



Article

The Unreasonable Destructiveness of Political Correctness in Philosophy

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Abstract: I submit that epistemic progress in key areas of contemporary academic philosophy has been compromised by politically correct (“PC”) ideology. First, guided by an evolutionary account of ideology, results from social and cognitive psychology and formal philosophical methods, I expose evidence for political bias in contemporary Western academia and sketch a formalization for the contents of beliefs from the PC worldview taken to be of core importance, the theory of social oppression and the thesis of anthropological mental egalitarianism. Then, aided by discussions from contemporary epistemology on epistemic values, I model the problem of epistemic appraisal using the frameworks of multi-objective optimization theory and multi-criteria decision analysis and apply it to politically correct philosophy. I conclude that philosophy guided by politically correct values is bound to produce constructs that are less truth-conducive and that spurious values which are ideologically motivated should be abandoned. Objections to my framework stemming from contextual empiricism, the feminine voice in ethics and political philosophy are considered. I conclude by prescribing the epistemic value of empirical adequacy, the contextual value of political diversity and the moral virtue of moral courage to reverse unwarranted trends in academic philosophy due to PC ideology.

Keywords: cognitive biases; multi-criteria decision analysis; epistemic appraisal; epistemic values; ideology; metaphilosophy; multi-objective optimization; political correctness; social constructionism; social oppression

1. Introduction

Western philosophy is under threat. The grand intellectual tradition that for over two thousand years has fostered iconoclastic freethinkers of the highest caliber—from Socrates to Hypatia of Alexandria and from William of Ockham to Giordano Bruno—has been infected by a spirit of uncritical conformity that is incompatible with its original pursuits. This time, the foe is not a persecutory institutional religion but a persecutory secular ideology. This ideology has become so ingrained in humanities departments all over the (so-called) First World that it has become a *received view*, a default position under which all other perspectives are evaluated. And dissenting points of view have been stormed, not mainly by intellectual argument the way they should, but by political rhetoric and social bullying.

The crux of the matter was pinpointed by social psychologist Jonathan Haidt [1]. Haidt, speaking in the context of contemporary North American higher education, argued that universities as a whole have been pursuing two mutually incompatible *teloi*—truth and social justice¹. As research aiming

¹ Naturally, to talk about “truth” and “social justice” in these cases is an abstraction; save for hardcore Fregeans, seekers of truth do not aim for a particular object called *The True* but intend to reach at the end of rational investigations *true truth-bearers* (beliefs, statements, theories, etc.). Analogously, what sincere partisans of social justice desire are actual concrete changes in the socioeconomic sphere.

at truth is constrained by standards of objectivity, research aiming at social justice is constrained by standards of *political correctness*—and the output of both may diverge *dramatically*.

The recognition that political ideology has been harmfully interfering in the thought processes of professional philosophers of unquestionable intelligence and expertise is not often obvious. Robust empirical results in behavioral economics and cognitive and social psychology over the last four decades have consistently shown that human beings are less the creatures of deliberate rational inquiry we'd wish them to be as they are of instinctive bias, confabulation, and groupthink [2–4].

Although this ideology, unlike other ancient institutional enemies of philosophy, is not overtly homicidal ², I claim that it is promoting the assassination of character, deterring the publication of quality research papers, inhibiting the participation of researchers that defend politically unwelcome theses in the academic arena and hindering epistemic progress on critical issues of our times such as the metaphysics of race and sex and the intellectual legitimacy of divergent political beliefs and values.

The most conspicuous face of political correctness (hereafter shortened as 'PC') is amply familiar; the enforcement of verbal norms intended to regulate speech which may elicit emotional responses of negative valence to individuals of socioeconomically disadvantaged groups. The hallmark of this process is the phenomenon of lexical substitution through euphemisms (such as the replacement of 'prostitute' for 'sex worker'); these are at the bottom strategic enactments of the moral virtue of politeness in the context of interpersonal verbal interaction meant to decrease hostility and increase cooperation among diverse parties [6].

Notwithstanding, I am primarily interested in the deeper, *covert* influences of PC in human cognition. In particular, how PC may negatively disrupt rationality in contexts of epistemic appraisal of theories by professional philosophers. As I will argue in detail, one of the reasons why I hold PC carries this penetration over rational inquiry is due to focal, often implicit, claims in history, economics, sociology, anthropology and psychology that ground the very motivation for why one should be politically correct. For instance, peripherally this includes the claim that existing rampant patterns of verbal behavior (and surrounding non-verbal behavior) perceived as discriminatory significantly *cause* the persisting sustenance of socioeconomic inequality among socially disadvantaged groups (for an overview of this complex subject, see [7]). But more crucially, we find the claim that socioeconomic potential, as it is constrained by mental ability, is about the same for every human group.

My strategy is as follows:

1. In Section 2, I sketch an empirical theory of ideology to guide discussions of detrimental ideological bias over fields of inquiry;
2. In Section 3, I review some of the evidence that points to the presence of widespread political bias of a "left-wing" or "progressive" variety throughout Western institutions of higher education, including academic philosophy;
3. In Section 4, I briefly expose a speculative etiology of PC and attempt to formalize the content of several beliefs associated with PC to understand the underlying worldview;
4. In Section 5, building upon some formal constructs I have introduced in the previous section and additional ones from applied science, I defend the epistemic integrity of philosophy as a truth-seeking enterprise and how PC concerns of social justice may undermine the epistemic prowess of philosophy;
5. In Section 6, I respond to three lines of argument cogent to the idea that philosophy requires socially progressive political values in order to be truth-seeking;
6. In Section 7, I finish this work with some tentative prescriptions of how to reverse existing deleterious ideological effects due to political bias in academic philosophy.

² It must be pointed out that postmodernism, stipulated as one of the central progenitors of this ideology I criticize, has generated virulent thought patterns which overtly promote anti-scientific thinking that may end up with the loss of lives; for instance, the accusation that evidence-based medicine is "fascist" [5] may influence the adoption of non-evidence-based medicine.

2. A Sketch of an Empirical Account of Ideology

“Ideology”, as political scientist David McLellan puts it, “is the most elusive concept in the whole of the social sciences” [8]. Given this confession and two centuries of convoluted discussion on the topic, I shy away from supplying a fully-fledged theoretical account of ideology³ and will instead deploy a preliminary informal characterization that will be sufficiently rich, inspired in a large number of sources.

I isolate seven *desiderata*:

Postulate 1 (Cultural-Biological Parity). *The cultural content of ideologies \mathfrak{I}_i are the products of processes of cultural evolution whose mechanisms behave sufficiently similar to Neodarwinian biological evolution to enable warranted analogies involving biological systems.*

This postulate is a general theoretical endorsement of an evolutionary account of culture. More specifically, I side with the field of memetics, a broad research program in cultural evolution that is yet to achieve satisfactory scientific credibility as a theory of both mental and cultural content and cultural change and diffusion⁴.

Employing a murky theoretical concept to explain another murky theoretical concept seems to be asking for failure. In defense, such an evolutionary account of culture, by being consilient with several results from the cognitive sciences, may do justice to features traditionally ascribed to ideology by social theorists, such as relatively stable conceptual cohesiveness (Postulate 6) and the unconscious control of behavior (Postulate 3).

Meme theorists posit “memes” as discrete replicating informational entities to perform foundational roles in the social sciences analogous to the way genes do in the biological sciences. In analogy to coadaptive *gene* complexes inside genomes, ideologies can be readily seen as a type of *co-adaptive meme complexes* (or simply “memplexes”). A memplex is a coalition of memes which are reproductively fitter as a packaged whole.

Viewing ideologies as organisms of sorts promptly allow us to adopt the *intentional stance* [18] towards them and commence the attribution of goal-directed behavior. Just like we do with biological organisms, we can assign to memplexes metaphorical purposes to spread their memes throughout human societies.

Employing memetics to theorize about ideology is not novel; it has already been comprehensively explored in James Balkin’s [19] theory of cultural software. Memetics has also been employed to understand the cultural evolution of religion [20]. If religion is a species of the genus ideology, comparisons with religions can be fruitful.

Postulate 2 (Content Pluralism). *The cultural contents of an ideology \mathfrak{I} include socially transmitted cognitive mechanisms, beliefs, and values.*

Following James Balkin [19] (Chapter 5), I take the phenomenon of ideology to be irreducible to a single type of component or bearer of content (such as explicit beliefs with propositional form). A memetic approach to human culture is not restricted to study procedural knowledge in the form

³ In analytic philosophy, one of the most comprehensive expositions of ideology is Mario Bunge’s set-theoretical account of a *sociopolitical ideology*, which is a kind of *belief system*, a subtype of *epistemic field* (see [9] (p. 91); [10] (pp. 228–237) and [11] (Chapter 4)) for description and discussion). Such an approach would be especially congenial to my work given my usage of his construct of a *field of inquiry*, the other type of epistemic field, which structurally is very similar to sociopolitical ideologies.

⁴ The literature of cultural evolution is extensive and evolving very rapidly. Memetics differs from other theoretical accounts of cultural evolution due to an assumption that the processes of cultural evolution are isomorphic to biological evolution concerning details of the individuation of cultural information (discrete) and transmission (relatively high fidelity). For an evolutionary account of culture outside memetics, see [12]. Introductory defenses of memetics are found in [13,14]. A comprehensive critical assessment is found in [15]. For some incisive criticism of memetics, see [16,17].

of beliefs or their linguistic representations; more importantly, it also encompasses *skills* that can be culturally transmitted. Specifically for a memetic understanding of ideology, we are interested in a wide variety of *cognitive mechanisms* (such as patterns of inference chains, heuristics, narrative scripts, idealized cognitive models, etc.).

Postulate 3 (Unconscious Processing). *The contents of an ideology \mathcal{I} are by default processed without major willful deliberation in the minds of the adherents A .*

This postulate assumes a theoretical endorsement of so-called “dual-processes” theories of reasoning or cognition (for contemporary reviews, see [21,22]). This perspective posits two “layers” of cognitive processing; the faster one is phylogenetically ancient, bears processes which are effortless, automatic and unconscious and content that is nonlinguistic. The slower one evolved recently in our species, is cognitively demanding, is under our conscious control and supervision and is associated with discursive or linguistic thought in the “stream of consciousness”.

This postulate was chiefly inspired by the notion of a *vision* described by political scientist Thomas Sowell [23]. Sowell characterizes a vision as a “pre-analytic’ cognitive act” and “more like a hunch or “gut feeling” than an exercise in logic or factual verification” [23] (pp. 16–20). I submit that ideologies interfere with thought processes chiefly through our more instinctive mind.

An important consequence of this is that ideological reasoning may not be readily presentable by introspection as ideological, irrespective of the intellectual abilities of the agent. To identify ideological influence may be extremely costly, requiring extensive cognitive effort.

Postulate 4 (The Worldview Constraint). *An ideology \mathcal{I} furnishes the minds of its adherents with both pretheoretical contents (such as intuitions and platitudes) and with the conceptual resources which allow for deliberate theoretical elaborations, under varying degrees of specificity, over a set of issues which are deemed to be relevant for the adherent.*

I second Marxist sociologist Göran Therborn [24] in his claim that “the operation of ideology in human life basically involves the constitution and patterning of how human beings live their lives as conscious, reflecting initiators of acts in a structured, meaningful world”. Ideologies are *comprehensive charts* that readily ground, inform and guide human action under a myriad of reflective decision-making contexts. They carry the resources needed to construe answers for a variety of possible inquiries. In other words, ideologies are *worldviews*. The set of domains over which an ideology informs can vary extensively, from the most general and abstract (such as viewpoints in ontology or legitimate practices of knowledge-acquisition) to the more specific and concrete (such as particular notions of social causation or even a partial description of a particular economic theory). The more an ideology has nurtured a culture of internal criticism, the more one may expect it to have its tenets publicly expressed in theoretical form.

