is not immediately offered. Second, in a shortlist of urgent racial issues in schooling, direct references to Asian Canadians are conspicuously absent while mentions of “Muslim”, “Jewish”, “black”, “Anishnabe”, “Latino”, “West Indian”, “Caribbean”, and “Aboriginal” identities all

appear at some point on the list (*ibid*, 136-137). At most, there is one item on this shortlist that makes an oblique reference to the exclusion experienced by “international students” on post-secondary campuses (c.f. *ibid*, 137). Third, useful theories for critiquing and explaining streaming are mentioned, but not in the same context as the discussion about streaming and race (*ibid*, 211). Instead, this theoretical nuance appears in a separate chapter dedicated to discussing schooling and work. Fourth, in a section dedicated to summarizing racial disparities (*ibid*, 256-260), the label of “Asian” is mentioned only once, just to highlight their concentration in high-paying STEM jobs (*ibid*, 257). The more specific label of “Chinese” is mentioned another time, to emphasize how they, along with “Jewish” groups, have the “highest average years of schooling and are most likely to have a university degree” (*ibid*, 259-260). Fifth, while there is awareness of underemployment as a phenomenon (*ibid*, 233), and even awareness of how underemployment affects immigrants (*ibid*, 221), in moments where statistics confirming anti-Asian stereotypes come explicitly to the fore such awareness is not mobilized.

The significance of “international students” in the metanarrative does not become obvious until we read this topic in tandem with the history of skilled migration in contemporary Canada. This points to the need for the sociology of education to situate the experiences of ethnic minorities against the larger backdrop of labour migration, much as it already situates classed experiences against the backdrop of the economy. As Li and Lo (2012) have noted, Canada shifted its skilled migration policy in 2002, when it was realized that Asian migrants who were selected based on their credentials were underemployed and were not integrating – not even economically. The blame was placed on migrant language skills, the standards of migrant admissibility became weighted more heavily towards English or French proficiency, and the focus of recruitment shifted from skilled families to skilled international students.

As Cui (2019, 72) has noted, even on statistical grounds alone the deployment of simplified numbers that reproduce model minority stereotypes often involve controversial methodological decisions, such as only looking at the average income for groups without controlling for the actual level of education they have, or only looking at the average education level for groups without disaggregating different institutional types within groups. This is not even to mention how purely econometric standards ignore unique needs for counselling and mental health (c.f. Sue 2013; Sum 2013), or how simplified portrayals of credentials coincide with openly racist diatribes in the media (Cui, 2019, 72).

We can see on the whole that the prevailing doxa in the sociology of education is of two minds on whether Asian Canadians matter. On the one hand, the metanarrative has all the tools needed to foreground the status of Asian Canadians with greater nuance, such as critiques of streaming and underemployment. On the other hand, these tools are not being used to do so in the metanarrative, possibly because dominant taxonomies of sociological knowledge tend to frame labour problems and racism as separate conversations.

Last but not least, critiques of education should not narrowly define outcomes as jobs, or credentials, or even the match between credential levels and income levels. Democratic participation is also an important outcome, as that can impact whether you can participate meaningfully in the public sphere. Feelings of national or social belonging are also an important outcome, as these can impact what you do when you have no job and feel isolated. Mental and physical health are also important outcomes, related to whether the job that lets you make a living is also slowly killing you. All of these things can be impacted by and through schooling. In my study, the participants' political outlooks and their modes of political participation are the

“outcomes” of schooling that I focus on. With this in mind, I turn to the next section, where I switch gears and review some existing literature on political socialization.

Social determinants of political stances

Broadly speaking, the literature on the social determinants of politics is abundant, but much of that literature resides in the field of political science rather than sociology. Notwithstanding the centrist, statist, and often Eurocentric tendencies commonly found in this kind of research, its universalizing ambitions coupled with its empiricist pragmatism can circumvent the model minority conundrum. Compared to some of the more radical traditions, this type of literature is less likely to focus on singular demographics and issues, and can better ensure a baseline level of coverage for demographics with less political visibility.

The study by Norris (2004), which investigates the relationship between electoral structure and political participation in over twenty different countries, can be considered a core textbook in this regard. One key insight from Norris (*ibid*, Chapter 9) is that in countries with “majoritarian” political systems (which is the norm in Anglo-Western contexts), minority participation is far more dependent on targeted recognition, on a group-by-group basis, by bigger political blocs. By corollary, a side effect is that minority groups are more likely to compete with each other for mainstream attention. This is an interesting perspective to complement existing understandings of model minority discourse. While the critique of model minority discourse reveals why Asian Americans do not receive targeted recognition, now we have a broader explanation explicitly stating that targeted recognition is a key ingredient in the political participation of minorities.

A more recent study by da Silva, Clark & Cabaço (2014), which investigates the relationship between sociocultural engagement and political progressivism, also provides important support for my research premises. As with the case of Norris (2004), notwithstanding some of my disciplinary reservations about da Silva, Clark and Cabaço's typology of nation-states, ethnic cultures, and citizenship, their interest in the connection between sociocultural engagement and political progressivism is of direct theoretical relevance to my study. Two claims in this work are particularly noteworthy. First, in many Western democracies, the perceived decline in traditional electoral participation in recent years is accompanied by an increased participation in the artistic avant-garde. The authors go so far as to say that if such artistic engagement is rolled into political engagement, then the much-purported decline of political engagement in Western societies disappears (*ibid*, 359). Second, national contexts that have historically been Protestant seem to feature the tightest correlations between art involvement and progressive disposition, although varying degrees of art's impact on politics is observed even in other historical-religious contexts. To the extent that we entertain these claims, we can say with some confidence that the connection between art and politics should be quite high in Ontario, which was decidedly Protestant throughout Canada's colonial history. Thus in the context of my research, it would give credence to the underlying suspicion that a non-art or even anti-art social trajectory would have some form of political consequence.

Studies of conservative subcultures and movements

Although the sociological study of conservative subcultures has a fairly dated intellectual genealogy that can at least be traced back to the Frankfurt School if not earlier, the sizable revival of this topic is fairly recent and largely based in the US. This particular sociological

genre, in its modern American manifestation, is exemplified by Gross, Medvetz & Russell (2011). Gross et al provide a review that brings together the scattered studies on this topic that have occurred over the years and also provide a mission statement regarding the critical and ultimately progress-oriented ethos of the genre as a whole. They point out that sociology has been slower than other social science disciplines, such as history, political science, and journalism, in studying conservative subcultures. Gross et al single out three branches of sociology in particular that have passed up key insights because they did not pay enough attention to this topic: sociology of intellectuals¹⁴, theories of social change, and scholarship on stratification (*ibid*, 325). Of those three branches I am involved in the latter two, and I very much share this concern.

In the years following Gross et al (2011), other scholars such as Dietrich (2014) and Hochschild (2016) have also taken up this task. Similar studies in other Anglo-Western contexts remain sparse. The study of conservative subcultures within minority contexts is even rarer. The only relevant study I have seen to date in this regard is a very recent dissertation by Kwak (2016), which is a historiography of Conservative Asian Canadian members of the federal parliament and a discussion of how they are embedded in broader governmentalities of racial governance that narrows the range of Asian Canadian political scripts.

¹⁴ Which I think should more accurately be called “historiography of political thinkers and pundits”, although Gross et al do make an interesting argument for adopting a more neutral stance on the word “intellectual”.

Chapter Summary

The purpose of this chapter is to identify the traditions, topical areas, or discursive communities that are of potential relevance to my research. In doing so, I am aiming to clarify how my project is positioned in relation to the topical areas that it draws from, talks to, or talks back to. These topical areas include feminist STS, migration and diaspora studies, the sociology of education, political science studies on electoral behaviour, and the sociology of conservative subcultures.

Much of this review is haunted by what I see as a significant visibility gap for Asian Canadians, rooted in model minority stereotypes that make data collection on Asian communities more difficult to justify. Sociology of education is a key battleground where counternarratives must be created. This is the place where Asian Canadian success is most likely to be methodologically exaggerated by simplistic assumptions about how easily credentials convert to money. It is also the place where Asian Canadian plights are most likely to be methodologically trivialized by reductionist views of educational outcomes, and indeed, reductionist theories of capital and human needs. Here, I reiterate my view that the nuance given to Asian Canadian issues in education research is a litmus test for the political visibility of Asian Canadian experiences more broadly. Moreover, I see political socialization as a major non-economic outcome of schooling, and it is this non-economic outcome that I set out to examine in my dissertation.

Chapter 3 – Methodological Paradigms

Chapter Overview

The focus of this chapter is to clarify some of my methodological commitments, justify moments where my project exhibits a mixed paradigm, and explain how my choice of paradigms meshes with a Bourdieusian theoretical framework. Through the process of doing this, I will also, as a matter of course, touch upon the methods and strategies that I have used to conduct my research, although a more detailed discussion of methods will take place in the next chapter.

A preamble on blurred paradigms

Research projects must operate under some kind of paradigm, worldviews that determine what researchers look for and what they do with what they find. Tracy (2013, 39-49) has outlined four major paradigms that can underpin social research. Positivist research looks for objective facts and tries to distill patterns and natural laws from those facts. Interpretive research looks for lay human perspectives and tries to give those perspectives a voice. Critical research looks for social inequalities and tries to analyze how they might be changed. Postmodern research looks for ambiguities and tries to emphasize the lack of absolutes in social life. Other social methodologists have supplied similar delineations between paradigms, such as Denzin and Lincoln (2011, 102-115) who divide paradigms into the categories of positivist, constructivist,

critical, and participatory, categories that are roughly equivalent¹⁵ to the delineations made by Tracy.

Different social methodologists have come up with different ways of delineating the different aspects of a paradigm, and here I am primarily going to use Tracy's (2013, 48-49) delineations as a basic starting point. In Tracy's scheme, the different aspects of any paradigm can be delineated as follows: [1] ontology of the paradigm, [2] epistemology of the paradigm, [3] goals of the paradigm, [4] traits of a good researcher within the paradigm, [5] strategies of data collection common to the paradigm, [6] analytical focus of the paradigm, and [7] characteristics of theory creation in the paradigm. These "aspects" can be viewed as questions, to which each established paradigm has a fixed set of answers. For my project, aspects [1] and [2] match the profiles of a critical paradigm, while aspects [3] and [6] match an interpretive paradigm. Other aspects are more complex, and I will explain the details as we go through each of these seven aspects section by section.

Ontology

In line with how Tracy has defined the ontology of critical paradigms, I believe social reality is "constructed through power and shaped over history". For example in my particular research context, this could mean that the "preference" my demographic seems to have for private sector trajectories, and particularly STEM trajectories, is a kind of "social reality". Simplistically speaking, there are many forms of powers (not all of which are negative) shaping

¹⁵ Compared to Tracy, Denzin and Lincoln see a greater difference between "positivist" and "post-positivist". Tracy does not frame them as radically separate categories, while Denzin and Lincoln lean towards doing so. Nevertheless, the broader delineations are largely equivalent.

or reproducing the demographic over time, such as labour-based immigration policies and neoliberal urban schooling.

Moreover though, beyond what is said in methodology textbooks, I think there is something else that should be included in my “ontology” section, namely the metaphysical assumptions that follow from employing a Bourdieusian theoretical framework. In this particular project, I can see four philosophical assumptions about what exists in social reality.

[i] There exist different social positions. Moreover, the divisions between social positions are more fundamental than the divisions between demographic groups.

[ii] There exist different forms of capital. Moreover, any social position has, and can be defined by, an associated capital volume and capital composition.

[iii] There exist social microcosms called fields, which can be viewed abstractly as configurations of relations between positions. Moreover, humans who are embedded in a field acquire specific habitus, which are mental, physical, and emotional dispositions, based on the nature of the field itself and the positions they occupy within the field.

[iv] There exist homologies, which are transfers of schema between fields based on perceived similarities between field structures. When humans move from a familiar field to a less familiar one, these structural similarities will, rightly or wrongly, exert heavy influence on their perceptions and actions.

These assumptions will have implications on how other aspects of the methodology pan out, as we will begin to see as soon as we start to discuss epistemology.

Epistemology

In line with how Tracy has defined the epistemology of critical paradigms, I see social knowledge as being often hidden and distorted, frequently in ways that conceal power. Beyond these general terms though, I want to continue my train of thought on how a Bourdieusian framework impacts my epistemology.

As I have explained above, the project is ontologically assuming the existence of fields, habitus, positions, capital, and homology in the social world. Epistemologically, the question then is how and why these things might be hidden in society, and how hard it is to uncover each of them.

At the outset of the project, I had some concerns that “field” would be a difficult unit of analysis for a logically limited project. As Bourdieu and Wacquant (1993) have said, fields are very difficult to pin down, especially considering how the daily politics within any field can put its field boundaries in constant flux. With the benefit of hindsight, I think the “field” in this project can either be the STEM-related disciplinary stream and the school-to-corporation pipeline that it implies, or it can be the ethnic niche of cheapened technological labour that represents the terms of my participants’ families’ migration as well as the terms of their belonging.

This particular understanding of the project’s field was not something I identified directly, but through indirect means by looking at habitus and homology. In the theory chapter, I have framed habitus in several ways – as a set of contextually ingrained dispositions, as an embodiment of previous environments, as a set of coping mechanisms for past problems, and as a set of lay epistemologies for confronting the unknown. In my project, there are plenty of

dispositions, coping mechanisms, and lay epistemologies, so there is an overabundance of moments where habitus comes to the fore. Here, I say ‘overabundance’ because, at first glance, there may not be any rhyme or reason to a scattered parade of dispositions. But once we overlay those dispositions with the powerful homologies that emerge in participant discourse, we can piece together a great deal about the structure of their field.

Working with homology involves two components that oftentimes coincide. First, from a third-person’s point of view, I have to identify analogous symbolic structures across different moments of quotidian life (e.g. when a participant conflates multiple dichotomies with each other while expressing an opinion). Second, from a first-person’s point of view, I have to spot moments where individuals carry old schemes into new contexts (e.g. when they apply scholastic-ascetic standards of docility and stoicism to judge candidates in political elections). In my interviews, homologies of various kinds came to the fore very easily. The key here is to recognize an underlying pattern beneath the homologies (c.f. Bourdieu 1977, 87-88; 1990, 86-87) and use that underlying pattern to deduce the structure of the field.

The underlying pattern beneath the homologies, as well as the opposing habitus and their respective practices, turn out to be the opposition between the acceptance or rejection of one’s economic and social niche and the streaming that comes with it. This opposition, mediated through family, school, and peers, is ultimately rooted in the conflict between different forms of capital. These different forms of capital, both in terms of volume and composition, gives rise to a range of positions within the classroom, the participants’ social networks, and the outlooks of the participants themselves when they make sense of society. Thus with the benefit of hindsight, the concepts of capital and position manifested very easily during analysis, almost on their own.

There is a heavy element of interpretivism in my overall approach since I am somewhat reliant on my participants to co-create knowledge with me. The importance of sharing narratives and giving voice cannot be overstated in the context of this work. At the same time, however, there is also an explicit critical bent. I am dealing with a field that can be very depoliticized, in the sense that there is a high pretense of neutrality and low availability of political discourse. Trying to uncover hidden and often unconscious political moments resourcefully is, in my view, still very much within the spirit of a critical paradigm. A minor caveat here is that rather than assuming that it is the “people in charge” that are hiding all the political information, I make room for the possibility that such information is hidden by all sorts of actors through all sorts of forces. This should not be a paradigm-level problem in any case, as even the very straightforwardly critical paradigms such as those from the Frankfurt School make room for categories such as “systematically distorted communication” (e.g. Habermas 1992) where hidden politics are not consciously hidden by anyone.

Goals

As stated in the introduction, the goal of the project is to increase the political visibility of the social position from which I draw my participants. At an objective level this means coming up with a coherent account of their political socialization; at a subjective level, this means sketching a map of their worldviews.

The goals of the research can either be perceived as critical or interpretive, depending on the perspective of the methodologist. In Tracy’s (2013, 48) framework, the interpretivist asks the whys and the hows, while the critical theorist asks “what should be”. Viewed in this way, my

project leans towards the interpretive side, since I am asking how and why my participants' worldviews developed the way they have. In my analysis, I ask a lot of whys and hows concerning my participants and their life choices but mostly avoid making judgments about "what should be", because judgements about people's circumstances should wait until we understand something about what those circumstances are.

As a potentially illustrative cross-comparison, in the framework of Denzin and Lincoln (2011, 106) my research goals will instead come across as being more of a halfway mix, rather than leaning purely towards the interpretive side. Denzin and Lincoln's criteria for what is critical and what is interpretive differs slightly from the criteria put forth by Tracy. According to Denzin and Lincoln, the goal of critical research is to identify power structures¹⁶ and get disempowered people to question aspects of their everyday lives. Meanwhile, goals for interpretive research are more ambiguous, but it can include things like understanding the meaning of lifeworld phenomena and reconstructing the rationale behind the participants' lay practices. Given the way critical goals are framed, my goal of identifying the powers that compel participant life choices straddles between the critical side and the interpretive side. Meanwhile, I am not enthusiastic about commanding participants to question their own lives, as this turns freedom into an onus and corrupts the very purpose of freeing anyone. Nor am I going to go to the other extreme, take participant narratives at face value, and unrealistically overemphasize "co-constructing knowledge" with them when they are embedded in meritocratic, corporate, or populist ideologies. Although pontification against false consciousness is not a good idea in this

¹⁶ The word "structure" should be understood more loosely here, rather than being understood in a Bourdieusian way where it could be construed as a synonym for "field".

context, naïve belief in the co-construction of knowledge is not going to work either. What we need here is to keep a pragmatic balance.

Professional and political priorities of the researcher

Most if not all qualitative research paradigms explicitly demand the researcher to have certain moral traits, and hence certain professional and political priorities, though opinions amongst methodologists vary regarding what each paradigm demands. In discussing my research priorities I am mostly going to stick to the categorization scheme offered by Tracy (2013, 48-49), though I will also refer to Denzin and Lincoln (2011, 106-115) at various places for a different perspective.

According to Tracy (*ibid*), the emphasis in an interpretive paradigm is for the researcher to maintain reflexivity and have a sober view of the background that embeds the research itself. Meanwhile, the emphasis in a critical paradigm is for the researcher to maintain a sustained effort to scrutinize how power structures and relations affect the research scene. In light of Tracy's categorizations of what is interpretive and what is critical, one can see that any Bourdieusian project will probably fall somewhere in between since a Bourdieusian framework possesses both a strong critical bent and a high level of attention to reflexivity. In my project, my approach also features this kind of mix. On the one hand, I have an interpretive leaning because I am very much an insider to the participant community, and reflexivity in this scenario is very much needed practice. Throughout my analysis in the later chapters, the reader will see that many of the symbolic conflicts in the lifeworld are organized around the clash between economic and cultural capital; this is a clash in which I am not neutral and, by the very fact of being a

researcher, cannot hope to be. On the other hand, I also have a critical leaning because those symbolic conflicts are rooted in real, overlapping structural conflicts. In the analysis chapters, there are extensive discussions of how gender and class enchant the petty rivalries of quotidian scholastic life in a way that deeply entrenches masculine hegemony within STEM, as well as how race and class play their roles in reproducing the STEM-based trajectories that railroad migrant youths towards corporate values.

One can also consult Denzin and Lincoln (2011, 106-115) for an alternative view of where I stand as a researcher. The paradigm categorizations of Denzin and Lincoln, in general, tend to deemphasize framing research priorities as reflections of researchers themselves, but they have nonetheless made some points that are relevant to the discussion at hand. Two of these points, voice and researcher posture, are of particular importance.

In terms of voice, the critical paradigm emphasizes an activist or advocate identity for the researcher and more or less subordinates voice-based considerations to the goal of driving social change. In a scenario where only the researcher truly wants change, the critical paradigm would greatly emphasize the voice of the researcher. Meanwhile, the interpretive paradigm is comparatively less concerned about change and puts more emphasis on the participants' voices. Denzin and Lincoln even characterize researchers of this paradigm as "passionate participants" who are responsible for reconstructing multi-voice narratives. Once again my approach falls somewhere in between. The interpretive element is due in no small part to the simple fact that I am an insider to the participant community, and that I am the final participant at the end of the study. The critical element is very much there as well because my intentions are related to advocacy.

In terms of researcher posture, the critic is framed as an activist and transformer, while the interpretivist is framed as a co-constructor of knowledge. At first glance, I would appear to lean towards the latter, although on a less obvious level elements of the former also apply. On the one hand, the demographic I am looking into does not necessarily want to mobilize, is unclear about what it would mobilize for, and is not ready for mobilization. In this sense, it would be foolish and elitist for me to try to “transform” anything, so being a co-constructor of a narrative is, by comparison, a much more sensible alternative. On the other hand, however, there are two caveats to that picture. First, I do believe that mobilization is the right path for them, and even though I am not forcing them to accept my beliefs, it is nonetheless this belief that motivated the project. Secondly, to the extent that this demographic is a more or less silent demographic whose voices are seldom solicited let alone heard, the mere fact of saying anything to anyone who holds potential publishing power is always already political. To the extent that the participants’ needs, experiences, and perceptions are not well-documented in mainstream political discourse, mere participation in a study where they can say something is already a kind of progress. Thus some transformation is happening, and no matter how tautological it may seem it is nonetheless not trivial.

Research strategies and methods

In terms of strategies and methods, my project once again falls somewhere between being interpretivist and being critical. The main strategy of the research is to *identify homologies*. Doing so in my research context fulfills both a critical as well as an interpretive function. For participants in the lifeworld, homology is like the glue that holds their worldview together. In a lifeworld that emphasizes order, patterns, and rationality, the symbolic cohesion of the status quo

directly contributes to the perceived legitimacy of the status quo. In this sense, mapping meaning is not all that different from mapping power.

In this project, semi-structured interviews are the primary means of data collection. Interview data more or less implies discursive data, and discursive data is quite conducive to capturing homologies. In this particular study, capturing homologies means going through participant narratives, looking for symbolic as well as structural dichotomies¹⁷, and keeping an eye out for moments where there are category slippages between dichotomies. These homological slippages are moments of sense-making, and they are significant because they are illustrative examples of how dispositions acquired in one context can become the basis of one's predispositions in a different context. And of course, my whole investigation can be viewed in this very light: *as an investigation of how dispositions acquired in migration-driven STEM trajectories can become the basis of one's predispositions in the context of civic participation.*

The semi-structured design of my interviews strikes a good balance between the critical and interpretive intentions behind this project. The open-ended aspect of the interview was indispensable for understanding the subjective perceptions and priorities of the participants, while the close-ended aspects ensured that most of the core topics (especially the politicized topics that are not considered common sense in the lifeworld) would still be touched upon during our interaction. As concrete examples, in my analysis chapters the reader will see that on the topic of high schools, my interactions with the participants are relatively less structured, sometimes almost to the point of interpretively “co-constructing knowledge” with the participant.

¹⁷ Of course, not all symbolic schema are of a binary nature. But it so happens that binary schema encode social conflict and political struggle very readily, so it is worth focusing on dichotomies even though not every schema is a dichotomy.

Meanwhile, on the topic of politics, my interactions with the participants are comparatively more structured, definitely exhibiting a more critical bent.

Analytical focus

In Tracy's (2013, 48) classification, interpretive research focuses on making sense of the scene and providing coverage to the subjective experiences of the participants, while critical research focuses on pointing out domination and aiming for change. In this classification, my current project leans towards the interpretive side, as I am prioritizing voice-giving and sense-making. As I have argued earlier in this chapter, I do not think it is a good idea to transform a social world that one does not even understand¹⁸. For example, it would be very arrogant of me if I just told every participant that they should follow the news, join rallies, take part in community events, and go vote, without even bothering to understand what their life choices mean within their lifeworld context, and then expect them to accept on faith that doing those things will truly improve their lives. That is not what I am interested in doing. That said, my emphasis on interpretation does not mean that I am “against” having a critical focus. Even a traditional¹⁹ critical theorist would surely recognize that there are real underlying conditions to political consciousness and false consciousness; getting at those underlying conditions requires us to not only see past the face value of lay narratives but moreover to understand what these narratives mean. In other words, even critical work is not free of interpretive movements. As I have argued

¹⁸ Even I do not claim to wholly understand this community. In a Socratic sense my motivation derives from the fact that at least I know that I do not know, and that there is something to be known.

¹⁹ When I say “traditional critical theorist”, I have in mind primarily the Frankfurt School and the Marxist influences they are drawing from, seeing as how “Critical Theory” is usually associated with this school of thought. The intended audience of this whole statement is mostly the methodologists who like to differentiate between “critical” and “interpretive” schools of thought, and who sometimes perceive critical theory to be an “old” theory. I am not sure if I agree with these methodologists, but I will, for the moment, refrain from defying dominant taxonomies.

at length in the literature review, my position does not differ too much from traditional critical theorists in terms of scrutinizing “underlying conditions”, barring my refusal to assume what those conditions are without engaging the lifeworld.

More specifically and concretely, much of the sense-making in my project revolves around mapping out the sympathies and antipathies of participants, across a variety of (potentially homologous) symbolic oppositions immanent to the lifeworld that we once shared. I have looked for homologies between their biographical likes and dislikes during their early teens, their quotidian likes and dislikes while in university, and the political likes and dislikes they have developed in the first decade or so after graduation. Moreover, I was particularly vigilant for moments when those likes and dislikes occur along the lines of gender, “race”, or capital, whether overtly or covertly.

Another caveat to this approach of subjective sense-making is that I do not always take participant narratives literally at face value. Even though I value the subjective perceptions of the participants, I am not going to naively frame their narratives as “truth”. As Kennelly and Poyntz (2014, Chapter 1, EPUB) have pointed out in their phenomenological guidelines for the study of youth cultures, when participants speak, the key is to understand the structures that are speaking through them. Thus there is a place for critical attitudes in interpretive approaches.

Theory construction

Tracy’s (2013) final aspect of paradigm difference concerns theory construction. Tracy argues that compared to positivist paradigms, all others (including both interpretive and critical) call for hypotheses that are much more loosely held, and concurrently feature a much more non-

linear and iterative process of verification and analysis. Thus in this instance, it is not as important to hash out the commensurability considerations between interpretive and critical paradigms. However, there is still something to be said about how my project generally deals with theory-building. In the following paragraphs, I am going to give a reflexive account of the methodological considerations behind my theory construction, putting more emphasis on the practical process and less on the theoretical arguments themselves.

I want to start this conversation about theory construction by noting that my project is limited in scale and scope, and has neither the intention nor the means to suggest or amend macro-level theories. At most, my project performs three theoretical maneuvers that may contribute something to the various debates in social theory. First, I am presenting a scenario where the categories of gender, race, and class do not simply additively “intersect” but instead mix and blend into each other in mutually entrenching ways. Second, implicit in my analysis is a particular class typology that defines the “petty bourgeois” class faction in a way that is based on capital composition. Thirdly, within the Bourdieusian tradition, I am casting some doubts on the conventional practice of associating education primarily with cultural capital instead of other forms of capital (c.f. Archer et al, 2015). Now I will talk a bit about the iterative polishing that went into each of those theoretical maneuvers during the research process.

First, regarding the “blending” that happens between different power relations, my initial inspiration or “loose hypothesis” is derived from Faulkner’s (2000) account of there being a process of “co-construction” between gender and class within engineering lifeworlds. Extending this co-constitutive model to race within the engineering lifeworld was one of the early aims of this project well before any extensive preparatory research took place. While I was drafting the proposal I had lost sight of this original motive, and I never purposefully solicited this theme in

my interview questions during fieldwork. During analysis when I was scrubbing various accounts of undergrad life for homologies, I was pleasantly surprised at the realization that the three-way co-construction between gender, “race”, and capital was an emergent theme. So long as dichotomies homologate onto each other in the social world, they are in a position to become mutually reinforcing structures. In particular, there is evidence that during undergrad life, classed distinctions between effort and ease was being mapped not just onto class, but also intermittently onto gender and ethnonational belonging. From there I can go on to suggest that, through the keenly felt lifeworld distinctions around learning styles, the categories of race, gender, and class become symbolically co-constitutive.

Compared to the first theme about identity co-construction, the second theme about the lower middle class was something I held onto much more tightly and deliberately throughout the research process. Although I have cast this class label in a Bourdieusian light and made a move to define it through capital composition, my “loose hypothesis” about this particular class originated from Frommian psychoanalysis. Although the theory is difficult to mobilize directly in sociology, it is notable for drawing a connection between the petty bourgeoisie and right-wing populism, and just as importantly for framing authoritarian dispositions as one of the coping mechanisms for deeper problems related to atomizing isolation and alienating conformity (see Fromm, 1941/2013, EPUB). Meanwhile, in the Bourdieusian tradition, capital composition has long been framed as a major determinant of both cultural tastes and political leanings (e.g. Bourdieu 1984; 1991). This became my first practical guideline on how to draw connections between political identification and social experiences. After fieldwork, I was quite surprised to see the tight match between theory and reality, with economic capital mapping onto the Conservatives, cultural capital mapping onto the Liberals, and with the moderates on each side

exhibiting capital composition atypical for their side. From there, I thought it might be interesting to overlay Frommian psychoanalysis on this whole set of results to furnish my sociological account with more psychosocial depth. So what I did at a conceptual level was to overlay just the very general husk of Fromm's (1941/2013) model of right-wing populism with the kind of right-wing populism I encountered in my fieldwork, and then connect that populism to economic capital vis-à-vis Bourdieu. Such was the thought process behind my eventual decision to use the label of "petty bourgeoisie" to designate broadly middle-class²⁰ people who exhibit an economy-heavy capital orientation.

Lastly, there is my third theoretical point, which locates both economic and cultural capital existing in tension within the school, thus slightly²¹ upsetting the traditional association between schooling and cultural capital. On this matter, my "loose hypothesis" in the beginning was nothing more than an acute awareness of what I sometimes call the "science-art divide" within education. It was less of a hypothesis and more akin to just a kind of sensitivity to a particular theme. It was only much later on during the research process, after the emergence of a tight relation between capital composition and political disposition that I started to explicitly rethink the science-art rivalry as a capital rivalry. From there, it followed that if we explained

²⁰ As one might recall from Bourdieu's (1984/2010) distinction chart, as one's total volume of capital becomes lower it becomes less likely for one to take extremes in terms of capital composition. In such a model, a minimal baseline volume of capital must be met for economy and culture to even begin diverging. Usually I am inclined to specify either upper or lower middle class depending on capital composition, and here I say "middle class" only in the narrow sense that I have just mentioned.

²¹ I say "slightly" because I think Bourdieu's original texts in *Forms of Capital* did leave room for adaptation. Even in the old treatise from 1984, it can be argued that the only fundamental definition of cultural capital is that which defies instantaneous transaction. Thus in the context of schooling for example, the contrast between memorization and understanding can be viewed as the contrast between fast and slow ways of knowledge accumulation, a scenario in which only the slower, cultivated way oriented to understanding actually echoes this idea of defying the instantaneous trade between tuition and knowledge.

disciplinary tensions within the school as capital tensions, we cannot then simply associate the school as a whole with just one form of capital.

Chapter Summary

This methodology chapter outlines, and justifies where necessary, the study's straddling between two different paradigms, namely the interpretive and critical paradigms. This hybridization of paradigms manifests as a mixture of interpretive or critical leanings on different aspects of the methodology. These aspects include ontology, epistemology, goals, researcher's ethics, research strategies, analytical focus, and theory construction. This particular delineation of paradigm aspects largely follows Tracy's (2012) model of paradigm tensions, although I also cross-reference the model from Denzin and Lincoln (2011) as a source of second opinions.

As I have argued throughout the chapter, although my general aspirations lean towards critical research, in this particular project I am dealing with an understudied environment. To the extent that this understudied environment is unmapped and illegible to political critics, the interpretive preconditions for meaningful critique remain unmet. Thus, the goals of critical research in this context must include the establishment of a sufficiently nuanced interpretive foundation for any future critical gaze.

Chapter 4 – Methods

Chapter Overview

In the last chapter, I have gone over the more abstract methodological considerations behind the project. This chapter is meant to give a more detailed overview of the concrete nuts-and-bolts of my research methods, plus a few other addendums related to the methodology that did not fit well into the previous discussion on paradigms.

Being an ethnography, my project deals with real people; the nuts-and-bolts discussions on methods largely pertain to how I handled the logistics surrounding those dealings. Subtopics in this discussion include recruitment, sampling, interview techniques, and various considerations related to ethics.

Beyond the nuts-and-bolts discussions, there are two addendums. One is a set of brief biographies of the participants, which is meant to offset the potentially dehumanizing effects of a fragmented portrayal composed purely of excerpts. Another addendum is a reflexive discussion on the autoethnographic aspects of the project, and my dual role as both a researcher and a participant.

Recruitment

Participants were recruited primarily through emails. I recruited eight participants directly this way, while six more were introduced to my project through snowballing. I also participated in the study myself, bringing the total number of participants up to fifteen. All fifteen participants are alumni from my undergraduate program. In terms of ethnicity, all

participants are of either East Asian or South Asian descent, and all of them were born outside of Canada. Except for two participants, all of them are “generation 1.5” Asian Canadians who came to Canada in their preteens between the years 1997 to 2004. Moreover, except for two participants who are from later cohorts, everyone belongs to the cohort that entered²² the program in the fall of 2006.

Some complications emerged around the issue of participatory consent. Originally the project was designed to collect written consent, but when recruitment began I saw indirect signs that written consent was deterring potential participants. There were a series of recruitment failures near the beginning of the recruitment phase, and in each case, the potential participant stopped responding to email as soon as I gave them the consent form. Recruitment failures stopped happening once I changed to oral consent, which simply involved having participants give their spoken consent at the beginning of recorded interviews. The vast majority of participants were recruited on an oral consent basis in this way, and I shudder to think what would have happened if I did not introduce this flexibility.

Remarks on convenience sampling

The reason for using convenience sampling was to ensure an adequate number of participants. During the research planning stage early on in the project, I anticipated recruitment to be one of the biggest hurdles. Because I had serious worries about not getting enough participants, I began to peddle my research agenda to fellow alumni a year in advance of actual

²² Because there is an optional internship year built into the curriculum, it is much messier to conceptualize cohorts based on the year of graduation compared to the year of entry. Moreover, in my own experience within that environment, social ties among peers tend to be based on the year of entry rather than the year of graduation, despite the faculty’s official practice of tagging alumni by their graduation year.

fieldwork. From then on and throughout the fieldwork period, an alumnus who was willing to participate was invited onboard.

Throughout the research design, I operated on the assumption that a high degree of trust was required to get engineering students to open up about themselves and their lives. Moreover, I did not want to directly alert my undergraduate department (with all of its corporate connections and public relations power) that a defector was going to conduct left-wing investigations about student experiences in its backyard. For these two reasons, I did not engage in any anonymous recruitment via campus flyers and never advertised my project on social media except through private messages with people I knew fairly well. The result of these recruitment constraints was that my participants were mostly “friends” or “friends of friends”. The eight participants I recruited directly were all familiar faces from my network of alumni, and one of those eight familiar faces snowballed six more participants whom I knew very little.

