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Table of Contents

1. Uncovering a Semiotics of Postmodernity	4
2. Mapping Postmodernity 2.2.2.0	9
i. Social Construction Imperiled	9
ii. Commodity and Rule Fetishism	11
iii. Techno-determinism.....	13
iv. Positivism 3.0	14
v. The Reification of Everything.....	17
vi. Premediation and Science Fiction	18
vii. Short-circuiting the Model of Premediation.....	21
viii. The Precession of Simulacra	22
ix. Jameson	23
x. Fisher	25
xi. Premediation’s Remediation	26
xii. Cyber ± punk	27
3. Schooling 3.0.....	30
i. Behaviorism and Pedagogy	30
ii. Personality, Identity, and Behavior	33
iii. Teaching to the Test	37
iv. Why can’t we talk about profit generating programs?	38
v. Specialization and Identity	39
vi. Psychosomatics and Neo-phrenology.....	40
vii. Overspecialization	43
viii. Curriculum Vitae Ethics	44
ix. The Meritocracy	45
x. A New Taylorism	46
xi. The Teacher, Human Agency, Scripts.....	47
xii. Cynicism in Teaching.....	47
xiii. Quantifiable Knowledge – Boxes and Rote	49
xiv. China.....	51
xv. National Exceptionalism and Global Generalizations.....	53

4. The Dismal State of the Dismal Science	54
i. The Economist's Burden	55
ii. Modelling	56
iii. Studying Economics	56
iv. Globalization and Tony Blair	57
v. The Origin of Infinite Growth	58
vi. Asset Bubbles and Perfect Commodities.....	60
vii. Cryptocurrency and the Metaverse.....	61
viii. The Precariat.....	61
5. Concluding Remarks	63
6. References	65
7. Estonian Summary (Kokkuvõte)	68

"All of the true things I am about to tell you are shameless lies."

-Book of Bokonon, Page 1¹

Uncovering a Semiotics of Postmodernity

What this is, is an investigation fundamentally about *frustration*. Frustration about technological determinism, the dominance of Economics, logical empiricism, science fiction... for better or for worse, it's all here. The objective of this research is to examine such phenomena for their shared social origins. Critiquing disciplines as being led or dominated by positivist inclinations is certainly valuable in its own right, but the central question being asked here is more oriented towards *why* such positivism is so common. Such questions of "why" relate back to the central theme of frustration- critiques will be useless in affecting change if such issues find their roots in broader societal tendencies.

The locus of this investigation is the domination of the socio-cultural sphere by the logic of the commodity — an increasing demand for the quantifiable, measurable, and present which permeates (post)modern society. *Postmodernity* here, as it is utilized in this research, does not gesture broadly to a period of time nor any specific elements, but rather a set of general and inextricable tendencies. *Postmodernity* is a societal condition in which the objects have won.

In a sense more specific to its understandings as applied to the arts, *Postmodern* also encompasses its functional aspects, the most major of which explored here is *self-referentiality*. There are no specific elements that are *essential* to *Postmodernity* or the *Postmodern*, and a critique of such essentialism is even a focal point of this argument. The specific objective in this research, if there can be said to be one, is to examine these ostensibly disparate conditions of Postmodernity, show their origin within logics of commodification, and examine how this gives rise to the aforementioned frustration.

While it may be somewhat difficult to imagine in the wake of political polarization following the onset of the coronavirus epidemic, we are not yet too far detached from the era which Fredric

¹ Book of Bokonon is a book within Kurt Vonnegut's Novel *Cat's Cradle*. The quotation can be found on page one.

Jameson aptly described as being marked by an “inverted millenarianism.” What Jameson took as the object of his research was a pervasive cultural sense that contemporary Western society had finally managed to escape from the fetters of political ideologies and politics in general; an ideological disposition encapsulated perhaps most infamously by Francis Fukuyama’s *The End of History and the Last Man*, but was certainly ubiquitous even if it did not always take the form of such blatant triumphalism. It is *somewhat* obvious in hindsight that such celebration was premature at best, especially given that it has been followed by thirty years of recessions, disasters, and declining quality of life. That being said, it does not mean that political discourse has abandoned the masquerade of post-ideological triumphalism, and, if anything, it has become more deeply entrenched in our institutions, media, and in how many contemporary issues are framed.

If there can be said to be a specific critique present here it is a critique of *optimism* produced at the core of commodification within *Postmodernity*. The optimism of the evangelists of the future can be largely understood as misplaced reverence for the commodity itself.

What the commodity represents is both *symbolic* and *temporal*. The ideal commodity is a *thing*, it is real, irreplaceable, immutable and can be readily exchanged. Real in this case meaning that it has some readily identifiable essence which can be used to constellate its position within a great network of objects. While such a perfect commodity is not actualizable, understanding the cultural mechanisms of commodification reveals a shared foundation across the frustrations, complexities, and contradictions of *Postmodernity*.

In a temporal sense, the uncertain valuation of commodities provides a strong impetus for enclosure of the future. Commodities and their symbolic valuations are not immutable, and thereby are imperiled by the progression of time. It is in the frantic rebellion against the future that the temporal aspects of Postmodernity are fully realized. The inverted millenarianism is not an unrelated aspect of some nebulous definition of the Postmodern milieu, it is an inevitable consequence inextricably linked with commodification.

Another subsequent, almost paradoxical, riddle of Postmodernity is the operation by which politics is ubiquitous while simultaneously ostensibly being a relic of a bygone era. Postmodern political discourse contains an awareness of a future within a tacit agreement that it *will never arrive*. There is some acute awareness of the flaws of contemporary systems and such flaws are regularly

vocalized in public discourse,² but this comes alongside great inertia and increasing entrenchment of the status quo. For as contradictory as these realizations may seem, there is a consistent *cultural operative logic* which is revealed when such results are understood as a reflection of society. Inertia is not an unfortunate development; it is a product of resistance against time in a world dominated by commodities.

Education and Economics are examined extensively within this thesis as they are particularly *revealing* of such commodification. Education is revealing insofar that it provides an effective example in which the veneer of society is regularly discarded and the cultural logic at play is made explicit. The exposed social condition being one in which irony and cynicism are dominant for want of a veneer of plausible deniability- a condition in which everything is possible and yet unachievable. Economics is interesting because it is ostensibly the science of the ideal commodity, and yet constantly finds itself under siege by the same drive towards commodification. The advantage of semiotics in this analysis is that it provides the means for a strategic reading of developments within the disciplines of Education and Economics. This allows for a more critical examination of not only how these sectors of society function under such commodification, but additionally the double-logic action created in the meta-reflection on such disciplines. How Education reflects on the act of commodification while itself being commodified, and how Economics reflects on the commodity while being consumed by its logics are phenomena which require careful consideration of the ways in which such disciplines both operate and constitute meaning in given social contexts. This extremely narrow constitution of meaning is the major motivator behind this investigation. The question asked being “What understanding of reality allows for such products to be considered reasonable?”.

The paradoxical nature is perhaps more clearly illustrated in strategic terms. While the ideological battleground of modernity saw real debate and ideological disputes in terms of curriculum, the school in postmodernity is, in function, almost completely ambivalent to systemic critiques, especially those which have explicitly ideological content. The issues that Paulo Freire and John Dewey were responding to still exist— schooling is still largely undemocratic, institutions reproduce societal biases, and overall, the schooling system seems to treat its subjects with cold

² One does not need to look beyond the explosion of the descriptor “critical” in both journal and article titles.

indifference comparable to seemingly bygone eras. The difference today being that such mechanisms continue to dominate instruction seemingly *in spite* of being subject to harsh criticism. The attempts of the constructivists to critique and right the errors of their predecessors have become themselves ossified and rigid. Methodologies that found their origin in critiques of the inhumane systems of modernity have themselves been standardized and applied unilaterally without appreciation for context. To provide an example, the critique of students and teachers as *objects* to be acted upon as opposed to *subjects* who act is by no means a new or novel one, but the reflexive nature of this cultural logic allows it to realize itself in service of their objectification — it is a question on a multiple-choice test, a flash card, a bullet point to be memorized by heart.

It is now thirty years on from the release of Jameson's *Postmodernism, or, The Cultural Logic of Late Stage Capitalism* and thirteen from Fisher's *Capitalist Realism* and yet the societal problems they both outlined have only, in most quantifiable metrics, further accelerated. Things today, especially following the onset of the coronavirus pandemic, are worse than ever in almost all regards, and yet not only has it become more difficult to imagine potential alternatives, even the very means by which such critiques were initially levied have been captured by the same elements of Postmodernity. The reflexive impotence engendered is *not* a novel development in this regard, nor is it especially a novel observation to be put forward. The Postmodernity 2.0 of my research is not new nor unexpected, nor does it differ from postmodernity in any way. It is the logical conclusion of such societal logics left unabated. 2.0 represents the death of creativity, the logic of the sequel, the tendency to reproduce and endlessly engage in self-reference. Postmodernity 2.0 is more of the same, almost exactly what you expect. Where this research *is* novel is firstly in the consideration of its subject matter. Media, education, and economics are not particularly unusual topics of discussion in regard to Postmodernity, but mechanisms identified and the understanding of them as being reflective of societal logic is unique to this investigation, as is the concluding logic seen as revealed by them.

A crucial part of Postmodernity is a contraction of choice, and as a result, semiosis. Is the future *determined*? No, probably not. However, this is not mutually exclusive with a deterministic cultural momentum. There is no conspiracy here. There very well may be dark rooms of the elite and the powerful colluding to produce a Matrixesque future where we all humans are reduced to batteries or processors or some nonsense, but conspiracies alone are not capable of producing cultural

conditions. When speaking of the death of human agency it is not part of the machinations of puppeteers or individuals behaving badly, it is collective cultural tendency of the here and now. A tendency which has a specific historical, economic, and sociological context. Although it is specific this does not mean that it is not widespread. An additional novel exploration within this research is contextualizing Postmodernity better as a global phenomenon, to better understand the developments in countries like China beyond the simple dismissal as something *fundamentally* different.

This argument by necessity draws on topics from a multitude of disciplines, and some of them are contentious. This work is not an attempt to be dismissive of any academics or their research, nor does the core argument presuppose that the objects of its investigation are necessarily of poor quality or otherwise morally reprehensible. For as far as this investigation is concerned, they need only be revealing.

The ultimate goal of this thesis is to be *interesting*. Semiotics is a useful tool for questioning the underlying logic present within the mechanisms of other disciplines, so the ideal outcome is to be able to raise interesting questions and present areas for future interdisciplinary research.

There is a meta-academic critique inherent in this goal of motivating interdisciplinary research. Especially in Postmodernity, academic work tends to hyper-fixate on individual issues, to reject the interdisciplinary in favor of perpetual specialization. The issues within these disciplines are not disparate nor anomalous, and it is only through understanding their broader context that they can be appropriately understood and challenged. Broader context of course being difficult to broach in a context which places heavy value on very specific work. The breadth of the approach here should be interpreted thus as an intentional research strategy, even if it is somewhat unusual.

A quick example of how this semiotic approach is valuable is in considering the increased prevalence of rote instruction in education. Understood as an issue in isolation it is easy to attribute to failures to be corrected in school administration or teaching training. Understood in the context of an increasingly transactional school system it becomes obvious that the reemergence is not anomalous, but rather a perfectly *internally logical* development. This understanding is vital to developing solutions, as simply trying to address it at an individual teacher level or studying it in isolation cannot fully capture the broader organization of the society surrounding the school.

MAPPING POSTMODERNITY (2.2.2.0)

We live as if inside Borges's fable of the map and the territory; in this story nothing is left but pieces of the map scattered throughout the empty space of the territory. Except that we must turn the tale upside down: today there is nothing left but a map (the virtual abstraction of the territory), and on this map some fragments of the real are still floating and drifting. (Baudrillard 2010: 63)

How could the contemporary postmodern milieu be explained outside of a crisis of the virtual? The safe and reliable *promises* of orienting loci within modernity, if they could ever have been said to exist, have been subsumed by a confused mass of derivative representations. Virtuality, in this sense, as Baudrillard perceived it, is an imitation in some way derivative of the real. (See Ibid: 62)³ The relationship between the map and the territory is only the start of understanding how semi-autonomous self-replicating mechanisms have come to dominate social spaces. Postmodernity 2.0 is confounding given that it presents itself as caught between replicating the past while cannibalizing the future, typified by essentialism, positivism, and a desire to enclose the future itself in the pursuit of the ideal commodity. The pursuit of the real produces a preponderance of its imitations: the virtual. The question is then as such: how does a desire for the real and immutable realize itself, and how does it produce such manic pursuits of the virtual?

Social Construction Imperiled

Understanding reality as being socially constructed, or otherwise contingent, opens up countless opportunities in terms of analyzing context and challenging misgivings about the status quo being somehow natural. For the sake of this investigation, there is no need to go into particular depth with the questions of the ontological minutiae of social construction or the related processes of ideological naturalization, as readers are only required to understand that social construction exists and the understanding of it is useful for many disciplines.

The drive to commodify necessarily eschews the nuances of social construction because commodities themselves, and especially the rules that apply to them, cannot be contingent. Rule

³ The full ontological discussion of virtuality and reality, while certainly an interesting and important area of discussion, is beyond the scope of this research. For here the rather simple designation of virtual as copy of some ostensible reality is sufficient.

fetishism is the product of the ideology of things because the perfect commodity cannot be brought into existence within a subjective system of value. It is not merely the naïve extension of the thought that concepts should or must be viewed as things, but instead rule fetishism is largely foundational. A system which seeks complete hermetic self-referentiality requires the stability of clearly delineated, real, boundaries. It is precisely in this operation that both the utility and imperiled status of post-structuralist semiotics are revealed: if rules and boundaries are not concrete things, but rather products of complex negotiations in meaning-making, then even the very idea of the commodity itself becomes destabilized. This runs contrary to the desire for an ideal commodity, as the idea of an eternal good with fixed value becomes nigh-impossible.

The reaction to such impossibility is a major insight into further widespread aspects of Postmodernity. Enclosure, rule fetishism, rent-seeking, and any attempts to reclaim the real and definite are all products of a singular desire to reassert the “objective” status of commodities. As ironic as it may seem, even the pursuit of the virtual is the product of the same pursuit: when real commodities fail to achieve the immortal status of the ideal, virtuality is elevated in importance in compensation via a familiar logic. As goods become more accessible and easily mass produced, they must be balanced by virtual countermeasures to maintain some semblance of the ideal commodity. In terms of education, the increasing focus on meta-evaluative measures is perfectly indicative of this. If education cannot be said to produce something tangibly valuable or productive, it must instead find its value in its *own status as an object*. The value of any degree is thus not in its capacity to bestow knowledge, but rather, to borrow from Baudrillard once again, on its *sign value*. Competitiveness, acceptance rates, and school rankings have no direct bearing on the *real*, but are rather only tangentially related to some notion of the real. This is the exact same process of rule fetishization; a desire to commodify allows such meta-evaluative standards to transcend their social construction and enter into the realm of the concrete. Especially for consumer goods, the process is even more explicit. Brand names become increasingly self-referential. Instead of functioning as a sign indicating value, the sign becomes its own sense of value. To use an extreme example: the *Gucci* on a handbag is almost completely divorced from any sense of use one may derive from it or the labor necessary to create it, instead the value is in how it differentiates itself

from other handbags.⁴ Take notice how in all cases it is an initial desire to make real, to objectify, to commodify, to reify which produces the ultimate propagation of the virtual.