Postulate 5 (Biocultural Symbiosis). *For an ideology \mathcal{I} , there exists at least one social group S , whose set of collective goals G' intersect with the set of goals G of the ideology \mathcal{I} .*

With this postulate, ideologies become *worldviews* which *advance the interests of at least one social group*. This account of ideology is *descriptive* instead of *pejorative*; there can be “benign” ideologies insofar as social groups can have “benign” goals.

Postulate 6 (Ideological Core). *An ideology \mathcal{I} is partially constituted by a web of beliefs p_1, \dots, p_n partitioned by a gradient assigning different degrees of importance, from the essential to the optional. The furthest a belief p from the “core”, the less one adherent is obliged to endorse p . The content of p is propositional and can be empirically extracted.*

This postulate is inspired by Imre Lakatos' [25] account of *research programs* where a scientific theory is said to have a robust "hard core", extremely resilient to refutation, surrounded by a myriad of "auxiliary hypothesis" sporting greater changeability. Using an analogy with evolutionary developmental biology (Postulate 1), I take it that ideological cores roughly work like co-adaptive gene complexes involved with essential biological functions [26]; changes in core beliefs are highly *pleiotropic*, that is, when changed, they reverberate significant changes over many other beliefs in the network. I also submit that "mutations" over beliefs deeper in the core of an ideology are also more likely to be deleterious; that is, they are more prone to produce *nonviable cultural entities*.

For instance, the religious ideology of Islam has as a core belief that Muhammad was the last and greatest of all prophets sent by Allah. Can there be a species of Islam divorced from the belief in a historical Muhammad⁵? I take it that the overwhelming unpopularity of such a position is evidence for the nonviability of Islam that suffers such a significant "memetic" deletion.

Postulate 7 (Rational Dogmatism). *The social costs of abandoning a belief p increase the nearer p stands at the core of \mathfrak{J} and the more committed the adherent is to \mathfrak{J} . When the truth of p is disputed, we should expect that adherents will predictably incur in behavior and cognition aiming at securing the alethic endorsement of p .*

In ordinary parlance, "ideology" and "irrationality" are usually seen as inseparable friends and "dogmatism" and "rationality" as polar opposites. I submit, given contemporary developments in moral philosophy, behavioral economics, and social psychology, that this is mistaken.

While reluctant and consistent dogmatism over beliefs which have been overwhelmingly refuted by empirical evidence is a gross intellectual failure from the point of view of the standards that ought to regulate scientific practice, not so necessarily from the point of view of the norms that guide human social reality. In contrast to the default conceptions of rationality, researcher Dan Kahn [28] situates *identity-protective cognition theory*, which shall be deployed to explain ideological dogmatism, in the tradition of *expressive rationality* defended by philosopher Elizabeth Anderson [29].

The theory of *identity-protective cognition* [30,31] advances the following picture; our nature as rational social mammals drives us into acceptance inside social groups—social belonging is a fundamental source of well-being. And, if the thesis that ideology is inescapable rings true, group-membership comes with a package of beliefs and values over which endorsement under varying degrees (Postulate 7) is expected. This conceptual and affective bundle structures our experience into worldviews (Postulate 4).

When the ideological core is challenged, a myriad of phenomena may take place. For instance, opposing viewpoints can be unconsciously registered (Postulate 3) as threats to the individual and the collective integrities, eliciting emotional responses of anger and priming insults and other aggressive behaviors. The thresholds of confirmation for antagonistic hypothesis may be subjected to unrelenting "goalpost-turning", accumulating ad hoc explanations just like a scientific research program facing an experimental anomaly.

3. Ideological Bias in Contemporary Western Academia

The Western world, spearheaded by the United States of America and the nations of Western Europe, stands as the keystone of human scholarship regarding the production of knowledge and its global influence⁶.

American universities are thus institutions centrally involved in this dynamics of power and knowledge. They also house many stereotypes. Among these, the outspoken commitment to social liberal values of *diversity* and *inclusiveness* throughout the campuses occupies a privileged position.

⁵ Such a theological hypothesis is explored in [27].

⁶ For a quantitative measure of this, the *Scimago Journal & Country Rank* maintained by the company *Scimago Lab* has bibliometric data up to 2015 which can be accessed in <http://www.scimagojr.com/countryrank.php>. See also [32].

But in defiance to these values, there exists one arena in which *uniformity* and *exclusiveness* appear to be the norm, and that is the sphere of *political affiliation*. Survey data on the politics of the American professorship, varyingly gauged as a function of self-reported ideological labels (for instance, ordinal variables such as “extremely liberal” or “slightly liberal”) and party affiliation (predilection for voting in Democratic candidates) display a noticeable tendency towards the political Left [33–36]. This pattern is even more skewed when we consider the clusters of the humanities and social sciences in isolation, thereby confirming another stereotype about academia in general.

But why should that matter? Naïve reflection could suggest that there exists no *logical* connection between the political affiliation of a researcher and the epistemic quality of his rational inquiry. Under the account of ideology I have sketched, if pure mathematicians working with category theory were overwhelmingly fascists, and astrophysicists specializing in extragalactic celestial mechanics were overwhelmingly constitutional monarchists, it would be hard to say how the cognitive output in their research fields could be compromised by their political beliefs because the associated sociopolitical ideologies have nothing relevant to say and prescribe concerning the *contents* of metamathematics and astronomy.

But in academic reality, *practical* connections between politics and academic compromise abound anytime the referents of ideological cores are the very objects being studied. The empirical evidence suggests that political homogeneity *simpliciter* is epistemically detrimental to fields of inquiry that engage with politically controversial subjects. The pervasive phenomenon of *motivated confirmation bias* [37], the often automatic cognitive tendency to perceive novel evidence as being supportive of previously accepted or believed hypotheses, gets hypertrophied in the presence of rising ideological *polarization* inside a group [38], the phenomenon in which pre-existing dominant ideological commitments are strengthened and exaggerated. This synergy may create an “echo chamber”, a homogeneous batch of content that only gets rehearsed and circulated inside its boundaries (see [39] for a discussion of a computational model of an “echo chamber”). This process, once kicked off in academic settings, may viciously imperil the very (so-called) “self-correcting” institutional mechanisms of science, such as the peer-review process (see [40] for a comprehensive analysis of this dynamics in the context of contemporary social psychology).

The most troublesome and detailed empirical data comes from American researchers in social and moral psychology studying political diversity and the effects of political bias in their own overwhelmingly “liberal” or “left-wing” fields. Concerning the consequences of this ideological hegemony in psychology, researchers have found evidence for discrimination in publishing, hiring, symposium invitation and grant application by scientists of a conservative persuasion [41]. Research has also challenged certain political stereotypes. For instance, there is evidence that intolerance against ideological out-groups, ordinarily perceived to be a prototypical feature of conservative “right-wingers”, is just as present in liberal “left-wingers” [42]. Specific ways in which established empirical results in psychology could have been distorted by “left-wing” ideological bias were also delineated. For instance, the institution of double standards under which the truth of an empirical hypothesis supportive to a conservative worldview is required to satisfy impervious standards of confirmation as the truth of hypothesis of undetermined alethic status which is congenial to a liberal worldview is presumed [43].

3.1. Political-Ideological Bias in Contemporary Western Philosophy

What is the status of ideological bias in anglophone philosophy? Similar in-depth empirical investigations of *particular* effects of political-ideological bias in the field of philosophy are necessary but lacking. However, for the time being, I hold that the inductive inference that contemporary philosophy is suffering from similar epistemically detrimental “left-wing” bias is projectable. More still; I predict that the situation is even *worse*.

This extrapolation from existing data is warranted for many reasons. First, existing survey data mentioned in the previous section on the political affiliations of philosophers display intense homogeneity.

Second, from a historical point of view, since the social sciences have been the last to emerge from philosophy, I hold that they can be reasonably expected to have a significant *shared academic culture*, from the general values guiding scholarship to particular research methodologies. The mere fact that the humanities and social sciences often share the same superordinate department in universities may promote this condition. As an additional factor, the paradigm of *critical theory* which I'll claim has had a foundational role in the sociopolitical ideology behind PC, blurs the institutional distinctions between philosophy and social science by design.

Third, some existing investigations exposing particular political biases in the scholarship of neighboring academic disciplines in the humanities reproduce the pattern found in psychology. For instance, in the context of American law, a statistical analysis made by political scientist Adam Chilton and legal scholar Eric Posner exposed that researchers who vote Democrat write more ideologically charged articles than researchers who vote Republican [44].

Fourth, the theoretical backbone of prevailing political ideologies has historically been articulated, innovated and advanced to a large part by philosophers working in normative ethics and political philosophy, from sketched generic frameworks to upfront detailed sociopolitical systems. In the actual world, there is no classical liberalism without John Locke, communism without Karl Marx or anarcho-primitivism without Henry David Thoreau. As philosophy became a professional career, a thinker with ideological impact is likely to be affiliated with a particular university. Therefore, we should expect academic philosophy, comprised of a network involving teachers, students, classrooms, conference rooms, and journals, to be a prolific spawning ground of political ideologies.

Fifth, there is some evidence that suggests that philosophers, particularly those dealing with normative disciplines, are in general less well-equipped than scientists to identify bias. For instance, philosopher Alan Hájek [45] has argued that in contrast to other professional academics, members of his profession are in general less conscious of their tacitly employed heuristics. In conventional philosophical methodology, the over-reliance on intuition as a source of content for philosophical argument is particularly problematic. The analogical claim that when intuitions are at hand, the philosophical expertise of professional philosophers grants a carry-over effect to philosophical cognition that is similar to the one appreciated by professional scientists has been challenged in light of recent results in the research program of experimental philosophy [46]. More dramatically in the subfield of moral philosophy, one of the very intellectual arenas that just scream for political controversy, the expertise of professional philosophers as sources of better intuitions has been questioned [47]. Under an experimental setting, while reasoning about moral dilemmas, professional moral philosophers have displayed significantly more susceptibility to framing effects (bias related to irrelevant differences in the presentation of a problem) than professional non-philosophers [48].

Finally, throughout the very tradition of analytic philosophy, self-congratulatorily exposed as a bastion of uncompromising rationality, semantic exactness and logical rigor, where we should *prima facie* expect the least ideological bias (so much for faulty intuitions), there exists anecdotal evidence of key philosophers reasoning on political causes in ways that would be deemed irrational under standards of objectivity [49]. To sum it up, contemporary cognitive psychology is consistent with the fact that one can sport a very cunning and logical mind when dealing with certain matters while being the subject of incapacitating "blind spots" in other areas.

4. A View to the Politically Correct Worldview

So far, the primary ideological bias in vogue in the academia has only been generically characterized as "liberal" or "left-wing". The more precise issue of ideological influence that is *politically correct* remains unaccounted. To truly probe the phenomenon, we must add specific content, a task I shall begin to explore in this section.

4.1. The Underlying Theme Behind Recent Incidents Involving PC Philosophy

Consider the following recent events in contemporary academic philosophy:

- The journal *Public Health Ethics* rejected a paper on the moral consequences of scientific research in genetic anthropology [50]. The author argues ⁷ that the reasons for the rejection are due to the fact that the paper considered, *ex hypothesi* (and not as an *actual* factual statement) the thesis that racial differences in behavior and cultural achievement are partially genetic in origin.
- A lecturer discontinued the teaching of a popular practical ethics course at the University of Texas, which had run for over three decades ⁸. His decision was motivated by persisting systematic disruptions of his class in recent years by outsiders and undergraduates that resisted the exposition and debate of viewpoints deemed to be morally unacceptable (un-PC) in topics such as abortion, immigration, and affirmative action.
- The editors of the distinguished *Stanford Encyclopedia Of Philosophy*, motivated by the empirical hypothesis that pervasive and systematic sexual discrimination towards women in philosophy is the leading cause of their academic undercitation, have led the to ask the invited authors to inflate the citations with publications from scholars of minority status. The truth of the discrimination hypothesis of sexism in academic philosophy has been challenged with bibliometric data [51].
- The *American Philosophical Association* has been asked by an expert in disability studies [52] to remove the phrase “blind peer review” because it is allegedly discriminatory against blind and visually impaired people.
- The student union from the *School of Oriental and Asian Studies* of Buckingham University has demanded that most White philosophers studied under the philosophy syllabus be dropped and replaced by philosophers from the African and Asian continents ⁹.