A major issue created by convenience sampling is that although the project is intended to be about Asian Canadian engineering students in general, there were only two South Asians²³ in the sample. This seriously underrepresents their actual demographic weight in two respects. First, it underrepresents the South Asian presence in my undergraduate program. Although I do not have solid statistics, in my recollections there were about as many South Asians as there were East Asians in my cohort. Second, the project can potentially create a skewed representation of skilled migrant demographics. This is of direct relevance to my project,

²³ In my study, “South Asian Canadians” primarily refer to Canadians who can trace immediate heritage to countries in and near the Indian peninsula, including India, Pakistan, Bhutan, Sri Lanka, Bangladesh, Nepal and Maldives. Meanwhile, the immediate heritage of “East Asian Canadians” are traceable to China, Korea, and Japan. Of course no such labels can possibly be exact, although it is interesting to note that while “South Asian” exists as a category in the Canadian census, “East Asian” does not exist as an official label. Instead, Chinese, Korean, and Japanese Canadians are grouped separately by the census.

because what I have termed “STEM-bound Asian Canadian youths” more or less refer to the children of those skilled migrant families. As Li and Lo (2012) have shown, skilled migrants in Canada, especially in recent decades, are overwhelmingly comprised of migrants from India, China, and Pakistan. There are, in fact, more South Asian skilled migrants than there are East Asian skilled migrants. If I only collect data on the children of East Asian families, it does not create anywhere near a complete portrait of STEM-bound Asian Canadian youths and their lived experiences.

In light of the above considerations, I think the best way forward is to frame my project in the following way: I am looking into a very particular group of people to whom I have ethnographic access. I cannot say for sure how widely a group they can represent, but I have reason to believe that there are generalizable elements to their lived experiences, and I have evidence that there are structural causes behind their everyday practices. Moreover, on a moral level, I would rather err on the side of political overgeneralization rather than on the side of political monopoly. By this, I mean that I want to avoid a scenario where the fruits of my research only bring recognition to the one demographic I can more reliably access (i.e. East Asian Canadians from skilled migrant families with STEM-based socialization) at the expense of other groups who may need very similar kinds of recognition and visibility.

More generally, narrative research is especially prone to reproducing political monopolies. This is because narratives have protagonists, popular narratives have default protagonists and, whether we like it or not, popular political narratives have default claimants to justice. Granted, “STEM suffering” is not a popular political narrative in the current status quo; but should it ever become a pertinent one in the future, the default protagonist must not be framed too narrowly. In the case of my project, the intended protagonist is any STEM-bound

Asian Canadian youth, referring more or less to any generation 1.5 Asian Canadian youth whose parents are skilled migrants, and who themselves may or may not be struggling to navigate civic participation due to having a STEM-bound upbringing. Just because I cannot access a diverse pool of protagonists does not mean that the pool of potential protagonists should not remain diverse.

Remarks on sample size and generalizability

To reiterate a point from the introduction, the “sample size” of this study is quite small. Furthermore, not every participant was available to directly discuss politics, which further reduces the generalizability of any conclusions drawn in chapters 8 and 9. As I stated in the introduction, this study is not aimed at making definitive generalizations about all STEM-bound Asian Canadian youths. Rather, the goal is to name this demographic, and study one instance of it. Propositions that emerge from this study can then be verified or challenged by future studies of this demographic, which might involve a different urban setting or a larger sample size.

Moreover, beyond the question of sample size, my participants should not simply be viewed as representatives of a group. It is also possible to view them as counterexamples to dominant narratives, such as narratives about institutionalized cultural capital (i.e. diplomas and how much they prove about your class) as well as problematic narratives regarding supposed “Asian success” in schooling. These things cannot be reduced to simple questions of how many participants there are or how “typical” they are – whatever one might mean by typical.

Data collection – core interviews

At the onset of designing the research, the plan was to include a variety of methods for collecting qualitative data. Beyond the core component of semi-structured interviews, the original intention was to supplement this with a combination of walking tours and fiction writing activities. However, as the practical reality set in during fieldwork, semi-structured interviews became the only consistent method of collecting data.

The semi-structured interview, which was the core component of participating in the study, involved a scripted list of roughly fifty questions about various aspects of their childhood, their school life, and their opinions about various things that have direct relevance to the everyday life of a STEM student. If participants sound like they are onto something important, I prompt them to elaborate. Sometimes those prompts lead to long tangents that deviate significantly from the script; in which case I would circle back to the script after we exhaust the tangent. If participants go on tangents themselves, I do my best to humour those tangents and wring as much as I can out of whatever tangent they go on. In a similar vein to my recruitment considerations, my consistent priority is to generate a sufficient volume of data – this time not by maximizing the number of participants, but by maximizing the amount of speech per participant.

Of the fifteen core interviews, nine involved face-to-face interaction where I used a physical audio recorder. Of the remaining six, two interviews were typed in Skype chat without audio, and two more were recorded in Skype with audio. The last two participants were too busy with their lives to sit down in real-time, and so typed up their responses on Word documents. Of course, for those last two, managing tangents was not an applicable issue.

Data collection – additional interviews

Midway through fieldwork, after I had interviewed nine or ten participants, it became obvious that the original set of fifty questions about childhood and student life were not enough to bring out their direct opinions on politics. After conferring with my supervisor, it was decided that I would add roughly ten more questions to the interview script that directly solicited political opinions. For the first ten participants who had already been interviewed, this required an additional interview, to which not all of them consented. Of those ten participants, seven of them agreed to the addendum, and in four of those seven cases, the addendum took place remotely on Skype through audio chat. The remaining five participants who received the extended questionnaire did not technically require multiple sessions, although two of them consented to unstructured interviews afterwards.

Data collection – other methods

One of the deleted scenes of this thesis was the series of walking tours I did with some of the participants. One of the original plans was to record the semi-structured interviews while walking through our old campus, which could have sparked a range of generative tangents. Due to the realities of remote interviews, the plan could not materialize because not enough participants had time to do this. This component was meant to demonstrate Bourdieusian insights about homologies between social space and physical space. There are still vestigial remains of this component in chapter 6, although it is no longer focused on university life.

Another component that never came to fruition at all was the art-based methods where I planned to have participants sit down and do creative writing. The point of this would have been

to locate hidden politics behind how they imagine their settings and design their characters. Midway through fieldwork when I added ten additional questions about politics to directly solicit the political opinions of the participants, one of the alternative paths I could have taken rather than ask those ten questions was to remain circumspect and use fiction writing activities to bring out their moral beliefs. Practically, this latter alternative could not be carried out, because getting STEM-bound people to do artsy things required even more interpersonal trust than a traditional political debate. This is not to even mention the additional logistics that would have been involved in setting up and recording remote activities online.

Transcription and interpretation

When it comes to analyzing the data in my context, an important matter needs to be flagged. This concerns my practice of consolidating scattered sentences from participants into longer monologues. When I say I am “condensing” participants’ words, to a conventional audience it may sound as if I am cherry-picking convenient pieces of participant speech out of context, and then stitching them together to support my own biases. This is a grave misunderstanding and I am going to explain why this is not the case. The different pieces of any consolidated monologue are always taken from the same interview session. What usually happens is that the participant is on an important tangent, and I am going for a divergent rather than convergent conversation style to elicit more information. In other words, monologues that feature heavy condensing or fragment-stitching are usually the cleaned-up versions of tangential rambles, or at least an amalgamation of comments on the same theme that are spaced no more than two or three minutes apart in real-time. If I did no condensing at all, what the reader would get in place of every compact monologue is up to three pages of divergent fragmented thoughts,

broken up by frequent prompts that represent my efforts to either clarify what the participant is trying to get at, prod for an important theme or provide the participant with a sense of direction. On top of being highly impractical, such an alternative cannot truly provide the mainstream reader with a more accurate glimpse into a participant's worldview. It would merely end up fetishizing the supposed incomprehensibility of the foreign other.

Remarks on discourse analysis

My analysis of discourse is aimed at distilling generating principles that denote the possible existence of homologies. When I analyze participant discourse, the main thing I look for is oppositions and dichotomies. These dichotomies largely fall into several broad categories. (1) Who you are or who you are not. (2) What you deem to be within reach or out of reach. (3) What you perceive to be trustworthy or untrustworthy behaviour. (4) What kinds of social arrangements you are for or against. Once I have a participant's narrative, I look at whether there are structural or functional similarities between the different dichotomies that they have expressed or exhibited. Then I look at whether it is possible to distill a "generating principle" (c.f. Bourdieu 1977, 87-88; 1990, 87) from a group of structurally or functionally similar dichotomies.

Privacy and security measures

The participants are not drawn from any vulnerable groups; this means by and large, even in the event of a data breach, any leaked information about participant identity is unlikely to cause any harm. Moreover, because participants are drawn from a collection of social networks

that were once quite tightly knit, it is practically impossible to prevent scenarios where participant X manages to guess the identity of participant Y just based on Y's opinions or figures of speech. Nonetheless, there are two privacy measures in place.

First, there is the anonymization system. Participants are referred to by two-digit codes from 01 to 15. The codes are arranged in chronological order based on the date and time that we had our core interview, and the full details of this chronology are unknown to anyone except me. During transcription, when participants talk about other participants behind their backs, I censor their code names with the “###” symbol. When they bring up other names of people who are not involved in the project (who thus would not have code names), I censor their names with a random-length string of non-alphanumeric characters.

Secondly, during interviews, unless participants bring up their industry explicitly, I try to avoid identifying the industrial sector in which they are currently employed (i.e. I try not to talk about the “type” of engineering they are doing). Moreover, during transcription, I always censor the company name of whatever company the participant is working for. This is designed as a measure to negate any whistleblowing that may occur because I want to avoid a scenario where this project ends up pitting participants against their employers. In hindsight, whistleblowing did not occur, but I still think corporate-based liabilities are nasty enough to warrant the extra caution.

In terms of data storage, recording and transcripts are stored on a hard drive that never leaves my house and is never used by anyone else. In the original, written consent form, so long as participants do not explicitly request to censor certain parts of their narratives four months after the interview, I reserve the right to keep copies of both recordings and transcripts. After the project switched to oral consent, things became so informal that this particular detail was not

even discussed with the participants. The lack of a clear consent structure is admittedly a flaw in the research design. However, as I will explain in a later section on auto-ethnography, the logistics surrounding the project ruled out the possibility of a prim and proper research design from the beginning. Nonetheless, I want to stress again that this group is [1] less vulnerable to being harmed by the recorded information, and [2] sufficiently well-knit such that watertight anonymity is already impossible to ensure.

Auto-ethnography: a reflexive self-analysis

Since I am one of the participants, some discussion of auto-ethnography is in order. Since the study is not strongly phenomenological and does not involve recording my feelings and behaviours in real-time, I will not dwell here on concrete techniques of self-measurement. My role as a participant in the project is much the same as any other participant, involving a role-reversal where a specific participant acted as the interviewer and interviewed me with my own list of questions.

Instead, I am going to devote this section to a reflexivity exercise, where I analyze how my own life experiences have structured my approach to sociology. This is in keeping with Bourdieu's take on what reflexivity should truly be – neither as a blanket autobiography nor as an apology exercise where the researcher parades their traits and privileges. What it should be is an analytical treatment of key aspects of one's own life that most strongly shape one's methodological approaches and presuppositions – in short, to sociologically scrutinize one's sociological scrutiny.

My approach to sociology has a lot to do with the way I picked it up. I first encountered sociology in graduate school, when I started my Master of Arts in the discipline of education. I was an outsider to the entirety of the liberal arts at the time, having just finished an undergraduate degree in engineering science on the opposite side of the campus. Not only did I enter the field of liberal arts through an interdisciplinary faculty, but I was also the alumni of a multidisciplinary program in the field of natural sciences that I left behind. This schooling trajectory has structured a disposition that is always ready to see the whole of natural sciences as one unit, and the whole of liberal arts as another. Such a disposition leads to an above-average openness to psychology, philosophy and history in my general sociological work. This disposition also compels me to view engineering as being one part of a greater STEM-based bloc rather than an isolated discipline.

Beyond shaping my perceptions of interdisciplinary unity and meta-disciplinary conflict, my first year in graduate school exerted plenty of other influences on my sociological approach. One issue I want to talk about in particular is my sensitivity to idiolects, malapropisms, and metonyms of various kinds. My first year in graduate school was when I first began to converse closely with large numbers of people who were not STEM-bound. In addition to navigating seminar-based curricula in school, I also joined a debate club off campus where I encountered even more non-STEM people who have had life experiences drastically different from my own. In that phase of my life, I was anxiously cramming non-STEM mannerisms so I could function passably in artsy seminars, and this anxiety drove me to a bout of sustained engagement with difference on very vulnerable terms, which was something that would have exceeded the patience of many. Through it all, I learned the hard way that any attempt to communicate across barriers of class, culture, or discipline is fraught with misunderstanding. In fact, beyond the

exchange of simple pleasantries, understanding is the exception and misunderstanding is the norm. Pre-empting and preventing those misunderstandings, by way of culturally translating²⁴ what is being meant by the speaker, is a necessary task. In my analyses of participant excerpts in this thesis, the reader may notice at certain points that I appear to be ascribing meanings to participant speech acts that go beyond what their words seem to say. What appears as ascription is really cultural translation, and I can only hope that the necessity thereof is not underestimated.

There is a much longer reflexive methodological point I want to make concerning how I approach ethnographies. I can break this discussion down into two parts, although they are facets of a single topic. First is the symbolic significance that ethnography has for me on a personal level, and how the decision to do ethnography is homologous with other moments in my life. Second is the accessibility of ethnography to someone in my situation, and how that has shaped my approach to fieldwork.

When I first entered the liberal arts and began to understand what ethnography meant, it immediately represented the one thing that I could not hope to do. I did not know how to recruit, and I could not ever picture myself securing a sizable sample of willing participants. In terms of symbolic significance, ethnographic recruitment was homologous with two other traumatic things in my life: selling chocolate and doing calculus, which respectively explain why I feel alienated from ethnography and why I did it anyway. I am sure that to most readers this sounds pretty random, so I will explain the politics of this randomness at some length.

²⁴ To be clear, cultural translation here does not mean translating “foreign” languages to English. It means translating between different uses of English, differences fundamentally underpinned by a difference in class destiny.

Ever since elementary school, I was never a popular person, and I was not the sort of person who had much of a social life. One of the things I hated the most in elementary and middle school were the fundraisers. This was when the school gave us boxes of chocolates and expected us to sell them so that the profits could be donated to a worthy cause. The school would tell us these platitudes about how it is not necessary to go door to door, but for those of us who did not have relatives in town, did not have familiar neighbours, and did not have family friends who could easily spare money, it was either face the strangers or sell nothing. I had an upbringing that did not encourage talking to strangers, so I never tried to sell anything. This got me into serious trouble at school, and I learned at a very young age that I did not have the charisma or connections required to be a good person. Fast-forwarding to graduate school, ethnographic recruitment felt like a glorified version of selling chocolate, in the sense that [1] it required a lot of social capital, [2] official curricula do not acknowledge the privilege-based nature of this requirement, and [3] there are no institutionalized measures to bridge these privilege gaps.

If ethnography was so similar to selling chocolate, why did I persist? That is where the homology of calculus comes in. During undergrad, calculus was a weak area for me. It was a basic skill that I never mastered. It was taught²⁵ hastily in the first year; most courses in later years drew upon this skill, and the curriculum assumed everyone knew it. The environment was unforgiving and showed little mercy to failures, so there were no remedial opportunities for this skill, much less any semblance of ongoing support. Toughing it out in that environment taught me a life lesson: *beware of the basic skill that nobody teaches you* because that is what makes or

²⁵ "Taught" here is a strong word.

breaks your legitimacy in the discipline. I learned in undergrad that I cannot outrun these basic skills and that they will catch up to me and threaten to weed me out.

When I first started my graduate studies and suffered my first bout of humiliating culture shocks in the seminars, it became immediately obvious to me that my inability to communicate was going to be a disqualifying trait in any branch of the liberal arts. In a panic, I began to search for the artsy equivalent of calculus, the untaught basic skill that decided whether or not I belonged to the discipline. After blindly tracing the bibliographies of course readings, I came to the absurd and fateful conclusion that this untaught basic skill was the Theory of Communicative Action, and that this had to be crammed right away so that I could communicate in seminars. So I dived headlong into continental philosophy, reading up on Habermas, Foucault, Heller, Taylor, and Derrida, mostly by mistake.

In reality, this did not make me any smoother in seminars, but it did typecast me as a social theorist. Regardless of my moments of misrecognition, and the misrecognition from others I brought on myself in turn, the point is that in my subconscious, recruitment equals popularity equals communication equals untaught skill. Even though I did archival research for my Master's thesis, I felt that I had to eventually confront this untaught skill, through rote learning if necessary, or risk getting weeded out of the liberal arts. That realization did not make ethnography feel any less impossible, but it at least encouraged me to keep an open eye for miracles. If there was the slimmest of chances to pull off an ethnography, I was ready to take that chance. The alternative was to leave a basic skill unlearned in an environment that takes the skill for granted and expects it to be used. I had endured such torture already in undergrad, and I did not want to endure it a second time.

The miracle I needed came very suddenly at the end of my second doctoral year. I was on a conference trip to the city where I did my undergrad, and I was able to reconnect with a somewhat estranged undergraduate classmate. When I talked about my idea of wanting to collect STEM-bound life stories and tell them to an artsy crowd, he became intrigued²⁶ and offered to snowball. All of this was pencilled in over a lunchtime meal, and all of a sudden I knew exactly what to write for my doctoral proposal. I just had to tailor my research design around the type and the size of the crowd I expected to get. So as it turns out, having a neat and orderly research design is secretly predicated on being able to count on a large participant pool and a reliable recruiting process.

The significance and meaning of being an ethnographer strongly shaped how I did my ethnography. When recruitment formally began after my proposal passed defence, there were various hitches related to collecting written consent. As soon as the hitches happened, recruitment anxiety returned and everything regarding my future was once again in doubt, so I had to change to oral consent to re-stabilize the recruitment process. Once again, this goes to show that reliable recruitment is the precondition, and not the outcome, of neat research designs. In any case at the end of the day, convenience sampling became the only viable way to stabilize recruitment, and that is why this particular sampling method was used.

More generally, this overarching need to constantly ensure stable participation also resulted in a particular set of interview strategies that involved trying to make participants as comfortable as possible. For example, when there were interview questions aimed at measuring symbolic schemas, I would always preface those questions with a full warning that the next few

²⁶ This is significant – there is a real, unsatated hunger for visibility in parts of this community.

questions are designed to “measure your psychology”. Once those questions were over and done with, I would immediately explain, in lay terms, what it is that I am trying to measure. This way, it minimizes the possibility of participants feeling deceived. As another example, when I ask them to give their opinions on certain things, whether related to school or society at large, I tried my best to sound as if I am trying to invite a professional judgement. I rarely ask them “how do you feel about X”. Instead I would ask them to “assess X” or “rate X” or “suggest improvements to X”. The reason for this is because in a STEM-bound, objectivist, and masculine culture, feelings are considered vague and those who elicit them can come across as confused or dishonest. On the other hand, inviting participants to judge something from a position of expertise, at a distance and preferably from above, is a much safer way to go if the goal is to keep them comfortable. I followed this male-oriented heuristic even when interacting with the participating women, not the least because I think it is only right to offer them the same deferential tone.

The overall point is that all of these subtle interview heuristics stem from a single need: to prevent participant turnover. This then ensures a stable pool of participants and lays down the hidden preconditions for a neat research design. This approach to fieldwork stems in turn from my alienated relation to ethnographic recruitment, and the all-consuming need to prevent this miraculous chance of doing ethnography from slipping out of my grasp.

The significance of including myself as a participant

I want to talk a bit more about the act of using myself as a participant. The short version can be summed up as follows. Insider status is the underpinning of my interpretive licence, and

including myself as a participant provides an empirical picture of the degree to which I can claim insider status.

Since this study contains an interpretive component, it makes sense to be more forthcoming about where my interpretations are coming from. My relative confidence in my interpretations rests on the fact I have lived in the same environment as they have during our undergraduate years, and have shared similar childhoods with many of them for an even longer period. Whether the reader believes I am a credible interpreter more or less depends on whether the reader believes I am an insider to my community.

Based on the way I have defined STEM-bound Asian Canadian youths as a demographic, I fall into the demographic. Based on my scope of recruitment, I am an alumnus of the same undergraduate program as all my other participants. In these ways, I am an insider. However, I have left engineering, while most of them have not. I have rejected the private sector, while the vast majority of them have not. Even while in engineering, there were times when I felt like I did not belong, and that I did not want to be there. So then this raises a question: am I truly an insider? I think this question is difficult to settle, but the least I can do in this regard is to put myself under the microscope, subject myself to the same sociological scrutiny as everyone else, and provide an empirical baseline on how similar or different I really am.

Chapter Summary

In this chapter, I have summarized some of the nuts and bolts of my research design, particularly those aspects that relate to the logistics and ethics of recruiting, interviewing, and safeguarding real people. Moreover, I have given a brief biography for each participant to

mitigate the potentially dehumanizing side-effects stemming from a fragmented, excerpts-based format of portrayal. Lastly, I have offered some remarks on the autoethnographic aspect of my research, focusing mainly on disclosing how my own lived experiences have shaped my methodological approach.

Chapter 5 - The Classing of Memorization

Chapter Overview

This chapter constitutes the first part of the overarching argument that, in the scholastic lifeworld of my participants, the tension between economic and cultural capital is an underlying force that homologically connects learning styles, career choices, and political socialization. The chapter mostly focuses on the participants who migrated from China and seeks to locate issues of class and identity in the lay conversations around engineering learning styles. In particular, the analysis zooms in on the participants' retrospective opinions on the legitimacy of rote learning as a studying technique. The chapter demonstrates that there is an ever-present and deeply classed political struggle between economic and cultural capital in their undergraduate lifeworld, lying just underneath the banal practice of "memorization" and the divided opinions over its legitimacy.

My general argument in this chapter is that the dichotomy between memorization and understanding is an indicator of stratification – that is to say, stratified ways of navigating schooling. The general strategy in this chapter is to start by outlining and sorting some of the narratives that emerged during the interviews around the symbolic dichotomy between 'memorization' (i.e. rote learning) and 'understanding'. I have loosely organized these narratives into several segments for ease of presentation. The first group of narratives emphasize how "memorization" can sometimes become a negative status marker that separates bourgeois and petty bourgeois ways of engaging in school. The second group of narratives zooms in on a set of scenarios where some participants see "memorization" as a marker of ethnic identity. In the third group of narratives, I present vignettes that demonstrate the difference between what I call

“extrinsic” and “intrinsic” modes of doing school. In my view, this last difference is important, and its repercussions will become more apparent in chapter 9.

However, before all of that, I must start with a lengthy preamble to avoid some misunderstandings.

Preamble I: The problematics of anti-rote stigma

In this context, rote learning refers to a particular way of coping with schooling expectations. These coping mechanisms are geared towards passing evaluations and earning credentials. In STEM-based pedagogical environments, rote learning often manifests as “memorization”, and is often stigmatized by educators who do not understand that a non-rote learning style requires significant levels of privilege.

In contemporary discussions involving Asian Canadian experiences in schooling, stigma against rote learners is often understood as a racial stigma, perpetrated either directly by white settlers or by assimilated Asian Canadians who have internalized white racism. Without denying this contemporary reality, I argue nonetheless that when we talk about anti-rote stigma, we should take a step back from “race” and our fear of “reproducing stereotypes”, and recognize two deeper issues. First, anti-rote stigma was historically a class stigma. In the Canadian context, concerns about rote learning in public education have existed amongst education pundits since the 1880s (Bing, 2015). Secondly, as was discussed throughout Bourdieu’s (1997) *State Nobility*, even in the late 20th century, it remains true that stratified class leads to stratified learning styles. In particular, the division between the upper and lower middle classes is what underpins many of the stigmatizing dichotomies in education, even prior to any considerations of “race”. My

position on this complex issue is as follows. Anti-rote stigma was historically a class stigma. Its contemporary function as a racial stigma reflects not just the class amnesia of white supremacy, but more importantly the ethnic diversification of the Canadian petite bourgeoisie. We should not see this shift as some kind of proof for a post-class society; rather, we should see this as a hint about the actual class of STEM-bound migrants.

It is an unfortunate feature of polemical politics that anyone who talks about a stereotype is assumed to be agreeing with it. To avoid this kind of misunderstanding, I will have to give a personal narrative to clarify to the reader where I stand on this issue. When I was in high school, the head of the math department taught me math for two consecutive years, during Grades 10 and 11. This teacher divided his students into those who “memorize” and those who “understand”. In the first year when he taught me, he thought I was the “memorizing” type. Not wanting to be stigmatized, I tried to perform the identity of someone who “understood”. At the beginning of the following year, he finally expressed pleasant surprise that I was not a memorizer. The interesting thing about this math teacher was that in his capacity as the head of the school’s math department, he wrote a number of pamphlets that were meant to guide students in picking their math electives. I remember reading these pamphlets, which did as much to characterize the courses as they did to characterize the students. There was a dichotomy in those pamphlets between students who “wanted to know how” versus those who “wanted to know why”. The former group was subtly encouraged to self-stream into the math electives designed for “college” or “workplace”, while the latter group was subtly encouraged to self-stream into math electives designed for “university”. I also remember conversations where he dichotomized engineers from mathematicians, saying that the former group just “memorizes formulas”. My math teacher was one of the seven authors of the provincial math textbook at the time, so his

views on education could very well have been a reflection of the system writ large. He would not have been the only teacher who perpetuated this system, and I would not have been the only student who has had to navigate it.

It cannot be denied that in the Ontario curriculum at the time (the late 1990s and early 2000s), high school math electives were systematically stratified based on social class, and were explicitly geared towards specific class trajectories (c.f. Curtis, Livingstone & Smaller, 1992). If we look at all the dichotomies that have been mentioned in this anecdote, we have academic versus applied streams, mathematicians versus engineers, understanding versus memorization, and knowing why versus knowing how. Now, analytically, we would have to ask how exactly these dichotomies constitute a system, and how “race” fits into a system that seems to be based on class. My answer to both of these questions is Bourdieu’s concept of homology. This is a concept that can be used to understand this anecdotal preamble, and it is also the concept I will mobilize to make sense of the actual chapter later on.

Preamble II: The problematics of homological analysis

As I have stated in the theory chapter, homology is a concept that appears frequently in Bourdieu’s oeuvre, but one that is seldom defined explicitly. In *Invitation to Reflexive Sociology* (Bourdieu & Wacquant 1993, 105-106), two pithy definitions are given in one passage. It is first defined as “a fit between positions in different fields”, but then also alternatively defined as a “resemblance within a difference”. In his other texts, this term has been used to characterize various relations, especially relations between real or perceived social oppositions. We see examples of this in *Distinction*, where homology is used to unpack the apparent similarity

between oppositions of class and oppositions of cultural tastes (Bourdieu 1984/2010, 227-230).

We see examples of this in *Logic of Practice*, where Bourdieu (1990, 293) identifies similarities between the family structure in a village and the arrangement of tombstones in the village graveyard. We also see examples of this in *Language and Symbolic Power*, where homology is used to unpack the apparent similarity between oppositions amongst politicians and oppositions amongst voters (Bourdieu 1991, 185; 214-216; 244-246). Moreover, in *Language and Symbolic Power*, Bourdieu says the following:

*...In order to explain this, I have to make a detour through a rather more complicated analysis. There is a political space, there is a religious space, etc.: I call each of these a field, that is, an autonomous universe, a kind of arena in which people play a game which has certain rules, rules which are different from this of the game that is played in the adjacent space. The people who are involved in the game have, as such, specific interests, interests which are not defined by their mandators. The political space has a left and a right, it has its dominant and its dominated agents; the social space also has its dominant and its dominated, the rich and the poor; and these two spaces correspond. **There is a homology between them.** This means that, grosso modo, the person who in this game occupies a position on the left, “a”, is related to the person occupying a position on the right, “b”, in the same way that the person occupying a position on the left “A” is related to the person occupying a position on the right “B” in the other game. When “a” wants to attack “b” to settle certain specific scores, he helps himself, but in helping himself he also helps “A” (Bourdieu 1990, 215; emphasis and quotation marks are my own).*

To the best of my knowledge, the concept of homology has not been used much outside of Bourdieu's own analysis, and the way I am using it in my thesis is intended to be a tentative application of the concept based on my interpretation of Bourdieu's work. In the way that I am using this term, identifying a homology amounts to identifying a problematic possibility. "Homology" in this situation, bluntly put, can be understood as the *possibility of a group of potentially analogous dichotomies turning into mutually reinforcing ideological tropes*, thus allowing any number of vaguely similar tropes to reinforce each other and congeal into an entrenched worldview. This is my own, milder way of rephrasing Bourdieu's *grosso modo* description of how a person of position "a" inadvertently helps a person of position "A" by attacking a person of position "b", seeing as how in my own interviews, my participants are not necessarily "attacking" any other specific individual. In my mild formulation, a potential homology exists insofar as when "a versus b" is invoked, "A versus B" can also potentially be invoked. Moreover, a person who self-identifies as "a" when confronted with "b" is more liable to self-identify as "A" when confronted with "B".

Moreover, *acts of invocation* that link dichotomies together are often discursive, and this gives a methodological entry point on how to spot potential homologies as well as what those homologies are supposed to tell us. On one occasion in *State Nobility*, in a passage discussing the sociology of job interviews, Bourdieu (1996, 122) makes a methodological point about homology and discourse analysis. This methodological point is relevant to our discussion at hand. First, an interactionist analysis of discursive exchange is meaningless if it ignores the greater structures affecting the exchange. Second, these structures can be social structures or mental structures. Thirdly and most crucially, Bourdieu says that *acts of "homologation"* establish "*common discourse*". This is a crucial clue to how qualitative studies of homology are

canonically envisioned. Discursive invocations of cross-field analogies, if practiced by enough people in a lifeworld, become a force that constructs homologies between fields. Moreover, the point of locating homologies in discourse is to highlight structural influences on discursive narratives, since it takes the strength of a structural force to compel a critical mass of people to draw the same connections between the same things.

It should be clarified – lest the effort to describe tropes is misunderstood as an effort to perpetuate them – that whenever we call out a homology (i.e. a potential set of mutually reinforcing oppositions) we are simultaneously calling out a set of constructs and describing a painful reality. On the one hand, we are calling out a whole slew of interconnected tropes; but on the other hand, we need to recognize that there is a real structure behind these tropes, and that simplistic tropes have real causes. For instance, the reason I talk about the slew of constructs that streaming is liable to generate is that I want to expose the real harms of streaming, not because I want to perpetuate those constructs. The fact that Asian Canadian youths are streamed into STEM is not exactly a secret (e.g. Wotherspoon 2014, 135), but the harms caused by this streaming is rarely, if ever, discussed. By discussing the structures behind the tropes, it is my hope that the often-subtle injuries of Asian Canadian STEM streaming can be more clearly seen and analyzed.

Using homology to understand anti-rote stigma

In this chapter, the analysis uses the (real or perceived) phenomena of rote learning as an entry point, and interrogates the perceived meanings by participants of the dichotomy between

“memorization” and “understanding”. Methodologically, the three key questions I asked all participants were as follows:

31. In your core science and engineering courses, was memorization officially denounced and/or discouraged by the teachers? How often did teachers portray “memory” and “understanding” as opposites?

32. Notwithstanding what the teachers said about memorization, was there a culture of memorization among the students you knew?

33. In your view, why do students memorize? Do students use it to absorb a lot of easy information quickly, or do they use it more to overcome hard material?

Here, the reader can see that I did not assume outright that all participants believed the popular trope of memory-versus-understanding, or that they all believed it to the same degree. I also did not assume that this trope is purely illusory, and left open the possibility that learning styles are actually stratified, and that stratified learning styles are rooted in stratified needs. The point of doing this is to ascertain (1) the extent to which they bought into the dichotomy themselves, (2) the extent to which they had to navigate this dichotomy whether or not they believed it, and (3) the extent to which this dichotomy is actually rooted in stratified practices and needs. I want to stress here that participants did not have to accept the dichotomous premise of these questions, and indeed some of them did not. They were also never led towards relating memorization to credentialism or job anxieties, but some of them drew this connection of their own accord. At no point did I lead any participants towards bringing up “race”, nor any direct or indirect discussions of whiteness, especially during our discussions of rote learning – but as the reader will see, some participants brought it up anyway.

The discussions of homology, then, can also happen in a mixture of three ways. First, for the participants who buy into the dichotomy, do they impose similar dichotomies onto other issues – such as perhaps, onto perceptions of hierarchized whiteness? This would be the analytical entry point for writing “race” into the picture. Secondly, for the participants who had to navigate this dichotomy, did they have to navigate other dichotomies that follow similar patterns? Thirdly, is there any kind of fit or match between dichotomized practices and stratified trajectories? It is with these questions in mind that we proceed to the analysis of data.

“Flukes”, merit, and memory

Notwithstanding his soft-spoken mannerisms, 06’s response on a textual level is the most resolute. His answer buys into the memorization-understanding dichotomy, and the side he takes on the dichotomy is clear-cut. He disapproves of rote learning as a technique, though he expresses some sympathy for students who practice it.

Alex: So when you were actually in the engineering courses, did you recall moments where the professor told you “don’t memorize things”?

06: Yeah, I think that’s a pretty common thing. And I do agree with this. I mean, if you memorize, it might help you now, but it won’t help you in the future. And you’re not really understanding, which is the purpose of the course, right? ... I know a lot of people who just memorized so they can get a decent mark and that’s good for them, but I feel like, it’s not the right way to take the course.

Alex: Did you recall a culture of memorization amongst some of your peers?

06: I will say yes. There are people who struggle with the courses a bit more. When I talk to them, I have a strong feeling that they have no understanding of what the courses are and what they are doing.

Here memorization, or rote learning, is implicitly framed as a coping practice for those who struggle to understand the curriculum. We will see later that this point about coping is actually echoed by another participant who has the opposite stance on whether rote learning should be avoided. Meanwhile, 06's comment that memorization "may help you now but won't help you in the future" is also very significant. The word "future" in this context is implicitly opposed to the here and now. In other words, a moral emphasis on "understanding" symbolizes a willingness to plan for the future and, more specifically, invest in a (streamed, disciplinary, orderly, professional) future in which the things you learn today will continue to matter tomorrow. It is not a stretch to say that a future-based orientation has a classed dimension. Your present has to be stable enough for your future to be imaginable, and your future has to be imaginable enough to warrant investing in it.

In a similar vein to 06, 10 also expresses disapproval of rote learning. However in comparison to 06, 10's disapproval is more openly disdainful, and he judges rote learners more bluntly. When I bring up the topic of studying practices amongst his undergraduate peers, his vivacious reply contrasts sharply with his usually methodical and cautious tone of voice, indicating a stronger than usual view.

Alex: Did you perceive a culture of memorization...

10: (Cuts in decisively) Um hmm! That's how you get the grades.

Alex: It's how you get the grades.

10: You can literally brute-force anything. That's actually my biggest problem with higher education. Because you can brute-force anything.

Thus, education is framed as a system that has failed to prevent “brute force” from succeeding. Two implications arise from this dialogue. First, this particular version of the pro-understanding discourse normalizes the gatekeeping function of schooling and attributes the sorry state of schooling to its failure to fail certain people. Second and more subtly, the language around “brute force” raises the question as to who the brutes are, and why they might come across as brutes. By extension, understanding the symbolic significance of brutishness helps us outline a particular sense of honour that is operative within the lifeworld.²⁷

Alex: in your view, why do students use brute force?