Commodity and Rule Fetishism

Commodity fetishism, to borrow a term from Marx, is a mainstay in discussions of Postmodernity for good reason. It is a valuable starting point for understanding the ascension of the commodity. To quote Marx directly-

Whence, then, arises the enigmatical character of the product of labour, so soon as it assumes the form of commodities? Clearly from this form itself. The equality of all sorts of human labour is expressed objectively by their products all being equally values; the measure of the expenditure of labour power by the duration of that expenditure, takes the form of the quantity of value of the products of labour; and finally the mutual relations of the producers, within which the social character of their labour affirms itself, take the form of a social relation between the products. (Marx 2015[1867]: Section 4)

The immediate appeal of such a conceptualization of the commodity is that it can be understood as a more generalized social mechanism of reification: that is, the near seamless movement of the perception of commodities from the social world to the natural. This process holds a powerful significance for any discussion of virtuality as it brings the process of mystification of the object into focus. Commodity fetishism specifically is interesting, and certainly a mainstay of critiques of Postmodern consumer culture, but primarily is useful in this analysis insofar it can be generalized to a broader mechanism of reification. This also gives rise to the inverse case, one in which the areas of society that resist such commodification, intentionally or not, become objects of contempt. Especially in regard to art, technical skill becomes an increasingly central measure of valuation, as it is perceived as being more 'real' in its quantifiability than other, more contextually dependent, metrics. For academic disciplines, rigor becomes synonymous with real, and subsequently positively correlated with social prestige.

One particularly illustrative example of the crisis of virtuality within Postmodernity is the ascendance of rules and laws beyond what seems to be *any* context. Rules and laws, in becoming divorced from the context in which they originated, have become reified. The transformation is such that law no longer functions as a product of moral reasoning, as they ostensibly were in their origin, but instead have come to determine morality *themselves*. They are stripped of any context

⁴ While the examples provided are my own, this concept of sign-value is borrowed entirely from Baudrillard's *For a Critique of the Political Economy of the Sign* (1981).

or social situation which gave rise to them, and instead act to function in an absolute capacity unrestricted from the perils of interpretation. This occurrence is not unique to Postmodernity; indeed, the entire basis for traditions is the reproduction of past rites without critical consideration for the context in which they were originally prescribed. What's significant about the understanding of laws as dictating morality acts to reflect a positivist reaction to projects of understandings of social construction.

Rule fetishism thus becomes the idea that our rules and laws hold some innate power free from social actuality. There are two important ideas revealed in this process. First is a confusion of means and end, and secondly it captures the imaginative limitations inherent to "end of history" ideology. While it is easy to dismiss those who are exceedingly preoccupied with technicalities and legalities as being *naïve*, it should be readily obvious how similar this process is to changes in orientations within many aspects of Postmodern society. The rule becomes a commodity, something which is ideally real, objective, context-independent and immutable.

As always, the question is then "What do such changes indicate?". The reverence for the *rule* allows the ambiguity inherent to any application of power within society to be forgone. The same ways in which the meritocracy allows us to wallpaper over the social ills reproduced by the school system, techno-deterministic rule mechanisms give us an exceptionally *convenient* method by which the significance of social power and privilege can be denied. It closes off context both in regard to its origin *and* its application.

The ultimate cynical realization of such a mechanism is the elevation of the policing apparatus as a quasi-religious organization which, via rules and enforcement, prevent the complete degradation of society. Law, in this narrow ideological realization, is seen as somehow preceding the societies that form and develop it. This is an extreme position, and we shouldn't be particularly concerned with how prevalent it is nor how exactly it manifests, but instead we should focus on the ways in which such an ideological orientation is entirely *logically consistent* with how individuals are otherwise socially addressed within postmodernity. Such a stance is not an aberration, nor simply a cultural disdain for the nuanced or complex. Rather it is a logical conclusion of any argument which frames rule systems regardless of their socially constructed origins. The more commonplace idea that the legal systems function largely impartially, and those deviations are attributable to corruption is operating on the exact same logical premise.

Techno-determinism

In his recently published book *On Futurability*, Bifo Berardi bridges power and deterministic social mechanisms with the term *techno-linguistic automatisms*. Quoting him:

Power can be defined as a form of engendered determinism.

In fact, power takes the form of techno-linguistic automatisms shaping future behaviour: ‘If you don’t pay the rent, you’ll be automatically evicted from your apartment’, ‘If you don’t pay the fee, you’ll be automatically expelled from the university’, and so on. The execution of the eviction or the expulsion is not the act of a human agent that might be moved by compassion and change her mind. These consequences are implicit in the technical machine, as if they were logico-mathematical necessities. (Berardi 2017: Introduction)

What Berardi identifies is another core facet of postmodernity — tyranny of the program and algorithm are in their *inability* to incorporate social nuance. They act within predefined parameters and produce consistent, *internally logical* results. While, in early 2022, there is yet no initiative to replace aspects of contemporary legal systems with algorithms,⁵ it is worth noting that they represent an extremely convenient continuation of the positivist orientation which perceives social nuance and interpretation as *flaws*. If the ideal system consists of natural laws applied fairly and evenly, the algorithm represents an exciting opportunity to create a more perfect system. In the framing of human agency as *liability* immediately reveals the excitement behind techno-deterministic projects.

This quickly extends simply beyond the logic of commodification of the here-and-now. The danger of the commodity is that it is liable to decrease in value, especially in a system in which the predicted future value is intrinsic to the value itself. The ideology of gradual, steady, and infinite growth is inherently at the intersection of the dream of the ideal commodity and the anxiety of it being unachievable. The *solution* is relatively straightforward; to deny that the future will ever come, and to capture the future before it even arrives. The former coming into being as cynicism, and the latter as optimism, are not necessarily mutually exclusive.

Technological solutions are ideologically expedient because they come at the intersection of the dream of piecemeal style infinite growth, require little to no reimagination of extant social systems, and provide a means to control or eliminate the stochasticity inherent to human agency. Although, it’s worth noting that these three results are inextricable from one another- they are all consistent with what is observed in the pedagogical systems and in economic discourse because they are all

⁵ Although this space is seen as one of the justifications for the *blockchain*.

reflections of an underlying societal logic. The idea of algorithmic solutions can rectify the social ills of our school system is not coincidental *nor* borrowed from similar inclinations in our legal and economic systems, rather they are all products of the same drive for the real. Algorithms lack the vulnerability of human subjectivity and have the strength of objectivity. The same inputs will produce the same outputs, and thereby there is little room for uncertainty or ambiguity. The rules and values are ‘real’ insofar that they can be effortlessly reproduced and applied across the board. This is not to say that there is not a swath of good applications for such algorithms, but rather to highlight the source of their cultural convenience and to perhaps offer a critique and explanation for their overreach.

Positivism 3.0

Positivism is a bit difficult to define owing to the fact that it has primarily become a polemical term following the collapse (or failure) of the Vienna school in the mid-20th century. Richard Creath, in his entry on logical empiricism in the *Stanford Encyclopedia of Philosophy* places the turn against the movement in the 60’s, but the conclusion of the entry provides excellent insight into the mystery of positivism’s resurgence:

Even in its heyday many philosophers who on either doctrinal or sociological grounds can be grouped with the logical empiricists did not see themselves that way. We should not expect philosophers today to identify with the movement either. Each generation finds its place by emphasizing its differences from what has gone before. But the spirit of the movement still has its adherents. There are many who value clarity and who want to understand the methodology of science, its structure, and its prospects. There are many who want to find a natural home within a broad conception of science for conceptual innovation, for logic and mathematics, and for their own study of methodology. (Creath, 2021)

So, what *is* positivism? It’s an extreme orientation towards the empirical, as if the alternative name of *logical empiricism* wasn’t enough of a hint. To quote from the horse’s mouth:

We have characterised the scientific world-conception essentially by two features. First it is empiricist and positivist: there is knowledge only from experience, which rests on what is immediately given. This sets the limits for the content of legitimate science. Second, the scientific world-conception is marked by application of a certain method, namely logical analysis. (Hahn et. al, 1929)⁶

However, as Creath identified, positivism does not so much operate strictly within the limits of such explicit delineation. That is, positivism presents itself in postmodernity as a shambling corpse- its dominance is *de facto*, an assumed default. The silliness of the Vienna circle is simply another

⁶ This is a quote from the Vienna Circle’s manifesto, not from *The Big Bang Theory*’s Sheldon Cooper. There is an extremely strong argument to be made that shows like *The Big Bang Theory* indicate a yet strong cultural undercurrent of positivism.

example of a failed attempt to bring the realm of the implicit into the explicit. Empiricism can serve as the end-all-be-all regardless of detractors.

To provide some evidence that such is the case, we need look no further than Computer Science. Finding its renaissance simultaneously with the fall of positivism *should* mean that the discipline is not overwhelmed with overly empiricist logic, but the reality could not be more different. Computer science is overwhelmingly positivistic, and the consideration for philosophy in curricula does not extend beyond an introductory ethics course. As far as a student prepared by such a system is concerned, philosophy is primarily concerned with *trolley problems*. Computer Science was readily inducted into the realm of ‘real’ science, the golden child of mathematics and physics, and as such given free reign to operate without the tedium of ontological concerns. This is precisely what positivism is and how it operates in *Postmodernity*, and it is no coincidence that this goes alongside a broader worship of technology as savior. The real, logically empirical ‘truth’ is in the ether, and it is the responsibility of *hard science* to bestow it upon us. Searching for positivism and computer science is especially revealing, as there is only *one* short (yet excellent) paper with two citations (as of May 2022) addressing this issue *Beyond Positivism in Computer Science*. (Luczak-Rösch, 2013)

Looking at curricula for the top computer science programs around the world is particularly revealing. For undergraduates MIT has only a singular optional ethics course in its choice of “independent inquiry subjects”⁷, Stanford and Cambridge make no mention of philosophy or ethics at all on their course overview⁸⁹, Tsinghua interestingly makes no mention of social sciences, but does have a course entitled “Internet Innovation and Entrepreneurship”.¹⁰ The computer science program at The École polytechnique fédérale de Lausanne shares a similar lack of interdisciplinary consideration to its contemporaries in other countries at both the bachelor and masters level.¹¹ The reality is explicit, a worldwide agreement to specialize, to study one thing. There is the world of computer science, and there is a world of politics, and a world of philosophy, and they are kept

⁷ <http://catalog.mit.edu/degree-charts/computer-science-engineering-course-6-3/>

⁸ <https://cs.stanford.edu/degrees/ug/Requirements.shtml>

⁹ <https://www.undergraduate.study.cam.ac.uk/courses/computer-science>

¹⁰ https://www.tsinghua.edu.cn/_local/4/DB/56/B83026643902FFE5C1B87242FB9_5E59B2C0_9EE22.pdf?e=.pdf

¹¹ <https://www.epfl.ch/education/bachelor/programs/computer-science/>

separate as possible. A single optional elective in ethics is not only woefully insufficient for students who will be studying courses like “Computational Genome Analysis” and “Intelligent Unmanned System(sic)”¹², it is missing the fundamental positivist ideology engendered by the entire global education system. The modern travesties of computer science are not far from those of hard sciences of the past. Facebook’s software engineers, most of which were educated at these top universities, are not isolated immoral bad actors, they are a direct product of *Postmodernity*.

Ultimately, today there are few who would be willing to refer to themselves as ‘logical positivists’, yet it does not require close examination to see that it is the core ideological orientation of many, if not almost all, contemporary social functions. As identified in the previous chapter, attempts to understand things as not existing in a “real, scientific” sense directly conflicts with attempts to realize a perfect commodity. Positivism, be it explicit or implicit, is an important cornerstone of any attempt to reveal true real science. The impulse to find the real scientific truth at the heart of the universe does simply resemble the desire to find the value of a Gucci handbag in the stitching or of a diamond in the imperfections in its carbon lattices, it comes out of the same logic.

Taking schooling as an example, contempt for everything not quantifiable is a key aspect of assessment, and as a result becomes a central focus. Such ruthless quantification may not stand up to scrutiny or debate, and there is certainly no shortage of criticism of positivism within academic circles, yet it functions regardless. Even when brought under scrutiny there is always the same retreat of it being strictly necessary, if regrettable. Regardless of whether this trend backwards towards positivist thinking comes via conscious cynicism or a naïve lack of imagination, the reproduction of it and its domination of the social sphere persists regardless and continue to define social relations. The disdain for relativism is engendered in students the moment they are presented with an exam where they are assessed in strictly binary terms. This is further exacerbated by the dominance of technological solutions, especially that of AI and algorithms, which necessarily operate in binary reasoning.

The distrust of social constructionism is unsurprising in this respect and rises *alongside* the dominance of positivism. Again, the key here being that this is both unexceptional and unsurprising.

¹²https://www.tsinghua.edu.cn/_local/4/DB/56/B83026643902FFE5C1B87242FB9_5E59B2C0_9EE22.pdf?e=.pdf

The mistake of conflating ‘socially constructed’ with ‘nonreal’ or ‘purely relative’ is not made in isolation, nor one that is purely adopted from reactionary public intellectuals. It reflects a social milieu which requires everything be countable and insists that science gradually trends towards truth.

The Reification of Everything

The drive to reify all aspects of life, to reduce them to their internal calculus, is not unique to today. The desire to make all subjects of study as clear-cut and objective as physics was a defining feature of *modernity*. It is in the explosion of technology, and especially the increasing dominance of representation of technology in media, that the frantic desire to reify becomes fully realized. Ideologies, governments, and identities become actual concrete parts of a shared social reality to be praised or rallied against. Capitalism becomes something not constituted in the means of production, but an extant object in the ether to be specifically defined. The endless handwringing over specific definitions of terms like *fascism* or *neoliberalism* is not only a misunderstanding of what it means for something to be socially constructed, but also completely reflective of the essentialist framing of all knowledge whatsoever. In effect, this displaces political agency from social systems onto the concepts themselves.

In regard to institutions, the product of reification can be directly witnessed within discussions regarding the government or the economy. Governmental institutions lose their complexity and status as social institutions and instead becomes akin to a higher power. Government and the economy both become largely inscrutable ‘things’ in their own right. The framing of protests as being against a government or economy completely extraneous to those protesting exposes the frailty of such a conceptualization. As Mark Fisher observed:

Live 8 was a strange kind of protest; a protest that everyone could agree with: who is it who actually wants poverty? And it is not that Live 8 was a 'degraded' form of protest. On the contrary, it was in Live 8 that the logic of the protest was revealed in its purest form. The protest impulse of the 60s posited a malevolent Father, the harbinger of a reality principle that (supposedly) cruelly and arbitrarily denies the 'right' to total enjoyment. This Father has unlimited access to resources, but he selfishly – and senselessly - hoards them. (Fisher 2009:18)

It doesn't require delving into Fisher's psychoanalytic interpretation here to see how what he identified as capitalist realism lines up neatly with a logic of reification. There is a government, an economy, an arcane *other* which must be negotiated with. The fact that such protests are regularly attended and organized by companies and individuals who directly contribute to the issues being

protested may at first seem to be a terrible irony or hypocrisy, but under a specific reified understanding such a conflict doesn't occur. Ronald Reagan making jokes about the terror of the government *while being sitting president* demonstrates how the concept of government is established as an external point of reference. Likewise, 'the economy' has come to occupy a similar space, albeit without the binary polarization within discussions on 'the government'. This is especially true as the economy continues to occupy an increasingly central role in discussions about every possible subject.