Events such as these abound in the centers and peripheries of Western academia (for a critical assessment of this trend, see [53]) and are part of a grander social dynamics. In this scenery, we can add a profusion of neologistic phrases and expressions such as ‘trigger warning’, ‘safe space’ and ‘white privilege’ entering public discourse, the shift for traditional “left-wing” concerns with the working class towards the identity politics of generally smaller social groups and the perceived sense of detachment between older liberal professors and their Millennial far-left students.

What is going on? I state that these events all resonate a same underlying theme: a demand for *social justice*. It is in this setting that contemporary critics of PC, not so much from the ivory towers but those standing on the roads of asphalt and engaged with internet culture, berate their adversaries as *social justice warriors* (“SJWs”) ¹⁰. In the age of polarizing figures from Caitlyn Jenner to Donald Trump, “social justice” is simultaneously appraised by the millions as both sacred value and unholy sin. But what exactly is this vilified “social justice” that these “warriors” are “fighting” for?

In its *leanest* sense, ‘social justice’ simply refers to *distributive justice*; families of theories in normative economics, ethics and political philosophy centered at the fair allocation of material and non-material goods in human societies (for a critical overview, see [54]).

At first sight, it is true that the sense of social justice associated with “SJWs” is strongly committed to soaring demands of distributive justice in social policy (such as affirmative actions for minority groups and international reparations for slavery and war) and the enforcement of norms deemed to be equity-contributing in both the public and private sphere (such as sensitivity trainings and zero-tolerance policies in businesses). But these, I claim, are but some of the salient *practical*

⁷ <http://www.thecollegefix.com/post/26076/>

⁸ <http://insider.foxnews.com/2016/12/05/ethics-professor-university-texas-bonevac-students-stifle-politically-correct-debates>

⁹ <http://www.telegraph.co.uk/education/2017/01/08/university-students-demand-philosophers-including-plato-kant/>

¹⁰ The phrase entered public consciousness to such a degree that it merited an entry in *Oxford's Dictionary*: https://en.oxforddictionaries.com/definition/social_justice_warrior

manifestations of an underlying worldview that cannot be readily identified with any established “left-wing” political ideology.

4.2. The Academic Originators of PC

Where did this ideology come from? My working hypothesis is that it is the product of cultural hybridization of several strains of both Anglo-American and Continental European academic thought throughout the last five decades. The spawning ground, originally in the departments of humanities and social sciences of Western universities, has shifted to the wider world, including the Third World (with some unfortunate results; see [55]). Of particular importance over the last decade, the cyberspace was critical in the shaping of social identities, speech norms and political activism from emerging subcultures of PC adherents. Disparate ideas with different genealogies have coalesced into a more or less coherent system by the continuous exchange between students and teachers, academic theorists and street activists, fiery partisans and resolute critics.

Although we could trace the memetic ancestors of this ideology as far away in the past and as much detail as we’d want, I deliberately restrict my attention to four paradigms and some of their various overlaps over the latter half of the 20th century; these are *social constructionism*, *critical theory*, *social liberalism*, and *postmodernism*.

An exhaustive historical and sociological analysis of the evolution of the memeplex I posit to be symbiotic with PC adherents is way beyond the reach of this work ¹¹. And delineating the conceptual cartography of different intellectual traditions and how they intersect may appear to be an unyielding task. I summarize my attempt to isolate what I take it to be the nexus of these ideas in the Venn diagram below (Figure 1):

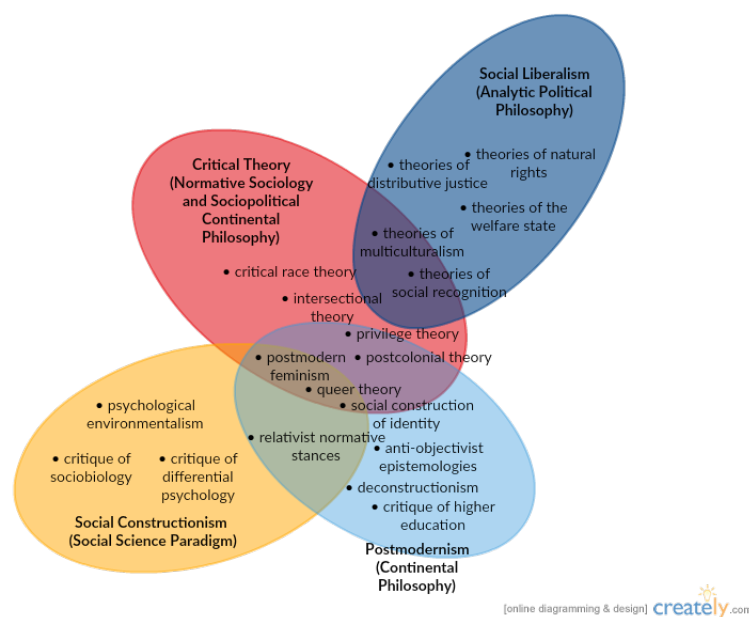


Figure 1. The Intersectional Paradigms of the politically correct (PC) Worldview.

¹¹ I refer the reader to some partly historical contemporary investigations and expositions of these trends which are consonant with this project. For a detailed incursion into PC and postmodernism and hypotheses on its intellectual ancestors, see [56]. For the ideological takeover of social science by frameworks developed by critical theory and postmodernism, see [57–59]. An introductory exposition of the origin and content of social liberalism as the hybridization of classical liberalism with socialist thought can be found in [60]. For the academic efforts to practice social science irrespective of relevant empirical generalizations from the biological sciences, a classic exposition comes from cognitive psychologist Steven Pinker [61].

4.3. Formalizing the Worldview of Contemporary Social Justice Adherents

It is time to make sense of some central ideas which I claim lie in the ideological core (Postulate 6) of the PC worldview. As described under my hypothesis of the origin of this ideology, the ideas I intend to formalize are conceptual hybrids, somewhere in between academic constructs with the intuitive repertoire of a layman.

My approach here is that of a normative naïve anthropologist; I intend to secure what a truthful and exact description of certain PC *beliefs* would look like assuming that their adherents are acting rationally (Postulate 7). When one confronts the discourse of an alien worldview, one of the most pervasive errors is to infer a lack of intelligence and rationality due to prejudicious background beliefs. As a matter of fact, there exists empirical evidence suggesting that “left-wing” progressives are in average more intelligent than “right-wing” traditionalists [62]. However, I shall also leave open the hypothesis that PC discourse, particularly in its most postmodern verve, may be primarily rhetorical and not designed to be truth-apt [56].

I suggest that this exercise is fruitful because it will allow us to provide with a certain precision a necessary condition for the social justice of norms and policies and some sufficient conditions for the political correctness (and *incorrectness*) of speech acts and constructs.

Formalizations are processes of translation. When the axiomatic approach is applied to science proper, a same informal theory can be formalized in many different ways. Therefore, I do not claim that my formal correlates of these ideas are the only ones possible—far from it. My attempt at formalization will also, unfortunately, be severely incomplete; it will depend on many informal postulates referring to entities which will remain undefined.

To be intimately acquainted with the PC worldview, a large number of concepts are candidates to fill the ideological core. I’ll focus my attention on two themes I take to be central; the first one probably needs no introduction, and that is the idea of *social oppression*, with several of its neighboring theses. The other one, which I have named *anthropological mental egalitarianism*, is meant to captures some strong intuitions a PC adherent may have on the equality of human potential.

Up to this point, there appears to be a bold inconsistency in the story I’m advancing; how could the explicit theoretical knowledge outputted by academics evolve into pretheoretical tacit understanding (Postulate 3) and become theoretical content back again?

We can resolve this apparent conflict in many distinct ways. First, under a dual-process theory of reasoning, habituation and training allow the migration of a task formerly subjected to conscious, willful supervision into an instinctive tacit skill [63]. From cognitive neuroscience, philosopher of biology Alex Rosenberg has argued that the difference between deliberative procedural knowledge and practical know-how is one of degree [64] (Chapter 8).

Second, it is a commonplace phenomenon that many academic products reach public discourse in a “pasteurized” fashion that is incomplete or even distorting and uninformative. In the times of modern faculty psychology, a common-sensical causal explanation by literate Westerners for the capricious behavior of adolescents could employ “the passions” as the *explanans*. As brain physiology advanced, the common-sensical *explanans* has been replaced with “the hormones”. It is unclear if any nontrivial knowledge of biochemistry and endocrinology has successfully penetrated public thought during this shift of words.

Third, terms may acquire entirely new meanings during this transition. ‘Deconstruct’ is a verb repeatedly used by contemporary social justice partisans but it is unclear how much it really has to do with the term of art ‘deconstruction’ originally described in Jacques Derrida’s *On Grammatology*.

Fourth, adherents may not be truly apprehending the relevant theoretical content at all but may be merely uttering sentences as if by pure Pavlovian reflex. Consider the memes that are commonly used as defeaters to slander the science of differential psychology such as “IQ does not measure intelligence”, “IQ only measures one kind of intelligence” and “IQ tests are culturally biased”. It is doubtful that most who deploy these propositions have acquired sufficient theoretical knowledge on tests such as Raven’s Progressive Matrices, the theoretical entity known as the *g* factor and the state of the art of

psychometrical research methodology. First-rate academic critics of intelligence testing do not merely use crude memes; they employ technical arguments (for instance, see [65–67]).

Finally, I am not claiming that anything resembling my formalized constructs is necessarily explicit in the minds of everyday PC adherents. I do claim, however, that they can be reasonably reconstructed out of several implicit beliefs. What I shall supply are artificial constructs, products of deliberate cognitive effort to make sense of the worldview of PC promoters under the assumption that they are behaving rationally.

4.4. Modeling Social Kinds and Human Societies

In the social ontology and epistemology advanced by the “SJW” worldview, *collectives* reign supreme. Human societies are partitioned into several overlapping factions, each with their distinctive collective identities, allegiances, and interests. The default level of analysis of social phenomena is centered in the dynamics among whole *social groups* and not the particular *individual human beings* that constitute them. That is, the PC worldview denies the thesis of *methodological individualism* that guides certain social science paradigms, surmised as the dual claim that properties of individual human beings exhaust properties of human societies and that social explanations ought to refer to these properties of individual human beings [68].

What do social groups mean for the average PC adherent? I employ the following formal semantic analysis [69]; first, the *extension* of a term or phrase designating a particular social group (such as ‘the bourgeoisie’ or ‘the White race’) is a *social kind*, which is a *set*. I contrast “social” with “natural” kinds solely on etiology (if these categories emerge in ordinary social contexts) and practical relevance for social cognition. On the issue of the *ontological objectivity* of social kinds, the degree by which they are “socially constructed” via arbitrary human decision-making or if there are facts of the matter independent of human intention, I will have something to say in the next subsection over at Postulate 12 (for lively contemporary discussions on this matter, see [70,71]).

Second, abstract entities employed for classificatory purposes do not exhaust the meaning of these words. The *referents* of terms denoting particular social groups are taken to be real human superorganisms of sorts, *aggregates* of individual human beings that function as willful agents of their own and which are of fundamental explanatory relevance for social theory. The variables representing these terms are *logically* the subjects of predication and *ontologically*, the “concrete” systems are the bearers of properties.