10: Because, at that point, they've quit. They've given up. They found something that worked, and then because it's a results-oriented kind of society, it gives them results, so they do it. I cannot blame any of them for doing it, because it's possible. And they get the best results from it. So... (shrugs)

Thus, rote learners are quitters who have capitulated to the demands of a results-oriented society. Here we see an act of contra-distinction, where 10 explicitly distances himself from “results-oriented” attitudes. In his view, rote learning is the symptom of a results-oriented society, and he distances himself from both the symptom and the cause. The significance of this became clearer during a follow-up interview when the notion of “results” surfaces again in the discussion of “merit”.

²⁷ For the purposes of understanding the symbolic significance of this stigma against brutishness, it does not suffice to just say that there is a classed dynamic in the guise of an honour scheme. Deeper digging is needed to understand how agents envision this scheme and, indeed, how they envision class.

10: A lot of times, merit comes down to results. When you produce results almost nobody cares how you did it. That's usually the case. Once you have the results, it doesn't matter how you did it, right? It's about results. And if you didn't have results, no matter how well you did it, it didn't matter. If somebody by fluke accomplished something good, he will tell the story like he's the greatest person in the universe, and did all this crazy work to get it done. But really he just got lucky, right? Whereas if you fail at doing something, nobody's even interested in listening to any of this stuff. So, the process, like, there is talk and debate about whether the end justifies the means. I think the norm is that it does. Barring some exceptions and certain circumstances, a lot of times it does.

The significance here is that 10 is symbolically positioning merit against results, and symbolically associating results with rote learning. 10's overall resentment against higher education is that it features an institutional culture that assigns credibility based on results, which in turn allows people to succeed through "flukes". In other words, [1] ideally merit should not be based on flukes. [2] Results-oriented institutional culture allows flukes to claim merit. [3] Results-oriented institutional cultures encourage rote learning. Even if we cannot surmise from this whether 10 considers memorizers to be flukes, we can at least say that in his view, *flukes and memorizers are both beneficiaries of a results-oriented techno-moral regime*, one that he wishes he could distance himself from.

Eating knowledge: memorization as survival

Meanwhile, how does the other pole of the lifeworld view memorization? 07's sober and ultra-realist response is the most illustrative of the discourse in favour of rote learning.

Alex: How often did teachers portray “memory” and “understanding” as opposites?

07: They say you don’t need to “memorize” but you do need to memorize lots of things anyway. By virtue of understanding, you are trying to memorize/grasp new concepts.

Alex: Was there a culture of memorization among the students you knew?

07: Yes... for example, memorizing assignment answers in case something similar comes up on the exam.

Alex: In your view, why do students memorize?

07: It’s a coping mechanism. If a student cannot digest something in time, he or she might as well memorize the method or theory first, and try to improvise on exams.

Here, 07 admits quite directly that she considers rote learning to be a coping mechanism. The fact that she uses the language of ‘cope’ in the first place is a sign that she perceives a mismatch between the position in social space encoded in the habitus and the position in social space normalized in the curriculum.

In a phenomenological sense, the intentionality of the coping mechanism is significant as well. Memorization here is directed towards the “digestion of theories and methods”. How she expresses her stance is as noteworthy as her actual stance: here we see that an eating metaphor is being used to describe the process of acquiring the logics of her disciplinary practice. But who *eats knowledge?*

I want to stretch our sociological imagination here, and be a bit more speculative than I am in other parts of my thesis. Of course, what I am about to say is my subjective interpretation, and I acknowledge that others might not find this theme to be as important. Nevertheless, I invite

the reader to entertain my speculations for the moment, if only for the sake of stretching our imagination about what might become relevant in ethnographic analysis.

Although 07's replies to me were exclusively in English, I know for a fact that she is also fluent in Mandarin. I am quite sure that "digestion" was a literal translation of the Chinese word *xiaohua* (消化), which is a commonly used verb in the Chinese context that simultaneously means to digest, to dissolve, or to master knowledge. Although using "digestion" to denote grasping knowledge is very normal in modern Chinese speech, it would be naïve to think that any word in any language is too normal to have a history. As far as I can see, while the word *xiaohua* can be etymologically traced back to circa 300 C.E., for the longest time it only meant "digest" or "dissolve", but not used as a metaphor for mastering knowledge. If we just take a cursory glance at this word in a Chinese-language encyclopedia (c.f. Baidu entry on 消化, accessed May 10th, 2021), using this word to refer to the mastery of knowledge seems to be a fairly new phenomenon, and seems to be a literary invention of twentieth-century novelists who are known for their working-class stories. The mid-twentieth century for China was not only a time of scarcity, but also a time when literacy rates skyrocketed, allowing the victims of scarcity to read, write, and modify the linguistic terrain. What I am trying to suggest here is that we might, albeit speculatively, entertain the possibility that 07's choice of words does matter, even after we take into account what might have been lost in translation. The modern Chinese language has plenty of other synonyms for mastering knowledge that have no connotative links with subsistence. In fact, the verb *zhangwo* (掌握), which literally means "to hold" or "to grasp", is the more direct word to use for mastering knowledge. Even if we take into account the possibility that 07 may be thinking in a different language, there is still plenty of room to speculate why she said "digest" rather than "grasp" – she could have very well said the latter.

As for my own speculation as to why this is so, my guess – and I stress that it is merely a guess aimed at stretching our sociological imagination – is that the choice to say “digest” rather than “grasp” is a sign of both gender and class. The gender part is rather more obvious since traditional upbringing (in many cultures including North American culture) tends to encourage young men to envision themselves as “graspers”, for whom the act of grasping is as much an act of possession as it is an act of control. It is no coincidence that even if I were to think in Chinese about knowledge mastery, “grasp” would be my word of choice because I have the privilege of a male upbringing. Nevertheless, I think that class is also part of this disparity, and the sense of scarcity, necessity and pressing needs can all potentially affect the picture. In chapter 6 I will talk more about how gender and class entrench one another, but for the moment I will leave this line of thought to one side. On the topic of class, any leftist critic of education, from Willis to McLaren to Bourdieu, would agree that the education system reproduces class disparities. The system does this by framing dominant knowledge as official knowledge and frames what the elites can easily learn as things that everyone most urgently needs to learn. Elites go to school to learn how to lead, but the oppressed are sent to the same schools to learn how to follow. Bluntly put, while the elites learn to wield knowledge, the oppressed are stuck eating it because they are never encouraged to grab and wield anything.

A class for memory?

Through presenting and interpreting the narratives of 06, 10, and 07, I am suggesting that the practice of rote learning constitutes a class marker of the petty bourgeoisie. We see that regardless of whether they oppose the practice or support it, their responses indirectly ascribe a class to the practice and it is more or less the same class. In the case of 06 and 07, this is very

clear, as they directly associate memorization with necessity, and hence, the taste of necessity that sets the petty bourgeoisie apart. By corollary, the notion of “understanding” is thus framed as bourgeois, as it stands in contradistinction to those who struggle to keep failure (and hence needs) at bay. Meanwhile, the petty bourgeois connotations of memorization are also confirmed by 10, although the dynamics are less direct. He frames memorizers as people who “want results” and then distances himself from them; such a move performs the very bourgeois move of elevating oneself above the banality of results, leaving little doubt about the status of the banal.

To be clear, I am not necessarily saying that 06 is totally bourgeois just because he opposes memorization, or that 07 is totally petty bourgeois just because she endorses it. To the extent that these stances do reflect the class trajectory of the individual, analytically it would still be just one class marker amongst others.

Regardless of any subtle differences between treating memorization as a classed practice and treating memorizers as a monolithic class group, it is hard to deny that the classed nature of rote learning is significant. This is not the least because it matches one of Bourdieu’s key remarks about higher education, one that reveals the hidden logic behind the seemingly paradoxical²⁸ pattern of who passes and who fails. On the one hand, the program features²⁹ an eliminatory curriculum that sees half of its students drop out in the first year; but on the other hand, the system seems acquiescent with the success of rote learners who struggle with and often bypass understanding the material. As Bourdieu (1996, 23) notes, schooling is ever torn between the bourgeois flexing of cultural capital and petty bourgeois compliance to dominant norms. The

²⁸ 10’s libertarian dissatisfaction with the system is a subjective interpretation of an apparent paradox. The apparent paradox is that, by allowing or even tacitly encouraging rote learning, the system is seemingly undermining its own meritocratic regime.

²⁹ At least, during the years when the participants were in school.

former is associated with the actual function of the system (i.e. selection), but the latter is associated with the official function that lends the system its legitimacy (i.e. uplift). This is precisely the tension we see playing out in my research context.

A preamble on memorization and belonging

It is much easier to identify homology between learning style and ethnonational belonging because unlike issues of class which remain largely covert, issues of ethnonational belonging seem to appear more frequently in participant discourse. As a disclaimer before further discussion, I am aware that the following analysis can be easily misunderstood as a reinforcement of Western norms about who supposedly counts as foreign and what they supposedly do. So here I would pre-emptively ask the skeptic, exactly what stereotype might I be accused of perpetuating? I have several guesses on what these stereotypes might be, so let us just go through them one by one, and I will state a clear stance on each.

Stereotype 1: All Asian Canadians do STEM

This is clearly false, and nowhere in my thesis do I actually perpetuate this statement. I think the full answer to this stereotype is to say “not all of us do it, but some of us do it, and those who do it are just as real as those who do not.” I think it is important to study the Asian Canadians who are actually in STEM and give them a chance to voice their narratives and feelings.

Stereotype 2: All Asians in STEM memorize

This is clearly false. This chapter contains plenty of examples where Asians in STEM denounce memorization. In fact, amongst this once-closely-knit community of racialized alumni, the legitimacy of rote learning is a somewhat divisive issue, over which at least some participants have well-developed and well-entrenched stances on either side of the fence. My full reply to this is, once again, the same as what I said above: some of us do it, others do not, and those who do it deserve just as much visibility as those who do not. It is also important here to stress that rote learning is not just about racial stigma. Historically, educational pundits in Canada have been framing rote learning as a problem as early as the 1880s (c.f. Bing, 2015), in a context where it was less likely to be a direct stigma against immigrants, and much more likely to be levelled against the working class.

Stereotype 3: Asians who don't memorize are less Asian

I have no love for this statement, but I am not going to call it “false”. I will begin by pointing out that you cannot “disprove” the statement without first clarifying what the statement means, and that there is no politically correct way for anyone to clarify the statement. Anyone who tries to “clarify” it must come up with some definition of what it means to be “less Asian” – that is to say, they must perform the self-incriminating move of quantifying an identity. So here we have a dilemma. How can we challenge the statement – which people seemingly buy into – without sinking to the level of the statement? My view on this is that the moment anyone asks “define what you mean by less Asian”, the analysis is heading down the wrong path. What we have here is not an unspoken “definition” or “criteria”, but the inherently pre-reflexive feel for a

particular kind of social game. Rather than viewing this statement as a “stereotype”, we are better served by viewing it as a doxa, and deconstructing it as such. Instead of fixating on whether the doxa is “true or false”, I think it is more important to ask what social game is being played, and more importantly, what kind of structure the participant is trying to navigate.

Stereotype 4: The lack of assimilation is a deficit

In a similar vein to this idea that you cannot just “define” the actual “criteria” for being “less Asian”, it is likewise hard to strictly define “assimilation” – which is a loose term I sometimes use (if only because I have to say something, however inadequate, to denote a phenomenon) to refer to an individual’s perceived and self-perceived moral distance from one’s country of birth, or one’s perceived and self-perceived sociocultural access to one’s country of residence. When it comes to understanding just what assimilation “means”, I think our best bet is to see it, in the Bourdieusian sense, as a “game”. People have a feel for this game, but different people feel their way around it differently. Although the stakes may shift, they are also quite real (e.g. belonging, opportunities, safety, etc.). As for whether it is a deficit to lose the game or not play the game, my answer is twofold. First, it should not be a moral deficit, although in the status quo it is often treated as such. Second, it should not lead to a deficit in economic or cultural access, although in the status quo it often does. We cannot fight the status quo if we are not allowed to talk about it.

Memorization and belonging

Without any more lengthy preambles, I want to continue with the analysis. Particularly amongst those with less clear-cut stances on the issue of memorization (but who nevertheless spoke to the topic at length), identity-oriented narratives surface much more readily. The responses of 03 and 04 are the most illustrative in this regard.

The initial response from 03 manifests a discourse that seeks to synthesize both memorization and understanding, although he does associate memorization with necessity.

03: I don't feel there's a strong [tendency in the curriculum to favour] one way or the other. It was necessary to have some things memorized, but obviously having some understanding is good too.

Despite an initially mild response, a reference to ethnonational belonging soon comes to the fore.

03: I feel that for international students, they do tend to memorize more. I guess at least, more for Chinese students. I feel the way they do high school in China... I feel that promoted more memorization. Whereas I feel those of us [who came to Canada at an earlier age] tend to rely less on memorization. I'd say that the international students were better at memorizing. I was not good at memorizing.

It appears like the propensity for rote learning is being associated with the relative degree of foreignness within the diaspora. My interpretation of this scenario is that 03 is playing a careful game of disidentifying from rote learning, without stigmatizing the “international students”. Compared to 03, the tendency to see memorization in ethnic terms surfaces much more bluntly in the responses from 04.

Alex: How often did professors portray memory and understanding as opposites?

04: I think almost all the time? And I disagree with them. Because I believe memorization – or, I use the word recitation – is a necessary part of understanding.

Alex: Notwithstanding what the professors said, was there a culture of memorization among the students you knew?

04: Among my close circle, it is understood that memorization is the biggest part of understanding. We are of the firm belief that the very old school of Chinese philosophy, in which you memorize works as part of your study, is essentially correct.

Even though 04 and 03 have different stances on memorization, and even though they somewhat identify with and against it respectively, both of them buy into the symbolic association between learning style and heritage. It is worthwhile here to recall that 04 came to Canada only three years later than 03, was also still in elementary school when he came, and certainly never went to high school in China. Identifying with memorization has little to do with coming to Canada at a later age.

To what extent, then, is learning style racially coded in the lifeworld? It is important here to clarify that not everyone in the lifeworld codes learning style in this way. Yet, we do at least see how 03 politely distances himself from the practices of “international students” and “the way they do high school in China”, just as how 04 bluntly embraces “old Chinese philosophy”. Regardless of whether they have an accurate picture of how Chinese people in China learn, or whether old Chinese philosophy truly endorses memorizing formulas, what matters here is an individual’s sense of moral distance from that imagined picture. As we will see in chapter 7, which presents high school narratives, 04’s embrace of this imagined picture is the result of

having given up on assimilation and accepting his own identity as an inevitability – which in his case meant giving up on the prospects of becoming a musician like his white high school friends.

A more disenchanted view

Of all the participants who spoke at length to the issue of rote learning, 01 was the most consistently resolute in resisting the premise that memory and understanding are separable. Even though her recollections of the program differed considerably from some of the other participants, she gave an answer that was more grounded in those recollections and less so based on symbolic distinction or prestige.

Alex: In your core courses, was memorization officially denounced or discouraged by the teachers?

01: I don't think professors discouraged memorization. I never heard professors put memory and understanding as opposite. I think a lot of engineering courses required memory whether it's in terms of retention or understanding.

Alex: Was there a culture of memorization among the students you knew?

01: I don't think so. I think [the question of whether or not to memorize] is trivial – often it's considered the first step of understanding.

It is interesting to note that amongst the six Chinese-born participants who spoke at length on the issue of rote learning, it was the two women, 01 and 07, who did not bring up ethnic belonging as an issue at all, either concerning rote learning or in more general conversations. In comparison to the men, 03 and 04 related rote learning directly to ethnic belonging, while 06 and 10

expressed views about assimilation elsewhere in their narratives. The gendered (and gendering) experiences in STEM-based lifeworlds, as well as the related interplay between gender and race, is another topic that is well worth looking into, and I will do so in a later chapter.

The honour of understanding

For most if not all of my Chinese-born participants, their parents came from a national context wherein the social acceptance of rote learning was high – certainly higher than what their children experienced in the Canadian system. In the Chinese context (as experienced by my parents' generation who did undergrad in the 1980s) rote learning continued into higher education, and the class markers associated with rote learning would not have been as pronounced as they are in the current context of the study. For those whose age of migration is similar to my own, I can make a few more remarks based on my own experiences. I left China in 1997, during the third year of my elementary schooling, and during that time rote learning was still standard fare. Reciting and writing classic poetry was a routine form of evaluation in language class. Sometimes, as a form of homework, students would even have to memorize entire short stories overnight and be able to recite them the next day. Those students who could not do it would be placed in detention and held until they were able to accomplish the recitation. So, in no small sense, there is some objective material connection between being Chinese and learning by rote.

This does not, however, necessarily mean that our society of origin devalues conceptual understanding in measure with how much it normalizes memorization. Conversely, in a non-Western context, the symbolic opposition between rote and understanding may not even exist.

We can see hints of this in the responses of 01, 04, and even 07, quoted earlier in the chapter. As was evident in their responses, even though they believed memory to be crucial they never directly said that understanding was not. 01 and 04, in particular, both framed memorization as the first step to understanding rather than its opposite.

One could argue that in a moral system where memorization is understanding's precursor rather than its opposite, the superior distinction of those who understand the material is more difficult to challenge. In a moral system where memorization and understanding are merely treated as essential opposites, the symbolic trope of being "different but equal" is still somewhat possible. But if the moral system frames understanding as a more advanced stage compared to memorization, then the dominance of the former is unequivocal. In such situations, a non-rote scholastic habitus becomes a potent status symbol, at times taking on a nearly magical aura. When 04 recounts his predominantly Chinese studying clique in undergrad, he once referred to a high-achieving friend as a "beacon of hope":

Alex: When you don't understand material, who did you turn to for support?

04: My best friend. I kind of recruited him for that purpose. [In our circle of friends] he is the beacon of our hope. If he is struggling, we just gave up.

Alex: Did the beacon never seek help?

04: If he is struggling, we just collectively gave up. It has happened probably twice, and each time, the professor, upon him not being able to do it, reduced the difficulty of the course. So he was literally the beacon.

In a later conversation with 06 who hung out in the same clique, I learned that at least one of the high achievers in that clique never memorized anything, opting to understand the material instead.

Alex: Your roommate could [both memorize and understand], right...?

06: My roommate never memorized, I think he understood everything. He derives the formulas himself. He's one of the smartest people I know. He derives the formulas before he even looks at the actual formulas. It's pretty impressive.

Regardless of whether the reader agrees with my interpretations on the complexities of how learnings styles are perceived as identity markers, I want to highlight what I think are the basics of the situation. In the context of the lifeworld that I am examining, I think rote learning is often used as a distinction marker³⁰. When I look at the narratives of 04 and 07 about why they feel a need to learn by rote, or even the narratives of 06 about his perceptions of rote learners, I see variations on the theme of “having to digest the material” or “having to pass the course”. In the Bourdieusian sense, the theme I see here is the taste of necessity. To the extent that we entertain this possibility, we can also entertain the corollary that the rejection of memorization can potentially constitute an act of distinction. This also explains what 10 is trying to do when he rejects rote learning and rote learners.

³⁰ Which is no doubt problematic, but one has to realize that petty distinction games are everywhere, and that the people who engage in it are human. That is, just as human as humans everywhere else.

Extrinsic and intrinsic engagement

The dichotomy between rote and reason is closely related to another dichotomy in the lifeworld, one between what I call intrinsic and extrinsic interests. Before diving into the relevant data that demonstrates this, I need to lay down some theoretical building blocks that are going to let me talk about this issue in a much more efficient manner later.

In a large-scale study of STEM aspirations amongst middle school children in the UK, Archer et al. (2012) encountered a phenomenon which, within their sample, only seemed to occur for the children of migrant families. The researchers have named this phenomenon “engagement without interest”, which refers to the practices of some migrant children who do not demonstrate an intrinsic interest in STEM material and may even struggle with it, but at the same time seem highly willing to commit to STEM-related trajectories. Furthermore, associated with this phenomenon is a discourse of “safety” amongst the migrant parents when it comes to the career choices of their children, and by extension demonstrates a distinct category of familial reproduction strategy. As a follow-up to this study, Wong (2015) examines the trajectories of the STEM-bound migrant youths in more detail, and makes an analytical distinction between “careers with science” and “careers in science”. Wong notes that even though the general STEM interests of those migrant youths were high relative to their peers, most of them commit to “careers with science” rather than “careers in science.” These careers with science tend to be in medicine or engineering, which are fields perceived to be higher-paying.

Before proceeding further, I want to slightly modify the phrase “engagement without interest”. I prefer to call it “extrinsic engagement”, and place it in opposition to something I call “intrinsic engagement”. In short and blunt terms, extrinsic engagement is when you are forced to do something under duress, while intrinsic engagement is when you are doing something you

feel interested in doing. Of course, as a sociologist, I do not harbour naïve views about the authenticity of “intrinsic interest”. In the final analysis, intrinsic motivation is not truly autonomous from the shaping forces of social structure. It simply implies a better fit between what you are moulded to want and what you are allowed to do.³¹ This quibble is significant because in my own experiences as a student at all levels of schooling, I often see instances of instructors take a liking to students who show “genuine interest” in the subject they teach. I think intrinsic interest is something that schooling sometimes valorizes and rewards, and my view is that this often-valorized distinction is the ideological flip side of “memorization”. Furthermore, I think that “genuine interest” is not innocent in terms of social class, and that it is the manifestation of a habitus that can keep needs at bay. This is how I draw the connection between “memorization versus understanding” and “economic versus cultural capital”. I think a major dichotomy in this context is whether a migrant youth is engaging with school in the significant absence of interest. Engagement without interest can be a sign of viewing school as a means to an end – often times a stable job and a good salary. In this chapter, I argue that if you scratch a rote learner at look at their trajectory, this is the trajectory you will often see. Meanwhile, if we analyze a student who wants to “understand”, and who is not satisfied with just remembering how to go through the motions, I think we will often see an impetus to accumulate knowledge coupled with the recognition that knowledge (understood here as something quite apart from diplomas) is worth accumulating.

In other words, I am arguing that the tension between intrinsic and extrinsic motivations is just the tension between the desire for (and hence, the legitimation of) cultural versus

³¹ In Durkheimian terms we could call this the absence of anomie, or in more Bourdieusian terms, a functional sense of protension.

economic capital. The notion of “intrinsic” gives away the position of a particular point of view, namely that of the knowledge-disseminating authorities³² within the academic disciplines. It is the occupants of this particular category of positions who are more likely to lean in favour of cultural capital. By extension, these positions also compel³³ them to frame economic capital and the undisguised desire for it as markers of the outsider, and hence the term “extrinsic”. In the specific case of the engineering discipline, there is an added complexity because the field itself leans towards the economic rather than the cultural side within the broader societal field of power (c.f. Smith, Mayer & Fritschler, 2008). Hence, the meaning of identifying with the “intrinsic” pole in the field of engineering schooling becomes highly ambiguous. For those who visibly occupy the intrinsic pole of the field, whose valorization of cultural capital contradicts what most of their peers in the discipline want and expect to receive from the program, at best they come across as misguided proto-pedants who should have gone to a career *in* science rather than a career *with* science. At worst, the open identification with culture in an economicistic field gives away one’s desire, however sublimated, to be wholly elsewhere.

Having now reframed the intrinsic-extrinsic dichotomy as the struggle between cultural and economic capital, I am ready to present a series of related vignettes. The first of them is an excerpt from 04 when he thinks back on the level of popular hostility that lay in store against classmates who asked too many questions in class.

04: My memory of [this university classmate] was that he just could not stop asking questions in class. It got to the point where [my friends] thought he was purposefully

³² Usually this would be professors, but sometimes teaching assistants as well. The label of “knowledge-disseminating authority” refers in general to any teaching figure who is officially endowed with the power to measure student performance and assign grades.

³³ Rather than saying “unconsciously”, what is emphasized here is the way in which these legitimacy-seeking actions merely follow from the position one occupies in social space.

sabotaging the class. Our belief was that, if you stop the prof from teaching and then you go home and learn it yourself, then we are all screwed, right? That was the belief. I don't think that's true, I think he truly was curious.

Such scenarios are not unique to the experiences of 04, or even limited to the experiences of those in his clique. 03, who is from a younger cohort of alumni altogether, tells a similar story. However, 03's story is told from the perspective of someone who is actually the one asking questions in class.

03: I guess maybe during class, I was definitely known for asking questions. I would ask a question and sometimes it would turn into a conversation, but I am mindful of not taking too much class time. But usually I would ask a question if I feel like it would help with some understanding for everybody. But it'd be situation-specific. There were definitely classes where I would be less comfortable doing that.

What I want to emphasize here is the sheer amount of moral scrutiny that always hangs over the head of those who want to ask questions. 03 and 04 give us the two matching halves of a coherent story, a story of the struggles between the need for understanding and the suspicion thereof.

Returning to 04's narrative of his "curious" classmate, I want to point out that "curious" is an interesting choice of words for describing the disposition of someone who likes to ask questions. Curiosity denotes a lighthearted, leisurely state of mind, and someone who is "curious" about the material is someone who is approaching it from a position unburdened by academic urgency and the pragmatic impetus for the most efficient way to pass. 04's choice of words strikes me as very jarring, as "curious" is not the word I would have used. For the record, I

would have been inclined to use the word “desperate”. This does not mean, though, that either of us is right or wrong about how to frame someone who asks questions. Differing positions on the choice of framing stem from differing positions in social space. Bluntly put, 04 does not view understanding as something crucial to survival, and that is why he frames the pursuit of it as a leisurely affair. Whereas for myself, “understanding” is a requirement for just about everything I have ever been interested in doing, so in my own experiences there is a much tighter correlation between not understanding something and not getting what I want out of life. The discrepancy between 04’s wording, and the wording I would have wanted to hear, is a sublimated struggle between economic and cultural capital. More specifically, it is a struggle over which type of capital accumulation receives the official blessing of the field. It is about how much reward the field should have in store for those who seek to fill in all their knowledge gaps whether or not it contributes to their careers, and how much that reward ought to compare to the benefits of memorization and credentialism. It is about which form of capital is framed as “necessary”, and hence, as fundamental and legitimate.

In fact, just moments before in the same conversation, 04 says something else noteworthy regarding precisely this matter. I will condense it slightly for brevity³⁴:

04: In the first year I did not have the concept, that understanding the material was different from passing the course. At that time, to me... passing the course equals understanding the material. It was only much, much later, once I started tutoring people, that those concepts became different from each other. Before that, when struggling classmates refused help from elite classmates in order to “understand” things on their

³⁴ An uncondensed version of this conversation is provided in Appendix A1.

own, I took it to mean, “I need to torture myself in order to feel less guilty.” And I did not understand those people, I did not sympathize with them at the time.

Here we see a reference to “understanding”, but juxtaposed with “passing” rather than “memorization”. However, the gesture to memorization is also implicitly present in discourse. If passing the course is not equal to understanding the material, then there must be some other unnamed practice, other than “understanding”, that can allow one to pass.

We can, moreover, notice that 04’s views change when he begins to tutor others. This is a stark demonstration of how social outlooks are underpinned by positions in social space. What is fundamentally happening to 04 is that he is stepping into a social position in which the officially sanctioned species of capital is no longer economic. The authority of the teaching position is precisely based on the command of cultural capital; if one enters into a position where one’s right to speak stems from understanding, then one can no longer say that understanding is not a thing. When 04 speaks of understanding, an understanding-based position is speaking through him. By corollary, this implies that in his early undergraduate days, he has occupied a position in social space that is precisely *not* marked by cultural capital. This is of course consistent with all the other aspects about him that I have analyzed so far.

I also want to remark that “understanding” is not necessarily always the dominant pole in the field, and not everyone at the understanding pole gets to be the “beacon of hope” for their study group. Understanding is sometimes the subordinate pole, containing those who are either reduced to asking for help or those who bear the stigmatizing suspicion of sabotaging the curriculum. It is not a coincidence that the *taste for understanding*, rooted as it is in cultural capital, can become suspect in a field largely geared towards economic capital.

In any case, the evidence so far allows us to say that there is a homology between the difference in learning styles (understanding versus memorization) and the contradiction between different scholastic priorities (intrinsic/learning versus extrinsic/passing), both of which have emerged explicitly in participant discourse. We even see a direct category slippage between the two tensions when “understanding” is contrasted directly to “passing”. Ultimately, the opposition of scholastic priorities is rooted in the opposition between the impetus to accumulate different species of capital (cultural versus economic). When learning style is homologous with scholastic priorities, a particular learning style becomes the sign for one’s faith in a particular species of capital, which in turn becomes the sign of one’s position in social space. We can, in fact, see that the possibility of prioritizing “understanding” is predicated on how much relevance cultural capital has for the social position one occupies.

Given the above, it is not surprising to see that between 03 and 04, there is even a homologous match between how much they emphasize understanding, and how popular co-op is amongst their close friends.

03: In my cohort, there were probably more people who did co-op than those who didn't. But I didn't do it, and I guess maybe towards the end apparently a lot of my friends continued on to academic things like PhDs. I would guess that those who go into PhDs would be less likely to have taken co-op... Of my close friends I guess less than half did co-op.

04: Co-op was popular in my cohort. It was the thing to do. Except for a few people who said they wanted to get to grad school as soon as possible. I don't relate to them. For me, finding a job right after school is a good thing. And basically co-op is a job, right? So I

get paid a little. So that was good. If you're to get a job right after you graduate, co-op is essential. So for my cohort, co-op was the thing. We didn't even have second thoughts.

Although 03 and his close friends lean slightly away from co-op, not all of them have opted to avoid it. In fact, his two roommates, who are also from the same program, have done it. We can even compare this co-op ambivalence in 03's social network with his ambivalent stance on understanding versus memorization, and recall that he "did a bit of both".

Money, brutality, and parenting

I now want to shift the emphasis away from intrinsic "understanding" and onto the more extrinsic, careerist point of view. In one of the later follow-up interviews with 04 where I discuss political opinions more directly, I actually summarized some of the findings from Archer et al. (2012) and Wong (2015), and then gave him some open-ended prompts for any views he has on the range of issues being brought up. Here I am going to display his response at some length, condensing it somewhat to strike a balance between brevity and fidelity³⁵.

04: I want to say something for Chinese parents and their children, including me. To us, the willingness to engage without interest is actually the tactics to get ahead in life. Let's be honest, [my discipline and career] is brutally boring. I'll say it on tape just so people know. It's not glorified. To glorify that is to glorify our suffering. But we want to get ahead in life, so we look for jobs that pay well, but somehow no one takes. Let's be honest, if you have a job like that, then it usually implies some brutality in the job itself. But we want to do that. That doesn't mean we want to go for all jobs that are like that,

³⁵ An uncondensed version of this conversation is provided in Appendix A2.

but we have our own selection criteria and there are some jobs that Chinese people go for. Namely accountancy; to some degree finance; engineering, and especially computer engineering. We go for these, knowing that their brutality creates a need for engagement without interest. Our willingness to engage without interest is our tactic to get ahead in life.

Thus to 04, the essence of an engineering career is not about math or computers. It is about having a job that “pays well, but somehow no one takes.” Here, 04’s narrative can be seen as the petty bourgeois variant of a working-class migrant phenomenon first identified by Pratt (2004). In an ethnography of working-class Filipino Canadian communities in Vancouver, Pratt (2004) discusses why many of the underpaid migrant care workers are opposed to raising the minimum wage. The reasoning of those who are opposed to it is that migrant care workers will be paid very low by society no matter what because racism is not going to change. If employers are forced to pay higher wages, then they are going to stop hiring Filipinos because, in the minds of the employers, Filipino labour cannot be worth that much. The similarity between 04 and the participants in Pratt’s study is that in both cases, the racialized worker perceives that their labour niche is based on doing jobs that white people are often not willing to apply for. It is for this reason that the racialized worker is opposed to political reforms that make their jobs more pleasant. One could in a vacuum say that these are subjective perceptions of the racialized worker, and are not indicative of the actual reality. But if Bourdieu has anything to say about it, it is that people, especially those in subordinate positions, have a pre-articulate grasp of their chances, by way of cognitively and somatically embodying their experiences of what works in life and what does not.

What makes 04's case markedly different is, of course, that it happens at a much higher income bracket. He characterizes his occupation, and the occupation of other Chinese migrants in similar shoes, as occupations that "pay well, but somehow no one takes", because it is "boring" and contains "brutality". Thus the unpleasantness of the job is precisely *not* about the money, but all the "brutality" that deter people *despite* the money. But what does "brutality" mean? How are we to unpack what it refers to?

For starters, brutality could refer to the arduous process of acquiring the credentials needed to obtain the job. In this sense, brutality is a reference to what occurs in the schooling experiences of a person. We can say, based on both existing literature (Archer et al, 2012) and the data shown so far, that this schooling experience involves engaging the curriculum despite the absence of intrinsic interest. Moreover, though, part and parcel to the "brutality" is a particular category of familial reproduction strategies³⁶. In the parlance of 04, it is a "gamble-heavy" strategy of investing in high-risk, long-term bids for high economic capital. Such long-term bids take on a punitive and disciplinary nature, often going far beyond just limited bouts of deferring gratification. He makes a particularly satirical comment about parents who force their children to aim for med school:

04: In terms of education and children, the biggest gamblers don't see their gambles as gambles. That's why they take risks bigger than what others can tolerate. I think that's part of the Chinese mentality. To the outsider, it seems like a gamble. But to the Chinese parent, "my child is so good, and I'll whip him so hard, that he'll work so hard, that entry [into a high-paying career] is guaranteed. The fact that it didn't happen to any of

³⁶ Or more bluntly put, parenting practices.

my friends before this shows the weakness of their parenting, not the overall system.”

That’s the mentality for those who aim for med school.

After fumbling for some words about a difficult topic, 04 shows that his views about the parents of engineering students (which would include his own parents) are not much different from the appraisal he has given to the parents of those who are groomed for med school.

04: What others see as statistical luck, Chinese parents believe they can... they can... they can... manipulate... through hardship. What do I mean by that? That means if you can sacrifice enough in the present, make that sacrifice the end, and aim for torturing yourself, maybe you can manipulate luck. As for the research you were talking about, I would say this, it is completely true for our classmates. We engage without interest. This engagement without interest has to do with parenting, and their emphasis on jobs, on earnings, on safety. I agree with all of it. I would say for my close friends that our willingness to engage without interest is what made us relatively more successful in the program.

If parental force is a key factor, then it raises the question as to the extent to which “extrinsic” interest is actually monetary. If the parental force is geared towards economic capital, then the child, once made to internalize the parental force, might also feel the same. But what if the parents have an ambiguous position on the type of capital they want their child to accumulate? In a conversation with 02, I see hints that this can happen.

I have not talked about 02 thus far, because he did not speak at length about the basic issue of learning styles. However, when we apply some of the broader homologies onto his

profile, we see that he occupies an ambiguous position both in terms of parental experience and in terms of his alignment between economic and cultural capital.

02: My parents became pretty liberal when I started university. They were like, yeah, you go figure out your own stuff. In fact they trusted me, for some reason, to make the right calls. It wasn't like that before university! All of a sudden after university my parents started trusting me. Now that I think back, I really appreciated that.