The desire to keep politics out of government and the economy is, once again, not merely the product of a deep misunderstanding. It is an application of the logic of the commodity to all aspects of life. It contains the idea that government and economic functions can be reduced to a series of inputs and outputs. The notion of a technocratic utopia is simply the idea that the right results can be produced via algorithmic deduction. It is precisely from this perspective that the underlying drive to commodify can be revealed, as it closely mirrors the disposition towards all forms of research in Postmodernity. It is reductionist, positivist, and naïve, but operates independent of any criticism as such.

Premediation and Science Fiction

In a 2004 paper entitled "Premediation" and published in *Criticism*, Richard Grusin introduced the concept of premediation to describe the manic anticipatory action which consumed the US media apparatus following the destruction of the World Trade Center in 2001. Grusin refines premediation as a concept to refer to the anticipatory function of media more broadly, borne originally out of a desire to avoid any future circumstance being unforeseen in a similar manner to 9/11.

Premediation is interesting as it reveals another piece of the puzzle as to how objects relate to the future, and more significantly, ways in which the future is closed off. What it primarily offers us is insight into the connection between technological determinism and the moment of enclosure. Grusin's enclosure is one that only extends so far as to mediate a potentially traumatic future, but with some close examination of cases where the logic of premediation breaks down will reveal more substantial connections to the future sought by this study.

The logic of premediation is one in which the future is remediated, that is, presented in new media forms. The result is media which not only makes predictions about the future but frames the future

purely as an extension, a mediation, of the present. It is not a coincidence that this reflexive logic closely mirrors that of the other aspects of postmodernity; it is not enough to predict the future, the future must be presented as something which *can be predicted*. Stochasticity and pure unpredictability are once again liabilities not afforded in the valuation of commodities. This subsequently produces an impulse to enclose the future itself, to predict a future in which the current system of values is undisturbed.

Grusin's logic of premediation, especially in respect to pre-2000 science fiction films, holds up extremely well as laid out in his 2004 paper. *Strange Days* and *Minority Report* are both movies which fall into the realm of science fiction as precautionary tale- a potential future is premediated as a sort of 'warning' to the present. The simple logic of "If we continue to develop robots/AI they will be indistinguishable from real people, and this will be bad/neutral/good" is not only a mainstay in science fiction, but it also crucially asserts that there *is* a future. It affords some uncertainty created by shifting and potentially dangerous technologies, and as such the track-setting nature of premediation as imagined by Grusin holds up particularly well.

Science fiction commonly serves as a textbook method of remediation- whether it is through simply recreating extant narrative schema in a future setting, or as a method of examining contemporary social mores in a setting unfamiliar enough to highlight their absurdity. Note that none of the aforementioned functions are mutually exclusive nor necessary, these are simply the most common cases in which Grusin's framework easily fits. The 'freedom fighter versus evil empire' narrative is explicitly remediated in *Star Wars*, but the premediating function is a skepticism of the relationship between technological progress and social progress. As Grusin emphasizes, the premediation of the film is not in predicting the death star or lightsabers, but rather in imagining a time in our future where we have the ability to engineer such devices yet still need to fight for freedom/what you believe in/truth. *Minority Report* does not predict a future where crimes will be predicted by three people in a tub and interpreted by Tom Cruise, but rather functions as a critique of the cultural logic of attempting to 'predict' crime before it happens alongside the danger of considering technology to be infallible. Spike Jonez' film *Her* premediates the possibility or non-possibility of technology serving as a solution to contemporary issues of alienation. The concept of artificial intelligence as a stand-in for human partners is remediated before it comes into existence.

In terms of offering critiques of contemporary society, Villeneuve's *Blade Runner 2049* and Cameron's *Terminator 2* were both described by their directors explicitly of functioning in this capacity. In the case of *Terminator 2*, when asked about his decision to make the villain an LAPD officer James Cameron said:

The Terminator films are not really about the human race getting killed off by future machines. They're about us losing touch with our own humanity and becoming machines, which allows us to kill and brutalize each other," he says. "Cops think all non-cops as less than they are, stupid, weak, and evil. They dehumanize the people they are sworn to protect and desensitize themselves in order to do that job. (Keegan, 2009)

Cameron's understanding of the functioning of the film is perfectly in line with Grusin's premediation. It also came to be *incredibly* prescient given that, shortly before the film was screened, LAPD officers would be caught on film beating an unarmed Rodney King sparking the LA riots of 1992.

Blade Runner 2049's director, Denis Villeneuve made a similarly explicit comment in response to accusations of misogyny in his film:

"What is cinema?" Villeneuve continued. "Cinema is a mirror on society. Blade Runner is not about tomorrow; it's about today. And I'm sorry, but the world is not kind on women." (Hoffman 2017)

Again, we can see an explicit reflection on the premediating effects of the film alongside its potentiality to remediate contemporary societal issues. The 'imagined future' is already real and immediate, and these films cast doubt on the ideology of technological determinism. There is a possible future in which technology does develop, but society contains its same ills as today.¹³

This concept of 'technological determinism' is also crucially intertwined with understanding the premediating aspects of science fiction. While all of the aforementioned films open themselves up to interpretation, it's hard to classify any of them as broadly falling into deterministic trappings with their attempts to remediate future forms. A more interesting question for the sake of the investigation is raised in cases in which premediation begins to break down, and it is precisely in such cases that the *Postmodern* once again begins to reveal itself.

¹³This is not to say that the author should be considered as a sole authority on their work, but I think in these cases the logic of premediation is made explicit. That being said, there is a meaningful critique of how 'intentionality' factors in to Grusin's concept of premediation which will be explored further on.

Short-circuiting the Model of Premediation

For the previously mentioned movies there are no clear issues with the model of premediation that Grusin has developed. The track set forth by the films presents these future technologies purely as remediations of current reality- potentialities that are anticipated yet not predicted.

The logic of premediation begins to become more complex in certain films where ideas of technological determinism are more ambiguous. If a film presents an exact recreation of contemporary society, but simply changes certain technologies out as props, what can it truly be said to be premediating? At first glance, films that serve primarily to critique contemporary society like *Blade Runner 2049* may initially seem like to fit into this category, but in fact their denial of technological determinism and their strongly critical approach absolutely do make some attempt to remediate the future prior to its occurrence- to remediate and critique a future that may or may not come to exist. The dystopian landscapes of a cyberpunk future are not presented as *inevitable*, but certainly as a possible product of contemporary systems.

If we look at major blockbusters, however, a different trend can be seen unfolding. The Russo's *Avengers: Endgame* only takes place half a decade into the future yet showcases many exciting and glitzy new technologies. Space flight, nano-machines, and artificial intelligence capable of conquering the world, are just a few of many extravagant technologies brought onto the screen by magic of CGI. It may be tempting to say that this simply premediates some possible future where genome-editing is perfected and super-heroes become reality, but this does not hold up to the double-logic of premediation. The technology is entirely ancillary to the plot and functioning of the film. Despite the superheroes, artificial intelligence, high-tech gadgets readily employed, the society portrayed within the film makes no effort to premeditate the future, it is simply a 1:1 remediation of contemporary society. Given this, it seems as if the film has *intentionally refused* to premeditate the future. One particularly cynical reading is 'transnational violent apparatuses are necessary for global safety' which may allow *Avenger's Endgame* to fit into the model of premediation, but such a reading does not break away from the status quo- it is purely remediative.

Another 2019 science fiction blockbuster was Frant Gwo's *The Wandering Earth*. Unlike *Endgame*, *The Wandering Earth* takes place half a century into the future on an ostensibly radically different earth. In a desperate attempt to save the earth from an aging sun, nations of the world unite to move

the earth itself away using massive propulsion engines. Despite the fantastical and dramatic setting, the film also seems to intentionally deny premediation. Society is unchanged. People live underground, but they have jobs, they earn money, there are police, jails, crime organizations etc. Like with *Endgame* the technology serves once again as simply a veneer. It may sound like a premediation of climate change, but the inevitability of the disaster presented (a dying sun) seem to intentionally preempt and deny this reading. Even the family structure remediates contemporary social conservative views, an older brother who protects his younger sister and two fathers who sacrifice themselves for their families.¹⁴ Like *The Avengers* it offers no criticisms of the society within which it operates. While these films may share an aesthetic with the cyberpunk works that they draw on, there is none of the critical vigor of works like *Blade Runner* or *Neuromancer*.

There are some potential premediating readings present in these films and ones like them, but premediation fails to reveal anything interesting about the logic by which these films are operating. Trying to work strictly through Grusin's framework only results in frustration. It's immediately obvious that *Minority Report* and *The Wandering Earth* are very different films through what they premeditate, but without adjustments the model begins to short-circuit when presented with the somewhat nihilistic non-future of *The Wandering Earth*.

Grusin argues that post 9/11 media is characterized by the frantic desire to premeditate all possible realities, but this does a poor job of describing films like the *Avengers* series, *Avatar*, or *The Wandering Earth* very well.¹⁵ If anything, these films seem to be operating under a very distinct rationality, but one that is not fully captured within the purview of Grusin's 9/11 focused framework. To expand the framework of premediation to better encompass such films, it's worth reconsidering what *Postmodernity* is alongside *how* it manifests.

The Precession of Simulacra

While Grusin makes an active attempt to break away from Baudrillard with his criticisms in the essay, there are yet crucial considerations relating to concepts that are unaddressed. From his 1981

¹⁴ They did it twice in one film!

¹⁵ I have intentionally chosen extremely high-grossing films to avoid issues of cherry-picking texts which are convenient for my analysis.

book *Simulacra and Simulation*, we can see that one of the defining characteristics of postmodernity for Baudrillard is the aggressive remediating aspects of it.

This artificial memory will be the restaging of extermination - but late, much too late for it to be able to make real waves and profoundly disturb something, and especially, especially through a medium that is itself cold, radiating forgetfulness, deterrence, and extermination in a still more systematic way, if that is possible, than the camps themselves. One no longer makes the Jews pass through the crematorium or the gas chamber, but through the sound track and image track, through the universal screen and the microprocessor. Forgetting, annihilation, finally achieves its aesthetic dimension in this way - it is achieved in retro, finally elevated here to a mass level. (Baudrillard 1981: 49)

For Baudrillard, the aggressive remediation of the past feeds into the notion of hyperreality, which Grusin explicitly mentions in the essay. But beyond this examination of remediation and the intersection of the real and imaginary, there is a broader sociological examination which is invaluable in the consideration of premediation. It is in this that the crisis of the virtual at the heart of Postmodernity once again reveals itself. Virtuality, in this sense, offers a potential explanation as to why the model of premediation fails to operate within the context of these blockbusters: they are themselves copies without origin. These films are stylistically similar to premediating media *because* they are imitations of a certain aesthetic structure. They cannot make assertions about the future nor the present, as they are operating under the misunderstanding that they themselves are ahistoric.

When media is understood as existing in some primordial state as both ahistorical and apolitical, it becomes quite easy to understand the pattern of film within a greater system of objects. The bloated CGI budgets and onscreen spectacle *are* the film in many respects. Much more is revealed about these films when the questions are “How much was spent on special effects”, and “How many A-list celebrities appear” than “What predictions does the film make about the future.”

Especially in regard to big-budget films, the profit-generating mechanisms and machinations of late capitalism cannot be ignored in consideration of their own mechanisms of operation.

Jameson

In his book *Postmodernism, or, the Cultural Logic of Late Capitalism*, Jameson identifies the imminent ideological force as Postmodern, which he strongly associates with the wide-reaching effects of the expansion of multinational capital following the second World War. (Jameson 2005: 10) Influenced by Lacanian concepts of the subject, Jameson presents Postmodernity as the conditions by which the signifying chain, the means by which a coherent shared reality is formed

between individuals, has begun to dissolve. For Jameson, the composed narratives of modernity are being gradually eroded by the emergence of the Postmodern. The result is a weakening of the historicity of subjects, as Jameson describes: "...schizophrenics reduced to an experience of pure material signifiers, or, in other words, a series of pure and unrelated presents in time." (Ibid 29)

Noticeably there is a considerable overlap between Jameson's attempt to identify the emergent cultural logic of what he calls late capitalism, and Grusin's attempt to understand the inner logic of media in a post 9/11 world. The crucial difference is that Jameson identifies the frantic remediation of the past with the new world composed of computers, aggressive new forms of media, American military hegemony, and the expansion of business as a modelling system. The emergence of Postmodernism, as Jameson sees it, is produced as a product of late capitalism. The effects of reduced historicity, parody being replaced by pastiche, and overall, a weakening of the connections to the past and the real are all symptoms of the cultural shift into Postmodernity. To quote Jameson again:

Guy Debord's powerful slogan is now even more apt for the "prehistory" of a society bereft of all historicity, one whose own putative past is little more than a set of dusty spectacles. In faithful conformity to poststructuralist linguistic theory, the past as "referent" finds itself gradually bracketed, and then effaced altogether, leaving us with nothing but texts. (Ibid: 24)

Ultimately his approach is to examine the emergence of this new ideology and method of reasoning directly seem to foreshadow Grusin's premediation. Jameson does not identify these shifts in media not with a singular traumatic event like 9/11, but as logical conclusions of the expansion of international capital and the overdevelopment of capitalist systems. He even specifically addresses such traumatic events as captured by the media:

Suddenly, and for a brief moment (which lasted, however, several long days), television showed what it could really do and what it really meant -- a prodigious new display of synchronicity and a communicational situation that amounted to a dialectical leap over anything hitherto suspected. Later events of this kind were then recontained by sheer mechanical technique (as with the instant playbacks of the Reagan shooting or the Challenger disaster, which, borrowed from commercial sports, expertly emptied these events of their content). Yet this inaugural event (which may not even have had the emotional charge of Robert Kennedy's death, or that of Martin Luther King, Jr., or of Malcolm X.) gave what we call a Utopian glimpse into some collective communicational "festival" whose ultimate logic and promise is incompatible with our mode of production. (Ibid: 239)

Even addressing "postmodern media *politics*" which definitely shows elements of Grusin's understanding of Gulf war reporting:

American television reporting, whose specific version of preparing for the last war consists in its (praiseworthy) determination not to humiliate itself again by covering for something like Vietnam in the

future, can also be counted on with unfailing reliability to reproduce the most tendentious Cold War attitudes when it comes to socialism. (Ibid: 238)

These logics of premediation and aggressive remediation appear again, but Jameson avoids assigning any sort of intentionality to the systems. They are aggressive and totalizing, but the inability to historicize and the obsessive cannibalization of past forms are evolutions of a cultural logic. For Jameson, the aggressive remediation of the future and past have taken over contemporary media because it finds itself *unable to do anything else*.