Social groups are then characterized according to their *constitution* and *taxonomy*. Over at the Appendix A.2, “An Ontology Of Collectives”, I supply a formal description to represent, via an algebraic operation of *aggregation*, how small units (labeled ‘atomic individuals’) can compose larger systems. An aggregation of individual human beings is called a *human population*. We will consider a two-level nested hierarchy of social kinds that partition human populations: *social genera* and *social species*. For example, according to the Commission of Human Rights of New York City¹², the equivalence relation “is of the same gender as” partitions the population of New York City into 31 equivalence classes. These *social species*, in turn, may be assorted into one sole equivalence class through an equivalence relation specifying a superordinate property, which allegedly forms the *social genus* “gender”.

Human populations can be *monospecific* or *polyspecific*. A human population is monospecific concerning a given social genus if and only its atomic individuals belong to the same social species, and it is polyspecific when it involves a mixture of social species. For instance, concerning the social genus “race”, the PC acronym “people of color” (“PoC”) refers to a human population whose members belong to many different races, allegedly sharing nontrivial collective interests. Usually defined by the negative property of not being a Caucasian of European descent (“White”), the object picked

¹² https://www1.nyc.gov/assets/cchr/downloads/pdf/publications/GenderID_Card2015.pdf

up by the reference class “PoC” can also be properly defined as the *aggregation* of all “non-White” populations. We could also define “polygeneric” populations. The LGBT community, for instance, is polygeneric from the point of view of at least two equivalence classes designating social genera, those of sexual orientation, and gender identity. These constructs are elaborated in greater detail over the Appendix A.3, “A Social Taxonomy of Human Populations”.

I postulate the following placeholder to minimally characterize a *human society*:

Postulate 8 (Human Society). *A human society S is the largest human population x living under a shared set of recognized social institutions I which enforce a set of social norms N.*

Human societies are aggregations of all members of social kinds responding to the same set of social norms. This postulate is good enough for our purposes, congruent with legal, cultural, political and geographical aspects of human societies.

4.5. Social Equality

Social equality is one of the moral centerpieces of the ideology underlying PC. For the most salient aspect of the meaning of social equality in this ideology, I refer to the words of the social worker and social justice advocate Neil Thompson; “equality can be understood to mean an absence of discrimination” [72] (p. 13). This ideal of equality includes the conception of equality known as *equality of opportunity* which I’ll take to include the thesis that different individuals with the same potentials in ability ought to have equal prospects for development and success in life.

But in the SJW worldview, I claim that, although the absence of discrimination or oppression is necessary for social equality, it is not sufficient. We also need another ideal of social equality, that of *equality of outcome*. More narrowly, this means that social groups in a particular society are equal if and only if each gets the same share of monetarily valuable resources. Under this conception, social equality just is a form of economic equality, defined by a central theoretical term from economics, *wealth*, taken to be the sum of monetarily valuable assets possessed by an economic agent in a fixed system of currency.

This conflation of *social* with *economic* inequality may be disputed on several grounds within the very population of PC adherents. For instance, there is the claim that social equality chiefly requires the fair allocation of intangible goods that resist monetary appraisals, such as respect or dignity. In response, I argue that equality of outcome is rightfully in tune with PC intuition. First, consider the following mental experiment; imagine an inegalitarian society that after hundreds or thousands of years of systemic oppression, manages to institute equal opportunity for all overnight. If equal opportunity is all there is for social justice, there is no more work to be done in this society. However, *prima facie*, the social justice partisan would still find not only desirable but necessary to institute additional policies and norms designed to diminish alleged accrued “head starts” benefiting the privileged groups¹³. Such policies could include prototypical social justice policies such as redistribution of wealth through social welfare. Second, I mention the defense by feminist political philosopher Anne Phillips in which even when a society is primarily pursuing equality of opportunity, equality of outcome serves as a good proxy for that goal [74]. Third, we have a pragmatic reason to pursue this account of social equality as economic equality since it can be defined with certain precision while the same cannot be said for other alleged intangible values which stand in more uncertain terrain to rigorously guide the ideals of social justice.

Economic inequality is most frequently measured as the inequality of *income*, which is much more tractable empirically and can be used as a proxy variable for wealth. I assume that wealth inequality, although very difficult to calculate in practice, is the ideal “gold standard” of economic

¹³ Economist Christopher J. Ruhm has described a mathematical model of this exact situation [73].

inequality (for a comprehensive technical exposition of the measurement of economic inequality in all its complexity, see [75]). We then have the following definition:

Definition 1 (Inequality of Outcome). *Two human populations x and y with respectively n_1 and n_2 atomic individuals and collective wealths w_1 and w_2 evaluated as m_1 and m_2 units of an arbitrary system of currency \$ are said to be economically unequal if and only if*

$$\frac{m_1}{n_1} \neq \frac{m_2}{n_2}$$

Readers may refer to Appendix A.4, “A Toy Model of Wealth”, for a sketch of an idealized measurement-theoretical account of material wealth and economic property.

What about the aspect of social equality characterized as the absence of discrimination? To investigate it, we first need to describe *social oppression*.

4.6. Social Oppression Theory

In the worldview of social justice, life in contemporary human societies is a hostile zero-sum game. If a certain social group enjoys material prosperity, it is because systemic unfair treatment is happening against at least another group. The key theoretical terms to consider are relations of *social oppression*. These are the intellectual heirs of the dyadic asymmetric relation of *exploitation of labor* described by Karl Marx between two populations of the social genus “social class”, which he identified with two species, the *bourgeoisie* and the *proletariat* [76]. Throughout the second half of the 20th century up to this point in time, this relation has been steadily expanded by critical theorists and other normative sociologists into a large family of dyadic relations of social oppression inside social genera other than social class [77]. Here I attempt to describe what we may call Social Oppression Theory (SOT), which will be used to characterize social justice and PC with greater precision.

I make seven axioms to characterize core tenets of the SOT. I supply a formal description of the set-theoretical model and logical formulae for these axioms in Appendix A.5, “Social Oppression Theory”. For a given society S , we then have:

Axiom 1. *A relation of oppression xOy is asymmetric (anti-symmetric and irreflexive). That is, if xOy , it is not the case that yOx .*

Let us recall that x and y refer to whole human populations. We call x the *oppressor, dominant or privileged* group and y the *oppressed, subordinated or marginalized* group.

The irreflexivity of relations of oppression could be disputed. For instance, consider the reported phenomenon of “internalized homophobia” in homosexual men from the mental health literature [78]. Couldn’t this be a case of reflexivity, the oppressed being their own oppressors? I submit that this is better explained in the PC worldview as being the workings of unjust social institutions enforced by an ideology named ‘Heteronormativity’ (Table 1) under which the fundamental causative agents of the oppression are homophobic heterosexuals and not homophobic homosexuals.

Table 1. Social Oppression in Western societies.

Genus	Oppressor	Oppressed	Immoral Act	Oppressive Ideology
Sex	Men	Women	Sexism	The Patriarchy [79]
Race	Whites	non-Whites	Racism	White Supremacy [80]
Sexual Orientation	Heterosexuals	Homosexuals	Homophobia	Heteronormativity [81]
Gender Identity	Cisgenders	Transgenders	Transphobia	Cisnormativity [82]
Body type	Thin people	Overweight people	Fat shaming	N/A
Nationality	Western citizens	non-Western foreigners	Xenophobia	Eurocentrism [83]
Ability	Able people	Disabled people	Ableism	Ablenormativity [84]
Age	Adults	Children and seniors	Ageism	Aetonormativity [85]

Axiom 2. *There are as many relations of oppression O_1, \dots, O_i as there are social genera $\mathcal{G}_1, \dots, \mathcal{G}_i$ partitioning H .*

Axiom 3. *If x oppresses y , then both x and y are of the same social genus \mathcal{G} .*

A same individual human being can be the surrogate of multiple relations of oppression insofar as they are different *types* of oppression relations. This is the cornerstone of “intersectional theory” [86], which encourages an analysis of social oppression at the level of the multiple social identities housed by human beings, that can simultaneously enact the role of oppressor and oppressed in relation to the different social genera he finds himself embedded in.

Axiom 4. *Take the relation of oppression O associated with a social genus \mathcal{G} .*

- If \mathcal{G} has two species, both the oppressor x and the oppressed y are the largest aggregates of members from their respective species, being monospecific populations.
- If \mathcal{G} has three or more species, the oppressor x is the largest aggregate of members of the social species, being a monospecific population. The oppressed y is the aggregate formed by the largest aggregates of each remaining social species, being a polyspecific population.

The *relata* of relations of oppression are entire collectives. For instance, when a person suffers racism, this is to be interpreted as an attack on an entire marginalized racial community by the dominant racial group. Under the oppressive ideology of Aetonormativity (see Table 1), which takes adulthood to be normative, the aggregate formed by children and seniors suffers ageism from the aggregate of adults.

Axiom 5. *If x oppresses y , then there is inequality of outcome between x and y where y is the worse off population.*

As privilege theorist Bob Pease puts it, “it is only when we understand that social inequalities are human creations designed to benefit a few that we can see the possibilities for challenging inequality” [87] (p. 14). In the PC worldview, social inequality is a result of certain social groups not acting fairly against other social groups. This notion can be interpreted as an expected consequence of a strong form of social constructionism which takes the etiology of social inequality to be the product of purely sociocultural factors.

This axiom merges both accounts of social equality from the social justice worldview (absence of discrimination and equality of outcome) with social oppression. To see how, logically this axiom has the form $p \rightarrow q$. By the rule of contraposition, we have $\neg q \rightarrow \neg p$ or to put it simply, if there is equality of outcome between x and y , there is no oppression between x and y .

Axiom 6. *If there is inequality of outcome between x and y , either x oppresses y or there exists at least one x' that is oppressing another y' whose set intersects with the set of y .*

This reasoning is due to the *intersectionality* of social genera. For instance, consider the population comprised by Kenyans living in English society. Were the oppressive relation of *xenophobia* between the English and Kenyans eliminated, this would not imply that both groups are now economic equals for Kenyans are disproportionately not of the same racial group of the English and thus can also be subjected to the oppressive relation of *racism* by White Englishmen.

Axiom 7. *Take the inverse relation of the relation of oppression xOy , the relation “ y is oppressed by x ”. The inverse of this relation is the privilege relation xPy .*

Here is my attempt to elucidate the formal structure and some of the semantic content of the pervasive but obscure notion of “privilege”. Privilege is a posited theoretical term that refers to

a nonobservable property (in this case, a 2-place relation) of oppressive human populations of a certain social kind.

This reading is motivated by a common trope employed by privilege theorists. For instance, Bob Pease takes privilege to be the “flipside of discrimination”; whoever oppresses is privileged [87] (p. 4). Similar metaphors involving the sides of coins are employed by other theorists over the literature [88,89].

Isn't the inverse of the inverse of xOy simply xOy ? For the sake of charitableness, we have the following traditional resource from the analytic philosophy of language at hand; relations of oppression xOy and privilege xPy are co-extensive (they have the same set as extension) and co-referential (both refer to the same system of social institutions). However, oppression and privilege vary in their *intensions*, that is, they are different “modes of presentation” for the same phenomenon.

For instance, imagine a primeval egalitarian society with two monospecific populations x and y of the same genus, each collectively possessing a wealth evaluated at 1000 electrum. Then x consolidates power and starts oppressing y by instituting unjust taxes and reaps some of the wealth of y . After some time, x possesses a collective wealth of 1500 electrum and y , 500 electrum, becoming social unequals. The system of tributes has two “faces”; x is advantaged by it and y is disadvantaged by it. The enrichment of 500 electrum by x in tributes from y co-occurs with the impoverishment of y of the very same 500 electrum.

Postulate 9 (Oppression-Action-Ideology Parity). *Each relation of oppression O typifies a class of immoral acts Z and an oppressive ideology \mathfrak{J} which enforces unjust social institutions and norms realized through Z that are responsible for social inequality.*

Table 1 summarizes eight different types of social oppression posited by PC normative sociologists as being prevalent in Western societies (this selection is not exhaustive; for other examples, see [87] (p. 13)). To say that the literature dedicated to exposing of these forms of social oppression is enormous would be an understatement. The general sentiment one may apprehend by the content exposed by contemporary normative sociologists working under critical theory and its various offshoots is that Western nations are terrible places for minorities to live, being social battlegrounds filled with multiplicities of invisible violence.