In light of the other things we have talked about, 02's simultaneous ambiguity in both parental strategy and in his own capital accumulation priorities no longer seem like unrelated phenomena. The significance of the “liberal turn” in the strategies of his parents is that he was allowed to make his own life choices, and in essence, was no longer receiving direct input on which type of capital to prioritize. “Homological effect of ambiguous parenting” thus becomes a plausible (if counter-intuitive) explanation for 02’s extended straddling between economic and cultural capital. In my interactions with 02, the single most shocking moment was when he said that the importance of getting a job was firmly ingrained in him early on, yet the importance of making money never became conscious in his mind.

02: Job prospects was definitely a factor. When picking majors, I put in engineering for my preference, because the general perception is that it's easier to find a job with an engineering degree. But I never related wanting a job to making money; it's very much, like, separate.

Alex: So even before you felt the importance of money, the importance of having a job was never in doubt?

02: Right.

Thus it seems like the status distinction of being an employed professional, rather than the goal of making money and surviving, functioned as his primary motivator. This entails a position that emphasizes a mix of knowledge and salary, and hence an orientation that sits midway between economic and cultural capital. We even see this reflected in the graduate school trajectory for both himself and a number of his friends, as well as the sustained economic motivation behind his own decision to continue into grad school.

02: When I graduated undergrad, it was one of the worst years after the recession. The economy wasn't quite there yet, so the job market, I want to say, was just warming up but wasn't active. So going to grad school was very natural for me. It gave me some buffer time to think about what I want to do in the future, that kind of thing. Most of my friends in the program actually went to grad school, and come to think of it, the high school friends I kept in touch with mostly went to grad school as well.

Certainly, in 02's narrative, there is not the same discourse of "brutality". The nonexistent reference to "brutality" or any hardship is accompanied correspondingly by a nonexistent emphasis on money, in addition to more liberal parenting. In light of the analysis so far, I do not see this as coincidental. At this point, even though 02 says little about his leanings on the basic question of learning style, and whether he favours memory or understanding, one can surmise that in his undergrad days he was most likely open to both and probably did not eschew the latter.

On the topic of engagement without interest, responses from 12 hint at an experience that could be comparable to 04. As far as my data goes, this further confirms something that is implied by the findings from Archer et al (2012) and Wong (2015), namely that engagement

without interest is not unique to Chinese migrants but is rather something that occurs for both East and South Asian skilled migrants more generally.

Alex: Before you went into engineering, did you have any childhood interests or hobbies...?

12: Not in engineering. I was interested in being an astronaut. Big dream. But I really wanted to become a journalist.

Alex: Was your entrance to engineering largely influenced by your parents?

12: Yes.

Alex: How did you cope with not being able to do journalism?

12: I coped. I adjust. I mean, I think I always knew, back in my head, that it's gonna be the case. That I have to... choose engineering, or any other technical field, compared to journalism, or being a police officer. As surprising as that is, I did want to be one.

Alex: You might have made a good cop, to be honest.

12: I wish I did... actually go. But enough, whatever.

In the context of Asian Canadian skilled migrant families, the experience of “strict” or “authoritarian” parenting can be deconstructed into several components. First, the family reproduction strategy emphasizes the accrual of economic capital, and on a concrete level, this manifests as the forceful steering of the child’s disciplinary choice³⁷. Second, the interests of the

³⁷ While strict parenting is obviously not an exclusively Asian phenomenon, discipline-based steering seems to be a much more unique feature of this demographic. We can see for example, in Reay’s (2012) study of white middle class parenting strategies, the steering of school choice but not the steering of disciplinary choice.

child/youth³⁸ are not taken into account, and the practice of “engagement without interest” requires the child/youth to constantly perform the additional labour of self-repression.³⁹ Third, a disciplinary choice tends to become a lifelong commitment, and I would expect this pattern to be even more pronounced for the demographic at hand. The STEM-bound children of skilled migrants are going into a highly specialized discipline, being streamed towards specific sets of jobs, and most importantly, are made to develop a comprehensive habitus that fits poorly into many other fields. Fourth, the dynamics of self-repression deter the youth from embracing personal agency, because the individualist injunction to follow one’s heart merely makes it harder to self-repress without changing the broader structures that make this self-repression necessary.

The self-repression aspect is particularly stark in the case of 12, as we can literally see that *words cannot describe how she had to cope*, and that keeping it undescribed is the key to her coping. Here we can see how a naïve individualist injunction to “be free and follow your heart” can actually aggravate a trauma and cause immediate harm.

³⁸ The awkward slash is unfortunate, but I think it is important to emphasize a more or less essential feature of this demographic. On the one hand, the individualist society views them as youths, and expects them to exude a level of freedom that is considered normal for a youth. While on the other hand in the collectivist home they are framed relationally as the children of their parents, and are expected to exude a level of obedience considered normal for a child. The migrant “youth” carries a relational baggage when navigating the individualist society, just as they carry an individualist baggage when navigating the collectivist home. Thus, the slash is no more awkward than the hybridity it is meant to get at.

³⁹ i.e. they have to force themselves to forget that they were forced, in order to make a forced life trajectory more bearable

Chapter Summary

In this chapter, the main dichotomy I have focused on is the constructed opposition between understanding and memorization. Through my interpretation of participant narratives, I have sought to identify the underlying structures at work in fuelling this constructed opposition. I have proceeded by trying to identify homologies between the dichotomy in question and a number of other dichotomies in the narratives of the participants. That is to say, I have been trying to identify possibilities for a collection of potentially analogous dichotomies to turn into mutually reinforcing ideological tropes, thus allowing any number of vaguely similar tropes to reinforce each other and congeal into an entrenched worldview.

This binary between memorization and understanding can potentially reinforce, and can potentially be reinforced by, a series of other binaries in the scholastic lifeworld: intrinsic versus extrinsic modes of engagement, curious versus survivalist attitudes, and asking questions to authority figures versus staying silent and relying on high-achieving peers. Moreover, the dichotomy between memorization and understanding is sometimes mapped (rightly or wrongly) onto the difference between more “assimilated” and less “assimilated” migrants⁴⁰. This whole gamut of homologically linked oppositions owes their endurance to the underlying tension between economic and cultural capital. While this capital tension is more or less a general human condition, the homological and phenomenological manifestations of this tension are contextual to the lifeworld, outside of which their political significance might not be readily legible.

⁴⁰ Here, I use the word assimilation to denote an individual’s perceived and self-perceived moral distance from one’s country of birth, as well as one’s perceived and self-perceived sociocultural access to one’s country of residence. This is a fraught word and I hope it does not come across as something that normalizes Eurocentric ideologies, but at least I can say that I am making this definition from a migrant’s standpoint.

The stance an individual has on the legitimacy of rote learning depends on their position in social space, and more specifically on the form of capital they are predisposed to accruing. A predisposition⁴¹ towards economic accrual is what undergirds a favourable perception towards memorization, and conversely, a predisposition towards cultural capital is what undergirds a favourable perception towards “understanding”. Moreover, even though the economic side may manifest the taste of necessity more readily, the symbolic dominance of the cultural side is not at all a foregone conclusion in a disciplinary field that gravitates towards the economic side as a whole due to its corporate connections, which exist despite the field’s nominally academic nature and the “intrinsic” intentions of its faculty. In some ways, the corporate-bound academic discipline, ostensibly a depoliticized space, is actually a lifeworld on the borderland torn between economic and cultural aspirations, ever-ready to incubate mentalities of horizontal rivalry that map onto the proto-conflict between economy and culture. The form of such rivalries is not at all incompatible with the structure of electoral politics, and this will become increasingly obvious in later chapters.

⁴¹ “Predisposition” here is used in the Bourdieusian sense; that is, as a combination of agentic preference and structural constraints, rather than simply the former.

Chapter 6 - The Gendering of Ease

Chapter Overview

This chapter constitutes the second part of the overarching effort to reconstruct how the tension between economic and cultural capital plays out in my participants' lifeworld, and how this tension structures the development of their political stances. Following from the previous chapter on undergraduate learning styles, this chapter continues to examine narratives from the undergraduate phase of my participants' lives. This time, however, I am shifting the emphasis from class onto gender. This chapter seeks to demonstrate how economic and cultural forms of capital take on gendered meanings in the STEM undergraduate lifeworld of my participants, and how the struggle between these forms of capital genders all the oppositions it homologically maps onto.

In this chapter, I dwell heavily on the dichotomy between ease and effort. Before going further, I need to clarify that I am using the notion of "ease" in a way similar to Bourdieu (1996), as captured in a particular passage from *The State Nobility*. In his analysis of the schooling system in France, Bourdieu (1996, 19-29) uses the term "privilege of ease" to refer to the fundamentally bourgeois nature behind a particular mode of school engagement, which involves not only meeting the curricular expectations but doing so in an effortless manner. In the canonical view, scholastic ease is taken to be a sign of class, and more specifically the upper-middle class. Meanwhile, the display of effort, in being the symbolic opposite of ease, becomes the sign of the petty bourgeoisie (Bourdieu, *ibid*). Bourdieu's remarks about the connection between effortlessness and bourgeois distinction, and by extension the connection between diligence and the petty bourgeoisie, forms the starting point of my analysis.

My overall strategy in this chapter is to start by seeking out moments in the lifeworld where the display of ease is coded as masculine. Then, I show how the dichotomy between ease and effort acts as an enabler of category slippages by simultaneously homologizing onto both gender and class. Finally, I analyze how category slippages between gender and class allow class-based disdain to furnish and reinforce gender norms, as well as how those gender norms furnish and reinforce class disdain in turn.

Rote learning revisited

In the previous chapter, I have shown how the tension between reason and rote, or “understanding versus memorization”, is homologous with numerous other tensions in the lifeworld. This includes the tension between [1] migrants who are perceived to be more assimilated versus those who are perceived to be less so; [2] the meritorious versus the “flukes”; [3] those who think long-term versus those who need “help” in the present; [4] the platitudes of the official curriculum versus the demands of the hidden curriculum; [5] grad school versus co-op; [6] intrinsic versus extrinsic interest; [7] “liberal” versus “gambler” parenting.

At first glance, the dichotomy between effort and ease seem strongly related to the whole parade of binaries listed above. This raises the question as to why I am framing the tension between ease and effort as a new topic, rather than just an extension of the discussion on rote versus reason. However, stacking too many dichotomies on top of each other is of little analytical use. In *The Logic of Practice*, Bourdieu (1990, 261) cautions against superimposing too many schemata at once during analysis in an attempt to reconstruct a super-coherent symbolic system. To Bourdieu, this is a form of scholastic fallacy because it attributes to the

practical lifeworld a level of precision and coherence that can only exist in the mind of an observer standing outside the lifeworld.

Moreover, what I want to do in this chapter requires a slightly different methodological style that relies less on direct testimonies. The tension between effort and ease is not something that pops up directly in participant discourse, and its presence is much more subterranean and indirect. Thus there is going to be a lot more interpretive work involved, which demands a different style of analysis that is best placed in an independent chapter.

The ease of belonging and the gendering of ease

In my research context, being at ease does not just mean being able to meet the overt curricular demands effortlessly, but also refers to being able to effortlessly fit into the hidden curriculum.⁴² In other words, I am going to explicitly treat effortless achievement and effortless belonging as “one thing”. Although this may seem to stretch the meaning of “ease” beyond Bourdieu’s (1996) formulation in *State Nobility*, it does not contradict his original theory. Bourdieu himself was simply not as direct in this regard. For instance, there are plenty of hints in the original text (*ibid*, 19-29) that the perception of effortlessness is at least partially owing to a judgement of taste on the part of the teachers.

I asked each participant in my study, without exception, some questions directly regarding the interests and motivations behind their choice to major in engineering. Amongst the women, almost everyone’s rationale for entering the discipline seems unique. On their own in a vacuum, the narratives of the women seem a lot more idiosyncratic than the narratives of the

⁴² By “hidden curriculum” in this context, I mean the social environment and norms around the overt curriculum.

men, with almost no common discourse between each other. However, the women do have at least one *indirect* pattern: there is one popular pattern *emerging from the men*, which does not emerge from the vast majority of the women.

Out of the fifteen participants, ten of whom were men and five of whom were women, at least six out of the ten men exhibited a sense of dispositional naturalness. Many (although not all) of the men reported that the decision on whether to commit to a STEM-based discipline was more or less “natural” for them, or that it “just made sense”. Examples in the data include 05 and 10 saying that it was “natural”, “a matter of course”, and similarly 06 saying that it just “made sense”. Moreover, although 02, 09, and 11 said that they did not really decide until the very end of high school, there are signs that a general trajectory in at least STEM, if not specifically engineering, had been well-ingrained in their dispositions and well-grounded in their circumstances. 02 for example seems to be in touch with an enduring network of STEM-oriented friends that go back to high school. Meanwhile, 09 has stated clearly that his trajectory had originally been tailored for medical school. Lastly, 11 had been participating in math contests every year during high school.

In contrast to those men, all the women except 13 cited tensions of various kinds, all involving parents who wanted to steer the career path of their child.⁴³ However, and very importantly, this does not mean that *women’s interest in STEM* is necessarily unnatural. The point here is that even when the women prefer STEM, elements in the lifeworld (usually parents but not always) still find a way to generate tension for them. When they want to do science, their parents will want them to do business. When they want to do humanities, their parents will want

⁴³ 01, 07, and 08 entered engineering in spite of having parents who didn’t want this path for them, while 12 dealt with parents who forced her into engineering against her wishes.

them to do science. *The point is that the feeling of ease about their own career track was gone well before they entered university.*

The taste of ease and the taste of choice

The experiences of 01 and 07 are a demonstration of how gender cuts across class lines. These two women enrolled and graduated in cohorts that were over four years apart, so they likely did not know each other. Their social positions did not seem similar either; 01's class origins seem markedly higher, having worked at her father's company while she was still in high school. It seems that 01's parents are not part of the cohort of technical migrants from the 90s, but belong more to the entrepreneurial migrants who started their lives in Canada on a more secure footing. 07's class background, on the other hand, seemed to be a much closer match to the typical profile of the petty bourgeois Chinese technical migrants in my sample, judging by the time of migration, the profession of her parents, and her own outlook on school.

01 had originally wanted to study physics, but her father wanted her to study business and thus engineering ended up being a compromise. Similarly, for 07, her father wanted her to study business, and her mom wanted her to study medicine, but she chose to study engineering because she liked neither. Despite all the differences in their class origins, the discourse of their fathers seemed strikingly similar: women should do business rather than science. In having defied their fathers to some degree, they approached the discipline with, at least in their own minds, a sense of choice. But to choose means to deliberate, and the deliberator is always already disadvantaged in the quest to look natural.

My interpretation of the situation is as follows: it makes a difference whether the decision to enter engineering is a conscious, willful one. Women like 01 and 07 would have had to exert a conscious, agentic stance against their fathers. When the men in the discipline doubt the women's belonging, much like how their own fathers had once doubted them, then it is possible that the women would push back in the same way that they coped with their fathers. I understand that my interpretation here is subjective and that a different scholar may offer a different interpretation, but I implore the reader to hear me out and entertain my train of thought. Much like what I did in the previous chapter, I am trying to identify potential points where social oppositions (in this case, the brave woman versus the doubting man) can carry across multiple situations and congeal an often-problematic status quo.

To be sure, a sense of choice is not necessarily less privileged than a sense of ease, but they do imply different outlooks and different modes of belonging. Just this difference alone renders their belonging in the discipline less self-evident, less inevitable. To counteract the androcentric norms that denaturalize their belonging, these women have to demonstrate a strong conscious commitment to the discipline. Yet the consciousness of this commitment, so liable to be perceived as artifice, reproduces their denaturalization.

The problematics of fitting in

A gendered need to "fit" into the institution, comprised of both the curriculum itself and the gendered social relations that render it possible, can lead to category slippages that transfer one's disposition towards the curriculum onto one's disposition towards gendered practices in other fields. In the case of 01, the need to prove her own belonging became a stark theme from

the first week of school, and was an ongoing concern throughout her time in the program. For starters, dealing with male perceptions is a recurring conundrum:

01: I really liked engineering culture, but if I have to criticize the orientation, I think women engineers were excluded from the songs. I think women engineers have very serious identity problems.

Moreover, the identity crisis also involves a lack of trustworthy peers (who do not have those “perceptions”) as well as a lack of role models.

01: There's also a lack of peers for female engineers. In a gender-unbalanced study environment, it is very difficult for female engineers to find peers to hang out with or people they look up to. It's hard for female engineers to see who they are, and who they want to become.

From this, there arises a very particular practice of dealing with adverse conditions, in which the discourse of strength and dedication become the means of affirming one’s belonging to the disciplinary culture.

01: I'm not saying things are absolutely bad. Actually I think because of this identity problem, I might have grown stronger than I would have in a gender-balanced environment. If I could choose, I would want to focus my efforts in achieving strong academic or career goals than resolve my identity crisis.

What is also noteworthy is the role played here by the concept of “choice”. What does it mean here for 01 to, essentially, choose strength? First, choice represents a reaffirmation of one’s dedication to the discipline. Second, it represents relinquishing one’s moral claims to see oneself represented in the curriculum. Third, it sets up an interesting dichotomy between *belonging to*

the discipline and seeing oneself in its curriculum. This is akin to a practice of “respectability” (e.g. Skeggs 2004), in which a dominant norm is internalized in a way that pushes back against domination. Insofar as one frames the relation between strength and identity as a “choice”, strength and identity become opposites and hence, those whose identities enjoy natural belonging are recast as people who lack strength.

An important nuance that emerged from 01’s narrative is her assessment of how male biases actually operate in her disciplinary and professional setting. Namely, the problem is not just about men assuming women to have low ability; more fundamentally, it is about the men setting up a false dichotomy between appearance and ability.

01: The guys’ perception is that women engineers are incapable of good work. If a female engineer likes to dress up, then she is thought to be weak in academics. From my personal experience I was told by quite a few guys that they thought it’s easier for female engineers to find internships or research positions because managers like to hire female engineers.

Hence to her, the male system is not trying to make her dress up. Rather, the male system is trying to force her to choose between appearing well-dressed and appearing capable. It is this dichotomy that she is striving to fight against in her everyday life. In light of this, it made a lot more sense why it was crucial to her to be able to dress up and be treated as an engineer *at the same time.*

The more or less plain observation is that the male classmates around 01 have created a homology between masculinity and merit (i.e. a perceived similarity between the range of comportments and the range of hierarchized ability). There are other observations to be made, all

of which are worth hashing out. For one, “managers” are implicitly coded as male. This is something that not only reflects the conditions in the field (i.e. men in tech firms get more promotions) but also serves to reproduce it (i.e. male-dominated management becomes too normal to question). Even more importantly, her insistence on “dressing up” is actually an attempt to counter dichotomies that bring down her chances in the field. The men miss this point because, in their imagination, appearance and competence are deemed incompatible. This imagination is so strongly held that to question it is literally unthinkable, thus they do not see that it is precisely this imagination that 01 is pushing back against.

Once more, I understand that my interpretation is subjective and that a different scholar may emphasize a different set of themes. In this instance though, I believe that this drastic imaginary separation between “knowledge” and social relations is something worth flagging. This masculine imagination contrasts sharply with 01’s experiences, in which proving one’s belonging in the knowledge and social aspects of the discipline are not separable endeavours. This dichotomy can be associated with many homologies in its own right, but I am going to leave this line of thought to one side. For now, I want to remain focused on the homology between gender and ease.

Hazing rituals, gendering anxiety

The homology between gender and ease also affects men, though it often does this in a way that impacts the position of women in the field as well. The orientation narratives of 02 (who is a man) is a stark example of how such dynamics can unfold.

During orientation week in the first year of undergrad, 02 encountered a hazing ritual staged by upper-year engineering students. In this ritual, the first-year students are gathered around a large horse statue situated outdoors, and they are pressured into licking the statue's male genitalia. The upper-year students exert this pressure by first emphasizing the high failure rate of the program, and then disseminate the superstition that not following the ritual will invite bad luck on exams.

02: Frosh week was kind of random. I felt there were certain things I'm not sure about, but maybe they just gave me a taste of college life. The seniors tried to get the freshmen to do all sorts of stupid shit. Licking the balls of that horse statue! I just felt that was really stupid. And they kinda like, made it superstitiously important. Like, if you don't do it, you fail. And I took that as a challenge. I didn't do it and I never failed.

The full significance of this becomes starker if we ask, what kind of people was this ritual meant to torture? Although 02 and I never actually spoke to each other during undergrad, I was actually present at the same ritual on that very day. From my personal experiences, I can hazard a guess as to who this ritual was truly meant to torture. As before, I acknowledge that my interpretation here is subjective, and once again I reiterate that my goal is to identify *potential venues* where tropes can congeal across different situations and reinforce a problematic structure.

A freshman who has a combination of the following three traits would be immensely miserable. First, their confidence in their ability is low enough such that they want help from an external source; second, their desire to pass the program is very high, to the point where every bit of help counts; third, they are too shy to perform the ritual in public. I stress here that the question is not about who is more likely to follow the ritual. The question is about who feels the most tension whether they follow it or not.

In other words, the intended victim is to have a combination of the following: lack of confidence, desire for success, and susceptibility to shame. Someone fitting this profile feels immense cognitive dissonance regarding a topic with very high stakes; the ritual creates a contradiction between success and respectability, two high-stakes distinctions that are often assumed to be aligned. The petty bourgeois children of Asian skilled migrants is one demographic that seems very susceptible, and they also happen to have high representation in the demographics of the program. While I do not want to assume with certainty that this ritual incites far more inner turmoil in the women within this group, the possibility is there.

In a highly heteronormative environment, a ritual such as this has a strong feminizing effect. The manifest masculinity of the statue serves to, in a very blunt manner, place the freshman in a feminized position. A whole range of distinctions associated with the position of the freshman become homologically linked to gender, with this ritual being the major mediating practice. In addition to the correspondence between effort and femininity, class and potentially “race” are now also brought into the mix. The caveat with “race”, however, is that as far as I can remember, the seniors running the ritual were also Asian (I remember one lanky fellow in particular, who told me to pick up a dead pigeon later that day). It makes more sense to say that the “racial” distinction is actually between the more assimilated and the less assimilated migrants, with the “anxiety to pass” being coded as a sign of the less assimilated.

Gender, class, and meritocracy

Through a vignette of my interactions with 10, I am going to argue that the dichotomy 01 brought up earlier between “dressing up” and “academics” is not an accident. The context of the

vignette is a follow-up interview with 10, where I was able to ask more open-ended questions. I had been probing 10 for his own perceptions of when his consciousness became politicized, and one key theme I had been pursuing is the gendered nature of meritocratic ideology. In this particular context, 10 is using the terms “hysteria” and “fad” to describe a particular kind of behaviour in the consumer society. The whole discussion has remained unconnected to anything within the schooling institution until he brought up the term “merit” and framed it as the opposite of “hysteria”.

10: What does hysteria mean? It means people jumping on a bandwagon, and being convinced that something is a certain way, without objectively, like, analyzing it using the traditional means. Like whether the product works well, or whether it has more features.

Alex: So, do you mean fashion?

10: I wouldn't consider “fashion” as a “fad”.

Alex: So fashion is not a fad?

10: Yes it is, but not this kind. Fads involve judging a product a certain way. It involves rating a product far above its actual purpose. It gets to a point where competing products, which would have been rated as better by comparing merits alone, is now considered nothing.

Alex: Are you saying hysteria is the opposite of merit? Because...

10: I think so.

Alex: Think carefully about this though, I don't want to put this in your mouth.

10: I think it is. I think hysteria is what overrules merit-based judgement.

This opposition between “merit” and “hysteria” seems to resemble the opposition between “academics” and “dressing up”, especially if we consider how 10 mentions hysteria and fads somewhat interchangeably. The discourse about “overruling merit-based judgement” is structurally similar to the discourse 01 attributes to her male classmates, in which “women have an easier time finding jobs” and that “managers prefer to hire women.”

Unlike in the case of the hazing ritual, wherein the extrinsically-motivated petty bourgeoisie becomes a prime target of feminization, 10’s valorization of functionality and “purpose” indirectly connects petty bourgeois mentality to masculinity. This is a very subtle point, so I will repeat the relevant section of his excerpt for better clarity.

10: Fads involve... rating a product far above its actual purpose. It gets to a point where competing products, which would have been rated as better by comparing merits alone, is now considered nothing.

Thus in 10’s constructed opposition between fads and merit, there is a category slippage between merit and functionality. Even though he makes no direct reference to aesthetics, there is implicitly a homology between “fads versus merit” and “aesthetics versus function”.⁴⁴ I think there is an element of masculinity in this petty bourgeois valorization of function over form, and the theoretical implications of this are worth dwelling on at some length. To phrase the question bluntly, if the hazing ritual feminizes the petty bourgeoisie but 10’s narrative masculinizes certain values from the same class, what gender position does the petty bourgeois position actually map onto? The answer is, of course, not that simple.

⁴⁴ The dichotomy between aesthetics and functionality is a frequent feature of engineering masculinity. In my own undergraduate experiences (and hence my classmate’s experiences as well) this trope was openly deployed on multiple occasions as soon as we began our first year studies. Methodologically I do not think it is a stretch to say that just beneath the surface of 10’s responses, a knock against aesthetics is subconsciously there.

As Faulkner (2000b) notes in her ethnography of software engineers, gendered dichotomies are ubiquitous in engineering culture; although some of the dichotomies map onto gender in contradictory ways, the dichotomies themselves as well as the gendered imaginations they evoke remain very durable. From a Bourdieusian perspective, the existence (or even prevalence) of contradictory symbolism within a homological constellation is not a surprising phenomenon in and of itself. As Bourdieu (1990, 261) remarks,

When one tries to push the identifications of the different series beyond a certain degree of refinement, behind the fundamental homologies all sorts of incoherencies begin to appear. True rigour does not lie in pushing the system beyond its limits, by... putting essentially mandarin questions of coherence or logical correspondence to the most typically practical of practices.

There are, however, issues in overemphasizing the “practical” nature of masculine tropes and attributing only “practice” to the lifeworld. As Faulkner (*ibid*, 784) notes, there is a difference between what participants do and what participants say. While the lifeworld is likely to be predominantly “practical” (i.e. non-reflexive), the *discourse* in the lifeworld tends to exhibit a higher level of deliberation compared to banal practice. Hence, there is a methodological problem in overemphasizing the “practical” nature of what participants actually *say out loud*. Faulkner’s own explanations come from a more materialist perspective. These contradictory mappings between gendered dichotomies are attributed to differently classed masculinities and differently classed social scripts of self-justification (*ibid*, 785-786).

In any case, at least for the context at hand, attributing the homological incoherencies to differently classed masculinities does seem to make sense, whether one borrows from Bourdieu or from Faulkner. It cannot be denied that there is a blending of gender and class in 10’s

valorization of function over form. 10's masculine discourse of "purpose" is a valorization of the petty bourgeois taste of necessity. This, accompanied by a denigration of precisely the tastes that keep needs at bay, constitutes an indirect way of locating masculinity (and hence, to him, logic and merit) in a particular⁴⁵ class position. This exists in tension with the hazing ritual in 02's narrative, a ritual that makes light of the needy and locates masculinity (and the power that comes with it) in a very different corner of social space. In a highly masculinized and scholastic lifeworld, wherein the palace struggle happens between the bourgeoisie and the petty bourgeoisie, it is not surprising to see opposed schemata from precisely these two classed factions. Each schema is structured by a bid for the prize of masculinity and the symbolic capital that it provides.

The gendering of race

So far, I have discussed some of the interplays between gendered divisions and classed divisions. In particular, I have discussed how conflicting, class-specific accounts of masculinity result in conflicting homologies between gender and class. The purpose of the next several sections is to write race into the picture.

The guiding questions of this analysis can be posed in the following manner. [1] In the general field of power, are there ways in which gender and race homologically map onto each other? [2] In the particular field of engineering schooling, can the dichotomy between ease and

⁴⁵ In this context, petty bourgeois. But 10's overall social status is one of the more complex cases. If we were to put him in a distinction chart, he would lean slightly to the cultural side within the engineering bubble, but this does not change the reality that the bubble as a whole leans towards the economic. As we will see later, once we stop talking about our studies and start talking about politics, this latter aspect of him will dominate.

effort, which demonstrably map onto gender, also be mapped onto race in a way that genders race?

Asian masculinities and racial castration

Participant 04 had one particular narrative about his high school band that illustrates very vividly how race becomes gendered. When asked to recount the gender composition of his high school band, 04 said that the white students were far more gendered in their instrument choices; meanwhile, all the Asian students, whether gendered male or female, played instruments similar to what the female white students would have been playing.

04: The Asians mostly did clarinet, flute, maybe a few other things. For example the clarinet, both Asian guys and Asian girls took it, so there did not seem to be a strong preference. But there were white girls doing flute, white boys doing trumpet. It was very clear for them. I was always troubled as to why there were so few Asians that did trumpet. Obviously, in China, there are trumpet players! Plenty of them, right? So I was always troubled, I did not get an answer for that. And... do you want me to speculate? I think has to do with some of the instruments, such as flute, being something you can play at home, and it seems very, um, civil. Whereas trumpet, you are loud and obnoxious. And that's something the Asian kids did not want their parents to feel they are.

I am not denying that parents are a huge force in our childhood and teenage years. But perhaps in this instance, it is not just the parents we should be looking at.

The history of gendered racial management in North America is well-documented. Dua (2007) has noted that ever since the 1870s, the white settler government in Canada has been

oscillating between importing cheap racialized labour for nation-building and whitening the nation that was being built. One way the government sought to balance between both of these imperatives was to separately adjust the number of migrant men and migrant women who were allowed entry, through the use of direct policy and quotas, which served to ultimately limit the birth rate of non-white demographics.

In a historical account of Asian masculinities in the United States, Eng (2001) uses the term ‘racial castration’ to reference both a phenomenon and its history. The surface phenomenon is the perceived deviance of Asian masculinities in a white settler society, particularly with regards to stereotypes that frame Asian men as weak, diminutive, effeminate, submissive, and undesirable to the heteronormative white settler order. On a deeper level, it refers to the historical and ongoing experiences of *structurally-conditioned bachelorhood* that has haunted (and queered) Asian American masculinities ever since the mid-1800s.

In my research context, the term applies to at least the phenomenological dimension of the lifeworld. The underlying causes of racial castration are not as clear in the contemporary milieu where status and labour niches of Asian migrants have shifted considerably. Nevertheless, there are some clues that point to mass media and popular culture as underlying factors. Similar to how women in my study experienced a lack of role models in STEM, other studies show that Asian men experience a similar lack of role models in broader North American society.

Schug et al. (2017) suggest that racializing perceptions can carry a gendered component, resulting in certain ethnic groups being viewed as more “prototypically” masculine or feminine. Their findings suggest that Asians are represented and conceived as prototypically feminine, both in mass media representations as well as in the imaginations of actual people in general society. In one study, Schug et al (2017) examined the representations of faces and bodies in

selected popular magazines. They found that the gender ratio for Asian representation is the most skewed, with 79% of Asian representations being women. By comparison, white representations show 56% in favour of women and Black representations show 59% in favour of men. In a different study, Schug et al (2015) told a large sample of participants to write fiction, with the caveat that the researchers would dictate the ethnicity of the main character. They found that when the researchers demanded a black or white main character, the participants were more likely to depict a man, but the participants who were told to depict Asians were more likely to depict a woman.

For the purposes of identifying potential venues for different social oppositions to reinforce each other, we can say that it is possible for homologies to be drawn between race and gender, especially in light of “prototypically” gendered perceptions of race. The next subject of discussion is how such homologies can unfold in the actual lifeworld of engineering schooling.

The (gendered) ethnicity of effort

In this section, I am working to locate the effects of gendered race in the engineering lifeworld, and to see if there is a three-way category slippage between race, gender, and effort within that lifeworld. To recap the relevant arguments in this chapter so far, we have established that homologies exist between femininity and effort, which is objectively rooted in women’s efforts to overcome masculine domination, as well as men’s misrecognition of said effort. Moreover, I have argued just now that homologies exist between femininity and Asian racialization in North American society, which is mediated through the representations of mass

media. What remains is to show how Asian racialization symbolically connects to the effort pole of the ease-effort binary, and the objective social mechanisms enabling this symbolic connection.

We have already noted, in the previous chapter on rote learning, that the impetus to accumulate cultural capital in the lifeworld can sometimes be perceived by the economically-inclined as a sign of *leisurely curiosity*. This has been established in my analysis of the peer resentment faced by those who ask questions in class. I suggest that this leisurely curiosity is the lifeworld's equivalent to the "privilege of ease", as it is a class marker of those who lean towards intrinsic knowledge, and who are less fettered by extrinsic needs that are felt as more pressing. On the whole, if the dichotomy between ease and effort maps onto the dichotomy between intrinsic and extrinsic interest, and if the clash of interests is in turn rooted in the struggle between cultural and economic capital, then the missing piece of the puzzle is the link between particular ethnicities and particular types of accumulation.

The missing piece can be found in the notion of "engagement without interest", as noted by Archer et al. (2012) and in the manner discussed in the chapter on rote learning. Although only one participant commented on it at length, it is known in the existing literature that engagement without interest is a common feature in the Asian migrant families that send their kids into STEM. This is not only seen in Archer et al., which shows that engagement without interest can only be coded in the migrant participants in their sample; Wong (2015) also discusses the same phenomenon in greater detail. Wong draws a difference between "careers in science" and "careers with science", and notes that migrant children to engage STEM overwhelmingly go to the latter. Careers with science are the ones that, as 04 has put it so bluntly, "make money". Thus their motivation is external to the pursuit of cultural capital, and hence, engage without intrinsic interest.

Other studies such as the ones conducted by Pang and Mu (2019) also closely document the parenting strategies of Chinese-Australian and Chinese-Canadian families. Pang and Mu suggest that a common feature in the childhoods of many Chinese-born migrant youths is the need to navigate parents who tend to misrecognize the realistic circumstances of the child and frequently leads to the child having to compromise on what they want to do in life. More importantly, parental pressure often channels children onto paths that emphasize economic capital. This is partly because in the migrant lifeworld, money is one of the few things that translate efficiently into symbolic capital.

Thus, mediated by family reproduction strategies that compel children to engage STEM even in the absence of intrinsic interest, homologies can arise between “being Asian” and “emphasizing economic capital”. This tends to run counter, and hence external, to cultural capital, and tends to work against the cultivation of a habitus of ease in the context of schooling.

To wrap up this line of thought, I have argued that the STEM-bound lifeworld of these migrant youths is overshadowed by a three-way symbolic homology between femininity in the field of gender, being Asian in the field of “race”, and unnatural effort in the field of schooling. Objective factors that underpin these homologies include normalized masculine domination in STEM-bound schooling, a castrated racial representation in mass media, and scarcity-driven socialization within the home.

Female faculty, petty bourgeois pride, and the contradictions of ease

While homologies are, strictly speaking, symbolic, they are not merely symbolic because they arise from actual social dynamics. Even when the symbolic homology is disproven by

reality, if the actual social underpinnings of the homology remain the same, then the homology will endure even if it is momentarily disproven. We can see rather stark examples of this in the student narratives about female faculty.

In my first interview with 10 when I had asked him to name his least favourite course, he blurted out the name of the professor rather than the name of the course. I proceeded to ask him to elaborate, and the response he gives is worth hashing out at some length. Here I will do some condensing, and try to balance fidelity with brevity⁴⁶:

10: That semiconductors course was ridiculous, and it appeared in the same semester as a whole stack of other useless courses. Really useless algebra and math courses, all blurred together, and taught by an Asian prof who doesn't speak English. It's downright ridiculous. I never liked all these calculus courses, but they were not as much of a big deal as semiconductors.