Grusin's concept of premediation is incompatible here because he sees the premediation as having some function in colonizing the future to avoid the trauma or shock of events like 9/11. The conflict being that ahistorical subjects of postmodernity are simply not capable of experiencing shock, as that requires a historical referent to indicate that whatever has transpired is in some way abnormal. The 'schizophrenic subject' as Jameson understands, lacks connections within the signifying chain necessary for any considerable disturbance to take hold. The descriptions of the hyper-remediation and hyperreality are very similar between Jameson and Grusin, both being influenced heavily by Baudrillard, but there is a much deeper pessimism within Jameson's broader sociological approach.

16

Fisher

Heavily influenced by Jameson's work, Mark Fisher's *Capitalist Realism: Is there no alternative?* is also focused on the ideas of prediction. Building on Jameson's *Postmodernism*, Fisher sought to more directly pinpoint the spaces in which the ideology of postmodernism thrives and develops. He emphasized how the demand of markets for increasing immediacy in solutions has created a specific cultural moment among children born into the late capitalism that Jameson identified:

What we in the classroom are now facing is a generation born into that ahistorical, anti-mnemonic blip culture - a generation, that is to say, for whom time has always come ready-cut into digital micro-slices. (Fisher 2009: 25)

We can see, once again, the appearance of this hypermediation is beginning to manifest. What Fisher brings to the table that is truly unique is this Jamesonian ahistoricism with the acceleration of neoliberal policies and the global political milieu following the collapse of

¹⁶ It's worth noting that Jameson is writing here prior to 9/11.

the Soviet Union. Fisher describes the malaise of *Postmodernity* in his own terms as “Capitalist Realism.”

Watching *Children of Men*, we are inevitably reminded of the phrase attributed to Fredric Jameson and Slavoj Žižek, that it is easier to imagine the end of the world than it is to imagine the end of capitalism. That slogan captures precisely what I mean by 'capitalist realism': the widespread sense that not only is capitalism the only viable political and economic system, but also that it is now impossible even to imagine a coherent alternative to it. (Ibid: 6)

This characterization finally contains the key to the logic of the films that previously frustrated attempts to express through the framework of premediation. His understanding of the underlying logic relating to the film *Children of Men* seems to closely reflect that which Grusin seeks in his description of premediation:

Once, dystopian films and novels were exercises in such acts of imagination - the disasters they depicted acting as narrative pretext for the emergence of different ways of living. Not so in *Children of Men*. The world that it projects seems more like an extrapolation or exacerbation of ours than an alternative to it. (Ibid: 6)

The future premediated by *Children of Men* is one in which the logic of capitalist realism has fully realized itself, but this relies on a meta-cultural functioning layer– it is a premediation of a future where only remediation itself can exist.

Premediation’s Remediation

The Avengers and *The Wandering Earth* are films that perfectly recreate our contemporary society because they are pure products of a logic whereby no alternatives to the status quo can be imagined. Paradoxically, these are cultural products premediated by films like *Children of Men*. This is the crux of the frustration, a cultural logic which disrupts traditional functioning of the subject itself.

The central villain in *Avengers: Endgame* is the perfect encapsulation of this cultural logic; the immediate erasure of sentient life is presented as the most reasonable solution to the very real contemporary issues of resource consumption. This perfectly mirrors how issues like global warming have transitioned culturally from issues that demand solutions and sacrifice to inevitabilities under the logics of global finance. In this respect, Baudrillard, Jameson, and Fisher are right to identify the roots of this cultural logic as being within late capitalism and embodied more by Ronald Reagan and Margaret Thatcher than some collective desire arising out of reaction to 9/11. There has been a massive, traumatic change in society, but it has occurred on the level of production as opposed to terrorism.

For the model of premediation, there is a need for a concept of both non-premediation and non-future. Cultural products, especially those that are designed by committee to be safe and appeal to as many as possible, frequently operate within this cultural logic by which the future can no longer be imagined. The futurism of *Forbidden Planet* or *Metropolis* has been continuously revived and re-referenced. We are left with what Fisher identifies as a nostalgia for what he considers ‘lost futures.’ (Fisher 2014)¹⁷ In addition to these lost futures of past science fiction, I would argue we should consider the barren premediation of *The Avengers* as orienting itself towards a complete non-future, one which makes no conjectures or offers any substance, only remediations of the past while masquerading as remediations of the future. The conspicuous absence of premediation is evidentiary of a cultural logic in and of itself. To quote Mark Fisher once again “The slow cancellation of the future has been accompanied by a deflation of expectations.” (Ibid 4)

Cyber ± punk

“I’d like to teach the world to sing in perfect harmony.

I’d like to buy the world a Coke and keep it company.”¹⁸

There is a dangerous interpretation in this regard that simply dismisses new forms of media and expression as being derivative ersatz products of some better, past form. While Jameson, Fisher, and Baudrillard may have fallen into this line of thinking to varying degrees, there are potential understandings which avoid such cynical trappings.

What made works like Gibson’s *Neuromancer* so influential was not simply a matter of literary quality, but the specific cultural moment to which it was responding. In the US specifically, the 70’s and 80’s marked a precipitous increase crime, homicides, as well as the beginning of the AIDS crisis. (National Center for Health Statistics, 2021) The world, seemingly in spite of continued rapid economic globalization and development, had taken a turn for the worse in the day-to-day lives of millions within the ‘developed’ world. The decoupling of economic growth with wellbeing was a major blow to contemporaneous ideologies of infinite growth, and subsequently left a great deal of uncertainty in regard to what the future would hold.

¹⁷ Another particularly egregious example is that of *Ready Player One*, which is a shameless pastiche of references to the past, once again meshed with the technology of a non-future.

¹⁸ From the 1971 Coca-Cola advertisement “I’d like to buy the world a Coke”. Archived by Google on YouTube. Accessed here <https://youtu.be/1VM2eLhvsSM>

One of the earliest reactions to the phenomenon was the narrative of a pure human soul corrupted by technology or modern living. The emergence of hokey world music and epitomized by an onslaught of corporate marketing seeking to appeal to the ‘original human’. This was transparent essentialism, a modernist reaction to a dying modernity. The economic contraction represented a serious crisis because it called into question every aspect of infinite growth under modernity. Dreams of a utopic future and a worldwide market economy fizzled almost overnight, retracting into pessimism. Suddenly population growth appeared as a threat, as the finitude of resources was stressed.

It is this *moment* which cyberpunk as a genre was able to find such cultural purchase both popular and among academics. The central themes of cyberpunk were all critiques of the naïve assumptions of modernity. The questions of cyborgs, humans, and inhumanity can be specifically read as critiques of the insincere narratives which insisted upon the potentiality of a return to nature. The multinational corporation, instead of a symbol of economic triumph, instead become despotic mechanisms of oppression absent any democratic oversight, and their cute, smarmy advertisements abandon any pretense of humanity. Infinite growth is twisted into an infinite chasm in wealth disparity, further echoing the doubts of the connection between economic prosperity and wellbeing. Technology, far from being a savior to deliver humanity from its sins, instead acts as yet another mechanism of control domination.

The question then becomes: “What happened?” The moment of 2021 is one defined by even greater income inequality, dominance of multinational corporations, and an increasingly unrestrained tech sector. Nearly *all* of the cultural tendencies cyberpunk initially set out critiquing have only become more extreme in their contemporary forms. Yet the popular manifestations of cyberpunk are entries devoid of such contents and fail in their premediation. To again quote Mark Fisher, from his essay “Terminator vs Avatar, Notes on Accelerationism” published in Urbanomic’s *The Accelerationist Reader*:

The actual near future wasn't about Capital stripping off its latex mask and revealing the machinic death's head beneath; it was just the opposite: New Sincerity, Apple Computers advertised by kitschy-cutesy pop. This failure to foresee the extent to which pastiche, recapitulation and a hyper-oedipalised neurotic individualism would become the dominant cultural tendencies is not a contingent error; it points to a fundamental misjudgement about the dynamics of capitalism. (Mackay, Avanessian. 2019: 344)

As Mark Fisher and other cybernetic theorists came to realize, for all its glitz and promise, *Cyberpunk* was ultimately subsumed by the same mechanisms which it set out to critique. The anti-hierarchical wild-west days of the internet as an enclave did not last, and as quickly as it was mass adopted it too was enclosed and infested by the tendrils of international capital. Cyberpunk would ultimately meet the same fate as Punk, becoming yet another aesthetic to be homogenized and marketed.

Having established some idea of the ways in which *Postmodernity* functions, there is an opportunity to return to the central question of education.

SCHOOLING 3.0

I am beyond frustration. Why is it that, regardless of my efforts, the world conspires to torture my students at every turn?

Behaviorism and Pedagogy

When speaking of cultural inclinations and developments, regardless of how much we may attempt to convince ourselves otherwise, nothing is sacred or beyond its reach. Commodification does not simply extend its reach to the limits of the marketplace and terminate. It is not a conscious nor intentional project from the perspective of those who perpetuate it, so the common response of it being beyond the pale to cynically extend the logics of postmodernity to schooling is a misunderstanding of the situation. Behaviorism did not need any serious proponents to reassert itself at every level of schooling, it expands as a matter of ideological expedience.

In the context of a worldview which leaves space only for numbers, objects, and growth it is easy to see the immediate convenience of behaviorism. It creates circumstances which allow the correlations between students and their performance to be directly analyzed in search for the *right* solutions. Imagining students as commodities reduces them immediately to the level of objects, evaluated in terms of inputs and outputs. Producing the ‘correct’ outputs then becomes a matter of finding the proper inputs. Low test scores become a matter of controlling variables. It is in this respect that we can find the justification for the deluge of academic research regarding “study time” and “direct instruction”- these are quantifications and readily available inputs. Carrel et.al’s 2011 paper “A’s from Zzzz’s? The Causal Effect of School Start Time on the Academic Achievement of Adolescents”, and Owens et.al’s 2010 “Impact of Delaying School Start Time on Adolescent Sleep, Mood, and Behavior” are two great and well-cited examples which reveal this orientation. From a more meta-analytical standpoint there is Wheaton et.al’s 2016 paper “School Start Times, Sleep, Behavioral, Health, and Academic Outcomes: A Review of the Literature”, which is an impressive collection of the literature available on adolescents and sleep.

The point being that one does not have to look hard to find such research, and not even that it is particularly egregious, but rather it starts to look *a lot* like the positivist tendencies within Computer Science and Economics. The undesired test results *must* be indicative of some failure either in the *input* or, failing that, within the inscrutable black box that is the student- a defective object. The understanding implicit to such research is simply that the right concoction of variables should result in the ideal education, and that achieving the ‘perfect’ student is not only possible, but possible as a direct result of such technocratic marginal adjustments. “*If only students had thirty minutes more of sleep per day, longer lunch periods, or greater instruction time.*” There is immediate *strategic* potential in such publications when they aim for a more humane learning environment, but such struggles already forfeit the status of students to object, conceding the fight uncontested. By such means, behaviorism propagates in spite of good conditions, and it doesn’t even need evangelists.

Students in this capacity are reduced to passive objects to be acted upon. Any incongruity between the algorithmically determined inputs and outputs must be approached as an *aberration*, as a deviation from the expected results presents an issue to be addressed at the moment of the box itself. Such an orientation again shows no room for human agency, as deviation from an anticipated norm presents as a need for correction. Negative reactions from students in regard to aspects of schooling present themselves as problems to be addressed, most often at the level of the student. From the perspective of the ostensibly apolitical observer this conclusion is perfectly logical, the by-consensus result is incongruous with the input, so naturally the issue must lie with student. Here we can find the origin of the problematization of otherwise mundane conditions. If a student is unwilling to sit down and focus on schoolwork for so many hours a day, it must be the result of some malfunction. The issue here arises at the point in which the ability to maintain focus becomes an issue over the consideration for how long such focus is necessary.

As much as this conflict in the school system may resemble past tensions of authority and anarchistic rebellion, there is yet a fundamental difference in the core conflict. While it may certainly be the case that students are constantly surrounded by nurse Ratcheds seeking to turn them into docile bodies, the landscape of the conflict is directly reflective of the *Postmodern* milieu. The appearance of the conflict *appears* similar *because* they are a remediation of said past conflicts. The counter-culture aesthetics are readily bought by students as they purchase and adopt relics of history as some essence of their identity. There is no positive content present in this resistance, as

there is no sincere shared belief that such systems can ever be changed. These systems are determined by the algorithm, arranged by *scientists*, and enacted by enigmatic bureaucracies. The resistance of the past is admirable, but to sincerely believe that such movements can find purchase now is *passé*. Such movements only could find purchase in history, there is no place for them in the ahistorical, apolitical post-history.

The aforementioned sleep studies, despite consistently producing damning indictments of school start times, have had no effect on start times across the world. (For America see US Department of Education's "Average start time and percentage distribution of start time for public high schools, by state: 2017–18"¹⁹. For France, Germany, England & Wales, Spain, Italy, and the Netherlands see the European Union Commission on "The Organisation of School Time in Europe".²⁰

It is a particularly damning indictment of school systems that such a miserable situation is occurring when the harms of such a system are well studied. As of 2022, Paulo Freire's *Pedagogy of the Oppressed* is one of the most cited books of all time, having over 100,000 citations according to Google Scholar as of May 2022.²¹ Teachers, through their mandatory training (more on such 'training' later) are at least *familiar* with the criticisms of behaviorism, dangers of competitive academic environments, and the subtle ways in which students construct reality, and yet the reality of the school and classroom can be most readily understood as a sort of social Darwinism. Students are expected to compete not only with their peers, but on a global level for a woefully inadequate number of positions at top universities, and for the increasingly rare career free from precarity and tedium. Universities which, once accepted to, will likely expose the students to an even harsher environment of ruthless competition, busywork, and unnecessary pressures.

The mental health crisis among students alongside the drastic recent increase in suicides, is a very *logical* result of a system of objects. What's most remarkable about this in 2022 is how we *absolutely* know better. We seemingly live in a time of great humanism, so why is it that our school systems can only oscillate between throwing students to the wolves or actively tormenting them?

¹⁹ Available online here https://nces.ed.gov/surveys/ntps/tables/ntps1718_202000602_s1s.asp

²⁰ Available online here https://eacea.ec.europa.eu/national-policies/eurydice/sites/default/files/the_organisation_of_school_time_in_europe._primary_and_general_secondary_education_21_22.pdf

²¹ Accessed online

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C34&q=pedagogy+of+the+oppressed

The responses of *Postmodernity* to the crisis, medication, small technocratic tweaks, increased access to mental health professionals represents the myopia of its operational space. To clarify- this is not intended to dismiss the possibility that in many cases medication or such technocratic adjustments can help students. There absolutely are contexts in which such methods are strategically sound. When and where it's appropriate to medicate students, or whether students *should need* a mental health crisis center in the first place are separate matters from understanding the failures within Postmodernity which facilitate such a phenomena.

Personality, Identity, and Behavior

Commodification does not stop at the level of student. Hobbies, passions, talents, skills, each and every aspect of the individual presents new opportunities for utilization. Even one's desire to help others is simply another avenue for capitalization and exploitation.