For four of these relations of oppression, those of racism, xenophobia, ableism and ageism, the oppressed populations are polyspecific. One of the oppressive groups appears to be polyspecific too, violating Axiom 3, the group of “able people”. This uneasiness can be fixed by replacing the genus of “ability” with several smaller genera (such as “visual ability”, “auditory ability”, “motor ability”, etc.).

Some forms of prototypical social oppression also appear to violate this schema. For instance, consider anti-Semitism and Islamophobia as forms of oppression directed, respectively, against Jews and Muslims. Both seem to conflate discrimination on race, ethnicity, nationality, and religion. They can fit the schema by being segregated into racism, xenophobia and religious bigotry¹⁴.

It appears that the ideology promoting “fat shaming” has not been named; following the etymological pattern, I suggest calling it ‘Leptonormativity.’

These axioms allow us to ground additional famous theses of the SJW worldview. For example, take a staple of “SJW” discourse, the denial of the existence of acts of “reverse discrimination”, such as so-called “reverse racism”¹⁵, racism perpetrated against a racial group taken to be socially dominant:

¹⁴ The existence of an ideology of “Christian normativity” present in Western societies under which that which is non-Christian is devalued by default has already been proposed [90].

¹⁵ See for example the following bold article, which neatly summarizes common arguments for the inexistence of reverse racism <http://www.dailydot.com/via/reverse-racism-doesnt-exist/>.

Theorem 1 (Impossibility of Reverse Racism). For a society S and two populations x and y inside S , if x is racist towards y , y cannot be racist towards x .

A favorite argument by PC proponents for the non-existence of racism against White people living in Western societies (but not, presumably, against White people living in Zimbabwe) involves defending the claim that the very concept is incoherent. This can be done for instance by redefining the concept of racism, like critical race theorists have summarized with the famous pseudo equation '*racism = prejudice + power*' [91]. But under the framework I'm describing, the *logical* impossibility of "reverse racism" is a simple result. If being racist involves enacting the relation of oppression associated with the genus of race and relations of oppression are asymmetric (Axiom 1), then only dominant racial collectives can be racist. The same can be generalized for other social genera (such as the non-existence of "heterophobia" in "heteronormative" societies).

We can now state what I hold to be a necessary condition for certain policy or action to merit the stamp of social justice:

Postulate 10 (Necessary Condition for Social Justice). For two economically unequal human populations x and y belonging to a same social genus \mathcal{G} under a relation of oppression xOy , an action a at a time t_0 is socially just only if a would cause the decrease of the inequality of outcome between x and y at a future time t_+ .

We could also call such actions *socially progressive*. This condition is not sufficient because arguably, not every kind of redistribution of wealth would be legitimate (for instance, by an overt theft of assets).

4.7. Generalized Difference Principle

The articulation of what came to be known as the theory of *justice as fairness* by political philosopher John Rawls [92,93] stands as one of the main intellectual milestones of the tradition of social liberalism. What is famously known as the *difference principle* [94] (pp. 5–6) can be interpreted as a heuristic for resource allocation in a society which permits social inequalities insofar they absolutely benefit those that are worse-off economically.

I posit an expansion inspired by this principle¹⁶ as an ethical heuristic to evaluate not simply actions at the level of policy and legislation but everyday verbal social interaction which may neatly capture an essential part of what is meant when it is claimed that a particular statement is *not* PC. I call it the "Generalized Difference Principle" (GDP).

This proposal is motivated by the following; first, in the PC worldview, verbal behavior is taken to be supremely causally efficient at perpetuating social inequality. Verbal discrimination, even when extremely subtle (what came to be identified as "microaggressions" by critical race theorists) may allegedly cause enormous economic damage (see, for instance, [96]). There also appears to be a strong conflation of facts and values in the PC worldview, for factual statements are often perceived to be immoral in various ways (such as "racist" or "homophobic"). Given this, I tentatively describe:

Postulate 11 (Generalized Difference Principle). Consider a human society S , two socially unequal human populations x and y respectively from the species S_1 and S_2 belonging to the same genus \mathcal{G} and a comparative factual statement p involving a deprecation of y in comparison to x with respect to a certain attribute M . If p is a statement on the propensity of M in the species S_2 , then:

- If x is oppressed by y , then an *assertion* of p is morally acceptable
- If y is oppressed by x , then an *assertion* of p exemplifies an action in the class of immoral acts Z associated with \mathcal{G} , being therefore socially oppressive

¹⁶ This was chiefly inspired by Neven Sesardić's similar use of the difference principle [95]. (p. 224)

- If y is oppressed by x and p is not asserted but there exists significant risk of p being interpreted as an assertion, then p also exemplifies an action of the class of immoral acts Z associated with \mathcal{G} , being therefore socially oppressive

For instance, consider a neuropsychological investigation of the relationship between verbal fluency and sexual orientation [97] which documented that homosexual men display on average better aptitude in different verbal fluency-related tasks (such as the generation of as many words as possible for a given category and the generation of as many synonyms as possible for a given word) and that homosexual women fare on average worse than heterosexual women on the same tasks. Since homosexuals are posited to be oppressed by heterosexuals under the ideology of Heteronormativity (Postulate 15, Table 1), it follows that this factual statement on the inequality of verbal aptitude among these aggregates partitioned under the genus of sexual orientation is not socially oppressive. For converse reasons, reporting the empirical result on homosexual women can be classified as homophobic.

Finally, I posit that not all oppression is morally equivalent; in the PC worldview, there are forms of oppression that are more immoral than others. I represent this with the following postulate:

Postulate 12 (Hierarchy of Oppression). For a given society S with n social genera where there exist relations of oppression, there exists an asymmetric binary relation of moral severity \ggg which takes relations of oppression O as relata, forming a set $\{O_{i \in I} \ggg \dots \ggg O_{j \in I}\}$, $I = (1, \dots, n)$.

What defines the ordering? The degree of impoverishment/enrichment could be a possible indicator. I leave it open for the SJW theorists to decide.

To see how this may be important, consider the following; Western feminist activists are avowed at fighting the sexist institutions which allegedly perpetuate a “rape culture” that is deeply ingrained in the societies they live in and which allegedly have an origin in conservative mores [98]. Feminists, however, have been criticized as a group by conservative social commentators for being senselessly silent on the topic of sexual violence perpetrated by Muslims [99,100].

Let us assume that the accusation of disproportionate silence is true. Is it irrational? I submit that far from being irrational, it is a sophisticated example of identity-protection cognition meant to preserve the narrative script of SOT. The reasoning behind a feminist activist being vocal against sexual crimes committed by White heterosexual men in Patriarchal White Supremacist societies is straightforward; if the goal is to achieve an egalitarian society through social justice and if such denunciations are effective means to cause a diffusion of power from the dominant social species to the oppressed social species, resulting in the decrease of social inequality, then such denunciations are *prima facie* instrumentally rational.

The same, however, does not necessarily apply to being vocal against sexual crimes committed by Muslims both inside and outside Western societies. If the vocal imputation of moral responsibility for sexual crimes on Muslims carries significant risk at being seen as “racist” or “xenophobic” (Postulate 9) and racism and xenophobia are ranked as having higher moral severity than sexism in the Hierarchy Of Oppression, then to abstain from denouncing Muslim sexual violence is *expressively rational*, for the sexism inflicted by Muslims becomes a lesser evil compared to the racism and xenophobia the activist could inflict. A feminist that denounces Muslim sexual violence will also be at the risk of being ostracized from her in-group of which she may have already invested significant emotional and social resources.

4.8. PC and Natural Human Equality

At first glance, it is difficult to see how the cosmopolitan developed world could harbor many anthropological *physical* egalitarians, those who believe that humans do not vary in significant ways with regard to *physical* attributes due to differences in natural endowments. Every four years in the Olympic Games, thousands of elite athletes show before our own very eyes the *prima facie* case of how

physical abilities, partially underpinned by group differences in the muscular, skeletal, endocrine¹⁷ and respiratory systems, are not distributed equitably with respect to the partitions inside the social genera of race, sex and age. This conclusion is suggested by empirical evidence (see [101] for an overview mostly focused on racial differences in athleticism). More; even with access to the best technology and infrastructure, not anyone can reach the elite level of an Olympic athlete in an arbitrary sport. The *potential* for athletic achievement is similarly not equitably distributed; it is ultimately constrained by genetic factors [102,103].

I'll explore here a central belief of the PC worldview and supply a charitable formal representation of its content. I call this belief *anthropological mental egalitarianism* (AME). AME encircles more specifically the denial of the existence of significant mental differences in between socially oppressed groups and their respective groups of oppressors of a same social genus, differences which are partially underpinned by differences in their nervous systems mediated by genetic factors. For reasons of charitableness, I restrict "significant differences" to mean significant differences in *potential*. What is at stake are not the *actual* mental abilities and competencies of members of socially oppressed groups (which may form considerable "gaps" in comparison to their respective oppressive groups) but what they *could be* were the relevant socially oppressive ideologies removed through the implementation of socially progressive policies and norms.

This contextualization with socially oppressed groups is important. According to the GDP as stated (Postulate 10), that there exists room for a PC partisan to tolerate "natural" inequality among groups when it is the case that it is currently benefiting the worse off socioeconomically. However, even this is risky and may undermine the entire PC worldview by sheer force of external consistency. I explain at greater length in Section 6.2 that from the point of view of the standards that guide scientific research, it is irrational to consider that natural talents are consistently distributed only to the populations of the socially oppressed. It is also inconsistent with the very tenet of the PC worldview that takes economic inequality to be a social construction. For *natural* talents presumably *naturally* lead to a differentiated acquisition of resources.

I argue that some version of AME stands one of the core beliefs of the PC worldview and that its denial is arguably the supreme intellectual taboo in the "first world". For a famous example, in 2005, Lawrence Summers, then the president of Harvard University, suffered considerable public backlash for stating the empirically adequate hypothesis that women are more underrepresented than men at top academic positions in science and technology *partly* because the normal distributions of mental abilities ("aptitude", in his words¹⁸) in women, in comparison to men, had lower variability—meaning that men are more typical in the extremes of the human cognitive spectrum. Since Summers uttered these statements, the hypothesis for the greater phenotypical variability of men has accrued even more evidence [104] and may constitute a difference between the sexes of fundamental importance. For this remark, Summers was denounced as "sexist", and it is speculated that this may have contributed to both his resignation as president of Harvard University and even to have cost him a top position in the Obama Administration¹⁹.

What I informally refer to as the "mental" involves both general and specific features of human beings posited by psychologists and encompassed in the categories of cognition, affect and behavior. It includes a multitude of traits such as negative affectivity and general intelligence, social intelligence and social anxiety, aggressiveness and creativity and delayed gratification and openness to experience.

¹⁷ Given the intimate integration of the endocrine and nervous systems, studied in the epistemic field of neuroendocrinology, and given the role of hormones modulating behavioral responses of all kinds, one who acknowledges natural group differences in endocrinology but denies natural differences in behavior may be at risk of being inconsistent.

¹⁸ A transcription of his speech can be found via the [InternetWaybackMachine](http://www.president.harvard.edu/speeches/2005/nber.html) at <http://web.archive.org/web/20080130023006/http://www.president.harvard.edu/speeches/2005/nber.html>

¹⁹ <http://www.independent.co.uk/news/world/americas/summers-sexism-costs-him-top-treasury-job-1033373.html>

I assume, under a principle of ontological conservativeness, that all of them have *at least* an ordinal structure, being representable through comparative structures (see the Appendix A.1 for the definition of a comparative structure). From a measurement-theoretic point of view, what arguably is the most studied psychological attribute—general intelligence—is commonly assumed to have a richer structure, judging by the kinds of statistical procedures used to manipulate and interpret data on intelligence testing (such as standard deviations and the averaging of data sets). This conclusion has been disputed²⁰. The various ways the information about a given attribute represented on a scale of real numbers (such as having one or two semantic poles or affective valences) are psychologically interpreted will also not undermine the argument if we make some adjustments (see the discussion below Postulate 15).