Alex: What did you hate about it?

10: Number one, the material didn't make sense. Number two, the prof assumed everybody loved her shit. It's very obvious.

Alex: How was that evident?

10: Okay so, there's kind of a hidden truth in all the courses, where [professors from different core courses] are not supposed to stack too much homework on top of each other. But this prof, she regularly overstepped her allotment of workload. Regularly! All because she felt you loved this stuff. The only reason her course was tolerable was

⁴⁶ An uncondensed version of this conversation is provided in Appendix A3.

because the circuits course, had a prof that was light on homework. Everybody survived [semiconductors] because [circuits] was forgiving. Meanwhile the semiconductors prof teaches like it's the most interesting thing in the world, but everything she said was comprehensible only to her.

It is necessary to include this excerpt because it shows a key dilemma facing women who become engineering faculty. To analyze this from a theoretical angle, what is happening is that the professor in question is *precisely* someone who [1] masters the material with ease, who is [2] academic rather than sociable, and who is [3] interested in the intrinsic knowledge of the field, to the point of staying in school to teach and do research rather than enter the industry for a salary. But unlike the intellectualism of male faculty, the intellectualism of female faculty does not come across to male students in the same way. While male faculty who fully embodies the intrinsic side of the curriculum might come across as brilliant, female faculty who do the same are simply perceived as obnoxious by male students, especially those with lower-middle-class dispositions. This is a realistic demonstration of how differently classed STEM masculinities, rather than cancelling each other out, function instead to create perpetual double binds for women in STEM, even in situations where their prestige is institutionally certified. When women do not conform to stereotypes and manifest the very traits that are used to justify male merit, they are simply faced with the double standards of the field in its full, undisguised form.

Having said that, it is technically possible for resentment from petty bourgeois students (associated here with a disposition driven mostly by extrinsic interests and economic capital) to also target male faculty who lean too much in favour of cultural capital, especially in a discipline that leans towards the economic side in the general field of power. The following vignette comes from 04, during our walking tour:

04: I've never been to this pub, but I do remember one professor saying his office hours are in here. You buy him a drink and he answers a question, or something like that.

Alex: He taught us algebra. He was also the vice chair.

04: Was that the guy who wrote his own book?

Alex: A couple of them did that. He wrote his as a storybook.

04: Oh god, how cringeworthy is that!?

Alex: His pedagogy wasn't bad.

04: Yeah, like everything, cringe has its place.

Alex: How many professors can you name who is both a good teacher and a good researcher? I think he's one of them.

04: I don't think about any professor's research, so I can't say.

Thus, to be sure, even without direct considerations of gender, students driven by economic capital will dislike professors who display leanings towards cultural capital. We can cross-compare this scenario with another conversation I had with 10, where we talk specifically about female faculty.

Alex: how many female faculty do you recall?

10: The semiconductors prof was number one. There was the first year programming prof, whatever his [sic] ... whatever her name was. There was a biology prof that I couldn't name...

Alex: [Mentions the name of the first year biology professor]

10: Yes, um...

Alex: [Mentions the name of the second year biology professor]

10: Who's that? I don't remember that one.

Alex: She taught molecular engineering.

10: Maybe I blurred those two professors together. I don't know if I took molecular engineering.

Alex: You would have had to. You had to take two years of bio.

This, bluntly put, is like the gender equivalent of race jokes that involve saying “you all look the same!” At least 04 has some faint recollections of the algebra prof which came up after a few prompts, but 10 on the other hand really remembers nothing. Notably, it is not just the professors themselves who have been “blurred together”. *The courses they teach have also been blurred together.* The comments I am making here are not directed specifically at 10, but more so reflective of a general concern I have with the prevailing sentiments of the field, which basically condition anybody inside the field to manifest those same sentiments. At the risk of talking in psychological terms, it seems as if when the general sentiment in a male-dominated field is dismissive of the expertise of women, any expertise of the women will simply be cognitively filtered out. It is as though it is easier for a man to wholly forget the existence of a woman’s area of expertise than to admit that women can be experts at anything.

With masculine outlooks being so prevalent in the field, it is hard to imagine any context in the field where gendered schemata do not come into play. Even in cases where male students express resentment against male teachers, it can be argued that gender is still happening. As

Faulkner's (2000b, 785-786) study of engineering environments show, class disdain amongst men of different classes sometimes involve the men trying to frame their own class as being prototypically masculine. In light of Faulkner's observation, I would interpret 04's disdain against his algebra instructor as an assertion of lower middle class work ethics, which cannot be separated from the gendered self-image of petite bourgeois working men. Once again, I acknowledge that these interpretations are subjective, and I reiterate that my goal is to identify potential moments where different social oppositions can entrench each other.

What is 04 cringing at? My interpretation here is that he is attributing dishonour to a taste and to a position he does not like. Whenever we have disdain against something, there is an opposition between an unconsciously held object of pride and a consciously perceived object of denigration. Any number of the follow oppositions could potentially be operative here: a curriculum based on storytelling versus a cut-and-dry curriculum of basic mastery; the "taste" of inventive pedagogy as opposed to traditionalist material; the taste of enthusiasm as opposed to dour duty; and most bluntly, leisure versus effort. To the extent that the image of the traditionalist, dour, and effortful worker is the politically-charged self-image of the wage-earning man, 04's disdain for inventive pedagogy and academic enthusiasm is as gendered as it is classed. My view of this scenario is that without the gender element, we might explain 04's resentment, but not his cringing.

Revoked precocity, stateless nobility

Although this chapter is mainly meant to focus on university experiences, there is a high school narrative from 08 that connects very well to the dichotomy between ease and effort. 08's

high school experiences of losing her status as a precocious student and being relegated to a struggling student bring up an orphaned theme that cannot be easily connected to the high school narratives of other participants in the next chapter; but barring the fact that it is not about university life, the theme of precocity instead fits well into the current chapter.

In this final section of the chapter⁴⁷, I suggest the possibility that the schooling system's power to ascribe and revoke precocity is a key contributing force to the declassing of STEM-bound Asian Canadian migrant youths⁴⁸. This force operates by playing on the dichotomy between effort and ease, and by symbolically associating migrant youths with the effort-based pole of the schooling field. Since it plays on this dichotomy, and since this dichotomy homologically equivocates between race, gender and class, the effects of this declassing will not just be classed, but also inevitably raced and gendered.

As Bourdieu (1997) has shown, precocity is another variant of the haute bourgeois' sense of ease. To the extent that the schooling system combines students of every social class into age-based cohorts, and to the extent that they are evaluated according to bourgeois standards, children from bourgeois families will appear to be precocious, ostensibly manifesting abilities beyond their age. Thus in the canonical scenario, the reified valorization of precocity functions to reproduce bourgeois legitimacy. But 08's experiences put a declassing twist to it all.

⁴⁷ It might be convenient to reiterate here, that the focus of the chapter is about the effort-ease dichotomy and the homologies surrounding it. So this last section is not as off-topic as it might appear.

⁴⁸ Here I do not mean to say all such youths become significantly declassed upon migration. I am merely saying that for those who do get declassed, the schooling system in the host country has something to do with it. By corollary, I would also not be surprised if the "exceptions" who avoid declassing are precisely those who manage to gain/regain/retain a precocious status in the school.

08 was once a precocious star student at an elite high school in Beijing, and was at least one grade level above her usual age group. However after moving to Toronto, the city school board did not recognize this status, and placed her with her nominal age group.

08: The demographics of my high school had a lot of Asian immigrants, but they had backgrounds different from mine. Lots of them grew up here but don't know how to speak English, but I came from a very elite school in China, so it's really not a problem for me to pull up to anything. I was doing well in regular Grade 10 English when I arrived. It's really weird that as soon as I came here, people just assumed that I couldn't keep up.

Besides the obvious class-based implications of losing her elite status, it is worth emphasizing that this loss of precocity specifically has the effect of *associating her with the effort pole of the effort-ease divide*. As we have established earlier in the chapter, it just so happens that the effort pole in this lifeworld⁴⁹ is homologous with not just the petty bourgeois (and hence to her, a decrease in status) but also with women and Asian migrants. This cannot be a coincidence, especially given what 08 has said in the passage above. My interpretation here is that 08 was symbolically funnelled by the system towards a symbolic position that was perceived to befit her gender and ethnicity. Seeing as how this act of funnelling led to a decrease in status, we can infer a great deal about where the system wants her demographic to stand in the order of things.

In migration studies literature, it is a known fact that amongst skilled migrants who navigate Western society with Asian credentials, declassing is widespread and furthermore

⁴⁹ One might object here that I'm playing fast and loose with field boundaries, and that I'm equivocating between the lifeworld of her university and the lifeworld of her high school. However, the homology between femininity and effort has been well-documented (Faulkner 2000; Archer et al 2012) as not just a local phenomenon or even a STEM-exclusive phenomenon, but as a general phenomenon in schooling and even popular culture beyond schooling. In any case, her high school was located in a particular part of the city that was quite close to the university campus, so even if we want to steer the debate in the direction of localism, there is still room for some argument.

affects women more than men (e.g. Liversage 2009; Boucher 2007). It is important to clarify here that the declassing experiences of migrant youths such as 08 are not really manifestations of those existing narratives, although there are important parallels worth unpacking and laying out. The declassing of Asian skilled migrants and the declassing of Asian STEM-bound migrant youths⁵⁰ exhibit similar dynamics of power that devalue the cultural and symbolic capital of migrants and especially migrant women; and yet, the same type of power is manifested through drastically different institutions. The former process occurs in the state-controlled immigration system and the employment system of the private sector. The latter process occurs in the education system featuring a very different cast of gatekeepers, who are less likely to receive direct scrutiny from social critiques that use the language of credential recognition and hiring practices.

Both processes co-exist in the life experiences of migrant youths when their declassed parents transmit their new and lowered status generationally. In such scenarios, it may become tempting to analytically collapse the second process onto the first. Such a pitfall involves attributing “declassing” to the labour situation of the parents, and scrutinize the school only for reproducing the parents’ newly lowered status onto their children. What this line of thought at least obscures, if not outright misses, is the fact that the schooling system is performing not one, but two distinct operations. The first operation is more in keeping with the canonical class critique of schools (e.g. Willis 1978; McLaren 2006), namely that schools reproduce class. But there is a second operation wherein the migrant youth is directly assigned a social class based on

⁵⁰ In this context, this clumsy phrase can be more or less understood as Asian youths who fit the following bundle of characteristics: [1] they landed before they turned 18; [2] during their initial years in Canada they were dependent on at least one migrant parent, who have either landed with the child or have come slightly before the child in order to secure housing; [3] at least one of their migrant parents is a skilled migrant who was admitted entry into Canada as such, who has a STEM degree that was obtained abroad; [4] they enrolled into a STEM-related university program.

the natural tendencies that they are perceived to have. Insofar as we analyze this second operation, the school is not “reproducing” the original⁵¹ class of the youth. Arguably, it is not even “reproducing” class structure and relations, because the school is a key actor in a milieu where the ethnic composition of a particular class is changing⁵². I would argue here that in such a milieu, school power is producing a new set of stratification dynamics wherein class relations and race relations increasingly co-construct each other.

In any case, Bourdieu (1997) is indeed correct that precocity, or the imagined, constructed idea of brilliance, is a quality attributed to the state nobility. But let us not fixate on the “nobility” and forget the “state”. I would argue that the fundamental reason why any student is not viewed as bright, in the case of 08 as well as anybody else, is that they do not match the state’s vision of what a member of the nobility ought to be.

Chapter Summary

In this chapter I have provided an alternative set of homological mappings in the lifeworld, this time taking gender divisions as the basic underlying issue. I have argued that masculine domination in the disciplinary field is maintained through gendering the privilege of ease, which associates ease with the masculine and effort with the feminine. This gendering of ease renders it possible to homologically map masculinity onto talent, natural belonging, and merit, although these mappings may be used in conflicting ways by men of different social

⁵¹ This word is used here in a Bourdieusian way, similar to how he uses the phrase “social origin” throughout his oeuvre.

⁵² In this case, the STEM-bound petty bourgeoisie is becoming increasingly Asian. Statistical evidence for this is quite plain, and here I will only cite the portion of the last census telling us that even today, Asian Canadians are still three times as likely to enter STEM compared to non-racialized Canadians.

classes. Such a system of homologies sets up a disciplinary system for women in which the less they belong the more they have to try, and the harder they try the less they are seen to belong. Amongst these homologically connected dichotomies, the one between gender and merit is particularly harmful. It sets up a discursive system through which men can automatically discredit women, on the problematic grounds that anyone with a socially esteemed appearance is assumed to have leveraged those appearances⁵³ to inflate their credibility.

Moreover, the tastes and distinctions of effort allow profound category slippages between gender, class, and race. To the extent that “effort” simultaneously connotes feminine qualities, petty bourgeois qualities, and Asian qualities, the gendering of effort simultaneously genders class and race. In the intersection between gender and class, the implication is that women of elite distinctions are denaturalized, and the symbolic capital they can accrue is curtailed. In the intersection between gender and race, this simultaneity reinforces racial castration.

Lastly, as an addendum, I looked into the role of the schooling system (but in this case, high schools more so than universities), and how its ascriptions and revocations of precocity play a key role in the declassing of migrant youths. I have suggested the possibility that the schooling system is subtly affecting the trajectories of Asian Canadian migrant youths, not by directly steering them into certain disciplines but rather, in a much more low-key exercise of power, symbolically associating them with the effort pole of the effort-talent divide.

⁵³ This is all the more fraught and complex amongst racialized men, who know all too well that appearances do in fact matter, and hence cling all the more tightly to these perceptions.

Chapter 7 - The Racialization of Discipline

Chapter Overview

This chapter takes a departure from analyzing the university experiences of my participants and moves further back in time to their high school days. It is meant to provide a view of how the economy-culture divide has structured their formative years⁵⁴. To reiterate the overarching purpose of the study and illustrate where this chapter fits, my goal is to unpack the role played by STEM-dominated schooling in the political socialization of youths from Asian Canadian skilled migrant families. My broad argument is that left-leaning and right-leaning political orientations, in the context of the lifeworld at hand, are the eventual consequences of opposed strategies of capital accrual. These strategies reflect participants' childhood migration trajectories, as well as their overall schooling experiences in Canada, and are not reducible to merely the socialization effects of university-level institutions. In the previous two chapters, we have focused on the university itself and established that the economy-culture divide is a very potent force with consequences that are clearly political. The purpose of this particular chapter is to step away from the university, show that this divide already exists by the time of high school, analyze how this divide is internalized by STEM-bound Asian Canadian high schoolers, and figure out why their internalizations are so durable.

The content of this chapter can be conceptualized as three broad parts. The first part zooms in on a pair of participants with seemingly similar backgrounds, but whose high school

⁵⁴ By this I largely refer to the combination of high school and undergrad, which corresponds roughly to the age range of 14 to 22. I find these years to be important because the teenage years are related to school choices, career choices, and life choices more broadly. These "choices" are, of course, hardly "free" choices.

narratives contrast sharply. The differences between them epitomize the ways in which differences of lived experience amongst STEM-bound Asian Canadian teenagers boil down to differences in the capital orientation of the family. In the second part, after I establish the significance of capital orientation in the high school lifeworld, I begin to describe and explain a troubling trend where disciplinary streams become racially coded, and where STEM streams are often internalized by Asian Canadian youths as ethnic destinies. After examining this phenomenon from several different angles, I argue that the persistence of the correspondence between “race” and discipline is underpinned by a multitude of mutually co-constructing dichotomies, which are ultimately rooted in the Asian Canadian youths’ reduced freedom to pursue non-economic capital. In the third part, I explore how the conflation between race and discipline can be mitigated. I suggest that it is important for Asian Canadian youths to be able to meaningfully access discourses that legitimize the value of non-economic capital. Moreover, it is also important for them to see themselves represented in non-STEM classrooms.

Economy-culture homologies in a high school setting

Since one of the intentions of the chapter is to illustrate the saliency of the economy-culture divide in high school settings, I have decided to start off with a set of juxtapositions between two specific participants who bring out this divide rather vividly. 04 and 05 are class foils of each other. These two men were born in the same province of mainland China and are of identical age; they moved to Canada in the same year during their preteens, landed in the same city, went to rival high schools in the same neighbourhood, and yet did not know each other until

they entered the same program in university⁵⁵. Their markedly different dispositions are much more readily attributable to class, and the familial reproduction strategies implied thereby. While the starkness of their contrast certainly cannot speak for everyone in my sample much less their respective communities, this extreme example is analytically illustrative because the gender, race, and migration trajectories of 04 and 05 are nearly identical, and thus their stark differences can be more easily ascribed to capital and class.

In analyzing this juxtaposition we can now mobilize some of the interim conclusions drawn in previous chapters. Near the end of the chapter on rote learning, I have suggested connections between extrinsic engagement, strict parenting and economic capital. We can furthermore add an insight from the gender and effort chapter, namely that there is a connection between strict parenting and effortful dispositions. Thus, we have so far theorized homologies between parenting style (strict vs open), scholastic motivation (extrinsic vs intrinsic), and scholastic tastes (effort vs ease), all of which are ultimately rooted in the conflict between economic and cultural capital. The contrast between 04 and 05 brings out this series of oppositions in stark clarity, plus additional contrasts that we have not yet discussed in detail.

Here we will compare 04 and 05 on several points: [1] “crazy” versus open parenting during early teenage years; [2] tedium versus hobbies during high school spare time; [3] working-class versus middle-class summer jobs in their late teens; [4] extrinsic versus intrinsic motivations before university. As a forecast, one of the consequences of this analysis is that it yields a sharper picture of the role played by “freedom” and “parenting” in the homological system. In turn, this picture illustrates how the homological system ultimately produces a by-

⁵⁵ This last point is important because they were not interacting with each other during their formative years, which justifies a more purely structural lens.

product with far-reaching impacts, which is the symbolic connection between perceived “whiteness” and cultural capital. We will start with a comparison of parenting.

04: Math camp in middle school was a magical experience for me. I think my parents were abnormal and crazy, and [being able to spend a night away from home] meant an exposure to a less crazy and abnormal environment. I think my parents are indeed crazy and abnormal; and their parenting on me was not good. The first [Chinese youth] I knew who went into engineering was my father’s classmate’s son, so to me the Chinese in engineering... were... the crazy Chinese.

05: In high school I audited some gifted classes, but I was never part of the gifted program. My parents never pressured me to enroll in it; they were like, you’re happy to do whatever you want to do. I audited those classes because I wanted to. Don’t get me wrong, they expected me to do well. But they were like, you choose what you wanna do well, and choose how you wanna get there. They’re awesome, really.

While 05’s appraisal of his parents is more or less plain, 04’s troubled tale warrants some further interpretive work. To fully explain the significance of 04’s last sentence, I will need to take some time to unpack what “crazy” means. When 04 uses “crazy” to describe the older generation, it is an adjective for strict parents. However, when he uses “crazy” to describe peers, it is an adjective for peers who are able to please strict parents. Despite this ambiguity in semantics, the essence of crazy is strictness. More precisely, crazy is the signifier for an abstract field of parental discipline, where parental desires constitute the structure of the field, and where certain forms of child achievement act as the symbolic capital within this field.

Crazy youths, thus formulated, are just youths who possess lots of crazy symbolic capital in the crazy field. Having lots of crazy symbolic capital (i.e. docility) entails a greater ability to please crazy parents (i.e. disciplinarians), and 04's ability to do so in his own childhood, by his own accounts, was not very high. Bourdieusian sensibilities tell us that when someone has little hope of collecting a particular species of capital, they are more likely to spurn its moral legitimacy. Hence we have the derogatory adjective "crazy", used in a way so vague and so general as to not even distinguish between domineering parents and docile youths. Such vagueness can be made sense of when a Bourdieusian lens is applied, wherein we frame the parental moral system as a field and child docility as the dominant capital within that field.

We now move on to a comparison of their childhood interests and hobbies. Between the two of them, "computers" and "music" were common themes; but the key is how they internalize their experiences, especially with regards to their awareness of adversity⁵⁶.

04: I think I was always meant to study computers, but for many years I stayed away from that. When I was seven my dad was still a professor and I saw his students build a computer... for someone with computer interests in China at the time, there really wasn't much outlet. When I came to Canada, somehow I started doing music, so for about five to six years music was the all-consuming thing. My parents were always against it because they think it's too expensive of a hobby. But when I moved away from my music friends I moved away from music.

In contrast, 05's answer involved much less tension and did not feature prominent moments where his desires ran against the hard limits of what his lifeworld could provide.

⁵⁶ And more or less, actual adversity.

05: I love computers. I loved computer and mechanical engineering. Things that essentially involved building stuff. I had LEGO toys, lots of model cars, electric motors, and stuff like that. In high school I had lots of friends in music and physics; they were basically the same crowd, and I hung out with them a lot. I actually had a fairly good high school life; people there were genuinely nice.

In a follow-up interview with 04, I asked a bit more about his teenage years, and it turns out that he had less leisure time during high school because his house was run-down, and he had to spend his spare time patching it up.

04: This was an auctioned house. So the previous owner, according to neighbours, was an air conditioning technician. He gambled away all the money, so the house was taken by the bank and renovated. Before he left, he took everything, including things you know, weren't able to be taken away. Like he took all the washers and stuff, and broke everything else. It was in shambles, but it was far lower than market price. So we moved in, furnished everything, renovated for years. Two years at least, room by room. Basically when I'm not doing academic stuff, I was renovating. I did the ceiling, I did the walls. My dad was okay as far as designing goes. He wasn't very physically willing. So my mom and I actually did most of the physical labour.

We now move on to a comparison of summer jobs. Between 04 and 05, the impacts of class manifest not just in the relative fetteredness of their teenage hobbies, but also in the types of summer jobs they had in their late teens. 04 did not have much to say directly, but his identification with manual labour should not surprise anyone at this point. Of much greater

significance is 05's summer work as a lifeguard, which is a perfect fit with Skeggs's (2004) model of middle-class cultural accrual.

04: I prize (sic) myself to be one who has done labour. I've done factory labour.

05: I really liked the lifeguard job, actually. It paid well and the work wasn't hard. My interests started in Grade 10 because our high school offered a course called aquatics as a pilot project. So it was a full year swimming class. A part of it was called Bronze Cross training, and it's like the first aid part of the class. The teachers all had that certification, and they gave us the option to take their test and get the certification ourselves at the end of the course. Most of us did that because it was natural; the examples were there and the role models were there.

Furthermore, the highlight of 05's narrative is the emphasis on acquiring "experience", which is not just an attitude he cultivated on his own, but rather reflective of how his parents cultivated him.

05: I kept working as a lifeguard in Grade 11 and Grade 12; I probably worked at five different pools altogether. The money I made wasn't to help my family pay their bills; it was like my own disposable income. My parents saw it as a good experience for young people, to go and work. Although if I didn't want to work they would have been absolutely okay with it.

As 05 proceeds to recount a particularly memorable experience in one of those five pools, his account bears increasing resemblance to the cultured middle class and their practices of experience acquisition. Contemporary class theorists such as Skeggs (2004) have provided detailed models of this kind of cultural accrual, wherein the culturally-inclined segment of the

middle class package their encounters with the working class into conceptually discrete and practically accrueable experiences. According to Skeggs (2004), the power to turn cultural experience into recognizable capital is not an automatic given, and those with higher social status are more likely to have this power⁵⁷. In other words, the cultured middle class is in the best position to tap into the capital nature of culture, and wield cultural capital as such.

05: I actually had one half of a summer where I worked at a community pool inside an apartment complex. It was a [poor neighbourhood] and I did not particularly enjoy the work experience over there. That said, I didn't have to work very hard that time. The pool was faulty and they had mechanical issues with the pump system. It often had to close down, but during normal day operations it was fine. It was really after, when the pool was closed after eight o'clock in the evening. A lot of people were openly taking drugs, and smoking in front of their babies. They were literally taking their kids for a stroll and just smoking in front of the kids. So I mean, it wasn't [too bad], it was just people getting on with their lives and I didn't see anything particularly dangerous, but I certainly didn't feel overly comfortable putting in my hours there. Eventually the pool had to shut down completely, and then my employer moved me to another pool.

Within the existing literature, there are very detailed analyses of how the cultured white middle-class families are able to immerse themselves in working-class environments and frame their own children's encounters with their working-class peers as "experience" (Reay, Crozier &

⁵⁷ i.e. what Skeggs refers to as "personhood" throughout her oeuvre

James, 2012). What we see here is a more cosmopolitan⁵⁸ example of the same category of phenomena occurring in the migrant middle class.

We now move on to compare their mode of engagement in school, especially with regards to their reasons for choosing an engineering career near the end of high school. After many discussions about homologies in this paper, it comes as no surprise at this point that 04 embodies the extrinsic pole and 05 embodies the opposite.

04: When I first applied to engineering, I actually applied for the mechanical program. But... I... I don't know why... but... I flipped from the mechanical program to the multidisciplinary program. I think my thought process was, if I must do something I hate – engineering – then I should do the most hateful of them all, which is the multidisciplinary program. Within the multidisciplinary program I specialized in computers, when I compared how hard it was for everyone else versus how easily it came to me. I felt that if there's something I can do but others cannot, I should do it.

We have already discussed in the rote learning chapter how 04 rationalizes a career in computers. We can recall from that chapter that 04 associated doing computers with being Chinese and finding a highly alienated labour niche that other demographics did not want to endure. What I want to emphasize here instead is his rationale for entering the multidisciplinary program, and how he deliberately, almost in an act of self-harm, consciously chose “the most hateful program of them all”. This is an extreme manifestation of “engagement without interest”, in which one

⁵⁸ I use this word with some trepidation, and I do not want to overemphasize the “modern” connotations of this word. I actually think cultural accrual is not just a malady of capitalist commodification, but a malady of hierarchical society in general. Such scenarios were certainly no secret to the ancient Chinese, and the time-worn adage of “going through mud without getting stained” (出污泥而不染) is the product of an all-too-familiar class dynamic where cultural elites can interact with the fringes of normative society and end up accruing honour rather than disgrace.

deliberately aligns oneself with alienation in an act of resignation. But it is no coincidence that this subjective self-harm fits perfectly with the objective labour niche in which he sees his own demographic – a labour niche defined precisely by suffering, in which the value of a racialized life hinges on the amount of extra suffering one is consciously willing to endure. In some ways, he has realized the types of accrual open to him and has begun an accrual process of his own. Meanwhile, though, 05's account contrasts sharply with 04's narrative.

05: I went into engineering because I was genuinely interested in being an engineer. So by about Grade 11, I figured out that I didn't have a talent for biology, so that kind of killed the considerations for med school. But I was good with computers, around programming and understanding how technology works. So by the time I was applying to university, I had my choices narrowed down.

As though being a total foil to 04, 05's alignment with intrinsic interest and intrinsic engagement is palpable. There is also something more subtle emerging here that is no less significant. We might notice at this point that 05's choice of words involves not just “understanding” and “interest”, but also “choices”. Just like the words “understanding” and “interest”, “choice” is also starkly absent in the passage from 04. Functioning in place of the phrase “I chose” is the phrase “I applied”. Whereas “chose” connotes a first-person point of view, “applied” connotes a more disembodied, third-person point of view. The first word has a phenomenological dimension which the second word lacks. One of the reasons I find this particularly disturbing is that we are faced with a scenario where having a “detached” view and being more prone to “see everything from nowhere” does not correlate to having more power or control. In fact, quite the reverse seems to be true, and the detacher is less so detached from a disempowered practical world, and more so detached from their own disempowerment.

In any case, we have established in previous chapters that themes such as intrinsic interest and striving for understanding align unambiguously with the cultural capital side of the lifeworld. Here, seeing as how “choice” and notions of freedom are also bundled with these themes, we can infer that “choice” and freedom, much like intrinsic interest, symbolically fall on the side of cultural capital.

To recap on this marathon of juxtapositions, 04 and 05 illustrate an example of how the economy-culture divide can play out amongst STEM-bound Chinese Canadian youths in a high school setting. Most of these homologically linked oppositions are familiar themes from previous chapters, and certainly one of my goals here is to show that these familiar themes have already become active in the high school phase of the participants’ lives, well before university. Even more importantly, however, through this more detailed series of juxtapositions, a new theme emerges that we have not dealt with in detail previously, which is the theme of “freedom”, or more specifically, the freedom to engage school on an intrinsic basis. As we will see later on in this chapter, this theme of freedom plays a key role in mapping race onto capital in the high school lifeworld of STEM-bound Asian Canadian youths. In turn, the mapping between race and capital (more specifically, the homological mapping of “Asian vs white” onto “economy vs culture”) exert heavy structuring effects on the political socialization of STEM-bound Asian Canadian youths.

STEM subjects and their foils

To clearly lay out this mapping between “race” and capital, we need to unpack the homological interrelations between accrual strategies, career paths, and modes of scholastic

engagement.⁵⁹ Here I will do this unpacking through another set of illustrative examples, which are moments when participants perceive STEM subjects to be the opposite of certain other subjects, and discursively map differences of race onto differences of academic disciplines (and ultimately, career paths). More bluntly put, for many participants, whether South or East Asian, being Asian and doing STEM was often intertwined in their narrative; moreover, they are prone to discursively associate being white with doing physical education or the fine arts.

The first discourse I analyze in this regard is the perceived dichotomy between STEM and sports. The theme of “gym” emerged more or less spontaneously during interviews, without any prompting or solicitation from me. Normally the many doxa governing the logics of group formation are very hard to put into words, but here the theme of gym emerged uninvited on multiple occasions. Although the stereotype of jocks versus nerds is a well-worn trope even in contexts where race and migration are not considered⁶⁰, the way in which the trope unfolds in the migrant lifeworld constitutes a particular instance of the possible. We can start with 03 as the first case of illustration.

03: Maybe [I experienced high school cliques] a little bit, but I also switched high schools. So that was, you know, I had to form new groups and stuff. I'd say towards end of high school, [my social network] was probably more with Asians, whether immigrants or CBCs⁶¹. At the beginning of high school, I guess, maybe, I didn't distinguish as much.

Alex: May I ask at what grade did you switch high schools?

⁵⁹ In the comparison between 04 and 05 we have already begun to do so, but not in a direct, explicit manner.

⁶⁰ Although tangential to the point at hand, I feel it is important to remark in passing that this dichotomy has a gendered dimension. “Jocks versus nerds” is a dynamic largely occurring amongst young men. It would be wrong to assume that this trope affects everybody just because it is a well-known trope; it would be equally wrong to assume that it affects nobody at all just because it’s not universal.

⁶¹ Canadian-born Chinese

03: After Grade 10. So I did Grades 9 and 10 at one high school, and I did Grades 11 and 12 at a different high school. Actually for half of Grade 12 I did a specialized program at um... at another place as well.

Alex: What were the similarities or differences between the two high schools?

03: I'm not sure if it's necessarily the high schools that were different. [I became] more focused on studies, and I guess maybe more specialized in taking science and math classes. So that would definitely fit me more towards certain demographics. I guess I did play some sports in high school, so I guess I did have some friends that didn't share any classes with me.

In the case of 03, the symbolic distinction is threefold. There is the dichotomy between [1] those focused on studies versus those who are, implicitly, not focused on studies; [2] between “certain demographics” that he “fit” with by virtue of doing math and science, versus those who are in sports and do not share classes with him; and by extension, [3] between STEM and physical education.

We can see similar examples from the narratives of 10 and 11, where a dichotomy emerges between the participants’ own ethnicity versus other peers who are active in gym class. 10’s accounts are particularly noteworthy because it features a deeply entrenched homology between the physical architecture of the school and ethnic divisions within the school. In 10’s narrative, he did not just associate his white high school peers with the academic subject of gym, but also with the physical location of the actual gymnasium. As we will see below, 10’s account is not just a narrative about the symbolic, ideological division between STEM classes and gym classes, but also a narrative about how self-segregating high school cliques subconsciously mark

territory. To illustrate all of this I will have to quote a vignette at some length, though I will do what condensing I can without sacrificing fidelity⁶².

10: The school was two storeys, like a rectangle with hallways that go around. There's one horizontal corridor in between, basically shaped like "ri" (日).

Alex: For the record, "ri" in Chinese is kind of like the 8 in seven segment display.

*10: Yes! So it's something like that, built around a corridor. There is one frontal corridor, and another corridor on the far side. The far side corridor has less rooms, and there's like a section with windows where the sun shines in quite a bit. **I think the sunny corridor might be where all the white kids are. I rarely go into that area**, but I think Gretel hung out in one of the secondary corridors⁶³, that comes just off the sunny one. Nobody sat in the front corridor, because it was like, in the middle of a traffic zone. Literally no one hung out there, but it was a very busy corridor. **I think the second floor horizontal corridor, the one in the middle, is where all the Asians hang out.***

*Alex: So the Asian kids sat in the middle horizontal corridor upstairs. **Were the white kids on the first floor or the second?***

*10: I don't know if it's first or second but I think it's first. **It's one of the vertical corridors near the back end, because I think that's where the gym is too.***

When we sift through the things he says we can readily see that 10 draws a symbolic association between being white and being near the gym. Meanwhile, the Asians in the school hung out on a

⁶² An uncondensed version of this conversation is provided in Appendix A4.

⁶³ Pseudonym for someone we both knew, but who didn't study engineering and hence wasn't a participant. She was a Chinese-Canadian who went to the same high school as 10, did not go into STEM, and spoke several European languages.

different floor in a different corridor. Later on, when we look at the narratives of 09, who went to the same high school as 10, we will see that the “Asian” area of the school in fact sits very close to where the STEM classrooms are.

There are a lot of emergent themes in 10’s narrative, and it is worthwhile here to take a slight detour away from the divisions of disciplines, and take a more direct look at the divisions of “race” lying underneath. In 10’s narrative, there is even a homology between one’s degree of ethnic assimilation and one’s physical proximity to the ‘white’ areas of the school, marked by large windows, sunlit corridors, and the gymnasium. In this narrative we can see Gretel, a Chinese-born schoolmate who was more assimilated than her fellow Chinese peers, being portrayed as someone who hung out in closer proximity to the ‘white’ area. In other words, not only does his discourse intertwine disciplinary difference, ethnic difference, and spatial distance, it moreover maps how socially assimilated one is onto how close one can physically get to the “white areas” of the school in a discursively constructed mental system of fine-tuned gradations.

In his description of his well-assimilated friend and her ambiguous hangout spot during recess, 10 has mapped social distance onto physical distance. The significance here is that once “whiteness” becomes conceptualized in degrees in a way similar to spatial distance, two distinct things occur. First, in a rather Foucauldian sense, this establishes a system of normalizing judgement where cultural legitimacy can be ranked, where foreignness can be framed as varying degrees of deviation from an ideal norm, and where foreignness beyond a threshold becomes fair game for exclusion. Secondly in a more Bourdieusian sense, the quantification of assimilation turns it into a capital that can be accrued, spent, or exchanged.⁶⁴ In any case, this is just one of

⁶⁴ It must be remarked in passing that this is a great counterexample to the simplistic assumption that “accrual” automatically equates to dominance. In this context, we have a kind of accrual that can only be made possible by

the ways in which racial dynamics do not merely constitute a surface for class mechanics but is rather simultaneously a structured structure and a structuring structure.