It should not be surprising that the students raised by and treated as objects begin to see themselves as objects. The constant implicit message of contemporary education is that students must refine themselves into a product to be sold. Study and training are means by which one can compete in an increasingly competitive global environment. It's ideologically simple economic calculus- just as goods must compete with their substitute goods in an open market, graduating students must do the same. There may be some nagging questions about how other aspects of one's identity intersect with such competitive systems, or if the meritocratic underpinnings are sufficiently meritocratic, but these inquiries are conspicuously ideologically constrained. The dominant logic is such that serious systemic critiques are simply naïve. It is conceded that such systems are flawed, but there is no possibility of any alternative to them. As such, the only possible solutions are once again small technocratic tweaks- to make the systems more meritocratic, and to reinforce the meritocratic underpinnings of every system. It follows that all systems are continuously made more competitive: more standardized tests, more rigorous enforcement, more difficult subjects being taught at earlier ages, anything to produce a greater differentiation between students by objective measures of ability. The bell curve in this age of virtuality becomes not a descriptive tool, but an objective. There is a Sisyphean curse in this: students performing well and having scores overwhelmingly distributed at the highest grade can only be interpreted as a failure of the *test*. Competition and rigor in the classroom and in a broader school system are no longer a means to an end but objectives in and of themselves.

Subjects which do not conveniently fit into this paradigm of competition and rabid quantification are presented with a conundrum- to adopt the means of other disciplines to rank and assess students regardless of whether it makes any sense to do so, or to be discredited, devalued, and eventually defunded. In most cases these are not mutually exclusive, with the former being adopted as a survival mechanism and the latter being an inevitable result of such cultural logics. Across the board, school departments have been quick to implement norm-referenced testing to differentiate good students from bad so that they may be fairly assessed in their relative worthlessness. For example, good philosophers are those able to memorize the most facts pertaining to philosophy, will matriculate into the most competitive university programs, and will eventually move on to prestigious position as an ethics consultant for Facebook and writing really long, boring articles that no one reads.

This is not to critique any specific instance or even the general proclivity towards such systems. What this analysis intends to draw-out here is the specific cultural logic that is necessary for both the creation and continued operation of a system. Yes, such examples may seem absurd in the reductionist manner I've presented it, but what's valuable is that it is internally *logically consistent*. The defense of the status quo *is* a logical position in some real sense. From the cynical perspective of the end of history, the meritocracy is a blessing, a technologically oriented beacon in darkness. This method of determining philosophy students is not *good*, but it is the *best we have*. The disappearance of arts and humanities from universities is certainly not *ideal*, but it is an *inevitable* product of the competition that comes with globalization. It would be *nice* to have functional humanity departments, but this is *naïve idealism*. Within this ideological configuration there is hope for a return of art (and the humanities to some degree...) but it is either in the form of eternal delayed gratification (it will *eventually* return when austerity ends etc.) or in new free market realizations (artists have found new ways to monetize their work etc.).

What better phenomenon captures the misery of goals and objectives within our schools than Goodhart's law? Writing in 1996, Keith Hoskin presciently described the plight of Goodhart's Law as a product of modernity.

"Goodhart's Law' ~ that every measure which becomes a target becomes a bad measure — is inexorably, if ruefully, becoming recognized as one of the overriding laws of our times. Ruefully, for this law of the unintended consequence seems so inescapable. But it does so, I suggest, because it is the inevitable corollary of that invention of modernity: accountability." (Hoskin 1996)

It is impossible to overstate how true this contextualization was and how it has become even more so over the last 25 years. The curse of the school system is that we are left with the metrics of historic society, the tools for calibration and measurement from a time when there was room for debate. The bell-curve and standardized test are no longer the means for assessment, but relics that must be worshipped and reproduced indefinitely. There is no longer any chance of seriously challenging or altering them, as this is not possible in the end of history. From the perspective of the end of history, it's easy to see why attempts to seriously reform or discard of such testing is primarily criticized as naïve. All the research in the world regarding student welfare or the capacity of standardized tests to accurately measure students' abilities simply *does not move the needle*. The tests exist and will exist, they have been spread to every corner of the globalized world and become entrenched in every facet of our school systems. Enclaves of resistance do exist, but as always, these enclaves are the exception which proves the rule- the difficulties faced by schools and students who reject modern and global educational standards are innumerable, and in a world increasingly defined by competition and backsliding into precarity, this is a death sentence for anyone not sufficiently insulated.

This confusion of a means (norm referenced testing) for an end (more equitable schooling) is evidentiary of the crisis of virtuality in postmodernity. Aspects which were initially implemented out of perceived necessity have become institutionalized. This is, as any sociologist can tell you, is not an unusual chain of events. Berger and Luckmann pointed out the process of habitualization and institutionalization of customs into a socially objective world all the way back in 1966. What is different for us now is how such entrenched ideas do not offer themselves to be challenged systemically. For example: competition was once (mythologically speaking) indicative of a healthy academic environment, a means to encourage students to provide their best work and challenge themselves. It should be particularly telling that competitive is now synonymous with good when speaking of educational institutions.

The problem we face today is that competition has become so entrenched and institutionalized that we no longer are capable of seeing as contingent or as a means to an end. It has become this looming monolith which exists not out of necessity, but almost out of a ritualistic desire. A ritualistic desire, which we, in spite of the amazing humanity of our contemporary society, regularly sacrifice students to. How many thousands of students have committed suicide directly related to the rigid

competition of school systems? How many thousands more have had their childhoods or lives ruined by the increasing pressure placed upon them? And yet, despite these mechanisms literally eating the youth alive in every country, the school systems have only become more competitive over the last thirty years.

To return to the topic of medication, this phenomenon is seen as so natural that our response to the stress inflicted on students is to medicate them. Students unable to sit and receive eight hours of instruction alongside five of self-study each day must have an attention deficit disorder, to not be able or to be unwilling to compete is an aberration that must be treated medically. Likewise, students depressed about having their entire worth questioned on a daily basis can be medicated as well. Depression cannot be seen as a natural outcome of our overly competitive pseudo-meritocracy as competition is so *natural*. Even if we find ourselves able to take a step back and highlight the absurdity of our competitive systems, and even if we acknowledge the immense harm inflicted on students by such systems, we find it impossible to mount any real resistance. We can count and publish exactly how many students we lose each year; we can raise any number of red flags about the mental health crisis, and we can petition school boards through whatever strained technocratic channels, but ultimately all that is accomplished are the small, technocratic tweaks. A slight retooling to make the monstrous appear more humane. More counselors, more medication, more therapists, better teacher training, public health campaigns all are completely woefully inadequate at combating the crushing societal mechanisms. There is an instinctive desire to seek out good actors in the system: teachers who put in extra effort to make the classroom more humane, but how much of this goodwill is undone by policies which grant bonuses to schools and teachers based on standardized test performance? The intended outcome of the classroom is a cynical meat grinder.

This may seem to be a very grim picture of contemporary schooling, but that is simply because it *is* incredibly grim. Within Postmodernity there is no space afforded for serious systematic changes. There is a large cultural incentive to protect and promote the status quo, to find optimism in the cruelty, as such it is not a coincidence that the biggest benefactors of such an ostensibly meritocratic system have also become its evangelists. If one is not paying attention, and it is easy for people not currently in the education system to underestimate how bad it has become, and subsequently be under the impression that Postmodernity represents a golden age of education.

Teaching to the Test

Teaching to the test is another goal-oriented method exacerbated by increasingly competitive academic standards. It falls into the familiar territory of being a phenomenon that is without real justification, at least there are very few who would defend it as being a positive development from a pedagogical standpoint.²² The only real defense is that it is *necessary* given the current competitive standards. It is not so much that it is good or appropriate, but that there is *no alternative*. It is particularly remarkable insofar that in spite of all the academic literature we have, in spite of it criticized at every convenient moment, teaching to the test has only accelerated. There is a meaningful discussion to be had about power relations between academia, teachers, and those who determine the curriculum and how it's implemented, but the more we focus on what is happening in one country and how it's happening, the more we lose sight of the fact that this is a *worldwide phenomenon*. What we are seeing develop is fundamentally not a failure in our academic setting, teacher training, or local initiatives- it is one of an emergent global cultural logic. School administrators and teachers are left with two acceptable orientations in the classroom at the end of history, teach to the test cynically or willingly.

It is fundamentally *not* a failure of teachers that they simply reproduce the societal logic in the classroom. Attempts to dismiss poor and inhumane teaching methodologies as the fault of the teacher is ultimately yet another distraction from the systemic nature of these issue. Ultimately, despite the best efforts of many well-meaning people, education was never able to extricate itself from the *Postmodern* society it exists within, and even the best intentions to reform are damned to perpetuate its same logics. The reflections on it, the widespread and nearly ubiquitous understanding of this result as being detrimental to students only leaves the opportunity for cynical acceptance in the people actually operating within society. A teacher can read and understand *Pedagogy of the Oppressed*, but in the classroom they will ultimately be held to account for societal demands of competition and brutality. The fate of the teacher is obvious: you know what you are doing is incorrect, but you must do it anyway. The ideal teacher in postmodernity is one which knows better, but cynically reproduces the system regardless. "The standardized tests harm students,

²² There are, of course, exceptions. There is a certain ideological standpoint which views all products of the end of history as positive unconditionally.

but there is no alternative for me/them.” The postmodern ‘ideal’ outcome in regard to the teacher is not to escape from such a system, but instead to be granted absolution from it.

There is also the possibility for an even more cynical reproduction, one in which such orientations towards schooling become not only necessary, but natural, and in such naturalness, correct. This is partially uninteresting for two reasons: one, because it does not differ from any other particular point in time, there will always be those who orient themselves uncritically towards the status quo; two, because they ultimately reproduce the system in the same manner as those who reproduce it cynically.

Why can't we talk about profit generating programs?

“The ultimate goal of schooling” is a debate which is, from an ideological standpoint, uninteresting. How schooling is perceived is ultimately ancillary to how schooling functions. This is made readily apparent by the fact that regardless of the cultural background, there is a definite global trend emerging in regard to schooling.

One of these trends is the transactional nature of schooling. It may be nice to imagine a school system which has priorities outside of a cynically transactional system, but this is not consistent with reality. While it may be popular to clutch one pearl at the concept of transactional exchange in higher education, it does not do much to address the problem at hand.

The evolution of higher education primarily as a transaction is not an aberration, it is entirely logically consistent with the societal position occupied by education. Students taking on enormous debt to pay exorbitant tuitions to top universities is simply not justifiable within a context of increasing precarity and competition. The price of attendance must in some way be justified by the product. While it comes at odds with there being some non-quantifiable value to education, such values do not count for much under the threat of hunger or precarity. The proliferation of expensive programs offered by otherwise prestigious institutions expose the underlying cultural logic. New York University's rankings rising in tandem with its spending on advertising and tuition costs is not a coincidence, it is a perfect encapsulation of said logic. You do not have to look hard to find higher education programs in England and in America that are largely occupied by foreign students. It is not that the foreign students are unaware that such programs do not have a value that rivals their cost, but rather that they are more comfortable with the idea of transaction in Education. When

an international student pays for a degree in statistics for John Hopkins, they do so full-well anticipating a prestigious degree which will yield them a certain income in the future. For western students, this calculus is more obscure, there is a greater understanding that while John Hopkins is well known, its statistics program *isn't*. To a certain degree I am inclined to agree that this represents a certain perversion of what education *should be*, but in this circumstance, it is important to note that we are talking about what education *is*. I highlight this example not out of contempt for any program or people, but because it lays bare that education fundamentally is a transaction.

Specialization and Identity

One of the consequences of any increasingly competitive academic and economic system is the necessity of *specialization*. Specialization, heralded as the one of the means by which the economy may continue its infinite expansion, has suffered a fate similar to that of competition. While in modernity specialization realized itself as a means, postmodernity has enshrined it as an end to be pursued in and of itself. The job, as an integral part of mythos of contemporary society, is roughly assumed to be best completed by an experienced and educated worker. There is nothing inherently wrong with the assumption, in fact the logical basis is what gives it so much sociocultural purchase. Where it becomes an issue is when it is reduced to a formulaic expression. Any sort of competitive system will inevitably lead to its gamification, whereby people will search for the most efficient formula to reach desired results. With regards to testing, this obviously produces an incentive to 'teach to the test', but in the case of specialization itself this is realized in specialization for specialization's sake. A prospective worker's value is equated to the value and length of their working experience, education, and how *specialized* it was. Economically, the more specialized a tool is the more effective a tool is in given capacity the more effectively it can function. Discarding human agency from the equation as much as possible leaves us with a system that produces as many differing specializations as jobs that need to be filled.

Combined with a positivist overall orientation, there is a strong tendency towards essentialism in this respect. Any aspect of identity is seen as having some *essence*, as opposed to being constituted in social discourse. The explosion of new identities which people readily choose from, be they professional, sexual, or otherwise descriptive of some personal categorization, highlights this essentialist turn. The question of one's identity has gradually become a task of discovery which identity groups oneself belongs to. It is not a coincidence that Twitter bios and Curriculum Vitae

have come to closely resemble each other in laundry list format— it is a direct reflection of a positivist distortion. What we are left with today is an exaggerated realization of what Foucault spoke of in 1984,

If identity becomes the problem of sexual existence, and if people think they have to ‘uncover’ their ‘own identity’ and that their own identity has to become the law, the principle, the code of their existence; if the perennial question they ask is ‘Does this thing conform to my identity?’ then, I think, they will turn back to a kind of ethics very close to the old heterosexual virility. (Foucault, 1996: 385)

This is perfectly descriptive of the rapidly expanding façade of freedom presented to us by consumer society. Freedom to discover oneself as a Honda owner or Ford, freedom to pursue personal passions in any number of hobbies and specializations which are in some way essential to one’s ‘self’.

In terms of work, it does make some logical sense that, when presented with two otherwise identical candidates, that you would choose the one with a specialized skillset more suited to the work. The *logical outcome* however, a blight of credentialism and educational inflation, is both unsustainable and absurd. Students are required at increasingly young ages to select and adhere to career paths, and the college applications have become an arms race to check as many boxes as possible. The current situation of every application needing several pages of various extra-curricular activities and students taking the SAT over ten times is absurd in some degree, but they have simply homed in on the logics of the system. This presents another way in which the ‘meritocracy’ is undermined by those with access to social information and material comfort- those who do not participate in the ‘game’ are at a distinct disadvantage. Of course, we culturally love our stories regarding impoverished students who had to raise family members being accepted to prestigious universities, but the sheer framing of this phenomenon as exceptional proves that the game is rigged against them from the outset. Ironically, these same stories used to reinforce and prove the value of the meritocracy *should* also work to undermine it, but if you see such systems as being absolute, such charity becomes genuinely positive.