To give more clarity to what is meant by “potential” and the relationship between biology and social genera, I shall elaborate two additional postulates centered on the issues of the social construction of social kinds and the environmental etiology of the psychological phenotype.

4.9. Social Constructionism and Mental Environmentalism

A comprehensive analysis that would make justice of the concept of “social construction” is far beyond the reach of this work. The theses associated with social constructionism can be phrased under variable strengths. Leaning towards social constructionism is not considered much controversial for genera such as religious affiliation and social class²¹. The scientific and philosophical controversy is initiated when there exists significant academic dispute that the genera under question (such as race and sex) are examples of what philosophers of science and metaphysicians call *natural kinds*. Full-blown social construction of identity could involve, for instance, the claim that the categories of sex and gender are picked up by properties which are free-floating from karyotype and anatomical dimorphism and that racial categories are not correlated with genomic substructures. There would be no objective fact of the matter at assigning an individual x into a species S of a genus \mathcal{G} .

Empirically sounder forms of social constructionism are more moderate. For instance, philosophers of cognitive science Edouard Machery and Luc Faucher [107] explain the prevalence of racial categories in human cognition as a byproduct of both biological and cultural evolution involving the tracking of real phenotypically salient traits of human populations whose clusters are otherwise taken to be “biologically meaningless”.

I supply the following provisional necessary condition of social construction inspired by a computational account of objectivity:

Postulate 13 (Necessary Condition for the Social Construction of Social Kinds). *For a given social genus \mathcal{G} partitioned into species S_1, \dots, S_n , we say that \mathcal{G} is socially constructed only if there exists no nontrivial clustering algorithm T which takes as input a raw data set D exhibiting information about the set of individual human beings H which outputs clusters S'_1, \dots, S'_n that approximate the equivalence classes S_1, \dots, S_n .*

The key term here is *raw*; the data set must be suitably *unprocessed*, devoid of idiosyncratic human manipulation. For instance, some have argued that the the social genus “sex”—partitioned into the equivalence classes “male” and “female”—is *socially constructed* predicated on the phenomena of *intersexuality*, involving individuals with a myriad of chromosomal, developmental and anatomical variations which statistically diverge from the typical phenotypes formed under the

²⁰ See [105] for a formal philosophical criticism of the prospect of quantitative psychology. Measurement theorist Fred Roberts [106] (p. 64) follows a convention from the literature in which *raw* intelligence scores are ordinal-scalable but *standard* intelligence scores are interval-scalable.

²¹ But even this may be disputed for the empirical generalization known as the “first law of behavioral genetics” [108] state that there exists no human behavioral trait with zero heritability.

XY sex-determination system of the human species [109]. However, even under high estimates for the prevalence of intersexuality (i.e., [110]), 98% of the members of an arbitrary human population x_1 will be clustered into the equivalence classes “male” and “female”. For a “social construction”, the male-female binary appears to be doing a very lousy job at *not* carving nature at its joints.

One must be cautious in the inference from statistical atypicality to social construction not to incur in a *nonsequitur*. For instance, in the case of intersexuality caused by major genomic structural variation, a mechanical expert system informed of the number of autosomes and allosomes (the non-sexual and sexual chromosomes, respectively) of individual humans would have no problem *objectively* sorting the populations into the equivalence classes generated by the equivalence relation “is of the same karyotype as”.

Another important thesis of the PC worldview associated with social constructionism captures similar anxieties with the scientific understanding of the biological dimension of humanity and expresses the attitude of divorcing biology from behavior and mind. I thus present:

Postulate 14 (Mental Environmentalism). *For a given mental attribute M which is not invariant across the population of all human beings H , the causal contribution that explains the variation of M throughout H that is attributable to genetics is insignificant.*

Why, of all biological factors, should genetics be privileged? This emphasis is a consequence of the science of behavioral genetics which has developed the important (and controversial) measures of *heritability*²² to estimate the relative causal importance of genetics in the explanation the phenotypical *variation* of a given phenotypical trait in a selected population. What makes genetics special is in some sense contingent; perhaps in the near future, advanced gene therapy will be able to transform the deepest part of our biology into environmental factors just like education and nutrition. But for now, I hold, following the arguments by philosopher of biology Neven Sesardić [95] (Chapter 5), that heritability entails *non-modifiability* or *non-malleability*. That is; the more the causal contribution of the variation in a given trait is ascribed to genetic factors, the harder it is to reshape it for it implies that there is less that is under existing practical human control.

The conjunction of the latter postulates can inspire a new axiom that is the converse of Axiom 5 from SOT, that is, the implication from inequality of outcome to social oppression. For if no social kinds are objective natural kinds, then their very partitioning is under human control, being a cognitive process that is a part of the social environment. And if there are no genetic contributions to the very phenotypical traits required for economic prosperity, then their full range also stands in the realm of social engineering. Natural environmental factors, such as droughts and disease, may be responsible for inequality of outcome but those factors are in the realm of modifiability (for instance, through irrigation and medicine). Therefore, from the lenses of the PC worldview, if we observe human economic inequality, this gives credence to the hypothesis that oppressive institutions are at work.

A more formal description of AME can be found in Appendix A.6. I will assume that the measurement processes being represented here are temporally indexed to the present time. As individual psychology changes over a lifetime, the ascribed numerical values of a given mental

²² The concept of heritability has been subjected to intense scrutiny by scientists and philosophers of science. For a recent novel criticism, contemporary geneticists have been struggling with the so-called “missing heritability problem” (often in the context of heritability in the *narrow sense*; see [95] (p. 21); for several given phenotypical traits measured as having a high heritability, the associated genetic variants which have been traced via genetic sequencing appear to explain very little of the total predicted heritability. Some scientists [111] have proposed transgenerational epigenetic inheritance to account for the missing heritability; this account is more consonant with PC for the causes of epigenetic factors may exist inside the range of environmental modifiability. However, alternative explanations which secure the notion of heritability in genetic factors exist. For instance, a team of statistical geneticists [112] has argued that the “missing heritability” problem emerges under the assumption that the contribution of a conjunction of expressed genetic variants can be modeled as a linear (“additive”) combination. When the *interactions* among genetic variants are modeled as nonlinear, the problem may significantly dissolve.

trait may fluctuate. For instance, there is cross-cultural evidence which suggests that people tend to become more introverted as they age [113].

Axiom 8. For a given mental attribute M , a fixed representation standard for M and any individual human being x , there exists a monotonic increasing function $\phi(x)$ that uniquely assigns a numerical value n to x .

This axiom just is a statement on the possibility of psychological measurement. Representational standards are particular units used to codify the empirical information of measurable attributes using numbers.

Axiom 9. There exists a numerical value ω representing the maximum potential of x at M . The value n is either lesser or equal to ω .

Postulate 15. For any given time t , a given mental attribute M , a fixed representation standard for M and any individual human being x , ω is the global maximum point of the monotonic increasing function $\phi(x)$.

Through the conjunction of Axiom 10 and Postulate 14, we can state the modal claim that the mental attributes of human beings, besides their *actual* realizations (captured by Axiom 9) also have *maximum* manifestations. Discussions on lower and upper bounds of mental features are not unknown. For instance, the case of sensations, encompassed by psychophysical variables such as “brightness” and “loudness” is straightforward; the components of our sensory systems bear a lower threshold that allows the minimum interaction with some type of energy and an upper threshold which may represent either nondescript registration or nerve damage. What about traits such as general intelligence? The philosophical literature on “superintelligence” appears to be committed to a *supremum* for the intelligence, broadly considered, of humans [114].

Postulate 16. The value of ω is heavily dependent on genetic factors

Following the preceding developments, the etiology of this ceiling is stipulated to be fundamentally genetic in origin.

Postulate 17. Only the maxima of mental attributes are relevant for social justice

Potentials are *prima facie* closed intervals with both *maxima* and *minima*. I assume that only the former are relevant for our discussion. If this postulate holds true, certain adjustments are warranted. For instance, take the “Big Five” model of personality which posits introversion–extraversion as a *continuum* with two psychologically distinct poles. For traits with this kind of structure, it is better in our framework to divide them in two given the possibility that both valences could be positively correlated with economic affluence ²³.

Axiom 10. For any two individual human beings x and y with their upper bounds for M respectively evaluated as ω_x and ω_y , there exists a function of comparative significance ι that takes ω_x and ω_y as inputs and outputs ‘1’ when the disparity is significant and ‘0’ when it is not

²³ For this particular example, current empirical evidence suggests that this is not the case; extraversion has significant positive correlation with income, new promotions and negatively correlated with unemployment [115,116]. It appears to be unlikely that the other tail of this *continuum* sports a significant violation of this monotonicity.

It is hard to deny the reality of *individual* differences in mental potential. I suspect that most of those who are sympathetic to the PC worldview acknowledge it ²⁴. For the sake of charitableness, I advance that even if it is the case that statistical innate *group* differences exist, they may not matter. And how could they matter? From the point of view of social justice, it is sound that differences in psychology are significant if they are causally connected with increases in wealth (Section 4.5). But by how much? Consider the example of general intelligence. According to factor-analytical results of [117] employing a North American data set, a one point increase in IQ is associated with an increase of up to \$616 of income a year ²⁵. Is a change in one IQ point significant enough? I'll leave the specification of such discontinuous function for the partisans of social justice.

Axiom 11. *For a given mental attribute M , a fixed representation standard for M and any two individual human beings x and y where x and y are members of two distinct species S_1 and S_2 from a same social genus \mathcal{G} , x and y have their upper bounds for M respectively evaluated as ω_x and ω_y , if we randomly "pick" x and y from S_1 and S_2 , then the probability that the function $\iota(\omega_x, \omega_y)$ will output '0' (not a significant difference in potential) is greater than 50%.*

This axiom is a *weak* denial of the existence of natural group differences. It states that typically, the differences in the natural endowments of members from different groups are not socioeconomically significant. This increase in charitableness, however, comes at the expense of external consistency with SOT, which demands stronger social constructionism. Axiom 6 states that there can only be inequality of outcome between two groups x and y in the presence of social oppression. But under Anthropological Mental Egalitarianism, there can be small group differences of wealth whose etiology is traceable to group genetic differences in psychological aptitudes. One way to make both theories consistent with each other could involve replacing standard equivalence relations " $=$ " for approximation relations " \approx ".

4.10. PC redux

I finish this section with a tentative compilation of sufficient conditions that make a certain construct c un-PC:

Postulate 18 (Sufficient Conditions for Political Incorrectness). *For any construct c bearing a certain content p , c is said to be politically incorrect anytime when:*

- p involves the denial of the ethical ideal of equality of outcome (Definition 1)
- p is inconsistent with Axioms 1 to 7 of SOT
- p is immoral according to the GDP (Postulate 11)
- p holds that a social genus \mathcal{G} is a natural kind (Postulate 13)

Denials of AME that are un-PC are already pre-specified by the GDP. The existence of a necessary connection between PC and the social construction of genera may be disputed. In defense, I view these propositions as forming a network (Postulate 6) with a certain stability. The placement of the fourth condition was partly motivated by the hypothesis that the acceptance that there are social genera

²⁴ For instance, feminist philosopher Anne Phillips writes: "Despite my scepticism about whether systematic differences of ability or disposition can be mapped onto these particular categories ("gender, ethnicity and race"), I am not so naïve as to doubt the existence of individual difference. Individuals vary in their abilities, characters, and dispositions, and though the variance is often exaggerated by social and educational inequalities, people are indeed different in what they want and are able to do" [74]. (p. 13)

²⁵ The same study establishes a connection between higher IQs and financial distress, pointing to possible nonlinear relationships between wealth and general intelligence.

which are natural kinds may initiate a runaway effect that may eventually prompt the denial of mental environmentalism and then, full-blown thoughts and utterances that violate the GDP.