There are two more participants who mapped race onto the symbolic opposition between STEM and gym. In the case of 11, he did so in the same conversation where he more or less mapped himself onto mathematics.

11: I was part of the Muslim student's association. That was one thing. I did hang out with people who practiced for [annual] math contests, [the one] from Waterloo. That was another thing. There was a very strong South Asian presence in my school, so like, naturally everyone hung out with South Asians. [Although] I did not hang out with people who were athletically inclined. So there were like, footballers and other people that I did not hang out with at all.

Alex: So were the athletic, gym kids mostly white kids?

11: I didn't go to athletic events outside of the mandatory gym classes, because I didn't like those events. But I think... um... those events would be disproportionately white.

Meanwhile, as an exception that proves the rule, 08 was an active participant in sports during high school but rationalized this participation as an attempt to move away from her Asian origins.

08: I think in university you get to choose where you want to be and who you want to be with. But in high school it was, sort of like, in a box. For immigrants that's generally true, especially if you came at around Grade 10 when people already have their friend

the accumulator's own marginality. It is thus a case where equating accrual with dominance simply makes no sense.

circles. For example I was on the basketball team and I was like, pretty cool and everything, but it's so hard to make friends outside the designated race box.

More poignantly, there is a discursive four-way correspondence in her narrative between being “not Asian”, “failing studies”, being “cool”, and “doing art” showing how quickly 08 has caught onto, for lack of a more fitting phrase, who’s hot and who’s not.

08: Summer school was kind of cool. I was essentially put with people from different, like, demographics. I remember there were lots of students with like, African origin, which I never saw at my own high school. So in my group projects I was hanging out with people from Africa who spoke French as their first language. So I thought it was kinda interesting, and I met a lot of like, cool friends who were from other schools and who were studying arts. That was nice.

In their large-scale study of Canadian and Australian Chinese diaspora, Pang and Mu (2019) trace the ways in which physical education falls to the wayside in diasporic lifeworlds. Notably, they argue against adopting a simplistic view in which Chinese adolescents (or in my case, Asian adolescents more generally from skilled migrant families) abstain from gym by choice to pursue academic success and social mobility. They point out that empirically, there are some Chinese youths who are interested in sports, but experience “social, economic, and political challenges to participation” (*ibid*, Chapter 3). They point out furthermore, that attributing Asian underrepresentation in sports to the scholastic mentalities of Asians is often part of a greater discourse aimed at pathologizing the perceived success of Asians in the schooling system (*ibid*).

Although in my sample gym narratives mostly emerge from men, Pang and Mu’s study of the sports aspirations of young Chinese diasporic women still has immense applicability to my

own context. In their analysis of why young Chinese women have a particularly difficult time engaging in sports, Pang and Mu show how the familial success strategies of Chinese parents constitute only a fraction of the picture. Besides the familial strategies that limit young Chinese women's access to developing a physically active habitus, several other factors are in play.

First, Pang and Mu (2019, Chapter 3) identify what they call a "Western gaze", which is a combination of mainstream stereotypes of Chinese people, and of East Asian people more generally. These stereotypes construct certain identities as being naturally unfit for athletics; as many of the young women gradually come to adopt the images that are legible to their peers, these stereotypes are reproduced and their effects are prolonged. Secondly, drawing on Bourdieu (1997) and Skeggs (2004), Pang and Mu (*ibid*) suggest that the young Chinese women lack access to social relations that can turn athleticism into symbolic capital. Pang and Mu argue that the Chinese women in their study only have access to two discourses on how to live their lives: the traditionalist discourse from their parents which expects women to be dainty and sedentary, and the neoliberal "postfeminist" discourse that encourages women to seek success in corporate professions. Both discourses devalue the exercised body, the exercised habitus, and the practices of exercise. Every discourse these young women can encounter frames these traits as the markers of low status, and they do not have access to a discourse that can allow athletic capital to accrue to them. Thirdly, Pang and Mu argue that where there is a lack of athletic aspiration, it is because the subjective hopes of the individual more or less match the objective chances they have in the system. Citing an example where a young woman could only get a drive from her father to the community athletic centre if her older brother also felt like exercising, Pang and Mu emphasize that it is not enough to have athletic resources lying around and counting on youths to access them freely. Rather, they argue that the way diverse youth access resources should be taken into

account, and when this account is taken we see that their objective chances are limited regardless of the resources available.

In light of these insights, I do not want to go too far with emphasizing “family accumulation strategy” to the exclusion of other factors, as if to blame migrant enclaves for their own marginalization. What I do want to suggest, however, is that accumulation strategy is one highly salient factor out of many, and this understanding is in fact in line with the arguments from Pang and Mu, who have themselves described quite clearly the high emphasis on economic capital present in many Asian diasporic families, which in turn makes life difficult for children who want to follow their intrinsic interests. An illustrative example comes from 04, who vividly demonstrates a case in which the discourse of money-making is used to justify one’s simultaneous resignation to a life of doing STEM rather than music, a life of being Asian rather than white, and a life of following necessities rather than interests.

04: I did a lot of music when I was in high school, so much that my teacher was surprised in Grade 12, when I stopped all music and started doing... Asian stuff. Over the four years of high school, I learned to be Asian as much as my white friends learned to be white. So we were able to hang out more in Grade 9, and not so much in Grade 12, possibly because we all grew up.

Alex: I want to hear some more details about how your friends “learned to be white”.

04: In Grade 9 I was the music person, I was the English person, but I was not the science math computer person. I never took computer in high school, actually, so [my computer proficiency] was a surprise even to myself.

When I continued to press 04 to explain what turned him away from music, he gave an answer that was centred on ‘making money’.

04: Can you make money being a musician? If you’re really good you make tons; if you’re not so good you make very little. This raises a question: can I be good at music? When I started learning in Grade 7, [my white peers in music] had exposure to it earlier. I knew some Chinese kids who started earlier too, but music was torture for them. But these white kids that did music, they loved it, so it was very different. I’m not sure what causes this distinction, nor do I really want to find out, but that’s what happened. At some point I realized my love of music was very social. I did singing to be in the choir. I did clarinet to be in the band. But for [my white friends] music is the passion of their life, so even if they’re going to starve they’ll do it. And if you love something that much, you won’t starve, right? So we were friends, but ultimately we grew apart.

Here, the discourse of “passion” is the elephant in the room, and 04’s perceived association between intrinsic engagement and white identity is very clear. Interestingly, in 04’s retrospection, he felt that even when he tried and tried to enter a music-driven subculture, he had extrinsic motivations⁶⁵, but even then, what is highly contingent and poignant is the connection he drew between extrinsic orientation and Asian identity.

Moreover, what 04 says about music matches quite well with Pang and Mu’s insights about gym: the non-STEM subject in question is not perceived as something that makes money. In other words, 04 has not seen in music the presence of any form of capital that he has felt

⁶⁵ Piecing together many of the discussions we had both on and off record, his self-perceived extrinsic motive for doing music was to have a predominantly female social network, and to prune away his petty bourgeois Asian peers with “crazy” family values.

compelled to accumulate. Thus, 04's parting of ways with music is not unrelated to what Pang and Mu (2019) have said about the barriers to Asian women engaging in sports. Suspending for the moment the distinction between intrinsic interest and extrinsic motivation, what we see here is that at the very least, music did provide a form of social capital for him. Much like the young women Pang and Mu (*ibid*) interviewed, who did not have access to a legitimizing discourse that attributes value to a healthy and active life, 04 seems to lack access to a discourse (and more fundamentally, life chances in any field) that legitimizes the inherent value of peer connections.

I want to cite one last example in this section from 09, to further demonstrate the extent to which discipline and identity can homologate onto each other in the mental life of STEM-bound Asian Canadian youths. As I have alluded to earlier, 09 went to the same high school as 10, and by looking at 09's narrative we can fill in the gaps left in 10's account, and see that the Asian cliques spent their recess around the STEM classrooms much like how some of the white cliques were perceived to have spent their recess around the gymnasium. In any case, 09's perspective is interesting in its own right.

*09: I don't recall anything like a workshop room in my high school. That could be due to the courses I was taking, but I also don't recall having much choice in my school. I think my high school had two storeys. **Math and science were on the second floor.** Music and gym were on the first floor. The first floor had two hallways and I believe most of my lockers were in the hallway with the music room and the auditorium. Sometimes in my dreams I see the second floor lockers but that might not be true. My memory's vague.*

To provide some context, those subjects were not the subjects he brought up voluntarily; I had explicitly asked him to recall the locations of the machine shop, the music class, the gym class, the STEM classes, and the successive places of his lockers during his four years. I knew from

two other sources that there was in fact a machine shop in his high school, although he had no memory of it. However, the symbolic contrast between the first and second floor (STEM stream versus electives) does appear to make a mark in his psyche, to the point where his conscious mind recalls the lockers on the first floor, while in dreams he finds his lockers on the second.

At the risk of venturing too deeply into a discipline I am not trained for, I want to set aside some space to offer some speculations on 09's locker dreams. Like in previous chapters, I acknowledge that my interpretations are subjective, that other readers might interpret it differently, or not even treat this theme as significant. This particular discussion is markedly more speculative than most other interpretive assessments I am making elsewhere in the thesis, which is why I offer this disclaimer here. I am making these speculations because I want to stretch our sociological imagination, and entertain the possibility that STEM socialization can become an integral part of a person's identity formation, at an intensity that is on par with things like class and "race", though in a way that is never wholly detached from either.

For a high school student, the locker is a place to keep personal belongings, and the location of the locker within the school can potentially become analogous with either a safe space or the subconscious parts of the self. It might act as a safe space in the sense that the inside of a locker is generally a place beyond probing and scrutiny, where one keeps personal or vulnerable belongings. In the case of Asian high schoolers, such belongings could include a lunchbox packed with ethnic foods that invite peer scrutiny, imperfect tests that could not be taken home, or a diary that must be kept secret from overbearing parental eyes. Moreover, the locker could also be seen as the part of the school space that is often used but rarely thought about. If you are heading to your locker between classes to swap your books, the destination in your mind could be the next classroom rather than the locker itself. Likewise, at the end of the

day when you go to the locker to pack your bags, the destination in your mind could be your own home, rather than the locker itself. In this way the place of the locker in a routine school-day is like the place of the subconscious within the psyche: ever-present, often accessed, but seldom thought about.

Thus there is a possibility that 09's locker dreams arise from *subconsciously locating a portion of the self, which is symbolized by the locker, on the “second floor” where the math and science classrooms are*. If this is actually the case, then what we are seeing is a scenario in which a position in social space (the position of the STEM student) is being mapped onto a position in architectural space (the second floor of the school). More significantly, it demonstrates an instance where homologizing schemata can be located squarely in the psyche, giving further credence to Reay's (2015) argument that aspects of the habitus can be located on a psychoanalytical plane.

To recap our line of reasoning in this section, we have been using various examples to demonstrate the homological connections between capital accrual strategies (which often manifests as parenting styles but not always), race, and disciplinary commitments. We have looked at scenarios where certain non-STEM subjects are discursively framed as foils to STEM, and how the dichotomy between STEM and their foil subjects homologate onto the perceived distinction between Asian and white identities, as well as the underlying tension between economic and cultural capital.

In light of the previous chapters, these homologies in and of themselves are mostly old news. The notable exception here is a more direct acknowledgement of “race” that involves perceptions about white identities rather than just references to the internal distinctions between the more and less assimilated Asian diaspora. However, I want to stress again here the two major

purposes fulfilled by this chapter in light of my overarching argument, neither of which has to do with identifying “new” homologies per se. Its first purpose is to drive home the idea that the economy-culture divide homologically enchanting the lifeworld of STEM-bound Asian Canadian youths is already operational in the high school phase of their lives, and thus any political and ideological consequences stemming from this divide cannot be reduced to the direct socialization effects of university-level institutions. The second purpose of this chapter is to bring the salience of “race” in the homological system into sharper relief. More specifically, I am suggesting here that the relative inaccessibility of intrinsic scholastic engagement is not only a major reproducer of racial division but more importantly sets up a fateful homology between “whiteness” and cultural capital in the lifeworld of STEM-bound Asian Canadian youths. In turn, this fateful homology carries immense ramifications for political socialization.

The co-construction of racial belonging and capital orientation

The last section of the chapter returns to the homology between race, discipline, and capital. This time, however, the emphasis is not on describing how the various related dichotomies symbolically map onto each other, but on theorizing the objective reasons as to why some (but far from all) STEM-bound Asian Canadian youths internalize disciplinary commitments as ethnic destinies. I suggest two different explanations here. The first explanation I have already sporadically hinted at early on in this chapter, which has to do with the tension between economic parenting and intrinsic schooling. A second explanation, which I have not discussed so far, has to do with the fact that STEM-bound Asian Canadian youths may not feel represented in the curriculum of the “foil” subjects that are often pitted symbolically against

STEM. I will start by fleshing out the first explanation quickly and then move onto the second explanation to clarify it at some length.

In the high school lifeworld of at least some of the STEM-bound Asian Canadian youths, the freedom to engage school intrinsically can symbolically map onto open and nurturing parenting styles, and thus become opposed to strict and authoritarian parenting styles. Since strict parenting in this lifeworld maps onto extrinsic engagement and economic capital, the freedom to engage intrinsically end up mapping onto cultural capital. Moreover in this lifeworld, a habitus manifesting high hopes for intrinsic fulfillment can sometimes be perceived as “white”, due to these Asian Canadian youths experiencing more parental steering in terms of career choices compared to their white peers⁶⁶. This is especially true if “freedom” entails the freedom to not do STEM, and the refusal to prioritize money-making.

In other words, when it comes to the homologies between parenting style (strict versus open), ethnicity (Asian versus white), mode of school engagement (extrinsic versus intrinsic), disciplinary distinctions (STEM versus its perceived foil subjects) and accumulation strategy (economic capital versus cultural capital), it makes sense to say that parenting style and accumulation strategy constitute the relatively more objective factors. Stemming from these objective factors, the mode of school engagement is an immediate outcome experienced by the child, which then leads the child to draw symbolic connections between disciplinary distinctions and ethnicity. Even more bluntly put, parenting, and more specifically the difference in parenting across racial lines, appears to be a major reproducer of racial divides. This factor is not negligible

⁶⁶ Once again, Archer et al (2012) and the theme of “engagement without interest” is an illustrative example.

if we really want to understand how 04 “learned to be Asian just as the white kids learned to be white” during his high school years.

At the very least, the correspondence between strict parenting and extrinsic engagement seems to be a pattern that is far more stable than other factors in the homological system. The story of 09 is another case in point⁶⁷.

09: I think my music experience started with the piano, when I was still back in Korea. I started around maybe second grade, and played until fourth or fifth. That didn't go too well for me. After I moved into Canada my parents started to make me learn the violin. That was around middle school time, like Grade 6 to Grade 9. Then through middle school and high school, I played the trombone. [Meanwhile] starting from middle school I learned by myself how to play the guitar, [and played it for] church service.

Alex: At what stages of your schooling were you in the school band? You seem to have alluded that this was true for middle school. What about high school?

09: I was involved in the brass band and I helped with setting up school concerts to earn extra marks in music class. I always played the trombone.

Alex: Could you comment on some of the social interactions within the band?

09: Mostly it was between students and teachers, not from student to student. Interactions between students were not needed because during school concerts you just follow the exact instructions of the conductor, who is also your music teacher. There wasn't much

⁶⁷ An uncondensed version of this conversation is provided in appendix A5.

communication between students when they are all busy making sure that each and every note is exactly right.

Alex: Did the conductor not try to facilitate teamwork amongst band members?

09: Teamwork was just coordination, and coordination meant playing the notes exactly on the spot, with the right timing and emphasis, as required by the conductor. So basically teamwork meant, just playing the notes as the conductor wanted.

The interesting thing about 09's case is that on the one hand, he exhibits the objective correspondence between strict upbringing and a starkly extrinsic experience in school; but on the other hand he does not draw subjective dichotomies between music and STEM disciplines. The material detail underpinning this scenario is that in his formative years 09 engaged both music and STEM extrinsically, but around the end of his university phase he began to engage both intrinsically after earning an income and moving out of his parents' home.

09: Picking up the piano again was quite an important matter in my life. From childhood I had the bad experience of having to play like a machine to win contests, and I came out of that with bad memories and trauma. At one point I had decided not to play piano ever again, until after third year university. When life went from studying overnight to just working nine to five, the rest of the time became free. I found [an indie gaming and music scene] online, and I found the genre interesting to me, and that's how I got into it. I could have used any instrument to compose, but with the same ten fingers you can simultaneously play two notes on a violin, six on a guitar, or ten on a piano. It was a numbers game at that point.

Thus in 09, we see an example where there are no direct clues to his familial accrual strategy⁶⁸, little to no evidence of having subjectively internalized foil subjects to STEM, but where even then, demonstrates a solid correspondence between strict parenting and extrinsic engagement. In fact, he became notably more intrinsic in every one of his pursuits as soon as he began to gain independence.

A similar, vice-versa correspondence exists in the story of 06, where we see a link between open parenting and intrinsic engagement, even when his economicistic orientation would otherwise seem to buck the homological system considerably. Here are three excerpts from him which are not arranged chronologically. The first two come from a follow-up session, while the third is taken from the initial interview.

06: My mom didn't influence me much in terms of my life priorities. I don't think we have the same ones. My mom is a very passive person, not very confident about herself. She doesn't try to force me to do anything, because she isn't sure whether she's right or wrong. So not a lot of influence from either parent, since I lived with my mom when they divorced.

06: I would agree with the idea that jobs, or more specifically money, is the highest priority. Other than that, general life is just about being happy. I think money and family are what makes me happy.

⁶⁸ The religious distinctions of heavily Protestant parents, complete with literal manifestations of the Protestant ethic, severely blur the line between economic and cultural capital.

06: I agree with teachers who encourage students to understand rather than memorize. If you memorize it might help you now but it won't help you in the future. If you're not understanding, then what is the purpose of the course?

Thus we see that even when the homology between cultural capital and intrinsic engagement breaks down, the homology between open parenting and intrinsic engagement remains durable.⁶⁹

I want to reiterate here that I am not trying to pin the co-construction of race and capital, vis-à-vis the experiences around extrinsic schooling, entirely onto parenting practices. There are other dynamics between peers that are not immediately attributable to the familial sphere. There is evidence in the data that participants are less likely to construct foil subjects to STEM, and therefore less likely to homologate STEM onto race, when they see their own identities reflected in non-STEM curricula.

Some participants had taken music electives in high school, and I probed each of them on how they internalize the role of music in their education. Interestingly, other than 04 who displayed a fierce tendency to construct music as a foil to STEM and homologate it in turn onto race, other participants who did music in high school did not react as starkly. Evidence suggests that they attach less identity-based symbolism to music when they do not see themselves as being less reflected in the music curriculum compared to their peers. We will not be surprised at this point that 05's narrative of music education is starkly more positive compared to 04, but the key here is where that positivity comes from.

⁶⁹ I am extremely reluctant to even suggest the possibility that parenting may be a more fundamental force than capital struggle, but I cannot deny that this possibility is not zero. This raises grave concerns about whether parenting is truly reducible to class, but I will leave that debate for another day.

05: I had a lot of friends from music class, very close friends. [There were also] friends from the sciences, physics class [especially].

Alex: Did you ever feel torn between the two crowds? Or were they actually the same people?

05: No, a lot of people are sort of together, yeah.⁷⁰ [Usually] they're all friends of each other.

Thus, 05 perceived no dichotomy between STEM and music because his STEM friends and his music friends largely overlapped. Here, it is not a stretch to suggest that 05 could see his own personhood reflected in the personhood of his peers. Having a lack of STEM foils can thus be viewed as a consequence of having an abundance of non-STEM or extra-STEM social belonging.

By comparison, 06's disposition towards music sits somewhat in between 04 and 05, and the anatomy of his moderate position is worth dissecting at some length. While there is one occasion in which he constructs a foil relation between STEM and music, he did so without any sense of vehemence or regret.

06: [In high school I played] violin; I was also in the choir and the orchestra. The reason is, uh, music always gives you high marks. But I do like violin.

Alex: Do you still play?

⁷⁰ The “no” refers to the first part of my question, the “yes” refers to the second part. This vagueness between “no” and “yes” is apparently a grammar pattern particular to Toronto, though I never felt it until a colleague from BC pointed this out. Interestingly but perhaps not surprisingly, 05 has this urban slang but 04 does not, suggesting a possible difference in the degree of integration into the cosmopolitan norm.

*06: No. After you... survive for four years, in like, university, **you kind of forget about it, so you can pass.***

Alex: Did you have music friends in high school?

06: Of course, yeah. A lot of my friends. One of them went into industrial engineering.

Alex: After you decided to go into engineering, did you find that because your stream, you were drifting further apart with your friends in band?

*06: Uh, not so much. I mean, **music is just a class. I don't think we played a lot of music outside the class anyways. So outside the courses we still do what we do [together].***

Although 06's replies do construct a subtle dichotomy between the pursuit of a hobby and the need to pass in undergrad, the literal contrast is between playing versus passing, rather than music versus STEM. While it does demonstrate an act of position-taking between economic and cultural capital, a contrast between practices (playing versus passing) is much more materially grounded than a contrast between institutionalized constructs (music versus STEM). The interesting thing to note here is that having a sense of belonging seems to have dampened the extreme symbolic consequences of having an economicistic orientation.

Chapter Summary

In this chapter, I have examined the high school narratives of the participants and highlighted some noteworthy accounts regarding their identity formation during this period of their lives. I started by zooming in on the homologies in their high school lifeworld, particularly those that relate to the tension between economic and cultural capital. Evidence suggests that

many STEM-bound Asian Canadian youths in the study symbolically associate certain disciplines with certain “races”, and moreover associate STEM disciplines with that of their own. When STEM-bound Asian youths associate STEM with a symbolically “opposite” discipline, these foil disciplines tend to be either physical education or some branch of the arts, disciplines that do not signify “making money”. This impetus to “make money” is an obvious clue that to STEM-bound Asian families of the skilled migrant type, the intention of studying STEM is to accrue economic, rather than cultural, capital.⁷¹ Some homologies were sketched out between strict versus open parenting styles, extrinsic versus intrinsic engagement in school, Asian versus white ethnic identifications, STEM disciplines versus their perceived foils, all of which are strung together by the tension between economic and cultural capital. Moreover, on a broader scale, I have shown that the economy-culture divide is already alive and well in the high school phase of my participants’ lives and that their position-takings later on in life are thus not reducible to the socialization effects of the university institution.

I then offered two complementary explanations as to why some STEM-bound Asian Canadian youths have internalized their disciplinary destiny as a racial destiny (and why others have not). The first explanation expands further on the homological correspondence between strict parenting and extrinsic engagement and suggests that so long as there is a racialized discrepancy between the accessibility of intrinsic engagement, engagement differences will reproduce ethnic differences. The second explanation explores the theme of peer belonging and suggests that providing an abundance of identity representation and peer belonging in the

⁷¹ This casts some doubts on the canonical idea that education must be conceptualized primarily as cultural rather than economic capital.

perceived “foil disciplines” of STEM is crucial for mitigating the ideologically alienating and fatalist homologies between discipline, race, and capital.

In relation to the overall arguments of the thesis, the chapter’s significance is twofold. The first significance is that the tension between economic and cultural capital is already structuring the participants during high school, well before the university institution has had any chance to directly exert its socializing influence. The second significance is that for many STEM-bound Asian Canadian youths, the lack of freedom to engage intrinsically in school gives rise to a symbolic schema that codes cultural capital as something alien and alienating. The ramifications of this second point will become manifest in the next two chapters, where we will see that there are close homologies between capital alignment and political alignment.

Chapter 8 - Homologies of Politicization

Chapter Overview

In previous chapters, I have discussed the classed, gendered, and racialized tensions that undergird the various symbolic schemata animating the undergraduate lifeworld of my participants. I have also taken a similar look into their high school experiences, in order to paint a more holistic picture regarding where these schemata are coming from. I now have the tools I need to carry out the most important step of my analysis, which is to examine the political socialization process of my participants and to unpack how their political dispositions follow from their schooling experiences.

I have divided the topic of political socialization into two chapters because they constitute two fairly distinct discussions. The first discussion, which comprises this chapter, is about the homological match between electoral alignment and capital alignment. This serves to connect the subtopic of political socialization to the general spine of the thesis, regarding the tension between economic and cultural capital. The second discussion, which will be in the next chapter, will delve more deeply into the psychosocial aspects behind the homology and will depart slightly from the homological format in order to further explore the interrelations between cultural representation, political belonging, and professional identity in a free-flowing manner.

As I have deferred the more complex psychosocial details to the next chapter, the content in this chapter is fairly straightforward, and the moral behind its stories is fairly simple. Amongst my participants, the homology between electoral dispositions and capital dispositions manifests in four mutually-confirming ways. First, unambiguous Liberals demonstrate higher affinities with cultural capital. Second, unambiguous Conservatives demonstrate higher affinities with

economic capital. Third, moderate Liberals are comparatively more economic than their fellow Liberals. Fourth, moderate Conservatives are comparatively more cultural than their fellow Conservatives. To be sure, none of this is to say that the homology is “natural” or “innate”; it is merely the indication of consistent, identifiable, and deeply-entrenched social structures.

Voting practices

While I am aware that voting is only a small part of politics, the topic of voting is still an interesting place to start due to the awkward role this topic has played in my research design. During fieldwork, I initially focused on collecting scholastic narratives, because I wanted to start with topics that promised more common language and hence more trust. My initial strategy was tailored to avoiding topics that risked venturing outside participants’ horizons, and instead focus mostly on school narratives. My logic was that if I made somebody talk continuously about school life, then politics would have to surface eventually since school is such a political thing. In reality, though, this did not work with many of my participants. Midway through fieldwork, it became apparent that, except for a few participants, the mere act of recounting school events was not going to bring out any conscious political stances or overtly political discourse. To be sure, many objectively political moments surfaced in their narratives, but subjective consciousness about the political nature of those moments seldom if ever emerged. At that point, I was left with no option other than to bluntly ask participants about their voting behaviour.

While voting is only a small part of politics, it is still the most obvious and commonsensical part of politics. If I am trying to collect political discourse in a depoliticized lifeworld, a simple conversation about voting is an indispensable starting point. A conversation

about voting can bring up politics safely, without injecting its disenchanting power into quotidian moments where it is not perceived to belong. Moreover, the lifeworld part of this picture has already been examined in the past three chapters, while the electoral part has not yet been analyzed closely. What remains to be done is to sketch out this electoral aspect, and to draw the connections between electoral dispositions, schooling experiences, and ultimately, capital orientations.

Voting, by the numbers

Due to the fact that this lifeworld is relatively depoliticized, a high amount of silence is par for the course. Roughly a quarter of the potential participants stopped responding to email immediately upon seeing a written consent form. Of the fifteen people who participated, five of them only had time for a basic interview. For those five participants, all I obtained was their schooling narratives, and no direct information has been obtained about their political leaning or voting behaviour.

By simple headcount, of the ten participants for whom I have collected political data, seven (04, 07, 09, 10, 11, 14, and 15) have voted after graduation, in at least one federal or provincial election. Three of them self-report as having voted for the (centre-right) Conservatives, while the other four self-report having voted for the (centre-left) Liberals. There are no signs of swing-voting between Conservatives and Liberals, although 15 is a confirmed swing voter between the Liberals and the (relatively further left) New Democrats. In terms of gender and ethnicity, the Liberal voters include one East Asian woman, two East Asian men, and

one South Asian man. All three Conservatives are East Asian men, and all happen to specifically be Chinese-Canadian.

Meanwhile, there were three other participants (02, 06, and 12) who were engaged enough in the study to talk about politics at some length in follow-up interviews, but have been apolitical in everyday life and not exercised their voting rights. One of them has moved to the US for work, while the other two stayed in Canada and hence could have conveniently voted if they wanted to. In terms of gender and ethnicity, the one who moved abroad is an East Asian man, and the two who stayed in Canada are an East Asian man and a South Asian woman.

By the numbers, if I take the silences into account, fifteen of the twenty potential participants decided to actually participate in the study. Ten of those fifteen participants talked at some length about politics, and seven of those ten have voted in elections.

The prominence of cultural capital amongst Liberal voters

There are four left-leaning voters in the sample, and each one of them shows some atypical⁷² affinity with cultural capital compared to their STEM-bound co-ethnic peers. 07 used to be in a high school rock band⁷³, 09 is an indie musician in addition to his STEM day job, while 11 and 15 both took humanities electives in university out of intrinsic interest. Of these four people I want to start with the case of 07 and unpack her relatively more moderate political disposition, as she can be seen as an exception who proves the rule.

⁷² I do not mean this as a statistical or aggregate claim, but rather an ethnographic claim based on the fact that I used to be well-embedded in their social networks and have a lived understanding of what is the norm.

⁷³ 07's freedom to do rock music rather than classical music is not a usual thing for youths in this lifeworld. Just ask 09, who had to hide his rock side at home for about as many years as he was forced to do classical.

07 has voted on two occasions, each time casting in favour of the Liberals. Amongst the left-leaning participants, she alone self-described as not having strong opinions. What is particularly interesting about her discourse is the dichotomy she constructs between expressing opinions and studying in school:

07: I voted for the Liberal party both times, believing their platform had the “better” policies. I wanted to participate as a citizen and exercise my voting rights, however, I was not fully aware of all the issues and platforms of all parties. Political views are not commonly discussed among my peers. My parents are critical of political leaders but they are by no means interested in actively participating in making changes. I am similar to them in the sense that I don’t actively participate. I would consider myself as not having strong political opinions. This is perhaps caused by my primary focus on academic subjects in school and the belief system that grades are all that matters for a student.

We can see that she explicitly constructs a dichotomy between grades and politics. The connection this has to the economy-culture divide might not be immediately obvious⁷⁴, but we can recall from previous chapters that “studying” has a special symbolic meaning amongst Chinese Canadian youths. Namely, it has to do with the parental injunction to make sustained long-term bids for economic capital, often through extrinsically engaging in school. To further confirm this interpretation, we can recall from previous chapters that her parentally-mediated⁷⁵ economic orientation is also in line with how she used rote learning to cope in school.

⁷⁴ I am tempted to make the lay remark that although my demographic has fuzzy boundaries, if you immediately get what she is talking about and not second-guess whether you heard her correctly, then that is a sure sign you could be one of us. Such a sign, its ostensibly racial aspects notwithstanding, is really more about class.

⁷⁵ Of course, I have refrained from saying “induced” since parents are also structured subjects. Mom and dad never really had untrammeled agency, despite our childhood feelings to the contrary.

When interpreted in light of the above nuances, the simultaneity of a less “strong” leftist stance and a stronger leaning towards economic capital no longer seems like a coincidence. What makes her opinions less “strong” is precisely a capital orientation that fits poorly with the given stance in the lifeworld at hand. If we accept the premise established in the previous chapter that studying is a signifier for an economically-oriented accumulation strategy in 07’s STEM-bound Asian Canadian life context, and if studying is being framed as the opposite of political expression, then it implies that politics is being associated with an incompatible accumulation strategy, even if only at the level of discourse.⁷⁶

The most straightforward match between leftist voting and cultural capital is in the case of 09. Let us first take a look at his political stance today, before delving into the meandering road that led him here.

09: I think I voted once or twice. At least once for the federal, for the Prime Minister. I voted for the Liberal guy, mostly just for the [qualities of the] person. The biggest issues that drive me to vote are taxes, equality between the races and the sexes, and I guess, simple cult of personality. I usually form my own opinions after looking at the key issues around me and what others think about these issues. Then decide where I should stand. I am not likely to base my opinions around the promises of politicians, or the theses of their party, or the ideas they represent.

The background behind his Liberal leanings is actually quite complex. 09 left home after finishing undergrad because his engagement with a video-game based Asian indie music

⁷⁶ That is to say, unconsciously. To repeat something from the previous chapter, cultural capital in this lifeworld may be experienced in a disguised form, namely as having the “freedom” to live life intrinsically. When a form of capital is structurally mystified into a qualitative thing that cannot even be accumulated, it becomes harder to consciously experience it for what it is.

subculture did not sit well with his culturally conservative parents. Incidentally, this Asian indie music subculture brought him into contact with an online community of Korean youths on Twitter, and it was this online community that led to his political awakening.

09: I'm far from being the first guy to transfer the game's digital soundtracks onto piano. I had a predecessor, an artist from Japan, who was really famous in the community, and the polyphonic music he made captured so many feelings that I [have struggled to express]. His work helped me overcome my traumas on the piano.

Alex: Did this artist also overcome personal issues through music?

09: Yeah, though it wasn't clearly proven until his North American tour in 2015. I asked him this in person during a Q & A, and he said that he was also taught very strictly in his childhood and he didn't like how he was taught. He gave up on piano for a while, until the video game brought him back onto the piano and he became very successful.

Alex: So, before you found this subculture, what were your hobbies like, and how many of those hobbies were social?

09: I don't think I had any hobbies. I was too busy studying. I had no life (laughs). Prior to [joining the subculture] I've definitely never met with strangers over a hobby. As the parental saying goes, don't talk to strangers, right?

According to 09, a key feature of this community is that youth pushback against traditional parenting (often tinged, in his context, with a mix of hierarchical Confucianism and authoritarian Christianity) constitute a centrepiece of critical consciousness. The following excerpt combines

several⁷⁷ of 09's mini-narratives, all taken from our second interview, into a single compact narrative for the sake of brevity⁷⁸.

09: [It was through] the Korean Twitter community that I realized, that a lot of people from the young generations deal with the exact same issues as me. I saw more and more young people who deal with Christian families, and the extending of family norms into society. They [see the same patterns] in the corruptions of politicians, corruptions of the industries, corruptions of business, or even, like I told you before, the corruptions in the national military in Korea. These corruptions are exact translations of why the youths are unhappy, and they felt that the Christianity they practice is completely bogus or incorrect. [Their struggles within the family] translates into all the oppression they are seeing, and now that the internet age has started, it's showing on the Korean medias. Everyone's like, yeah, that's exactly what's going on, and I want to blame exactly my parents for making my life so miserable.

In the case of 09, the moral of the story is that cultural accumulation, youth identity, and political consciousness went so heavily hand-in-hand that they intertwined into one thing at the level of subjective experience. We can say that 09's simultaneous awakening in both indie music and youth consciousness is another example demonstrating the correspondence between a leaning towards Liberal voting and an orientation⁷⁹ towards cultural capital.

⁷⁷ In the actual transcript, these mini-narratives were dispersed across roughly ten pages, during which I was prompting him in various ways with improvised questions.

⁷⁸ An uncondensed version of this conversation is provided in Appendix A6.

⁷⁹ Without getting too deeply into semantic quibbles, by orientation I mean a fuzzy mix of wanting the capital and having hopes for getting the capital.

This correspondence between cultural capital orientation and left-leaning electoral dispositions is demonstrated by 11 in a different way, one that has nothing to do with music education or music subculture. 11 is notable amongst the sample for being very politically informed and involved. As a young South Asian man who identifies as Muslim, 11 campaigned actively for the federal Liberals during the 2015 elections, even while retaining his job as an engineer. As we will see below, although 11's impressive politicization sets him somewhat apart from other participants, the correspondence between his political leaning and his capital orientation is wholly within our expectations.