Psychosomatics and Neo-phrenology

Outside of economics, psychology is another field which finds itself on uncertain grounds within the Postmodern atmosphere. As a discipline, psychology finds itself between a rush for quantification and identification of positive or essential aspects of the human psyche within modernity alongside the very postmodern confusion of what psychology should and can do. The

result is a uniquely insular social science, indicative of a particular involution. In the 2020 study “Inside Job or Deep Impact? Extramural Citations and the Influence of Economic Scholarship” published within the *Journal of Economic Literature*, Angrist et.al. found psychology to be substantially less likely than political science, sociology, and anthropology to draw on research from other fields. In terms of citing other disciplines, it was most similar to economics, which is not saying much given economics finds itself at the nucleus of such societal trends.²³

The theoretical divide is, at its core, very straightforward. There is the domain of the real, measurable, observable; and there is the realm of the *non-real* i.e., everything else. The inclination then becomes for psychology to only concern itself with the former category, to secure itself alongside the more respected hard sciences as opposed to (ostensibly) languishing alongside the less prestigious social sciences. The result of such an orientation is psychological reductionism, essentially a quest to find the ghosts in the machine, to reduce the human subject to a series of chemical processes. The similarity of this to the renaissance of operant conditioning in schools is not a coincidence, they share an identical origin with positivism: concerns of education outputs must be understood in terms of inputs from the school or the very mechanisms within the psychology of the students, an imbalance of chemicals akin to a mechanical malfunction. Medicalization and pathologization are then means by which Psychology extends into every facet of life, especially the school. Every potential deviation or disfunction presents an opportunity to be brought into a medical model, to be quantified and dissected, additional qualifiers to be attached to black boxes to better match inputs to outputs.

The absolute and extreme insularity of psychology proves that such reductionism is overwhelmingly common. Psychologists, especially those published in well-respected journals, reference the other social sciences outside of itself with only a fraction of the rate that other social sciences do, and less than even *economics* does. (Angrist et. al.: 10) In fact, studies in Psychology are almost as likely to reference studies in Economics as they are Sociology (Ibid: 12) There is an obvious appeal to belonging to the echelon of *real, hard science*. Sociology is inconvenient for Psychology as it brings with it all manner of subjective baggage. Counting brain chemicals is much easier to publish than serious questions on the psychosomatic origins.

²³ See chapter four for a greater exploration of economics specifically.

The schism core to psychology comes from the fact that psychological dysfunctions are diagnosed on the level of observation, and as a result there is a neglected complex semiotic system between observations and what gives rise to them. When mental illness is defined strictly in negative terms, the inability to function within some defined societal norms, there is no straightforward to approach it in positivist terms. To the consternation of many researchers, brain chemistry cannot capture the full complexity of how humans experience emotion or the world more generally, yet that doesn't stop researchers from trying to understand depression caused by the COVID epidemic in terms of dopamine and linear regressions; a pursuit which more closely resembles phrenology than a sincere desire to help anyone.

“The desire to help anyone” is worth stressing here as it strikes at the core of the issue within psychology, wherein its actual capacity to render aid is secondary to its desire to assert itself as a rigorous science. Sarah O’Conner, an employment columnist from the Financial Times, described in her 2017 article the epidemic of misery in Blackpool in terms of what local general practitioners had come to refer to as “Shit Life Syndrome”.(O’Conner, 2017) Generally speaking, there is something dreadfully obvious about the origin of misery in economically depressed areas, yet the lack of serious interdisciplinary study within psychological research betrays a distinct disinterest in the psychosomatic origins of both shit life syndrome and deaths of despair.

In fact, the near total abandonment of psychosomatics, from psychology as well as semiotics, is particularly telling of how academia has lost the plot. How can ideas such as the opioid crisis or suicide be discussed without consideration of the economic conditions of those raised and living in poverty, the pressures faced by doctors in prescribing medicines, the wear placed on the bodies of menial laborers, or the crushing reality of the ecological future? At the very least a deeply interdisciplinary approach is necessary, and yet psychology falls tragically short in this regard. The dangers of overspecialization are exposed in this interaction, the readily observable psychological reality of such crises is somehow beyond the purview of psychology as a discipline.

Not only as psychosomatics been largely discarded as a pursuit, psychosomatic has come to be associated with *non-real*. Similar to the other issues investigated, the desire to *prove* and *identify* the essential elements of human suffering does not start nor end with psychology. The obsession with material evidence, and the astonishing amount of time and energy dedicated to determining whether any given individual is *truly* suffering is not only disturbing, it is a product of the very

limited understanding afforded by rampant empiricism. Mental illness is *fundamentally* socially constructed, and the conflation of social construction with *nonreal* can result in truly horrifying ‘solutions’. Medicating students becomes extremely dangerous in this regard. It is not that there are not students for whom medication is a suitable treatment, it is simply that it is potentially seen as a solution to a symptom. The reaction to miserable students in school settings should *first* be to ask if such misery has its origin in the broader society or schooling system. The under/overmedication debate misses that the point should be *helping students*. There is value in understanding the biochemical nuances of the brain and physiology, but it is clear how such pursuits have been used as a cudgel to bludgeon human agency.

The hair splitting over malingering occurs in a similar space. The drive to expose imposters is at odds with the capacity to render aid, as if malingering itself is not also indicative of some need.

Is Psychology properly *Postmodern*? Overwhelmingly, yes. It is plagued by self-referentiality given its insularity and dominated by the recrudescence of positivist and essentialist (mis)understandings from Modernity in the *exact* same ways education is.

Overspecialization

It should not be surprising that the endpoint of specialization is overspecialization. When systemic pressures constantly emphasize the need for specialized knowledge, there is a certain pressure of opportunity cost. Time dedicated to learning multiple skills is a waste of time that could have been devoted to mastering a single one. The ideal scenario here is that students are left unmolested to pursue their own passions in their studies, without being academically limited by weaknesses in subjects beyond their interest. (Pay no mind to the fact that students’ ‘passions’ are largely correlated with current demands for labor within industries, although maybe there are children who dream of petroleum engineering) Unfortunately, this reduces interdisciplinary work to either a liability or a luxury, and it potentially provides the opportunity for the overpromotion of excessively narrow academic approaches. Disciplines which benefit from or heavily rely on interacting with other disciplines find themselves in limbo.

What does it mean to specialize in a subject that rely on subjective or heavily contextual knowledge, and moreover how can a proper normal distribution of some nebulous talent or effort be realized? Difficulty and rigor once again assert themselves as solutions to problems that don’t necessarily

exist. The issues being not inherent to the discipline, but again symptoms of *Postmodernity*. Challenge, once again becoming an end as opposed to an unfortunate necessity, finds itself in the *test*. Memorizing lists of historical events and their respective dates might not be what makes a good historian, but it *does* provide a good means of differentiating students in testing. This evenly aligns with the portrayal of experts in the humanities within media; prodigious talent is associated with ready recall of names, dates, and locations. The logical product of such pressures is someone easily replaced by an encyclopedia- an object.

The loss of social prestige for these disciplines which cannot comfortably or easily meet the demands of quantification and specialization is unsurprising. The defunding of the humanities and the resentment of STEM students forced to take classes in humanities is completely consistent with the fundamental systemic values of the school. Like with other aspects of Postmodernity, this functions regardless of whether or not anyone necessarily agrees with it. All of the humanities departments the world over can publish papers and protest but left unabated every aspect of such societal trends is set towards destroying academic research, especially that of the humanities.

Curriculum Vitae Ethics

Identity becomes a particularly tough issue under this regime of specialization. The Curriculum Vitae reduces students to a list of accomplishments, numbers, and activities, in this capacity it functions as a window, revealing the *functional logic* of worth within society. The CV itself is not the issue at hand and attempts to legislate or act against the CV or application processes themselves reflects that is simply a symptom of the desires for quantification and specialization. It should come as little surprise that students construct a view of reality which seems to closely mimic that of the CV, as this is a logical outcome of any societal ideological values system. Students are constantly regulated in environments where such value systems can be *inferred*. Inference becomes the key to understanding the link to cynicism in the postmodern classroom- it is not required for students to actually adopt the values of the broader societal system they are operating in. Both students who sincerely see themselves and their worth in the terms of the CV and those who understand the contingency of the CV and its contents are subject to the same unyielding system. In fact, the ideology of postmodernity becomes more effective with its ironic disavowal. Understanding that applications are a reflection of perceived societal worth leaves one more able to manipulate the results. What makes this significant for postmodernity is that such ‘gaming’ of a system is not only

assumed, but also often necessary. It does not serve to undermine or compromise the system; it actually serves to both reinforce its logics by catering to them.

Regardless of the degree to which students internalize the values exposed by the CV, there is an immense and constant pressure to perceive themselves in a similar manner. The implicit message is undeniable: that a student's worth is easily measured by their quantifiable accomplishments. The ideal student is one most able accrue a long list of awards, high scores, and experiences. Where this becomes particularly insidious is the way in which it indoctrinates students as a natural or justified system, as ideologies are wont to do. Such a system does not only influence the values a student holds, but it also additionally works to encourage students to see themselves in terms of the *list*. To be reduced to their quantifiable parts, reduced to a list of essential categories. I was a bit stunned when a colleague on my graduate program proudly informed the class that they are a "dyadic semiotician", but this is entirely logically consistent with the ideology of specialization. What you are, what you study, what you desire to be, are not contingent but distinct essential categories to which one belongs within this ideological framework. Once again, the ironic disavowal of such specialization enhances one's ability to operate within the system and reinforces it. Whether or not students adopt the system too eager to 'select' an identity or begrudgingly imposed, it ultimately leaves no room for human agency.

The Meritocracy

Contemporary attitudes towards the meritocratic nature of educational systems are particularly representative of the complex reflexive underpinnings at play. There is an active tacit understanding that our system is not meritocratic, and that the products of ostensibly meritocratic systems largely reflect the non-meritocratic aspects of those who engage in them. The question therefore is such: are the failings of the meritocratic system something to be gradually improved upon and repaired, or are they indicative of a deeper systemic failure within the system? There is a convenient response available in the meritocratic mechanisms are far from perfect- *but they are the best we have*. It is no coincidence that this also aligns neatly with the prospect of gradual adjustments culminating in an ideal system. The default stance is that such systems have and will continue to improve, and in the case that they regress any criticism can be swiftly dismissed as naïve.

It is not simply a veneer either — the meritocracy hints at a world where the calculus of human potential and ability is solved. It imagines within it a natural hierarchy of people, each assessed by ability and assigned according work. A system in which hard work and ability are directly awarded operates as a powerful *aspiration* even if it is constantly mired by complications. Whether or not a perfect meritocracy would be an actually good idea is completely ancillary to the fact that it is convenient within the operation of our cultural logic. Once a means to achieve a more equitable system, it has begun to fester as it became a goal in and of itself.

A New Taylorism

One of the foremost ideological manifestations of modernism is found in the advent of scientific management. From an ideological standpoint it's hard to overstate how scientific management as a context meshes with the central values of modernism. From the positivist standpoint of being on the precipice of objective truth, the desire to modernize everything via standardization and scientific principles was *not* unreasonable, nor did it represent a step backward for public schooling. On the contrary, this period saw an unprecedented rise in public access to quality education. The issue here, once again, being that such standardization and scientific management had a specific *context* in which they worked and were designed for. What we are left with today is a shambling reanimated corpse. Standardized testing, performance incentives, and specialization have, in the absence of any readily identifiable 'end', have become an end in the same way competition has. In an incredibly depressing paper, Wayne Au aptly describes the current state of education as "New Taylorism". Au crucially outlines exactly how perverse incentives and an insatiable desire for scientific methodologies harms both students and teachers, and indeed he is far from the first to notice this issue. (Au, 2011)

What does the revival of New Taylorism represent?

The positivists orientations of New Taylorism run entirely too smooth; they are extremely well matched ideologically. The post-historical notion of there not being a future may initially seem incompatible with the future-orientations present at the genesis of scientific management. When the possibility of future is stripped away of the old positivist methodologies, they begin to resemble closely the piecemeal approach of small technocratic tweaks. We reproduce the scientific methods

of the past in absence of any possible alternative, this is once again made apparent by the fact that serious attempts to reimagine schooling are typically dismissed as being *naïve*.

The Teacher, Human Agency, Scripts

Teachers are, today in 2022, regularly trained for classroom activities by scripts. That is, the teachers are instructed to instruct via instructions. There is a line with blanks to be filled in that teachers have to read and familiarize themselves with. Regardless of whether or not this is effective, justifiable, or humane it certainly is indicative of certain attitudes and predispositions towards the *role* that a teacher is filling in the classroom.

Are teacher robots? No, but wouldn't be nice *if they were?*

A robot is predictable, able to effortlessly produce reliable results. What is the end-goal of standardization if not the removal of all variables? Human agency presents unpredictability, and once again the black box presents itself. The same cultural logics which seek to completely deny any aspect of human agency from students have come to affect the teachers as well, albeit not as quickly. The proliferation of 'study programs' sold as packages to parents present a particularly grim insight into fundamentally where the value for education lies. There is a list of lessons, prearranged homework, regular standardized testing, and of course a teacher who is trained in delivering said specific course.

Cynicism in Teaching

Cynicism must be first understood as a centerpiece of the contemporary classroom. It is a sort of compromise between modernist developments in pedagogy and the brutal realities of the society surrounding the classroom. It comes at the conflict of teachers knowing that students should be encouraged to pursue their dreams, while simultaneously knowing that this is not part of an actionable reality. Taking ecology as an example, it's a relatively straightforward process to see how this logic realizes itself. Climate change is real, ecological collapse can be observed and quantified, but it is distinctly *external* and *abstract*. It is typically understood as foreign to both the classroom and the subjects that inhabit it, allowing it to be observed in absentia. This gives itself to a convenient mnemonic style for memorizing lists of ever-expanding information, as is consistent with the banking model of education as criticized by Paulo Freire in his *Pedagogy of the*

Oppressed, but ultimately provides students with an extremely narrow perspective of the given subjects, and even less able to critically reflect on it. Freire describes this model as such-

Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiques and makes deposits which the students patiently receive, memorize, and repeat. (Freire 2000: 72)

Not only does this critique seem particularly relevant to other contemporary modes of education, but it can also be easily read as a critique of attempts to simply integrate a greater deal of ‘knowledge pertaining to ecological collapse’ into the curriculum. Simply accumulating more facts in relation to a topic does not convey a genuine, meaningful understanding of it. Through this it is possible for students to understand climate change without *understanding*. It is not only that they are unable to imagine solutions or alternatives, but also that the act of *imagining* in and of itself presents itself as *ridiculous* or *naive*. It is important not to underestimate how significant this semiotic function is- ironically the same impulse that leads to such a conclusion simultaneously obstructs the ability to frame it in meta-pedagogical studies. (It becomes *ridiculous* to address the issue of *ridiculousness*) Cynicism, thereby is easily able to perpetuate itself as the status quo and do so largely functionally uncontested.

Even once brought under critical examination, cynicism has no easily accessible solutions. It is an *implicit* part of how any competitive educational system is structured. What will be studied is what will be tested, and ‘importance’ only reveals itself in terms of secondary significance. Critical reflection likewise finds an explicit presence within pedagogical discourse and the curriculum- yet is necessarily relegated to secondary or tertiary significance owing to overarching structural factors. The fact that the term ‘critical’ has been largely reduced to an empty signifier within a broader educational discourse is evidentiary of this.²⁴ Especially within ecological studies at the high school/college level (Environmental science in the US or environmental management²⁵ in the UK) the concept of critical reflection is explicitly present in the language of the curriculum but is conspicuously absent from the actual standardized assessments due to its subjective nature.