5. Philosophy and Political Correctness: An Irreconcilable Marriage

What is the *telos* of philosophy? And why exactly would PC hinder it? To investigate this question, we must probe the *physis* of philosophy, so to speak. In particular, its knowledge-evaluating dynamics. In this section, I shall present some arguments inspired by technical results from applied science to defend the epistemic integrity of philosophy against contentions that philosophy is or should be congenial to PC. In particular, I will briefly expose some tools originated from the field of engineering which I hold will help us understand the relationship between PC and philosophy.

5.1. Philosophy as a Field of Inquiry

In the post-Wittgensteinian world we live in where a thriving cognitive science scrutinizes the statistical character of the contents from our most beloved concepts, we have become reluctant to accept ambitious definitions with *crisp* either-or membership criteria as an answer for questions with the schematic structure ‘what is x ?’. However, given the preliminary state of these investigations, I hold we’re warranted to explore this nebulous terrain with the aid of conceptual analysis and other formal methods conjoined with a dose of plausible empirical speculation; we must start from *somewhere* and diligently revise our constructs as empirical data is revealed.

My starting point is the fruitful framework designed by philosopher-scientist Mario Bunge to characterize *epistemic fields* in general and *fields of inquiry* [9] in particular²⁶. Bunge’s set-theoretical exposition of epistemic fields portrays the complex systems under which knowledge, broadly considered, is produced by human beings.

Genuine philosophy, alongside all of the legitimate sciences and some of the other humanities, when properly conducted as investigative pursuits (such as archaeology and history) are all taken to be examples of fields of inquiry.

The measurement-theoretical construct of a *comparative structure*, defined in Appendix A.1, will be deployed many times in this section.

Now, onto my adaptation of Bungean fields of inquiry:

Definition 2 (Field of Inquiry). A field of inquiry \mathfrak{F} at a given time t is a 10-tuple $\mathfrak{F} = \langle A, E, G, R, C, F, K_i, V, S_i, \succ \rangle$ where:

- A is a set of *professionals* trained under a given research tradition
- E is a set of *research methods and processes* enacted by members of A
- G is a set of comparative structures, the *goals* of the field of inquiry
- R is a set of *problematics*; the open problems and issues entertained by members of A
- C is a set of *constructs*, the formal and informal *representata* (statements, theories, propositions, etc.²⁷) produced by members of A to answer P
 - F a proper subset of C , the *fund of knowledge* of \mathfrak{F}
 - C is partitioned into proper subsets K_i , each pertaining to a class of *comparable* constructs (rival constructs engaging with a same topic from P)

²⁶ In Bunge’s original scheme, epistemic fields come in two types; *fields of inquiry* and *belief systems*, of which I take *ideologies* to be one of its species.

²⁷ Naturally, to treat logical formulae as individuals $x, x \in C$ is an abstraction. Treating them as logical formulae *proper* would require the framework to employ second-order logic which would be extremely cumbersome.

- V is a set of comparative structures, the *values* used by members of A to assess members of C under G
 - V is partitioned into proper subsets S_i whose members stand under a *partial order relation* \succ , the different families of *evaluation standards*

We could devise axioms for a “black box” model of the production of knowledge, where one or more professionals $a, a \in A$ targeting a problem $p, p \in R$ engage in a research process $f \in B$ which takes as input a proper subset the fund of knowledge F and outputs a construct $x, x \in C$.

Under this framework, the metaphilosophical quest for a *definiendum* of philosophy would typically center in the analysis of the *problematics* R of the field of inquiry of philosophy. I shall not venture into this hard issue. Instead, I’ll focus on other aspects I take to be both more readily scrutable and which will be sufficient for my arguments; the set of *goals* G and the set of *values* V of philosophy.

Following developments from contemporary epistemology which will be discussed in greater detail later in Section 5.3, goals come in two types: *epistemic* and *non-epistemic*. This distinction will remain undefined and purely in the domain of intuitive appreciation; epistemic goals include standards such as wisdom, understanding, learning and, most important for our investigation, *truth*. Non-epistemic goals are a heterogeneous lot which includes economic profit, well-being, entertainment and the other primary indictee of our investigation, *social justice*.

Legitimate fields of inquiry, in relative contrast to stagnant pseudoscience and pseudophilosophy, other degenerate research programs and dogmatic ideologies, are *cognitively progressive*; this can be informally characterized as the dual claim that their funds of knowledge tend, over time, to be populated with more and more constructs which are better attuned to the goals of the field²⁸. If philosophy is a field of inquiry, it is no exception—although the advancement appears to be considerably slower than other fields of inquiry [118]. However, despite all the alleged actual and potential insurmountable mysteries, antinomies, paradoxes and theoretical dead-ends as well as unfortunate periods of wasteful degenerate philosophical research programs where the function of our philosophical knowledge loses its monotonicity, I take it that that we stand today in a more fertile ground than the one initiated by Nietzsche’s admired “Greek sages”²⁹. For a candid but blunt example, the seeds of Thales have ultimately germinated in the minds of a succession of thinkers—from Aristotle, Leibniz and Boole to Gödel, Church and Turing—responsible for the formal causes of the technological marvel I am using to write this paper down³⁰.

5.2. Philosophy and Truth

What are the goals of philosophy? I accept that the gist of this issue has been successfully captured by one of the oldest (if not the oldest) metaphilosophical accounts; out of the Pythagorean *love of wisdom*, we extract that philosophy is, first and foremost, a *truth-seeking* enterprise [121]. Even if there exists contentious disagreement on both the domain of truths philosophy seeks (not to mention the nature of truth itself!), *truth* of some persuasion remains the supreme *epistemic goal* of philosophy³¹.

²⁸ An easy and risky way to characterize this feature under this framework is this; let F_{t_0} be the fund of knowledge of philosophy at a time t_0 and F_{t_+} the fund of knowledge of philosophy at an arbitrary future time t_+ . Then the statement $|F_{t_+}| > |F_{t_0}|$ is probably true.

²⁹ The relevant quote comes from *Philosophy in the Tragic Age of the Greeks*: “The very first experience that philosophy had on Greek soil, the sanction of the Seven Sages, is an unmistakable and unforgettable feature of the Hellenic image. Other peoples have saints; the Greeks have sages” [119].

³⁰ There exists extensive metaphilosophical disagreement on the possibility of progress in philosophy. The sort of progress envisioned by my example would not be considered properly philosophical [120]. But even the case that perennial problems (such as the mind-body problem and free will) are unsolvable, if true, would *itself* be a positive epistemic result by demarcating limits to human knowledge.

³¹ This strong thesis resonates with Berit Brogaard’s [122] account of *epistemic value monism* under which truth is a primary, overriding and non-negotiable epistemic goal.

This metaphilosophical position may no longer be as fashionable, but I contend that it is hard to make sense of philosophy which does not take truth as an epistemic goal. If one holds that philosophy has nothing to do with the pursuit of truth, I take it as a conversation stopper and a performative contradiction. For if metaphilosophy is philosophy, the disagreement with the metaphilosophical inquiry of what philosophy is *for* is a disagreement on the *truth* of what philosophy is for. If one wishes to follow the road of doing philosophy that rejects these basic constraints of rationality, one is at the risk of, to paraphrase philosopher Daniel Dennett, to engage in nothing more than “verbal ballet” [123] or to play “intellectual tennis without a net” [124]³². Philosophies so unrestrained are mere belief systems, *not* fields of inquiry. The question of the possibility of philosophy being able to thrive as both a truth-oriented activity and a vehicle for social justice—both understand the world and to save the world—will be answered negatively in the next sections.

Up to this level of analysis, the postulated features of truth-seekingness and cognitive progress not only underspecify philosophy but makes it indistinguishable from *basic* (as opposed to *applied*) science. This is not an accident, but probably comes from shared inheritance for basic science is historically an offshoot of philosophy. It is also not a demerit for the arguments I shall deploy in support of a radical separation of philosophy from political correctness will be just as effective if applied to basic science.

But what truth are we talking about? Modern mathematical logic has a built-in formal theory of *logical* truth as model-satisfiability which has been famously advanced as an interpretation of the “classical” (correspondence) conception of truth. I shall not assume this particular schematic structure of truth. Instead, in the spirit of maximizing generality and neutrality, I characterize a bland conception of truth for fields of inquiry which should be compatible with many different theories of truth. Truth, being a goal, will be represented as a bounded comparative structure $\langle T, \succsim \rangle$ with a pair of real numbers setting a lower bound (absolute falsity) and an upper bound (absolute truth). For convenience reasons, we can use the well-known interval $[0, 1]$. The *relata* of the ordering relation \succsim are constructs x_1 and x_2 being compared with respect to truth. If one holds that philosophical truth is strictly bivalent, one may replace a continuous comparative structure for a discrete one so that the image of the function of truth $\tau(x)$ only has two values, such as $\{0,1\}$. However, I believe the analysis is more fruitful if we concede *orders* of truth for philosophical *representata*. For instance, assuming that the following examples are rival positions and thus members of the same class K_1 , for a philosopher to hold that x_1 (neutral monism) is truer than x_2 (materialism) and to hold that materialism is truer than x_3 (substance dualism) is to assign as the image for the function of truth $\tau(x)$ of these constructs three real numbers y_1, y_2, y_3 so that $0 \leq y_1 \leq y_2 \leq y_3 \leq 1$.

5.3. A Formal Account of the Relationship between Philosophical Knowledge and Values

How do the members of an epistemic field legitimately evaluate a given construct as successfully attaining a particular goal of the field? And what if the field has multiple goals or worse, multiple *conflicting* goals?

This kind of problem has been entertained by both philosophers of science dealing with *theory choice* and *model selection* and epistemologists dealing with *belief justification*, which we may generalize as the problem of *epistemic appraisal* (for a contemporary overview, see [125]).

What must the relationship between a bearer of content x and a particular goal $\langle \Omega, \succsim \rangle \in G$ be for it to be successful? A received philosophical view I’ll assume is that we are justified to hold x as being on the road to achieve a certain Ω -goal if x “embodies” the appropriate Ω -*values*. In the words of epistemologist and philosopher of science Stephen E. Grimm, “a belief earns positive marks (counts as justified, rational, virtuous, etc.), from an epistemic point of view, just in case it does well with respect to the things with intrinsic epistemic value (i.e., helps to promote them or bring them about).

³² Dennett attributes this adage to philosopher Ronald de Souza, referring to philosophical apologetics.

Likewise, a belief earns negative marks just in case it does poorly with respect to the things with intrinsic epistemic value" [126].

To formally characterize this relationship, we turn to a vibrant discussion in the contemporary epistemology of science on *epistemic* or *cognitive*³³ values (such as empirical adequacy, predictive accuracy, and external consistency; a finer-grained typology in the context of the epistemic field of science is found at [128]). These epistemic values are contrasted with *contextual, non-epistemic* or *non-cognitive* values (such as safety, social equality, and racial diversity). Fields of inquiry may employ both, in variable configurations according to their set of goals.

Let us take *epistemic goals* to be accomplishable by constructs bearing the appropriate epistemic values and the converse happening with *non-epistemic goals*. For instance, applied science, such as the several branches of engineering, differs from basic science by having additional *practical* non-epistemic goals which supply further normative requirements [129]. As an example, the field of inquiry of aerospace engineering has an overarching *non-epistemic practical goal* of *aircraft and spacecraft design*, the construction of machines that transit the atmosphere and beyond. These crafts, in turn, must efficiently carry on a variety of specialized supplementary practical duties depending on the role—from belligerent air supremacy to peaceful civilian transportation. Thus, the epistemic appraisal of an x (such as the computational model of an aircraft) must also be guided by the relevant non-epistemic or contextual values such as safety, resilience, acquisition cost, payload capacity, and firepower. Aerospace engineers naturally also want their fluid dynamics to be approximately true³⁴ or else their aircraft may not kick off the ground (much less reach escape velocity).