We can infer 11's capital orientation from his disciplinary preferences in both high school and university. More specifically, in terms of course choices, we can see that he gravitates towards more abstract courses in both his non-STEM electives as well as his STEM electives.

11: I think I took two electives [in university]. One was related to my personal interest, which was Islamic History. Another course, which was really interesting, was called the Art of Memory in China and the West. It was comparing Chinese and Western philosophy in some abstract ways. Um, and then there was a business course... but it wasn't a memorable one.

Generally in the field of STEM schooling, one can surmise a great deal about social positions and capital orientation by looking at the non-compulsory course choices made by students. What we see in 11 is a palpable leaning towards cultural capital. Not only did he take electives in philosophy and humanities out of intrinsic interest, but he also discursively contrasted this with business, an elective which he took but found less stimulating. Such upper-middle-class tastes

stand in contradistinction to the preferences of the young migrant men from petty bourgeois families, who precisely tend to avoid humanities in favour of business.⁸⁰

Moreover, even within the compulsory STEM curriculum, we can pick up subtle signs that 11 gravitates to the more abstract, theoretical (i.e. intrinsic and cultural) pole of the field. In a neoliberal society where science, technology, engineering and mathematics are ostensibly bundled as a single field of power⁸¹, the two abstract parts of the field (science and math) often stand in opposition to the two parts that are more concrete (engineering and tech), which then recreates the split between cultural and economic capital. With this background in mind, we can take a look at 11's position and position-taking within the compulsory curriculum.

Alex: Before you went into engineering, did you have any childhood interest or hobbies that drove you in this direction?

11: I had strong interest in mathematics; I hung out with people who practiced for the annual math contests from Waterloo.

Compared to the rest of the sample, 11 is one of the few male participants who did not cite computers as part of their childhood interests, instead citing math. In light of this, I eventually asked 11 to comment on a particularly math-heavy course nearing the end of his university phase. Prior to fieldwork, I already knew from 09 (who took the same course) on an anecdotal basis that the concrete aspects of the course were interesting but the abstract aspects were

⁸⁰ For the sake of having a focused flow of arguments, I will skip supporting quotations here. Suffice to say this is true of 02, 04, 06, and 14.

⁸¹ This is done by both sides of the political spectrum, who, not coincidentally, historically co-created the science-art divide in Anglo-Western schooling. This is discussed in more detail in my Masters dissertation (Bing, 2015).

difficult. 11's response in light of this is highly distinctive, in the Bourdieusian sense of the word.

Alex: Did you take biomechanics in 4th year university?

11: Yes.

Alex: How was the math?

11: It was good! I actually got really high grades in that. It was one of my highest grades.

I didn't get high grades in other classes but in that one, I did.

Now, when we look at 11's political engagement, we indeed see a political leaning that is in step with his capital leaning.

11: I voted in the last federal election, I voted in the last municipal election, and I also campaigned in the last federal election. I was like, going door to door and stuff, campaigning on behalf of the Liberal Party of Canada. I think I voted in the provincial elections too and I'm planning to vote this month as well. There are a lot of big issues that drive me to engage, like climate change, racism, Islamophobia. ... As a minority I tend to see diversity as a good thing. I tend to value things like freedom of expression, freedom of religion, and so on. As a Muslim I oppose Islamophobia, and as a visible minority I'm opposed to racism.

At this point, the emerging pattern amongst left-leaning voters is fairly clear to see, but for the sake of completeness, we can take a brief look at my own responses during the final interview when one of the other participants (codenamed here as Lennard) interviewed me with my own

questions. I have paraphrased the dialogue slightly, so as to make some of the contextual subtleties more obvious⁸².

15: One of my electives [in undergrad] was a third year geography course in waste management, which I took in second year. It was about the science, the policy, and the politics around urban garbage collection. It was really interesting. The course code was GGR332.

Lennard: You do know how the course codes are constructed, right? The middle digit is stream relevance. Lower number is more relevant to the stream, and a “3” is actually on the relevant side. So why did you take a third year core course for an elective in second year, when a first year intro course would have done the job? There were ten big first year courses, like anthropology, psychology, sociology, linguistics, economics...

15: None of them really interested me.

Lennard: How did you know none of them interested you? Did you hear anyone talk about it?

15: No. I just haven't thought about them. Why would I be interested in something I've never thought about? My grade in [the urban geography course] wasn't the greatest, but I enjoyed the course and the textbook.

Lennard: So compared to the engineering textbook, this one was better? Why is it better?

15: It talked about real people, real places, and real issues.

⁸² The uncondensed version of this conversation is provided in Appendix A7.

This vignette offers a clear juxtaposition between the intrinsic and extrinsic modes of doing school. Here, my leaning towards cultural capital is evident from my preferential⁸³ emphasis on intrinsic interest, an emphasis that is sharply incompatible with the cost-benefit mentality of getting senior-level credits for freshman-level effort. Moreover and very importantly, my professed preference for “real” people and issues should not be misrecognized as a working-class resistance against abstraction. On quite the contrary, in an ascetic lifeworld of petty bourgeois disengagement, realness is a luxury of the middle class proper, a privilege fundamentally linked to the opportunities for intrinsic engagement and the social position this implies.

Just as my curricular tastes give away my capital orientation, so too does my capital orientation leave little room for surprise when it comes to political leanings (which are anything but the products of informed impartiality).

15: I voted Liberal provincially. I just had to vote for an alumni from my grad school. But there were other factors, other than the fact that her poster was in my department library. First, I felt that she had a more urban agenda. I felt that her NDP counterpart was too rural in her policy leanings. Second, I really identified with the fact that she was an educator. Third, like, identity-wise, I just had to vote for the first openly lesbian premier. But in the federal elections I've always voted NDP; I would make up my mind beforehand and not even follow the news.

As a recap of our discussion of the left-leaning participants, the main takeaway is the prevalence of cultural capital. Although there are leftist participants who lean towards economic capital, in this particular lifeworld they tend to be the ones with more moderate or ambiguous stances. In

⁸³ And indeed, moral

the next section, we will see an analogous relationship between right-leaning participants and economic capital.

The prominence of economic capital amongst Conservative voters

Of the ten participants who provided direct comments on their own political stances, 04, 10, and 14 are the three participants who have openly professed to have voted for the Conservative during the interviews. My observation of them is that the more cultural capital they exhibit, the more moderate their conservatism tends to be. By corollary, the further they lean towards economic capital, the more they gravitate towards the far right.

As a blunt example, 14's case is like the mirror reverse of 07; whereas 07 is a Liberal whose views are dampened by an economic leaning, 14 is a Conservative whose views are dampened by a cultural leaning. 14's capital orientation can be inferred from the following quotes.

14: Yeah I mean like, I'm fully supporting the concept of volunteering, giving back to the society. And if whoever chooses to, outside their day job time, participate in some volunteering organization, and design something for those who cannot afford to pay them back, that's perfectly fine. This is just giving back to society.

His view on community involvement is not just a moral and political stance, but also a reflection of the social engagement opportunities that he is willing and able to access. There are other details about his extracurricular and community involvement that I cannot directly share; but, suffice to say, 14 exhibits a capital orientation that seems atypical for his electoral leanings. In a way analogous to the case of 07 on the other side of the political spectrum, 14's atypical capital

profile is an exception that proves the rule: a seeming mismatch between capital orientation and political camp⁸⁴ is actually the explanation for having a relatively moderate stance within the camp. The following vignette between 14 and myself occurred in Chinese, and the excerpt here is a translation.

14: I haven't voted in the past federal election, but in the times I did vote, provincially or federally, it was always for the Conservatives.

Alex: Were you voting for the party, the leader, or the policy?

14: I voted for the party. I went to high school in Calgary, and it's like a Conservative headquarters here, in a way. When I first went to Toronto, I got culture shock when the design curriculum openly mocked Conservatives; because I was more used to mocking Liberals growing up.

Alex: I understand. But have you ever encountered far-left activists while in high school? Anyone who said they wanted to do consciousness-raising?

14: I've never heard of that. If you meant to ask whether there are any Liberals in Alberta, I guess there must be. But they'd have to keep it to themselves, because the atmosphere is very much swinging the other way. At least during my high school days, it was heavily Conservative. Alberta was like an ironclad camp for the party, because [everyone in] the province was pissed at the energy policy. Liberals in Calgary would have to keep quiet, much like how where you're from, in Ottawa, Conservatives have to

⁸⁴ It should be noted here that these “camps” are highly fuzzy, constructed and imagined communities, often congealed through various forms of social media. Bourdieu’s general methodology of deconstructing classification struggles clearly applies here, but I will not have the space to dwell on this tangent.

do the same. If eight out ten people around you are voting the other way, you'd get a lot of weird looks if you spoke up. Kind of like Trump supporters in California.

So what we have here is a reflexive participant, who is very ready to acknowledge that one's views are a product of the environment. Furthermore and just as significantly, he did not provide strong accounts of being under parental duress. As we have discussed in previous chapters, the relative absence of parental duress and a relatively independent childhood can be the sign of a cultural capital oriented family in the STEM-bound Asian Canadian lifeworld. In the case of 14, there is evidence of a kind of "independence" that, while not conclusive on its own, does provide circumstantial confirmation of an alignment towards cultural capital.

Alex: Do you recall encountering overt, large-scale political activities in your everyday life, either during school previously or during work right now?

14: Not really, in the kind of environment I'm in, I don't get much exposure to those things.

Alex: Where do you get your political exposure then? How much do your views coincide with that of your parents?

14: I actually haven't discussed much politics with them, but I can't imagine there being no overlaps between our views. Within the same family and the same environment, drastically different views wouldn't be very commonplace.

Alex: Have your parents tried to instill any particular values or ideas? Not necessarily political ideas, but just ideas in general?

14: It still may be too strong a word; it would have happened in ways that are subtle and subconscious. They would of course, say the usual things Chinese parents are known to say. Apply yourself in things with clear payoff⁸⁵, find a good job, put your studies first, and don't fall in love while young. The basics, right? (Laughs) As for other things, after I grew up I did not communicate with parents as frequently. I'm an independent person, with independent thinking. I developed a lot of thoughts on my own, through reading, through internet, and sometimes through just navel-gazing reflection. Not much of [my views] were developed through direct communication of any kind.

On the whole, in the case of 14, an alignment towards cultural capital, which is a disposition usually associated with leftist tendencies within the lifeworld, works in this particular right-wing scenario as an explanation for 14's relatively moderate position within his camp. This political and hence moral moderation can be seen through the fact that 14's discourse is noticeably bereft of vehemence and resentment, something which renders him rather different from 10 and especially different from 04. This will become more obvious as we get to their respective narratives in turn. For the moment it suffices to say that 14's electoral tendencies can be largely attributed to ordinary conformity.

⁸⁵ The original Chinese phrase, *tashi* (踏实), is very difficult to translate. It is a short, packed adverb used to describe a very particular kind of work ethic. The adverb itself, literally referring to walking on solid footing, is simultaneously meant to connote stability, capital accumulation, and peace of mind, in a way that rather aptly reflects the mentality of the Chinese peasantry and urban petty bourgeoisie (classes which 14 himself was probably comfortably above, even in his poorest days, though we can surmise little about his parents). At the end of the day, this word is the sign of a particular economic habitus that favours extremely long-term, low-risk accumulation schemes which are doxically premised on an extremely stable society and an extremely stable set of structures and values.

Compared with 14, 10's Conservative electoral leanings correspond far more directly with an economicistic orientation. The various excerpts below are all taken from a follow-up interview with 10 dedicated to discussing electoral politics.

10: ... Economy is the issue I care about the most. Under normal circumstances I don't feel an urgent need to vote. But if I felt the need then it would be about the economy. Things related to taxes, spending, that kind of thing. If a single issue can move me to vote then it has to have a big impact. If the sky is not falling, everything is debatable. Economy is where the sky falls down.

Alex: So where do your views come from? Whose views do you read?

10: To be fair, the views you're drawn to are the views that reminds you of what really happens. At the end of the day, what really happens is your paycheque. Economics is the one thing that's gonna move me to a vote. When we were in school, we were talking about theories, about the bigger world, about what's best for it, things of that sort. Certain values and ideals appealed to you at that point. But once you have a job, making money, out in the real world, buying the things you want to buy, making the money you want to make... your priorities change.

Here it may be worthwhile to explain 10's response with a bit more context and detail. The significance and relevance of this passage lie in how 10 has discursively framed his past disposition. According to him, the disposition of his former self gravitated towards theories of what is best for society, and had a greater sensitivity to "values and ideals". Juxtaposed against these signifiers of the old self, 10 associates his new dispositions with jobs, money, and the "real world". Thus we have a discursive opposition between theory versus reality, ideals versus

money, and concern for society versus possessive individualism. What is at work here is once again the familiar dichotomy between cultural and economic capital, and 10's narrative amounts to a self-described trajectory of moving from the cultural camp to the economic camp. At the very least, this provides further evidence for the saliency of the economy-culture divide in the lifeworld of STEM-bound Asian Canadian youths, and the impact of this divide on one's political disposition.

There is further evidence that whatever capital leanings 10 may have had back in school, his current capital orientation is staunchly on the economic side. Indeed, if we look at what 10 proceeds to say, we can see telltale signs of classed discourse from a very particular position in social space. Such discourse suggests that his political dispositions are rooted much more deeply than the mere fact of having gotten a job, even if getting a job has shaped his dispositions a great deal.

10: I bring my coffee in every morning, so I don't have to buy coffee at Tim Hortons' every morning. Saves a buck or so every day, right? But when you see the government spending money on random shit, and then you're still bringing your coffee as opposed to buying every day, why are you saving your money but the government is spending your money like it is water? I have no problem with government spending money, but government waste ticks off a lot of people paying taxes.

Thus we see petty bourgeois thrift, manifesting as a symbolic dichotomy between saving and waste. At this point, it only took one probing question to reveal the meaning of his position-taking for "saving" and against "waste".

Alex: So when the government spends money, this irks you. But what about your fellow citizens, when they consume...?

10: That! That actually bothers me too! Sure, they consume shit. But I'll give you a very acute example of what's going on. And I blame this on banks, not on the citizens. Have you noticed that cars have gotten a lot more expensive lately? If you look at when you buy a new car, they offer these really retardedly stupid deals on brand new cars. You can buy a really bad shitbox, that's gonna die in five years. There's 90 months zero interest payment. That's eight to nine years. The car will be dead before you pay off the damn thing. It makes no sense to offer these kinds of financing deals, but the banks are offering it so people can "afford" much better cars than they would have if they saved up the money and bought it instead. Capitalism fails when people spending the money don't use their brains. If people buy stupid shit, the need for stupid shit is created, and then supply for stupid shit is provided.

Thus we have: consuming versus saving, stupidity versus brains, present affordability versus deferred gratification, and, more subtly, people whose demands can influence supply versus people whose demands cannot influence supply. How are we to unpack this?

We can first of all note that the dichotomy between consuming and saving connotes how Bourdieu (1984b) first justified a need to analyze cultural capital as a category in separation from economic capital. One of Bourdieu's original rationales for doing so is that even if you have enough money to buy a cultural commodity upfront, you cannot buy upfront the knowledge and skills required to consume the commodity in a socially legitimized way. In other words, one of the rationales for conceptualizing cultural capital is precisely that *there is an aspect to consumption that is impervious to instantaneous buying power*. If we read "consuming" as a

metonymic signifier for “getting to know how to consume”, then the tension between consuming and saving becomes the tension between accumulating consumption know-how and accumulating money. In other words, we see once again a sublimated tension between economic and cultural capital.

We can then see that homologizing economic capital onto “brains” and cultural capital onto “stupidity” is a way of asserting legitimacy. In particular, it is a petty bourgeois way to challenge the traditional association between cultural capital and knowledge. Moreover, the tension between deferring gratification and deferring payment, and 10’s own proud identification with the former, can be related to the kind of asceticism that an engineering student such as himself would have experienced in school. This scholastic asceticism, as Bourdieu (1997, 110-111) says, play a significant role in cultivating a sense of elitism amongst the students who manage to endure its trials.

Within 10’s diatribes against unthrifty consumption, there is very notably a political resentment against consumer demand and consumer influence. 10’s lament about “stupid people” creating demand for “stupid shit”, constitutes an openly hostile attempt to *valorize the taste of necessity*, coupled with a concurrent attempt to denounce influential consumer demographics who can use their clout to steer the development of cultural commodities. This is very much about exclusion from culture, but discussions falling under this theme will have to wait until the next chapter. For the sake of streamlined clarity, I will not pursue that tangent here.

A minor puzzle arises when we try to connect our image of 10 in this chapter to our image of him in the chapter on rote learning⁸⁶ because there is the question of why his intrinsically-driven school orientation does not homologically match the rest of his economicistic, rightward-leaning traits. What we can say here is that his cultural-favouring habitus in the field of STEM has been compartmentalized away from his economy-favouring habitus in the general field of power. This compartmentalization, however, is aided by none other than the very force fueling the homological system, evident in his discourse juxtaposing the theories and ideals of the “school” to the riches and jobs of the “real world”. In other words, we should not be analytically alarmed that a symbolic homology is not extending itself to every corner of a person’s practical life. The methodological purpose of tracing the homology is to root out the underlying tension between economic and cultural capital. Such tensions, as we can see even in the case of 10’s most un-homological moments, are still very much in play and very much guiding his political dispositions.

Moving on to the case of 04, we see once again the prominence of economic capital. When I asked 04 why he disliked the current Prime Minister (who is a Liberal), he readily invoked the discourse of jobs and work⁸⁷.

04: Let’s break this down into four aspects. One, [the Prime Minister] campaigned on his family name. We don’t want Canada to turn into a dynasty, so for people who campaigned on their family names they should be held to slightly higher rigour. Two, he hasn’t done much work. His resume is quite empty. People dissect his resume online...

⁸⁶ To be clear, it is not realistic to expect a whole series of “perfect matches” for homological models of the lifeworld; Bourdieu has said so himself. Nevertheless I just wanted to explain the imperfection in the model as far as I am able.

⁸⁷ An uncondensed version of this conversation is provided in Appendix A8.

and it can be agreed that he hasn't really done much work. He was a supply teacher, which was the only true job he might have held. He might have done some union work, political activism... I cannot [approve of] his work experience. He cannot understand how wealth is generated. Next point is about his ability. Over the past year, how many times has he humiliated our country? His trip to India, his dress-up parties, his [choice to] say "peoplekind" and not "mankind". Those things went viral. So his ability as a leader is lacking. ... Fourth, did he think about how much the Canadian health care system or the economy, or how many refugees it can truly handle and integrate? That's the question I pose, and I have a feeling that he doesn't care about the feeling of the average Canadian, or their lives. So that's my problem, with his political stance. He deemphasizes his own citizens. I'm against refugees. I'm for borders. But besides that, I don't think he cared about us.

The four reasons he gives can be translated into the language of capital quite easily. First, we can see that he disliked Trudeau for using his “family name”. This choice of words matters, because he could have said “family wealth”. 04 is not just angry about Trudeau’s inherited family privilege in general but is specifically angry about the symbolic (i.e. non-economic) aspects of that privilege. From his second point, we see that rather than frame Trudeau as a man with lots of money, 04 frames Trudeau as *a being who is alien to money-making*. In his third point, 04 expresses hatred for Trudeau’s clumsy, and hence visible, possession of symbolic power, and the attempt to change the symbolic order (i.e. non-monetary aspects of the system) through symbolic (i.e. non-monetary) means. In his last point, 04 resents the lack of valorization given to “average Canadians”, or more bluntly put, money-makers with their money-making lifestyles who know how hard it is to make money.

Chapter Summary

This chapter is a straightforward description of the extent to which the political dispositions of the participants homologically map onto their capital orientation. Generally speaking, cultural capital orientation seems to correspond with Liberal leanings, while economic capital orientation seems to correspond with Conservative leanings. An important nuance is that this correspondence is between orientation and leanings, not between orientation and individuals. When it comes to individuals, Liberals oriented towards economic capital tend to be the moderate Liberals, whereas Conservatives oriented towards cultural capital⁸⁸ tend to be the moderate Conservatives.

This chapter has largely refrained from asking the deeper psychosocial questions about why these patterns exist. I have held off on the questions of “why” in this chapter so that the “what” can be presented as simplistically as possible. The next chapter will explore in greater detail the subjective experiences and outlooks that underpin the participants’ political stances.

⁸⁸ This is meant to denote moderate conservatives who have increased appreciation for cultural capital that are largely urban and cosmopolitan in nature. This is not to be confused with the phrase “cultural conservatives” appearing in lay political discourse.

Chapter 9 - To Ground a Point of View

Chapter Overview

This chapter continues the discussion on political socialization but emphasizes a different set of themes. This difference in emphasis demands a different argumentative flow⁸⁹ involving a looser collection of significant themes that do not necessarily have a linear logical order and hence warrants a separate chapter. In this chapter, I unpack the psychosocial underpinnings of the participants' political stances. In terms of data, I will be mostly using the same scenarios, vignettes, and excerpts as I have shown in the last chapter, but I will be examining them from a more open range of perspectives. The goal of the chapter is to develop a coherent articulation of how the subjective experiences of representation, belonging, and identity intersect⁹⁰ with the homologies described in the previous chapter. Whereas the previous chapter focused on the relationship between electoral disposition and capital orientation, this chapter focuses on the relations between cultural representation, political belonging, and professional identity.

Political consciousness and political belonging

I want to start the argument with a comparison between 09 and 10 regarding how they approach politics. For much of this section, I will use the phrase "groundedness" as a shorthand, but the shorthand boils down to whether a participant deems it important to see themselves represented in their own politics. As it turns out, while 09's (Liberal) political epistemology

⁸⁹ i.e. the material in this chapter is much harder to neatly arrange into theme-based blocks

⁹⁰ That is to say, where and how those subjective experiences fit into the system of objective dynamics arising from the capital divide we have been looking at so far.

involves a journey of finding a belief in which one can find oneself, 10's (Conservative) political epistemology seems to feature no such thing.

In the last chapter, I had framed 09's story as a demonstration of the homological connection between cultural capital and Liberal leanings. In this chapter, I am examining the same story from a different angle. Here, my point is to demonstrate how politically powerful it can be to find subcultural connections with other people sharing similar struggles.

Alex: So, before you found this subculture, what were your hobbies like, and how many of those hobbies were social?

09: I don't think I had any hobbies. I was too busy studying. I had no life (laughs). Prior to [joining the subculture] I've definitely never met with strangers over a hobby. As the parental saying goes, don't talk to strangers, right? [It was through] the Korean Twitter community that I realized, that a lot of people from the young generations deal with the exact same issues as me. I saw more and more young people who deal with Christian families, and the extending of family norms into society.

*09: We [see the same patterns] in the corruptions of politicians, corruptions of the industries, corruptions of business, or even, like I told you before, the corruptions in the national military in Korea. **These corruptions are exact translations of why the youths are unhappy, and they felt that the Christianity they practice is completely bogus or incorrect. [Their struggles within the family] translates into all the oppression they are seeing, and now that the internet age has started, it's showing on the Korean medias. Everyone's like, yeah, that's exactly what's going on, and I want to blame exactly my parents for making my life so miserable.***

At this point, Bourdieusian readers have surely noticed 09's discourse of "translations", and have realized that it is an untrained way of talking about the homologies between social struggles in different fields. If someone has grasped such concepts without any sociological training, we can say at the very least that they have thought a lot about the world around them. And yet, despite this propensity for critical reflection, 09 only became interested in Canadian politics after returning to the youth culture in his country of birth, and after becoming politicized there. What we see here are strong hints that Canadian political discourse, on its own, did not resonate with his experiences and as a result, could not have politicized him.

*09: And then, watching all [the political issues in Canada], I'm like, **how does this relate to me?** I wouldn't want to just go [into a politicized space] and then just state the popular opinion like everybody else. Like **how does that [relate] to my own problems?** **How does that contribute to my own dealings with the world and [my efforts] to make sense of it?***

Alex: Do you think it would ever be possible for you to Tweet your own issues?

*09: Well **it would be mostly, uh, parental problems.** I don't know if I've expressed this to other people before, but **I'm happy in Canada everywhere except in my own home,** living with my own parents. So my biggest issue will be dealing with the Asian parents. Especially the ones who are devout in Christianity, and are pastors who want to make their own church.*

Compared to the more common political themes of class, gender, and race, the idea of generations in Canadian society is much less prominent and is seldom used to mobilize movements. Indeed, 09 is well aware of this:

09: As I personally felt, [strictly hierarchies based on seniority] were not engrained or even practiced in the Canadian institutions, whether in the workforce or in the university.

My point is not necessarily to argue for increased attention to generations in academic and political discourse⁹¹; rather, it is more worthwhile here to emphasize how generation “blends into” race, in a way that is slightly but not wholly different from how gender blends into class in our previous chapter on ease versus effort. Bluntly put, to what extent does the mainstream interpret generational sensitivity as a racial sign? Moreover, to what extent is “race” a determinant of how much generation matters? And if the general field of power has a universal verdict on how much generation matters (regardless of what the verdict is), is there not a racial structure always already in place? I do not have solid answers to these questions; I am just suggesting the significance of these questions and posing them as a conduit for reflection.

In any case, the psychosocial takeaway from 09’s story is that a political cause cannot expect to attract supporters without giving them something that resonates with their experiences. A cause without resonance becomes an extrinsic cause, and as we have seen from all the previous chapters, *an extrinsic disposition is not politically neutral*. This is a nuance of which the political left should take particular heed, as this is a bigger liability for them than it is for their rivals. But how can this resonance be achieved? What exactly are the experiences that await resonance? The case of 09 is an extreme example of how generational⁹² tensions can constitute one such category of experience. Certainly, its significance cannot be understated, due to the

⁹¹ Indeed, bluntly increasing attention to generations might not lead to very progressive outcomes. More likely than not, activists will lose control of the discourse, which then proceeds to reinforce anti-Asian stereotypes in all the wrong ways, and finally leave Asian communities even more open to divide-and-conquer strategies of governance.

⁹² Or, at least, apparently generational. I do not doubt that we can deconstruct generation if we really really try, but since this is the subjective moment I am going to give subjective perceptions their due.

homological connections between parenting styles, modes of engagement⁹³, capital orientations, and political tendencies. There are, however, other types of defining experiences as well that are not limited to generational tensions. One such experience is a sense of cultural invisibility. We can see this in 09's narrative when he wonders how mainstream politics actually relate to him. In fact, we see similar disconnects amongst Conservative participants that are ostensibly very different from him.

Compared to 09, 10 not only votes for the opposite side but, more crucially for the discussion at hand, exhibits a disdain for identity-based voting that, at least at first glance, contrasts sharply with 09's political epistemology of finding an identity-affirming stance that relates to personal experience. The following excerpt is packed with significance, and I will be coming back to it several times in this chapter.

10: I don't vote according to simple ethno-demographics. In the States, a lot of people vote just because. You're Hispanic, you vote Democrat. You're Black, you vote Democrat. They don't think. They vote the way they've always done, and they really don't pay attention to any of the campaigns and electoral messages. They know nothing, but every time they reliably go out and vote for whatever they always vote for. I'm not worried about government redrawing electoral districts. When people vote like that, then things like redrawing districts becomes important. But if you actually pay attention to issues, and be informed, redrawing districts is not as important since the parties can't nail you down easily enough.

⁹³ i.e. intrinsic versus extrinsic

Compared to 09's emphasis on having a grounded stance in which one can see oneself, it is very stark that 10 apparently prides himself precisely on needing no such thing. Notably, by using signifiers such as "knowing", "thinking", and "attention" to distance himself from identity-based bloc voting, 10's discourse constructs an opposition between having cognitive knowledge versus having a grounded identity. What social circumstances could have structured such a dichotomy?

Identity, representation, and media presence

The nuances behind 10's discourse can perhaps be better understood if we consider him in tandem with other Conservative participants. There are three participants (04, 10 and 14) who have voted for the Conservatives in past elections. There are several glaring facts about them. They are all of Chinese descent, all male, all came to Canada in their early teens, and all exhibit distrust for the "media". This last point, as I argue, is highly relevant to understanding why certain positions in social space might come to perceive knowledge and identity as opposites.

I will use several scenarios to illustrate this. The first scenario comes from the same interview as above, just moments before 10's previous quote about grounded voting.

Alex: Have you ever imagined yourself to be a possible target for voter suppression?

10: Depending on what type.

Alex: It doesn't matter who's suppressing you – that's my next question.

10: Then it would be yes. It would definitely be yes.

Alex: Who do you think would suppress you, and how might they go about suppressing you?

*10: I really don't know who will suppress me, but the method is pretty easy. Through basically manipulation of media. **Media manipulation is the easiest way to do it.***

Alex: Has geography never played a part in your electoral concerns?

10: No matter where I am, I'd imagine I'd be driving somewhere. I don't really think it's a massive concern. Time maybe, but not geography.

Alex: Are you never worried that political elites – doesn't matter left or right – are redrawing electoral districts in ways that demographically work to your disadvantage?

10: I've heard this one before but I'm not worried. I don't vote according to simple ethno-demographics...

It is at this point that 10 gave the previous exposition about not voting according to one's demographic identities. In fact, with this piece of context, we see all the more starkly that from 10's perspective, "voter suppression" connotes "media" rather than "electoral districts".

Alex: So you would never have strong fears about... failing security checks at the electoral station, and stupid things like that?

10: Well, if you're legal you should always pass. There shouldn't be a problem failing it, if... you know... you're legal, you walk in, you did all the paperwork, and the government says yes you can vote. Then there's absolutely nothing to be afraid of.

In other words, 10 is more concerned about the symbolic violence related to portrayals and representations in the media, and less concerned about the physical violence related to electoral access. Once we begin to see this emphasis on the symbolic aspect of violence as the symptom of a particular social position (e.g. see Bourdieu 1993, 153), his discourse of not needing

groundedness (i.e. a legitimated identity open to mobilization) no longer seems like a coincidence. It is very much a discourse that synchronizes his subjective hopes for groundedness with his objective chances of actually getting a legibly grounded position. This is not a case of dismissing what one already has, but a case of abandoning the pursuit of what seems out of reach.

Thus, the moral of 10's story is that the utterance of "media" in the lifeworld can act as a metonym for symbolic exclusion. Let us now, in light of this, view a vignette with 14 and see his take on what "media" means to him. The context of this exchange is that we were having a discussion about whether engineers are truly depoliticized.

Alex: Do you think political opinions are mainly for artsy people?

14: Not really. Being an engineering and science student, you are probably gonna rely more on logical arguments, and logical reasoning, instead of like, appealing to the emotional side of people. These emotional arguments... I mean... (fumbles for words) I've known a lot of friends in engineering whose political opinions are pretty strong, and they have a lot of confidence in their opinions, but they just don't express it much or as loudly as the art people.

At this point in our exchange, it looked like 14 was struggling a bit to find the right words to describe the "emotional" people and their characteristics. I wanted to probe this further, so I tried switching to a different language.

Alex: (switches to Chinese) Around what age did you realize that art students have stronger expressive ability?

14: (replies in Chinese) Well, I mean, **I don't think their expressive abilities are stronger per se. I just think their methods of expression resonate better with audiences.** Because, my impression is that, even when they have the same views, a logical person would list the reasons for their views, in bullet points, while **the emotional person would appeal to common experiences, which end up making a deeper impression.** And, how can I put this? Emotional people, whether by nature or nurture, are better at...

Alex: Moving their audience?

14: Moving their audience, expressing their emotions, resonating with their audience.

It is at this juncture, amidst all the dichotomies about logic versus emotion, science versus art, decontextualized points versus common experiences, and silence versus expression, that the word “media” suddenly emerges.

Alex: (switches back to English) So I guess you don't think that people with strong political opinions are a poor fit for engineering.

14: (replies in English) No, I don't think they are a poor fit. Let me put it this way. Just because someone doesn't express a loud political opinion, doesn't mean they don't have a strong political opinion. I think it's a biased stereotype, that engineering students are not as political. Artsy people are more expressive, more emotional. So they tend to speak out loud, really loud, compared to engineers. Engineers tend to appeal to the reasonable and logical side, and that doesn't propagate as well through media, right?

Thus we have art, emotion, being loud, and rousing the audience, versus science, logic, being reasonable, and making a poor showing in the media. First things first, it must be mentioned that the gendered nature of these binaries comes as no surprise. Faulkner (2000b) has long since

observed that gendered binaries are widely pervasive and deeply entrenched in the engineering world. Beyond that though, there is something to be unpacked about the act of framing the *media as other*.

While 14 attributes his lack of media representation to being “logical”, the analyses in previous chapters seem to suggest a different reason altogether. As we can recall from the chapter on gender, findings from Schug et al. (2017) suggest that Asian men are one of the least represented demographics in popular media. In addition to the fact that Asians, in general, are found to have one of the lowest representation rates in popular magazines, the few representations that do exist are found to skew 79% towards Asian women. My argument here is that we have a classification struggle on our hands; we are dealing with a group of Asian men who are cognizant of their lack of representation in popular media but attribute this lack of representation to an overabundance of “logic” rather than to their gendered racialization. In other words, they *identify* as logical people, rather than Asian men. If we cross-compare 14’s identifications with that of 10’s, we see that 10’s discourse about not needing a grounded identity can also be viewed in this light, a discourse in which cognitive honour serves as a consolation prize in lieu of belonging. Let us replay 10’s diatribe once again, this time emphasizing just the important parts:

10: I don’t vote according to simple ethno-demographics... [Those who do] don’t think. ... They know nothing ... But if you actually pay attention to issues, and be informed, [district-based voter suppression] is not as important since the parties can’t nail you down...

To be sure, 10's dismissive rhetoric about identity-based, bloc-based voting reflects a general pattern found in right-wing discourse⁹⁴, which I have encountered in my own life from time to time when I tune in on political debates. But what I want to emphasize here is not the fact that 10 is repeating a popular right-wing lament. Instead, I would argue against the naïve view that 10 has simply been mentally reprogrammed by an arbitrary discourse that has no relevance to his life. I do not think it is a coincidence that 10 has deployed this discourse in a way that frames himself as being logical, through asserting himself in contradistinction to people who purportedly "don't think" and "know nothing". We can see how 10 prides himself on the fact that the political establishment cannot "nail him down", and that he is "informed" about political issues. By way of such discourse, the standards of honour shift from being in the news to having read the news, the standards of shame shift from having no community to having no information, and the standards of empowerment shift from visibility to unpredictability. Without assuming or needing to assume that 10 is doing any of this consciously, we can at least say the following. *His political practices constitute acts of resistance against the lack of representation in the bourgeois public sphere, acts which precisely delegitimize the very popularity denied to him, through leveraging the skills and distinctions least dependent on such popularity.*

Through identifying with logic, and through ongoing self-construction practices that frame the self as a logical self rather than a racial self, men like 10 are thus no strangers to respectability practices. In some ways, it makes sense for them to identify themselves the way they do. If you had a choice between two labels, and one label carries vastly more stigma than

⁹⁴ Although by no means exclusive to this historical period, the polemic against demographic blocs was especially strong in American political debates during the transition year from Obama to Trump. This was a time when emboldened alt-right populists openly complained that black or female Democrat politicians leveraged their identity to garner "automatic" support and that this somehow amounted to foul play.

the other, what label would you choose? Why would anyone choose the label with more stigma? These identification choices (in other words, classification struggles) should not be simply viewed as some kind of misrecognition of one's own situation. On the contrary, 10's identification choices, and to some extent 14's as well, stem from an intuitive grasp of the odds they have, and of what identities can get them farther in life in the societal status quo. If they denounce the invisibility of logic, they are counting on the sympathy of those who respect logic. If they denounce the invisibility of Asian men, they are counting on the sympathy of those who respect Asian men. How one frames the denouncement says a great deal about what one can, or cannot, count on.