²⁴ In my experience, talk of ‘critical education’ has been met with eye-rolling by teachers. While this may be an indictment of the teacher or the systems that produce them, it’s more productive to ask *what* this indicates.

²⁵ The framing of the course name “environmental management” within the UK curriculum is significant here as well, as it presents the environment as something to be managed, contingent and pliable. It certainly reduces the environment to something to be understood in the same terms as an organization or business.

Subjectivity is antithetical to the ostensibly objective material that any given subject must be reduced to for reliable standardized testing. Ideally instruction and practical work should be able to flesh out the inherent weaknesses of testing by serving as a sort of ideological counterbalance, but as they function now they are unable to successfully impart unto students the proper context of environmental degradation. As much as it is hoped that the curricula or classroom activities can reach students in some objective, rational manner, they are still contingent within the specific sociocultural context they are introduced in, not detached from it.

The *impotent reflexivity* that results as such is thus not a conscious creation, nor is it ever an objective of the well-meaning teacher or curriculum designer, but rather primarily a structural phenomenon. It is not that the classroom is designed with the idea of stripping away any sort of context or complexity, but rather that these are stripped away *unconsciously*. The litany of standardized tests and curricula make the ahistorical, purely mnemonic learning fashion unavoidable. It is from this perspective that I must be critical of many of the previous approaches to restoring historical context within the classroom. It is not really an issue that can be addressed via improved teacher training, nor can it be remedied by additions to an already overbearing curriculum. In this respect I propose the term *anticontextual classroom* to indicate the classroom, which is produced by such societal forces, anticontextual in the sense that it almost aggressively eschews contextualization and attempts to present itself as ahistorical and without contingency.

Quantifiable Knowledge – Boxes and Rote

What is the fate of knowledge in postmodernity? The logic of the bean-counters has found a comfortable place in the school, but what does this mean for the concept of knowing itself? One does not have to look farther than contemporary cultural portrayals of intelligence within media. To be intelligent means to be good at math and memorizing facts. Why? Because these are extremely convenient within the limited positivist scope which we find ourselves operating in. A good Biologist is one capable of memorizing the largest list of facts relating to obscure animals and phenomenon, an intelligent historian knows the date of every battle ever fought in Europe and the names of all its Monarchs, and talented mathematicians are good at mental math. Once again it is not a coincidence that such a conceptualization closely mirrors the organization of standardized testing- a good scientist does well on the science standardized test (which largely revolves around

memorizing lists of facts). Rote memorization emerges out of this ideological disposition because to memorize is to know, and value finds its only orienting locus within such a system.

It is unsurprising that language learning has fallen prey to these same trappings. You buy a package which promises how many words your child will learn, and preset sentences they will become familiar with. In only one year of ‘training’ they will be able to pass the IELTS (International English Language Testing System) with a high score or your money back, but they will likely not be able to express even simple ideas. Language is simply another pile of boxes in the brain to be stacked higher, and mastery of the language can be readily achieved by memorizing a dictionary.

Within the context of a situation where information is readily available, and especially so via smartphones, it becomes easy to see the devaluation of knowledge and expertise. If knowledge is primarily understood as a list of facts one memorizes, it is only natural that experts are seen as in competition with a cursory internet search. There is a terrible trap for higher education within this conceptualization, and that is the possibility of replacement via technology *seems* entirely feasible. The rapid growth and expansion of software engineering is partially a product of these logics: the idea that expertise can be largely substituted for by an app is certainly asinine at its core, but it does betray a specific brand of misunderstanding.

This approach to knowledge also strips away any possible benefit education could provide outside of helping one accumulate more ‘facts’. When students are reduced to the level of objects to be instructed upon, any aspect of the curriculum designed to enrich the students themselves becomes pointless. The movement to replace university education with vocational training, as well as to move away from mandatory general education on university courses, is indicative of this.

This is all not to say that nuance should be the goal itself, as to do so would be again to mistake a means for an end. The misconception is quite straightforward— works traditionally regarded as *good* are typically nuanced and abstruse, so therefore nuance and abstruseness should be goals in and of themselves. Sociologist Kieran Healy examined this tendency within sociology in his appropriately titled 2017 paper “Fuck Nuance”. He shows that mentions of the word ‘nuance’ itself have increased tenfold within sociological journals over the last thirty years. While he delimits his examination to strictly within his field of study, it’s not hard to extrapolate this tendency to encompass a wider societal race to the bottom. (Healy, 2017) To say something new, to assert

value, to create specialized knowledge for the sake of insulation. The idea of cross-disciplinary critique becomes absurd, as they have both dedicated time to accumulating a differing pile of facts.

For economists this is particularly useful, as they can ignore all sociological and political critiques via models and credentialism.

China

There is nothing particularly unique or exceptional about the Chinese education system. It simply, in most ways, represents the conclusion of our societal logics. Students are assessed, via aggressively standardized testing, at every transition between institutions.

There is a national standardized test for middle school which determines for which middle school you can apply. Following middle school there is another standardized test to determine what high school the student will be able to attend. The final standardized test is taken upon completion of high school known as the *Gaokao* (高等學校招生考試) . Performance on the Gaokao almost entirely decides not only which schools can be attended, but which majors at said schools can be entered into. A higher score allows one to attend a higher ranked school and there is an implicit association with being able to earn more money. Studying abroad for higher education is increasingly an option available to the wealthy and privileged, with their degree often holding esteem over equivalent degrees from a Chinese university. These students are often subject to extortionate tuition fees, but there is no contention as the transactional nature of the agreement between student and institution is well-understood.

Especially at the top universities, there is yet competition for non-revenue generating majors, but such programs increasingly represent cruelty and precarity as they do in the West. As such, such majors are considered the *unfortunate* victims of contracting world. The logic is clear: “It would be nice to allow people to study the arts and social sciences, *but* China must develop first...” The rhetoric of austerity is not quite as explicit as it is in defunding humanities in universities in other countries, but the result is the same- specializations which exist far detached from the modes of production are fundamentally seen as a sort of charity. Fat to be trimmed at the first sight of difficulty, if not held in contempt outright for ‘uselessness’. Given that in postmodernity modes of production have become more focused on financialization and consumption, it should come as no surprise that economics, business, and accounting have come to the forefront in terms of prestige,

funding, and volume. China is ahead of the game in this regard, as there are already very few humanities students to begin with. Defunding the humanities is not necessary when they simply weren't expanded alongside China's expansion of higher education.

The ideology was recently made explicit in a working paper released by four PhD economists at China's central bank, which concludes with astonishing clarity the operative logic at play:

A greater emphasis should be placed on STEM education, as the failure of Southeast Asian economies to escape from the middle-income trap can be attributed to an overabundance of liberal arts students. It should be noted additionally that the products of science and technology take a long time to realize and are difficult to control. (Chun Jie et. al: 54, translation mine)

The paper as a whole is particularly revealing of how perilous the prospect of China's demographic crisis is alongside the potential of not escaping the middle-income trap. The GDP must grow indefinitely, through any means possible, and to this end almost anything can be sacrificed. It is the same subtle logical inversion. The economy is not a means to improve quality of life for its constituents, but instead something which requires endless sacrifice. None of this is likely particularly new or interesting, as the same conversations regarding austerity and the humanities have been had a million times over. What *is* interesting, however, is *where* it's taking place. There is a nasty tendency to Orientalize China as adhering to cultural logics which are indecipherable to foreign observers. China does not represent some great exception to the status quo we find ourselves embroiled within in Postmodernity. The consumer culture, financialization, precarity, nationalism, disparagement of humanities, and rampant privatization are just as much of contemporary China as we would see in other developed or developing countries. There will always be stochastic differences accounting for differences in how and to what degree certain aspects of these factors will be realized. It is easy to pick at slight differences in realizations, and ultimately this only gives way to strategically unproductive nitpicking. China's close resemblance to the US, to the point which some scholars describe it as neoliberal (Chu, Yw., So, A.Y. 2010: 46), can and should be taken at face value, evidentiary of an ultimately identical cultural orientational logic.

There are two Orientalist approaches common in this regard. The first is to see China and its excesses with contempt as something fundamentally *alien* to some sort of "civilized" western society. Individuals from China are not necessarily seen as lesser (although this is commonly the case), but are suitable objects of observation or pity. The second approach, becoming increasingly common following continued economic hardships in the OECD countries, is to assume that China

represents some great exception in the positive dimension. That the ways in which China resembles the worst aspects of the west is either pure coincidence or done out of pure cynical necessity. Both of these approaches deny both China as a country and its citizens of their agency.

National Exceptionalism and Global Generalizations

Orientalism is simply another form of exceptionalism, the desire to isolate and extricate oneself or own country from the observed. The tendency to narrow ones' field of study, to emphasize nuance, and to reject generalizations finds a convenient place within Postmodernity. There would be an -ologist for every country were it not simultaneously within the mechanisms to eradicate humanities research.

The crisis in academic research is worldwide. The status of research, especially within the humanities is in jeopardy. Are there enclaves of resistance? Of course, but such enclaves are, once again, exceptions that prove the rule.

The Dismal State of the Dismal Science

Economics, as a discipline, is perfectly representative of the crisis of postmodernity. Debates core to economics should not come as any surprise, as they are in no way unique to economics as a discipline. Rather, they are both particularly revealing and interesting for their close proximity to modes of production. Economics, by virtue of its subject matter being that of the system it occupies, is often unable to meaningfully extricate itself from the status quo, although it certainly is often treated as an ‘ideologically pure science’. Reflexivity thus becomes a perennial issue for economics as it is for academic sociology, how do you observe a system which you exist within? The solution, of completely ignoring this issue and restating that it an objective science, is also in line with what is present in other parts of society. The disdain for qualitative work and the insistence on quantitative modelling is exactly the same phenomenon observed across other social disciplines. Economics willingness, paired with the ability, to shift towards a heavy focus on quantitative modelling is certainly part of the reason why it has fared better than every other social science in maintaining its social capital.

The paradox of economics expanding in prestige despite consistent failures within the economy, especially those that economists failed to predict, is only a paradox in appearance. This again presents the same issue presented by the relation between the law and morality: does economics predict an economic reality or describe it? While it may initially seem that this distinction is either nonsensical or unimportant, it introduces a certain uncertainty within the core tenants of the discipline which is particularly revealing of the space it occupies in postmodernity.

For economists, the calculus of society is always what it appears to be. Anything not yet represented as a variable is only proof that we haven’t tried hard enough. Marriage has a market, carbon emissions have a price, death an acceptable threshold: expressing complex ideas in the form of equations is not a reduction, but a part of the natural order. Oversimplification is only ever a matter of not having enough variables in your equation.

Most significantly, economics finds itself largely unable to incorporate the realities of climate change. (Nordhaus 2018) There are fewer more perfect insights into the nature of *Postmodernity* than the inability of Economics as a discipline to acknowledge such a guaranteed disruption.

The Economist's Burden

This leaves an important question of what economics *can do*. Fortunately, in many cases this does not require a close reading or analysis, as many economists are willing to state outright, in well-read papers, how they perceive economics. In the year 2000, Edward Lazear published a paper entitled “Economic Imperialism” in the prestigious economics journal *The Quarterly Journal of Economics*. It opens with an amazing illustrative ideological screed:

Economics is not only a social science, it is a genuine science. Like the physical sciences, economics uses a methodology that produces refutable implications and tests these implications using solid statistical techniques. In particular, economics stresses three factors that distinguish it from other social sciences. Economists use the construct of rational individuals who engage in maximizing behavior. Economic models adhere strictly to the importance of equilibrium as part of any theory. Finally, a focus on efficiency leads economists to ask questions that other social sciences ignore. These ingredients have allowed economics to invade intellectual territory that was previously deemed to be outside the discipline's realm. (Lazear 2000: 99)

Here Lazear very clearly lays bare both the positivist ideology of postmodernity, as well as states that economics is useful as a means to bring the wasteful social sciences to heel. Setting genuine science in binary opposition to social science is indicative of the value placed upon the ability to quantify and form models. While this position is almost stunning in its arrogance, I would argue that Lazear is simply making explicit an implicit broader logic.

He simultaneously introduces the idea of the potential in applying the quantitative models of economics to social sciences, an idea which he unironically positively refers to as ‘economic imperialism’. It should come as no surprise that Lazear was closely associated with the application of economic models in education and worked with the administration of former American president George W. Bush. An administration which would oversee the implementation of the “No Child Left Behind Act of 2001”, widely considered to be a disastrous application of outcome-based education. To put simply, Lazear was very closely associated with the *exact* educational initiatives criticized earlier in the paper. The pressure to standardize, test, quantify, and crush human agency with prejudice came from the meddling of economists, not educators.

In a particularly confused paper entitled “Speeding, Tax Fraud, and Teaching to the Test” Lazear defends high stakes testing by comparing it with traffic violations and tax fraud. By doing so inadvertently highlighting the ridiculous overreach of both economics as a discipline and the shortcomings of using models *without context*. Lazear's contempt for qualitative analysis in this regard leaves him with bizarrely narrow analysis, but if the objective of his research is understood

to be the models and analysis itself, it can be considered successful. Lazear's models are a perfect example of mistaking the map for the territory. They are not complex in order to be successful descriptors of reality; they are successful because they are sufficiently complex and esoteric. Complexity in models becomes not a means to an end, but an end in and of itself.

Modelling

In a paper published in 1978, slightly less embarrassingly shameless economist Paul Krugman sought to bring models of international trade to be in line with the observed reality. To quote from his conclusion:

What is surprising about this analysis is that it is extremely simple. While the role of economies of scale in causing trade has been known for some time, it has been underemphasized in formal trade theory (and in textbooks). This paper shows that a clear, rigorous, and one hopes persuasive model of trade under conditions of increasing returns can be constructed. Perhaps this will help give economies of scale a more prominent place in trade theory. (Krugman 1979: 479)

While it seems like an exceptionally pedestrian paper at first glance, the objective of the paper, building models to formalize already extant knowledge in the field, reveals an uncomfortable question of "What is the point of making a model to describe something we already know?". If models are meant to make predictions, then how does it make sense to tailor them to match reality, and if we already have knowledge of how something operates, in this case international trade, then what purpose could the model possibly serve? This highlights a familiar issue, in that models have become their own justification. The formal model is not a means to an end in this case, it has clearly become the end itself.

This should not be misinterpreted as an indictment of Krugman, his work, or economics as a whole, but rather a particularly illustrative example of how economics finds itself at the heart of postmodernity. Economics as a discipline, while certainly not innocent, is again not a *source* of cultural logic, it is merely an accomplice.

Studying Economics

Returning to Lazear's paper on Economic Imperialism the second paragraph reveals another crucial piece of the puzzle:

By almost any market test, economics is the premier social science. The field attracts the most students, enjoys the attention of policy-makers and journalists, and gains notice, both positive and negative, from other scientists. In large part, the success of economics derives from its rigor and relevance as well as from its generality. The economic toolbox can be used to address a large variety of problems drawn from a wide range of topics. (Lazear 2000: 99)

The almost comically self-indulgent second half is yet another example of misplacing causation. He is partially correct in that the prestige of economics has certainly increased dramatically, but this does not necessarily indicate the strength of economics as he wants so badly to believe. It is possible, and I would be so bold as to assert is the case, that economics simply has found a convenient space for itself within social momentum. The positivism, essentialism, and virtuality of postmodernity find no fundamental conflict within economics, where qualitative and contextual data can be readily forgone for sake of expedience.