At this point I have yet to talk about 04, but, as I am going to show now, his discourse also contains features similar to what we have seen above, despite being kneaded into an even more doctrinal and formal recitation of right-wing stances. These features include an aversion or disavowal of marginal identity groups, a positioning of oneself in alignment with some dominant value in contradistinction against liberal political culture, and a seething anger against being "deemphasized" and neglected by this liberal culture.

04: Remember what the Prime Minister said about the cabinet? That we're gonna have a gender-balanced cabinet because it's 2017. How much more stupid can he get? His job is to determine, individually, which MP should be in the cabinet, in what role. Not use gender balance. ...

Again we see a symbolic opposition between individualized merit and collectivized identity. It should be duly noted here that individualist meritocracy, in and of itself, is a more generic ideology that is not specific to the lifeworld we are working with. What interests me in this scenario, however, is why my participants are drawn to this ideology and why they take it up.

On a theoretical level, we can reframe the problem of ideology in a more Bourdieusian parlance (c.f. Wacquant 2012). We can say that “individualist meritocracy” is a hierarchizing principle that informs the distribution of honour in a particular field of power. This principle holds strong sway in some fields but not others, and I am asking why my participants are drawn to fields of power where this principle is strong. Moreover, said principle is being wielded against recognized collective identities, and more fundamentally, against an alternative principle of honour that emphasizes having a recognized and mobilized identity. With this in mind, we can look at some more excerpts from 04, and see a consistent opposition to recognized and mobilized identities.

04: Bill C-16 will forever harm this country. That's the self-prescribed gender pronouns. It's a compelled speech law. The way it's formulated, you must use these words, under these circumstances. That is something I think goes against the spirit of the British Common Law system, which I believe is one of the greatest things in this world. Then there's the Islamophobia law. I'm against formulating it that way because I think laws against racial hate should fall under a general protection law, not formulated on single race.

Aside from his hostility to LGBTQ+ advocacy and Muslim-Canadian advocacy, 04’s ostensible identification with the “British Common Law system” is worth flagging. Similar to how I analyzed 10’s seeming adherence to generic right-wing populist discourse, here in the case of 04 I argue that we should not interpret this “British” identification as merely an internalization of colonial power. Instead, “British” in this context signifies a normalized, doxic, and hence unnamed, identity. This assertion of a dominant-but-unnamed identity is a move *to recast invisibility as dominance*. More bluntly, it is a move to devalue visibility-related symbolic

capital. It might be tempting to say that 04 has internalized something that is irrelevant to him, but is it truly irrelevant? I think not.⁹⁵ In fact, let us look at what 04 juxtaposes against group recognition:

04: Did the Prime Minister think about our health care system, our economy, and how many refugees it can truly handle and integrate? I have a feeling that he doesn't care about the feeling of the average Canadian, or their lives. So that's my problem with his political stance. He deemphasizes his own citizens. I'm against refugees. I'm for borders. But besides that, I don't think he cared about us.

Critics of nation-state ideology would immediately notice that he is constructing a boundary over who gets to have citizenship and personhood, not just in the case of immigration but also in the case of gender pronouns. Moreover, we can readily note that his discourse frames refugees as beings who are alien to the resources of the nation-state. We can even note that he is drawing these boundaries knowingly and deliberately. But what I want to emphasize here instead is the more subtle fact that his imagined “average Canadian” is a biopolitical *homo economicus*. “Their lives” first and foremost connote “our health care system” and “our economy”, suggesting that the chief possessions of the imagined average Canadian consists of their life and their money (rather than, say, their connections, hobbies, or beliefs). As we have heard 10 say in the previous

⁹⁵ While 04’s discourse is not wholly alien to his circumstances, we should not take this observation too far in the other direction and say that his views completely reflect his identity. While it is fallacious to frame people who cite dominant values as pure dupes, it is just as fallacious to blame them for actually being dominant. Sometimes it is a more subtle case of disempowered invisible people citing doxic norms, in a doomed attempt to reframe their own invisibility as a status symbol rather than a stigma. Meanwhile, the regrettable tendency to blame the supplicants of dominance for being actual dominators, stems from a false assumption that every view is a grounded view, that groundedness is something everyone already enjoys, and that every view one expresses automatically reflects one’s identity. Such a thing is not at all a universal truth; only the right and left mainstreams enjoy such a close match between their views and their identities.

chapter, if the sky is not falling then everything is debatable, but economy is where the sky falls down.

To be clear, my emphasis here is not that 10 and 04 are oriented towards economic capital, as we have already established that in the previous chapter. My emphasis in this chapter is to unpack why economic concerns are symbolically pitted against not just cultural concerns in general, but concerns specifically related to political groundedness, representation, and identity. At this point, it is not sufficient anymore to merely say the general truism that economic capital is at work, or even that it is opposed to cultural capital. The unique system of symbolism and connotations around each form of capital, which in turn gives the lifeworld its own distinction chart of judgements and tastes, is what substantiates this lifeworld as a particular case of the possible.

Social scripts and cosmopolitan integration

After discussing the Conservatives at length, I want to analyze the Liberals for a moment in order to round out my arguments in this chapter. Those arguments will be easier to substantiate once I have presented the left side of the picture as well as the right so that they can be more readily compared. I want to argue that for the right-wing participants, economicistic discourse does for them what overt representation does for their leftist classmates: it allows them to see themselves in their political discourse, thereby grounding them more firmly in their political subculture.

One of the subtler ways in which issues of groundedness, representation, and identity manifest is in whether one has access to a ready-made social script⁹⁶ with which to talk about their sociopolitical struggles. We can see a demonstration of this by returning to the story of 09, but this time comparing him not with 10, but with 11, a fellow Liberal.

As I was transcribing the narratives of 09 and 11, it became apparent that 09's speech was much less smooth. It was broken up into grammatically disjoint sentence fragments separated by speech disfluencies such as "um"s and "ah"s. We have already noted previously that 09's lay insights are actually very astute, but these insights are shrouded in a political idiolect that does not resemble any established political discourse. (Recall for example, that he had a brilliant grasp of what homologies are and why they are political, but in his idiolect, they were called "synchronizations", a term which does not resonate with prevalent discourse.) The case of 09 contrasts sharply with 11, whose political speech can genuinely be called political *discourse*.

The political fluency and practiced acumen of 11 can be seen in his ability to retain both his tact and his honesty even when discursively blindsided. This is particularly evident near the end of our interview when I, emboldened by the fact that we were so clearly on the same political side, probed him with some difficult questions, which he answered genuinely and skillfully.

Alex: Have you engaged with feminists, feminist thinking, or feminist politics, in your political activities?

⁹⁶ This is a gross simplification, but I do not want to further break up the flow of my arguments with this tangent. Of course, the concepts of "social scripts" is an oversimplification because it does not account for the relational aspects of communication, the importance of which Bourdieu himself has emphasized many times (e.g. Bourdieu 1991).

11: No, I don't think I have engaged too much.

Alex: Do you know any Muslim women who are engaged in these issues?

11: Sure, yeah, I do know Muslim women feminists.

Alex: So if you were together in any kind of political movement, what would you do to coordinate your agenda with theirs?

11: I guess I haven't thought about it. I mean, on social media I discussed feminism with Muslim women, and I [have a close acquaintance] who is Muslim and she is super-duper feminist. Yeah, as far as I know, a lot of Muslim women are fairly pro-feminist.

Even when I continued to press him, 11 remained thoughtful and tactful. Notably, in contrast to 09's political speech (many parts of which were just as intertwined with faith and just as personal), 11's answers remain very smooth.

Alex: What would be your stance towards Muslim feminists who wanted to reform certain basic tenets in the faith?

*11: I see religion and faith as an individual thing, and anyone is free to practice whatever they want. **They can choose to practice something, they can choose not to practice something.** I choose to practice it holistically, everything, as a whole, in an orthodox way, but **I think anyone is free to practice things how they want. They are free to express their practice, they're free to talk to people about it, and they're free to persuade other people, through writing and through speaking, and so on. ... And I think, you know, we live in a country that should allow, and currently does allow, the freedom to [practice a faith in different ways].***

Two questions arise from this exchange. [1] How are we to make sense of the discrepancy between 11's generally progressive political consciousness and his relatively lacking consciousness for feminism, such a core aspect of modern leftist culture? [2] What allows him to express his views so tactfully even when blindsided? What enables him, even when dragged outside his comfort zone, to remain secure in his own stance, express openness to other stances, own his own shortcoming and be at peace with it?

First, groundedness matters. Even at very high levels of political engagement, groundedness (mostly synonymous with identity and representation, but can be more rigorously defined as having a high degree of coherence between where you stand and what you stand for) remains a major driving force behind one's political commitments. Even for someone like 11 who is very well-engaged, the above responses suggest that his political engagement declines sharply as soon as it involves a gender other than his own. Just as notably, what encounters he does have with feminism are grounded encounters. It involves people within his own community such as his neighbour, familiar faces to which he can put familiar names. I am not saying this just as a description of 11, but as a very human condition in which 11 is far from alone. In fact, in the case of 09, who did not politicize until re-engaging with the youth culture of his birth country, the centrality of groundedness is even clearer. He politicized by finding a crowd, and by investing in a collective struggle that he can call his own.

Secondly, 11's political acumen can be understood through its diachronic and synchronic aspects. The diachronic aspect is that his politics is very firmly grounded, through practice and over time. Acting on the same stance for many years will make you more secure in it, especially if that stance is one in which you can genuinely see yourself. As we recall from the high school chapter, 11 participated in clubs related to his faith even while he was still in high school.

Similarly, in his university days, he kept up a prayer routine in the multi-faith centre on campus, and also took an elective on Islamic history. In other words, the diachronic aspect of his groundedness is robustly reinforced by sustained practices that affirmed both his position and position-taking.

Yet, the diachronic aspect is not all that there is in explaining the wise ways in which 11 carries his stance. In his answers to my batch of difficult questions, a very significant moment is when he starts to cite the basic freedoms of a citizen. Canada's current constitution, commonly known as the Charter of Rights and Freedoms, was created under the rule of a Liberal administration in 1982. As far as mainstream rhetoric goes, this is a highly potent symbol for Canadian Liberals. I imagine that the symbolism would be all the more potent amongst Liberal migrants who integrated contentedly into Canadian multiculturalism. When migrants from my generation were granted residency in Canada, one of the first things we received from the government was a welcome booklet, which would, understandably, contain many references to this Charter. While I do not remember any details about the book's contents, I remember firmly internalizing the message that it was this Charter that kept racists off my back. Thus, when 11 started to cite the Charter, it was a move to create common ground by referencing something important to the Liberal, cosmopolitan consensus, something that resonates especially with the well-integrated migrant middle class.⁹⁷

A further layer of significance here is that it demonstrates 11's high degree of integration with the discourse of the mainstream left and its cosmopolitan consensus. The reason why 11's political discourse is so much more polished compared to that of 09's is that he is better

⁹⁷ And evidently, 11's strategy worked on me brilliantly.

integrated with the public sphere (which can be roughly understood as the moderate cosmopolitan section of the general field of power). In other words, 11's greater political fluency partly stems from his greater political integration. This greater degree of integration is not a simple individual choice, but something reflective of the political relevance of one's identities in the current symbolic order. The correspondence between integration, groundedness, and fluency can be seen in the following excerpt:

11: I think a lot of immigrants would tend to have non-xenophobic views, at least those who are logically consistent. If you're an immigrant yourself, you're more likely to view other immigrants more positively than if you're not, right? One would think so. So I'm an immigrant myself, therefore I view immigrant more positively. You don't see that many white supremacists who are African American, right? That'd be kinda weird.

Alex: If left-wing white activists want to include Muslims in their movements, what advice would you have for them?

11: I guess appealing to Muslims, and fighting Islamophobia. Yeah I think they already have Muslims in their movement.

In this passage, we can see how groundedness comes to 11 very naturally. A well-grounded political epistemology in which one can see oneself in one's own stance is, for 11, the default epistemology for anyone who is logically consistent. There is a sense of ease in 11's groundedness, a sense of ease that someone like 09 clearly lacks. 11's answer to my question about white allyship is almost tautological, and what shines through the tautology is just that taste of ease.

Here I must address a major misunderstanding. Whether one's struggles make it into political discourse is separate from whether those struggles are severe. I am saying this because it may appear to the reader as if I have spent many pages dissecting a progressive, splitting hairs over where he got his political skills, and nitpicking the prominence of his cause in the political limelight. It should be firmly clarified, however, that just because one's grounded stance is enabled by structural circumstances, does not mean that the stance is less genuine. 11's stance is in fact *very* genuine, which precisely derives from the well-grounded way in which he arrived at his stance. Moreover, just because a community is getting attention does not mean that the attention is unwarranted. In the case of 11's community, the spotlight is highly warranted, and its integration into the centre of cosmopolitan discourse is unequivocally needed. This is legitimately urgent considering how Islamophobia has even found its way into the stances of some of my participants. In this whole analysis, I am merely pointing out, with a Bourdieusian sense of reproductive pessimism, that the limelight reproduces the shadiness of the people in the shade. As Bourdieu (1989) says, the subjective moment is an integral part of the objective moment. How far a group can go in the classification struggle is an integral factor in understanding as a whole where a group stands in the general field of power.

Although an identical question about white allyship was never posed to 09, we can readily see in between the lines of his narrative that one key to allyship lies in a greater understanding of the inter-generational challenges the STEM-bound Asian Canadian youths experience and the strong shaping effects this has. For discursive integration to take place more

readily, sufficiently legible and nuanced political scripts relating to such issues need to be made available.⁹⁸ Here we can recall again the following excerpt:

09: ...Like how does [mainstream politics relate] to my own problems? How does that contribute to my own dealings with the world and [my efforts] to make sense of it?

Alex: Do you think it would ever be possible for you to Tweet your own issues?

09: Well it would be mostly, uh, parental problems. I don't know if I've expressed this to other people before, but I'm happy in Canada everywhere except in my own home.

We can infer here that, for someone in 09's circumstances to see himself reflected in political discourse, there would need to be a greater range of political scripts related to familial and generational experiences. The availability of political scripts is not a mere reflection of one's objective conditions, but an integral part of it. One can hardly ground their politics without seeing themselves appear in the political discourse; by this, I do not just mean merely being depicted, but also having one's social situation understood and taken into account.

The example at hand from 09 is one such situation that warrants more understanding, and it is one facing many Asian Canadian youths who landed before their preteens and had to grow up in a particular type of household facing particular challenges. It is often hard to bring up this issue with any level of meaningful nuance because individualist Anglo-Western societies tend to normalize parent-independent youth subjectivities.⁹⁹ This normalization has the power to

⁹⁸ As an example, one field where Asian Canadians have seen notable inclusion is that of mental health. There is discourse available that recognizes the particular social challenges facing Asian adolescents, and the particular kinds of mental health challenges that come as a result. Not coincidentally, key to this inclusion is a nuanced recognition of the parenting factor.

⁹⁹ As an anecdotal example, one barrier to Asian youths in LGBTQ+ subcultures is the individualist nature of popular advice about how and whether to come out to parents, with the orthodox answer being "talk it out" and the heterodox answer being "run away and live with peers". Both answers are underpinned by parent-

underpin the default political and academic imagination about what it means to be a youth, how they are socialized, how they vote, how they navigate urban life, how their struggles map onto their tastes and practices, and how they might be engaged, integrated, and mobilized. Our upbringing is a big part of who we are, and how our upbringings differ from those around us is a major determinant of how we come to understand ourselves. 09 had been searching for a genuine kind of belonging that could understand this¹⁰⁰ difference, and he has not been able to find it until he reengaged with – shall we say – the youth cultures that existed closer to his ethnonational position in the global field of power.

I do not doubt that, in the context of the STEM-bound Asian Canadian lifeworld, greater affinity with leftist stances corresponds to greater degrees of integration into cosmopolitan cultural life within the nation-state. It is no coincidence that there is a tendency amongst the right-wing participants to attune themselves not with the discourse of Canadian Conservatives, but with the discourse of American Republicans. We can recall 10’s statements against grounded voting, and notice very starkly that his picture of minority voting blocs included “Blacks” and “Hispanics” with no mention of the Indigenous identities that are more relevant in Canadian discourse. 14 meanwhile has his own circumstances, having grown up in the political cultures of Western rather than Central Canada, but we can recall that even he drew analogies about “Trump voters in California”. At the time of writing this paper, during the COVID-19 pandemic, I am in a state of shock upon finding out that one of the Conservative participants is actively attuned to

independent youth subjectivities. One answer assumes a familial field where moral difference is not an inherent problem. The other assumes a childhood habitus attuned to talking sideways instead of looking up.

¹⁰⁰ I want to stress in passing that difference is inherently relational, and should not be essentialised as “his difference”.

the American Republican discourse of going outside and flouting social distancing, even though the Conservative premier of Ontario has openly discouraged such practices.

Groundedness and capital orientation

We have, at this point, seen evidence of the significance of groundedness, and how it acts as a key force that gives progressive stances their moral endurance. Moreover, groundedness is precisely what appears to be missing amongst the Conservatives in the same lifeworld. In place of this groundedness, they have a collection of economicistic or rationalistic discourses, which are metonymically encoded with their self-image. This kind of self-image tends to be some variation of the *homo economicus*, wherein “jobs” and “work” become the underpinnings of how they see themselves and their interests.

The remaining task is to connect this discussion on groundedness to the greater overarching argument centred on capital conflict and its accompanying homologies. In other words, why would an economic orientation lead to a hostility to identity politics, and why would a cultural orientation lead to groundedness? What we see so far merely tells us that there is a correspondence between groundedness and capital, but why is that correspondence there? What are the *concrete lifeworld dynamics* that lead one to the other?

My argument here is that the dichotomy between intrinsic and extrinsic approaches to learning, instilled in formative years, is perhaps the most important piece of the puzzle if we want to understand the dynamics happening at the lifeworld level. To underscore the significance of this theme, I will open with a rhetorical question: *what would happen to the desire to see oneself represented if there is no self in the first place?*

As we have seen in the high school chapter, economic familial strategies lead to extrinsic engagement, which implies a negation of intrinsic interests. The familial enforcement¹⁰¹ of this negation gives rise to a particular form of asceticism aimed at negating “likes” and “wants”. There is a very subtle and devious consequence arising from this asceticism, which is a mutilated relation to likes and wants. Likes and wants, or in other words tastes and preferences, are basic passports that would have allowed one to enter the realm of symbolic distinctions and the judgement of tastes. Without tastes and preferences, one cannot hope to recognize, obtain, accrue, or value culture. It is of course no surprise that this whole scenario stands utterly opposed to cultural capital – it did stem, after all, from an economic familial strategy. Nevertheless, how it happens is important, and the psychosocial dimension is an indispensable part of the how. In seeing how it happens, we come to understand the way in which the taste of necessity reproduces itself.

It is known in the existing literature that, at least in the Anglo-Western context, the “self” is a middle-class construct inextricably tied to cultural consumption (e.g. Skeggs 2004). I will go a step further and say outright that in such societies, preferences related to cultural consumption is the building block of the self, and being out of touch with your own preferences (especially taste-based preferences far removed from necessities) pretty much means not having a self. The next relevant excerpt comes from 09, which details a struggle for selfhood. This is a story that demonstrates many themes that are relevant to our current discussion, themes such as the absence of self, the consumerist nature of the self, and the preference-based nature of the self.

¹⁰¹ We do not see very many verbal details regarding family discipline, but that is no reason to think the discipline is not there. Participants do not talk about this very much, because no one wants to relive those moments of their lives. In the few instances where participants wanted to put it into words, they really struggled and I think we can imagine why.

Most importantly, it demonstrates the close correspondence between selfhood and intrinsic interest.

*09: Video games played a big role in my self-discovery. Although I grew up playing games, it wasn't until university when I started playing together with other people, when [my friends in the program] held LAN parties in the dorm. Even after we no longer lived in residence, we kept up the LAN parties by setting up remote networks. When we all played the same game together, we all saw that everybody had different ideas about how the game should be played. This was especially true in role-playing games, when everyone had different ideas about how characters should be customized. Conversations would go back and forth about all those differences. **I was the quiet one in the group, and at first I was just taking in other people's opinions.** But then I began to communicate more about what I had, and what others didn't.*

While 09 eventually drifted apart from this particular clique of gamers, it is nevertheless significant that the spark for his selfhood came from an encounter with opinions and preferences. As his tastes developed¹⁰² he began to migrate from the competitive pole of the gaming field to the artistic pole. This was when he found his way into an indie subculture where games were made by indie developers rather than big companies, and where the artistic side of game production was emphasized more than in-game mechanics.¹⁰³

¹⁰² I will not engage in a debate here about whether those tastes were “developed” or “discovered”. For what it is worth, I am not too morally invested in my choice of words here, and it would not at all impede the point I am making either way.

¹⁰³ The games made by bigger companies are more likely to be used for competitive tournaments, and this leads to a decentering or even outright disdain for storylines and symbolisms behind the game in favour of disenchanted game mechanics and how to master them. Moreover, gamers with economic orientation are more likely to see games as the product of companies, rather than artists. These are the concrete social dynamics that mediate the homologies between “indie versus companies”, “lore versus mechanics”, and ultimately, cultural versus economic capital.

09: While I'm quite fond of [reading our tastes into how we play], I found myself tremendously weak about actually talking about the in-game mechanics and memorizing them. I never got into [our undergraduate clique's] way of consuming games; it was more interesting for me to find alternative ways of approaching games, and to put those alternative ways into words.

Alex: When you entered [the indie subculture], to what extent was it your intentional goal to express yourself? Or was the subculture giving you some other form of enjoyment, other than self-expression?

09: It was kind of like relearning... from scratch... values that I have never known about. Which includes freedom of expression, or expression in and of itself, and finding a meaning towards... um... the things other than what needs to be done. It's kind of like, you start from a blank slate, and you fill in the gaps and find out what you've been missing.

The demonstration of theory could not be starker here. To relearn the self from scratch entails not only expressing oneself, but finding meaning. In turn, finding meaning entails finding “things other than what needs to be done”. In other words, the meaning of selfhood rests upon finding tastes beyond the taste of necessity.

Alex: So... were you expressing yourself before you realized that this is what you were doing?

09: Expression, by itself, doesn't get at the core of knowing who you are. [Nor does it help you gain awareness of] how you think about what you are. If all you have is expression, you're just going to be a reflection of many other people's ideas. [That

reflection] is just what others assume to be you, but the things you express will have no meaning and they [won't be based on] any of your previous activities.

Thus, in his view, there is an element of selfhood that goes beyond the mere fact of being socially constituted. In between the lines, it is as though he sees a dichotomy between being socially constituted versus having a self. From a sociological point of view, I am not sure whether we should literally agree with him on that point, but at least we can be sure, in a Pascalian sense, that 09's *view of selfhood* is the result of *having viewed selfhood* from a particular position in social space. It may be tempting here to get drawn into a philosophical debate about whether selfhood is a construct, but let us instead recall one of 09's previous excerpts about his approach to politics, and see the match between position and position-taking.

09: And then, watching all [the political issues in Canada], I'm like, how does this relate to me? I wouldn't want to just go [into a politicized space] and then just state the popular opinion like everybody else. Like how does that [relate] to my own problems?

The interview about selfhood and the interview about politics took place on wholly separate occasions; and yet, we can notice the structural similarity between his approach to selfhood and his approach to politics. To 09, “being a reflection of other people’s ideas” is homologous to engaging politics without being well-grounded. In fact, homologically speaking, becoming a voter is analogous to becoming a self!

As an aside, it is worth noting that, from 09’s position in social space, having “expression” and being politically expressive connote conformity rather than non-conformity. What kind of social position would give rise to such a characterization? I think it would be some

kind of social position¹⁰⁴ that lacks access to meaningful discourse. It could only be from such a perspective that the more discourse you wield, the less grounded you must necessarily be.

In any case, the point of the story is to explain why and how intrinsic interest corresponds to political groundedness. Political groundedness, understood here as a state of being where one can see oneself represented in one's own political stance, must necessarily entail some kind of selfhood. Selfhood in turn, in our current society, hinges on preferences and tastes. In the lifeworld of STEM-bound Asian Canadian youths, an untrammelled relation to preferences and tastes is a key casualty in the clash between intrinsic and extrinsic ways of engaging with learning. The consequences of a compromised relation to preference and taste is a compromised ability to navigate fields that hinge on distinctions and cultural capital. The construct of selfhood, however philosophically tenuous its basis may be, functions in this practical context as a mechanism through which an intrinsic disposition may be preserved against the taste of necessity.

Now we can also understand why, on the right-wing side of this lifeworld, the ungrounded yet normalized populist subject is a *homo economicus*. What the *homo economicus* seeks, is what an extrinsic subject would be allowed to seek. What the *homo economicus* wants, is what an extrinsic subject would be allowed to want. Many years ago nearing the end of our undergraduate days, one of the participants compared human life to a rock getting eroded as time goes by. I was shocked that someone could conceptualize life not as a process of growth, but as a

¹⁰⁴ By “some kind of position”, I am not trying to be euphemistic. Of course I think that Asian Canadians lack access to meaningful discourse. But regarding this particular technical detail, it should be stressed that any demographic that is socially silent for any reason can potentially fit the bill. The fundamental principle has little to do with race per se. For any demographic defined by stigma, the delegated representatives of that demographic are faced with a dilemma. How much of that stigma should they continue to wear, when they enter the mainstream limelight? Too much and they lose their allies. Too little and they lose their constituency.

process of loss. Perhaps *homo economicus* is what is left over when intrinsic interests have been eroded away.

Chapter Summary

In this chapter, I have explored some of the psychosocial aspects of the participants' political responses. I have done this by grappling with four overlapping themes.

First, I introduce the idea of groundedness, which is a shorthand for a state of being in which one can find oneself represented in one's own political discourse. It seems that a need for groundedness is far more prevalent amongst left-leaning voters, and the representation-based logic of groundedness is more likely to guide their political epistemology. Meanwhile, those on the right do not seem to value this state of being nearly as much. In right-wing domains, economicistic discourse is more likely to guide political epistemology, in place of more grounded approaches rooted in identity or belonging.

Second, using the right-leaning participants' unanimous antipathy against the media as a starting point, I explore the implications of political invisibility. I unpack the psychosocial significance of "generic" subjectivities in the right-wing symbolic order. In my analysis of the ostensible phenomena of Conservative-voting Chinese-Canadians internalizing colonial superiority, I suggest that the actual situation is far more complex than simple internalization. I argue that, by valorizing the category of the generic normalized subject, Conservative-voting participants are seeking to reframe political invisibility as a merit, rather than a demerit, to their symbolic capital.

Third, I explore how political visibility can be conceptualized as a cause, rather than an effect, of political engagement. I suggest that the availability of relevant political discourse (i.e. discourse reflective of a subject's experiences) is a strong determinant of whether a subject becomes politically engaged. In particular, I suggest that Asian youths can be alienated from political forums where discourses related to generations is either absent, individualist, or otherwise lacking in nuance, as this silences a major part of their experiences.

Lastly, I explore the concrete mechanisms of mediation that are responsible for reproducing the homological system. I suggest that the key dichotomy at the lifeworld level is the conflict between extrinsic and intrinsic modes of traversing school life. My argument is that the extrinsic habitus entails a compromised relation to preferences and tastes, which places inherent limits on one's ability to recognize, accrue, and wield cultural capital. In relation to this, I have also suggested that discourses and practices of selfhood in this lifeworld can be taken up as a repudiation against extrinsic life, as well as a means to re-engage with preferences, tastes, and all the possibilities homologically implied thereby.

Conclusions

Propositional conclusions

Since this thesis is a project geared towards coverage and visibility, even mere descriptions of the lifeworld can be viewed as a kind of “argument”. Nevertheless, we can still distill several points from my thesis that fits the bill for being a propositional argument in the more traditional sense, and I have listed them as follows.

[1] First, social critiques that use Bourdieusian language to scrutinize schooling need to move beyond simplistically associating education with only “cultural” forms of capital. Critical accounts should remain sensitive to how rivalries between different forms of capital underpin seemingly apolitical distinctions within the schooling system, such as those between divergent disciplinary trajectories or different learning styles.

[2] Second, in the lifeworld of STEM-bound Asian Canadian youths, the seemingly apolitical distinctions between disciplinary trajectories or learning styles can encode power dynamics related to not just class but also gender. By corollary, clashes between different forms of capital do not just underpin class antipathy, but also entrench the social construction of gender. Moreover and more generally, capital clash gives rise to a particular dynamic where the categories of race, gender, and class do not simply intersect as separable factors or ideologies, but blend into each other in mutually entrenching ways through homological slippage.

[3] Third, in order to understand how STEM-based socialization affects the political consciousness of STEM-bound Asian Canadian youths, one must move away from a purely institutional framework that attributes socialization power to specific institutions. Instead, one

should pay attention to the overarching homologies that overshadow the life-course. In this context, I argue that the youths who seem to have been rendered conservative by their university schooling have actually been carrying existing tendencies from an earlier phase of life, tendencies that are in turn born of the social predicaments faced by Asian skilled migrants in Canadian society.

[4] Fourth, at least in this lifeworld if not more broadly, there is a high correspondence between antipathy to cultural capital and antipathy to grounded¹⁰⁵ forms of politics. The psychosocial link between economicistic disposition and ungrounded disposition is that both are associated with strongly extrinsic socialization, which manifests in the schooling context as “engagement without interest”. This kind of socialization creates a type of habitus that struggles to develop coherent tastes beyond the taste of necessity, which not only blocks cultural capital accrual but also impairs selfhood. Since selfhood is a precondition for any kind of politics that emphasizes seeing oneself represented in one’s own cause, a habitus with impaired selfhood will struggle to navigate grounded politics.

Potential directions for future research

Based on what this project has done and in light of what has yet to be done, I can see future research take a number of possible directions, some of which are easier to implement than others.

¹⁰⁵ To reiterate previous definitions, grounded politics is understood here as civically engaged politics in which participants can see themselves represented.

One of the original intentions of this thesis was to shed some light on the connection between artistic participation and political participation, but in the end, direct evidence for this connection remained elusive. Thus, the first direction for future research is to empirically ascertain, in the STEM-bound Asian Canadian context, the extent to which artistic-cultural alienation dialectically relates to political alienation.

As a second direction for future research, there can be similar studies of STEM-bound Asian Canadian youths, but centring on other sub-categories within this demographic. Due to the convenience sampling used in this project, most of the emphasis has been on the Chinese Canadian subset of this group. If other researchers with other kinds of social networks can recruit a different subset of this demographic, it would add immensely to the comprehensiveness and generality of this type of research as a whole. Other than the fact that it will require a different researcher with a different set of connections, the feasibility of such a project will be comparable to my own, and thus, relatively simple logically.

Thirdly, and perhaps much more ambitiously, one can begin looking into the fundamental similarities, potential differences, and complex relations between the Asian Canadian petty bourgeoisie and their white Canadian class counterparts, especially as it pertains to the connections between political leanings and scholastic socialization. Very importantly, this will explore the question of whether the white Canadian petty bourgeoisie suffers from similar visibility deficits in political culture, and whether this corresponds to either their STEM propensity or their populist propensity. More generally, I also think comparative projects of this kind lets us transcend a racially exclusionary false dichotomy prevalent in lay social commentaries, where class is either subconsciously viewed through a Eurocentric lens and then applied in universalist ways, or consciously viewed through a Eurocentric lens and then framed

as something that only affects white settlers.¹⁰⁶ I certainly hope neither mentality animates my current project, which is meant to consciously examine class from an Asian Canadian standpoint, while firmly refusing to monopolize class discourse as my own.

¹⁰⁶ To be clear, I think no particular lens is right or wrong on its own. The mistakes lie in either being unreflexive about the particularity of the lens, or in using the lens to morally monopolize a category of human experience.

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Glossary of Selected Terms

STEM-Bound Asian Canadian Youths: Asian Canadians who migrate to Canada in their preteens as part of skilled migrant families, whose parents are employed in sectors related to STEM (science, technology, engineering, mathematics), and who are themselves streamed towards the same range of jobs in the Canadian schooling system.

Homology: In this thesis, homology can be more or less understood as the *possibility of a group of potentially analogous dichotomies turning into mutually reinforcing ideological tropes*, thus allowing any number of vaguely similar tropes to reinforce each other and congeal into an entrenched worldview. For more information, refer to pages 84-87 in the thesis for an explanation on how I understand this term, or pages 19-22 in the thesis for a more detailed background.

Rote Learning: In this context, rote learning refers to a particular way of coping with schooling expectations. These coping mechanisms are geared towards passing evaluations and earning credentials, sometimes at the expense of not understanding the actual knowledge those credentials are meant to imply. In STEM-based pedagogical environments, rote learning often manifests as “memorization”, and is often stigmatized by educators who do not understand that a non-rote learning style requires significant levels of privilege.

Anti-rote stigma was historically a class stigma in Canada dating back to the 19th century. Its contemporary function as a racial stigma reflects not just the class amnesia of white supremacy, but more importantly the ethnic diversification of the Canadian petite bourgeoisie.

Extrinsic Motivation: Extrinsic motivation happens when you feel compelled to do something you do not like to do. In the context of schooling and disciplinary streaming, it means you are forced into a life trajectory you do not like, either by circumstance or by other people. In my thesis, two major markers of extrinsic motivation include “engagement without interest” and “taste of necessity”.

Intrinsic Motivation: Intrinsic motivation happens when you feel you are interested in doing something “for its own sake”. In the context of schooling and disciplinary streaming, it means you are drawn to a life trajectory because it entails doing something you like. In the final analysis, intrinsic motivation is not truly “freer” than extrinsic motivation, and is not truly autonomous from the shaping forces of social structure. It simply implies a better fit between what you are moulded to want and what you are allowed to do.

Capital: Generally, any form of capital has the following characteristics. (1) It is the result of labour. (2) It can be extracted and transferred. (3) It can be accumulated. (4) Its circulation stems from and reinforces particular social structures with particular social relations. For more detail, refer to pages 12-18 in this thesis, or to Bourdieu’s (1986) original discussion on the forms of capital.

Economic Capital: in the briefest of lay terms, money.

Cultural Capital: a form of capital that, in contrast with economic capital, tends to resist instantaneous transaction, and as a result becomes easier to disguise but harder to transmit. Typical examples include knowledge, physique, and certification.

Political Groundedness: At the subjective level, being politically well-grounded refers to a political attitude where identity plays a major part in one's political allegiance. At the objectively level, being well-grounded means you are part of a recognized demographic that political leaders, pundits, and critics openly cater to.

Meanwhile, being politically ungrounded at the subjective level implies a disdain for identity politics, and a tendency to internalize one's own identity as generic, normalized, average, or typical, as well as ignored and unrecognized. The position of my thesis is that, at the objective level, ungrounded attitudes amongst STEM-bound Asian Canadian youths are a reflection of the lack of recognition they receive in dominant political discourse.