But this is by no means an isolated occurrence, as even a cursory examination of the language used to discuss a multitude of issues reveals the creeping influence of economic thought. Issues of marriage and relationships are framed in the context of a 'marriage market', and social access and privilege are understood as realizations of 'social capital'. This goes back to the previous discussion of individuals commodified under Postmodernity: everything is made measurable, counted, and attributed as the essential essence. One's potential or propensity to marry can be understood in terms of their height, age, income to be analyzed and examined by economists to identify the outputs associated with certain inputs.

Globalization and Tony Blair

In what can now only be described as ominously prescient, Tony Blair's 2005 conference speech has an interesting mix of post-ideological fatalism and, ultimately misplaced, optimism. To quote:

The pace of change can either overwhelm us, or make our lives better and our country stronger. What we can't do is pretend it is not happening. I hear people say we have to stop and debate globalisation. You might as well debate whether autumn should follow summer. They're not debating it in China and India. They are seizing its possibilities, in a way that will transform their lives and ours. (Transcribed by The Independent, 2005)

The idea that there is no debating globalization is one that yet persists today, although it is particularly telling that it persists without the optimism Blair expresses here. The curse of postmodernity, as Blair learned alongside New Labour, was that they were only half right. Globalization was indeed not up for debate, or at least it resisted any serious abatement. The

specification of China and India is interesting as well, given that both countries represent extreme realizations of the logics of a globalized economy. Continuing:

The character of this changing world is indifferent to tradition. Unforgiving of frailty. No respecter of past reputations. It has no custom and practice. It is replete with opportunities, but they only go to those swift to adapt, slow to complain, open, willing and able to change. Unless we "own" the future, unless our values are matched by a completely honest understanding of the reality now upon us and the next about to hit us, we will fail.

And then the values we believe in, become idle sentiments ripe for disillusion and disappointment. In the era of rapid globalisation, there is no mystery about what works: an open, liberal economy, prepared constantly to change to remain competitive. (ibid)

In this we have a frank statement of the deterritorializing effects of globalization in addition to Fukuyama-ist triumphalism. None of this is particularly surprising, especially given how common this sentiment continues to be today. The idea that globalization is both inexorable and positive is the core basis for the piecemeal incrementalism described before, and a fairly accurate representation of (neo)liberal ideology.

Perhaps most interesting is the almost unbridled optimism present in Blair's address. It is readily apparent such optimism regarding the future has been severely hampered following the great recession of 2008, and how that optimism has given way into a cynicism. What we are left with is the same incredulity of any possible alternative to the endless expansion of markets, yet without the positive outlook. In this regard it is highly reminiscent of schooling- the lie of endless growth is continuously exposed by endless recessions and asset bubbles, and yet seemingly in spite of this fact, we are socially more invested into it than ever before.

The Origin of Infinite Growth

The idea of enclosure is in no way unique to our current situation, but is the current fervor surrounding accumulation not simply the logical conclusion of the logics of enclosure? In the same way the commons were parceled and a market created, the dream of postmodernity is to find new markets, new areas for expansion and value extraction indefinitely. Primitive accumulation has given way to a frenzy to deterritorialize in search of the means to perpetuate the economic growth of early expansion and acquisition. The uncomfortable economic questions of sustainability are inevitable *even without* considering the purely physical and ecological limitations of such a system.

The foremost question of how infinite expansion can occur within a finite system of resources provides valuable insight into a major aspect of postmodernity: the virtual. The first major conflict

of growth came in early industrialization with productive capacity outpacing supply. The solution, the advent of consumer society, is another example of semiotic inversion: supply is no longer a means to the end of demand, rather demand is a means to the end of supply. However, consumer society only affords so much room for growth, thus creating an impetus for new modes of transaction. The result is a self-referential financial behemoth. The specific means, legislative or otherwise, which financialization came to dominate worldwide economies are not important in and of themselves, but rather what *financialization* as a trend represents. It is the abstraction of the market brought in on itself, growth begets growth for sake of growth. Stock markets no longer represent the anticipation of profits or industrial success, but rather the self-referential anticipation that stocks will increase in value. As of early 2022, Tesla has a market cap of over one trillion USD, more than all other US automakers combined, despite producing a fraction of the vehicles of any single automaker. The investments expose the disconnection of money and production in the maturation of markets.

Globalization immediately rears its ugly head in this respect. As production lessened in important it could be shipped abroad to bolster profit and support domestic consumption. The decoupling of production from finance leaves many countries stuck in the middle-income trap: the market has been cornered and they lack the capital necessary to compete on a global level. This is not as abstract as it seems, the reality of a self-referential economic system is that the best way to make money is to *already have it*. This is true not just on a macro level, but on a micro scale as well. It's not just production-based developing economies being confronted with the futility of postmodern economics, but individuals as well with the share of wealth going to labor being at record lows in every advanced economy as well as most developing economies. (Dao 2017)

There are additional avenues of hope: technology, higher education (the *right* kind), and automation are all commonly seen as means by which growth may momentarily prolong itself. These obviously relate back to the piecemeal incrementalism which is first and foremost rhetorically convenient. Such an ideological disposition always posits that systemic changes are strategically unnecessary, and that tomorrow will inevitably be better than today just as this generation is better than previous ones. This is, especially in the wake of multiple once in a lifetime recessions within the last twenty years, not entirely consistent with the material reality faced by those interpellated as such. This crisis is fully realized in the fact that the economy is not a *thing*,

it is *socially constructed*. Especially following the aggressive financialization of major economic systems, it primarily operates on *faith*. A crisis of faith in the ruling ideology as such cannot be ignored. The solution is the same inward cynical turn.

Asset Bubbles and Perfect Commodities

“And the needs invested by the individual consumer today are just as essential to the order of production as the capital invested by the capitalist entrepreneur and the labor power invested by the wage laborer. It is *all* capital.” (Baudrillard 1981: 82)

It is within this cultural moment that the driving force of rent and asset bubbles reveal themselves. Asset bubbles are a direct product of the scramble to get up the ladder before it's kicked down. In an economic logic dominated by capital, the self-reflexivity present within the market mechanisms ensures itself: your assets will appreciate as the economy expands. Supply and demand short-circuit in this capacity, leaving only the what Baudrillard referred to as the sign-value. The ‘bubbling’, or rapid increase in prices of all assets comes regardless of anything beyond the promise of its own value. Housing is gradually becoming detached from any sort of identifiable element beyond the idea of ownership. Yes, we can measure the square footage, the quality of the home, its location, and any other number of factors, but ultimately this does not account for the meteoric rise in prices from the early 2000's. The average price of a home in 2021 more than doubling that of the average price in 2002 (US Census Bureau 2022) is not indicative of larger or higher quality houses being built, it is only explicable in context of the ever-nebulous *demand*. Demand does not appear out of the ether, and in this instance it can be taken as a manifestation of a cultural desire, or perhaps a reaction to a cultural momentum, which increasingly is inaccessible to those not already established within the system. Assets and their promises of appreciation bring all the promises of indefinite returns without the uncertainty and naïveté of simple hope in a more universal societal enrichment. The 2008 subprime mortgage crisis represented only a very small negative effect on house prices at the time of its occurrence, but it left deep ideological scars in the form of *doubt*. Doubt both that the economy would not expand indefinitely, and doubt that labor could maintain its share in the wake of globalization. Assets filled in this gap of confidence. To own *something* of value that is scarce in some way is to be insulated against the threats of a rapidly shrinking world.

Cryptocurrency and the Metaverse

The Metaverse Land Grab Is Here—Should You Move In?

More than \$100 million was spent on virtual land this week. The metaverse is coming, whether you want to go there or not.²⁶

There is no end to the technobabble being flooded into every facet of social discourse, but this is no coincidence. The endless obfuscation of what the metaverse and cryptocurrencies are and how they work is intentional on the part of evangelists. The objective is to conceal that cryptocurrencies are close to a complete logical realization of the commodity. There are not traditional markers for determining value, and it relies entirely on an extremely contingent socially constructed value from the onset. The logic of investment to its natural conclusion as well, with investment being a simple bet that more money will be invested into it by others. It is a pyramid scheme in the purest since, having done away with the tedious pretenses of typical Ponzi and multi-level marketing schemes. Today, with the advent of ‘metaverses’, there is even the possibility of owning the idea of a house, especially as a potentially appreciating asset, without the house.

While it’s easy to lambaste cryptocurrency and its acolytes, there is a specific type of societal desperation represented by it worth considering. In its pure form, bitcoin as an asset represents the desperation of a world already enclosed. The appeal of the blockchain is made apparent by the one thing it can ostensibly offer- ownership in a world where housing prices, inflation, and depressed wages, and debts conspire against the young. The increasing inaccessibility of retirement and pension funds coincides with the rise of bitcoin because it drives the sense of desperation.

The Precariat

Casualization of work and the gig economy have all but taken over the world. Uber (and its analogues) are the perfect example of the effectiveness of technological solutions. An app which can seamlessly connect drivers to customers almost anywhere in the world certainly represents a certain efficiency in its function. More interesting than the efficiency, however, is the broader implications for ‘work’ within the gig economy model. Precariat refers broadly to the class of people who work jobs that are broadly precarious, without certainty or security. There have been a

²⁶ Headline of article written by Daniel Roberts. Available online here <https://decrypt.co/87553/metaverse-land-grab-is-here>

lot of attempts to identify a specific point of origin for the precariat, to lay the blame at Uber's feet, the housing crisis, or even the COVID-19 economic recession. The attempt to present the gig economy as in some way aberrational is simply an attempt to find a scapegoat. While any of these events may have exacerbated the miserable situation of work, at its core we are looking at the same issues that plague students. The future is smaller and demands greater education, specialization, credentials for an ever-smaller share given to labor.

The threat of menial and precarious labor additionally serves as a bludgeon against students. Fear of exploitation in the labor market feeds into the desire to pursue university education regardless the cost, to seek further training, and to prostrate themselves before any company who would pay them the honor of 'experience' in exchange for their labor. The self becomes another investment, a form of capital to be measured and weighed. Skills, experience, potential future earnings become things to be gambled upon.

Part 5.0 – Concluding Remarks

What does semiotics have to offer?

Semiotics offers the means by which to examine issues of context and contingency. In semiotics there is at least the potentiality of a radical confrontation with the semantic maps of *Postmodernity*. Radical empiricism and the subsequent drive for specialization within *Postmodernity* logically lead students and researchers alike towards an increasingly narrow moment of study. The broadness of approach here, the desire to examine multiple facets as they are realized across disciplines, is an *intentionally* broad object of study, as *Postmodernity* is ultimately as multitudinous as it is abstruse.

There are yet interesting investigations and critiques to be found within the narrower aspects of what has been engaged with here. Economics, computer science, psychology and pedagogy all have interesting questions and debates within their disciplines that are worth having, and this should *not* be misinterpreted as an attempt to be dismissive of such fields of study or the people working within them. Rather, it is a matter of what can be discerned from a broader investigation which may be neglected by more specific pursuits. From a broader standpoint, it is possible to see that the work within such disciplines hold similar characteristics: an overvaluation of the empirical, self-referentiality, and a deep confusion of means and ends. Asking where the obsession within Economics with logical empiricism begins and ends will undoubtedly lead to some interesting insights and criticisms of methods and objectives, but in comparison to simultaneous movements in computer science or pedagogy it gives a more totalizing view of a semiotics of *things*.

What does the system of objects look like in 2022? It is the same as it has been since modernity. There is a great focus on the real, quantifiable, measurable, and empiric. The advent of computers and the, perhaps, failure of *Postmodernity* have only provided us with a preponderance of new spaces to be colonized by the same logics of enclosure that defined *Modernity*.

Future research should either be pointed towards a more integrated interdisciplinary approach, or more concrete, local, and direct action. The intention of this specific research was, from the onset, fueled by a genuine desire to help students. In this regard, any efforts to genuinely improve the lot

of students, especially those that reject the cynical underpinnings all-too common in contemporary education, have my endorsement.

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Estonian Summary (Kokkuvõte)

Postmodernsus 2.0

"Kust algab ja kus lõpeb postmodernsus?" on ilmselt rahuldava vastuseta küsimus. Tõsiasi on, et leiame end hetkes, mida ei saa kritiseerida ega küsimuse alla seada – leiame end sügaval postmodernsuse haardes. Tänapäevased uuringud kihavad vaidlustest ja kriitikast, kuid paradoksaalselt oleme kinni jäänud *ebaefektiivsuse* poolt määratletud olukorda. Esimene küsimus: kuidas on säärane abituse loogika asunud ühiskondlikku – ja eriti akadeemilist – sfääri domineerima? Teine küsimus: mida see loogika puudutab ning kuidas peaks seda laiemas semiootilise süsteemi raames mõistma? Leiame eest *asjade süsteemi* kasvava tähtsuse – vähemasti seda väidab käesolev töö. Ükski valdkond ei ole sellest välja arvatud; nii on ka õigus ja kõrgharidus võtmetähtsusega kaasosalised postmodernsuses – kuigi nad sooviksid jääda neutraalseteks vaatlejateks.

Töös uuritakse pedagoogikat ja majandusteadust, kuna need aitavad heita konkreetse pilgu *Postmodernsuse* sisemistesse mehhanismidesse, millest me end leiame. Pedagoogika, või täpsemalt õpetamine, võimaldab vaadelda väärtusi, mis on omased objektide süsteemile. Standardiseerimismeetodid, mida igal tasandil armutult juurutatakse, on lõppkokkuvõttes standardiseerimise ja kvantifitseerimise tööriistad, mis viivad aina kõige positiivse ja empiirilise suunas. Majandus pakub sarnase viisi näha ühiskonna pealispinna alla, paljastades tema väärtussüsteemi – see mis lõppeks alles jääb on see, mis suudab tõestada oma kasulikkust. Sotsiaalse kapitali laienemine majandusteadusele, ja sellest tulenev teiste ühiskonnateaduste uurimistulemuste alahindamine ei ole kokkusattumus, vaid annab tunnistust samast Postmodernsest väärtuste süsteemist, milles objektid on saavutanud võidu.

Seega võti, mille abil säärasest reduktsionistlike ja positivistlike süsteemide laienemisest postmodernsuses aru saada, peitubki just asjade süsteemis. Elame maailmas, milles objekt võidutseb subjekti üle. Jääb üle mõista, kuidas, miks ja mida peaks sellises olukorras ette võtma. Majandusteadus ja pedagoogika näitlikustavad eriti hästi neid meetmeid ja mõõte, mille kaudu subjektid objektideks saavad. Resümeed, intervjuud ja kraadiprogrammid näikse aina vähem olevat kujundatud inimesi silmas pidades. Põhjuseks on, et nad ei ole mõeldudki inimestele.

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