The sole epistemic goal we will be interested in is *truth* and the only epistemic values I'll be interested in I'll call *alethic epistemic values*, those that are truth-enhancing. Other possible epistemic goals (such as understanding or curiosity satisfaction) do not necessarily converge with truth. For instance, educators teaching basic arithmetic with positive integers to small children, in an attempt to make the subject more intelligible, (that is, to attain the epistemic goal of *understanding*) often utter verbal heuristic devices such as "you can't take a bigger number from a smaller number" which are strict mathematical *falsehoods*, either decreasing or neutralize the goal of truth [130].

Taking for granted concepts from the science of statistics, alethic epistemic values are now provisionally defined:

Definition 3 (Alethic Epistemic Value). For a certain field of inquiry \mathfrak{F} with the epistemic goal of truth, $\langle T, \succ \rangle \in G$, a value $\langle E, \succ \rangle \in V$ is an alethic epistemic value if and only if the function of truth $\tau(x)$ is positively correlated with the function of the value $\epsilon(x)$.

For instance, if we have good reasons to think that when a philosophical construct fares well in semantic definiteness and formal rigor, its truth is being enhanced, then these are candidates for being alethic epistemic values. If scoring well in *ad hocness* and unwarranted aprioricity has the opposite effect, we have the opposite conclusion.

I similarly define a *politically correct value*, a type of non-epistemic value:

Definition 4 (Politically Correct Value). For a certain field of inquiry \mathfrak{F} with the non-epistemic goal of social justice, $\langle J, \succ \rangle \in G$, a value $\langle P, \succ \rangle \in V$ is a politically correct value if and only if the function of social justice $\sigma(x)$ is positively correlated with the function of the value $\rho(x)$.

³³ Larry Laudan [127] distinguishes *cognitive* from *epistemic* values. In his account, cognitive values encompass epistemic values as a proper subset and the "epistemic" is strictly construed as the domain of necessary and sufficient truth-conditions for a construct. My sketched account of what I call *alethic* epistemic values is not as strong and may involve weaker contingencies between a value and the goal of truth.

³⁴ As a matter of fact, in the context of modeling a design problem (Section 5.4), engineers do not need to expend resources computing the truth of natural science which has already stood to massive empirical scrutiny. It is already a given, a part of the fund of knowledge F .

And now, we define a *dummy* alethic epistemic value:

Definition 5 (Dummy Alethic Epistemic Value). *An alethic epistemic value $\langle E, \succ \rangle$ is a dummy alethic epistemic value if and only if there exists another alethic epistemic value $\langle E', \succ \rangle$ and the values of the function $\epsilon(x)$ are proxy variables of $\epsilon'(x)$, that is, $\epsilon'(x)$ is better correlated with $\tau(x)$ than $\epsilon(x)$.*

This last definition is stimulated by intuitions on the existence of possible hierarchies of alethic epistemic values in which some are more “basic” than others and the possibility of there being alethic epistemic values that are *redundant*, performing idle work. For instance, elegance³⁵ may be tracking simplicity, in which case it would be a *dummy* epistemic value. However, in scientific practice, proxy variables are often indispensable, particularly when the relevant variable researchers aim to track is non-observable.

I posit that sound philosophical and scientific inquiry is often constrained by a shared set of regulatory ideals, i.e., for an arbitrary family of evaluation standards from a basic science K_1 and another from philosophy, K_2 , we should expect that $K_1 \cap K_2 \neq \{\emptyset\}$. For instance, one of these which I hold follows naturally from the character of philosophy as a truth-seeking field of inquiry is the epistemic value of *external consistency*; philosophy ought to be consistent with the truths revealed by other epistemic fields at least as epistemically secure as itself, the natural sciences being a prominent example³⁶. If your descriptive metaphysics is inconsistent with the most established developments of quantum mechanics and general relativity, then your system loses epistemic value. If your normative ethics is inconsistent with the most solid results of behavioral genetics and moral psychology, then this is also a serious defect of your theory. And so on.

5.4. Epistemic Appraisal as Engineering

Dealing with herculean projects which aim at the simultaneous satisfaction of multiple clashing objectives, often in the light of information that is partial and even inconsistent, is what many engineers, computer scientists, and economists working in the interdisciplinary field of inquiry of *operations research* (OR) do for a living. In the spirit of consilience among epistemic fields, I suggest that the general problem of epistemic appraisal in philosophy and other fields of inquiry can be represented using the formal skeletons of types of problems managed in OR and that we may tentatively draw some lessons from the decades of human ingenuity accrued by research in this field on the prognosis of politically correct philosophy.

From OR, we have two types of problem of interest; roughly, when an agent knows in advance a finite set of alternatives with variable performance in such and such criteria and needs to pick the best, one has an *evaluation problem*, and one does *multicriteria decision analysis* (MCDA, also called *multiple criteria decision-making* or *aiding*). The relevance of MCDA methods on the problem of theory choice in the philosophy of science has been explored in recent years [132,133].

When one does not know in advance the alternatives of a problem involving multiple goals but has a working mathematical model to represent it, one has a *design problem* and may attempt to find solutions through *multiobjective optimization* (MOO, also called *multicriteria optimization* and *multiobjective programming*).

I shall make a very brief exposition of MCDA and MOO problems and draw some lessons for our project. Some understanding of vector algebra will be assumed for this section. Vectors are referenced

³⁵ Several examples of simplicity and elegance in the history of science are described by biologist Ian Glynn [131].

³⁶ Critics of a postmodern or non-naturalistic verve may object and claim that such inferences are “scientistic” (or any other number of smear words). I reject any such charges of “scientism” as deliberate buzzword-infused ploys meant to avoid the satisfaction of external consistency and the loss of epistemic value such a constraint would cause for philosophical theories that ignore empirical truth.

in **boldface**, conforming to a standard notation. First, let us check the structure of an MDCA problem (adapted from [134] (p. 10)):

Definition 6 (Multicriteria Decision Analysis Problem). A multicriteria decision analysis problem (an evaluation problem) is a 6-tuple $M_C = \langle A, X, X_0, \Phi, \mathbb{R}, \mu \rangle$ where:

- A is a nonempty finite set of actors enacting the decision-making
- X is a nonempty set, the set of all possible decision variants, the decision space
- $X_0, |X_0| \geq 2$, is a nonempty finite proper subset of X , the set of decision variants
- Φ is a finite set, the set of $m \geq 2$ criteria functions $\phi_i, \phi : X \rightarrow \mathbb{R}, i = (1, \dots, m)$
- μ is the criteria mapping function $\mu : X \rightarrow \mathbb{R}^m, \mu = (\phi_1, \dots, \phi_m)$
- The actors A intend to select a decision variant $x, x \in X_0$ for which $\mu(x)$ is the most preferred multiple criteria valuation

Now, for a generic MOO problem (adapted from [135] p. X and [136]):

Definition 7 (Multiobjective Optimization Problem). A multiobjective optimization problem (a design problem) is a 6-tuple $M_O = \langle f, x, \mathbb{R}^n, S, g, h \rangle$.

- f is a finite column vector of size $m \geq 2$, the vector of m objective functions $f = \{\phi_1(x), \dots, \phi_m(x)\}^T, \phi_i : \mathbb{R}^n \rightarrow \mathbb{R}$
- x is a finite column vector of size $n \geq 2$, the decision vector $x = \{x_1, \dots, x_n\}^T$
- \mathbb{R}^n is an n -dimensional Euclidean space, the decision space
 - $S, S \subset \mathbb{R}^n, S \supset x$, is a nonempty set, the feasible region space
- g is a vector of p inequality constraints, $g = \{g_1(x), \dots, g_p(x)\}$
- h is a vector of q equality constraints, $h = \{h_1(x), \dots, h_q(x)\}$
- For each function $\phi_i(d)$, $\phi_i(d)$ is to be either maximized or minimized

These frameworks are commensurable. For instance, the criteria functions from MCDA just are the objective functions from MOO. Researchers often engage with the two types of problem at different stages of a same project³⁷.

We may now draw several semantic equivalences that will allow us to frame the problem of epistemic appraisal using the terms of fields of inquiry. Table 2 summarizes these correspondences:

Table 2. Semantic equivalences.

MCDA and MOO	Field of Inquiry
Set of actors A of an evaluation problem M_C	Set of professionals A from a field of inquiry \mathfrak{F}
Decision space X of an evaluation problem M_C	Constructs in C from a same class K_i
Set of criteria functions Φ from an evaluation problem M_C	The set of functions $\phi_1, \phi_2 \dots$ associated with the values of a family of evaluation standards S_i
Vector of objective functions f from a design problem M_O	As above
Inequality and equality constraints g and h from a design problem M_O	<i>A priori</i> impositions by members of A given the set of goals G

³⁷ As framed in [135], the MCDA evaluation problem is actually a proper part of a major MOO problem “It should be clear that multiobjective optimization consists of three phases: model building, optimization, and decision making (preference articulation)”.

5.5. Modelling Epistemic Appraisal

Further qualifications are warranted. In the name of formal rigor and structural conservativeness, we strive to deal, if possible, solely with *ordinal* varieties of MOO and MCDA. In this move, we potentially lose several technical options but still capture what is more essential. As a team of control engineers puts it, “order [of objective functions] is much more robust against noise than ‘value’” [137] (p. 13). Getting the order right is what’s most crucial.

Sometimes it is assumed that the values involved in epistemic appraisal can be readily given a cardinal interpretation. For instance, in the context of the epistemic appraisal of scientific theories and the demarcation problem, Martin Mahner proposes such an account of scientificity [138]. It is true that several such characterizations have been proposed for particular alethic epistemic values. Most notably, ways to quantify different senses of the *simplicity* of constructs [139,140]. Such polysemies in alethic epistemic values are probably the norm, making the problem even harder. The concept of simplicity in the context of epistemic appraisal, for instance, appears to be a mongrel concept that designates different syntactical, semantical, epistemological, practical and aesthetic properties of constructs [141,142]. Unfortunately, most philosophical theories (and other philosophical constructs) are informal and are yet to be expressed in the regimented languages required for such computations. This fact gives more credence to the proposal that presently, epistemic appraisal in philosophy (and science) should be a strictly ordinal endeavor.

In MCDA and MOO, engineers regularly defy the measurement-theoretical doctrine of permissible transformations by treating ordinal variables as if they were interval or ratio-scalable (for instance, by extracting arithmetic means of arbitrary data and assuming that the different levels of Likert-type scales³⁸ are equally spaced magnitudes). In the absence of evidence that the variable at hand satisfies the axioms for linear structures or any kind of structure where an operation of concatenation isomorphic to arithmetic addition can be defined, one should be conservative and assume that it just meets the simpler and less demanding family of comparative structures $\langle A_i, \succ \rangle$.

Now, for an exposition of some of the results from these fields of inquiry:

Postulate 19 (Non-Optimality). *I suppose that, in general, for a given multi-objective optimization problem M_O , there exists no solution $x \in S$ that simultaneously attains the desired outcomes of objective functions f (i.e., maximizations and minimizations) under constraints h and g .*

The rule of thumb is that multiple objectives will conflict with each other. MOO is an art of negotiation and compromise; the quest for a Platonic ideal aircraft, traffic system, or automated factory is irremediably tragic—the optimal solution in the sense of *scalar* or *single-objective optimization* is generally impossible, and one must be content to one of their possible *efficient* worldly realizations.

There are many types and hierarchies of efficient solutions; below the crown of scalar optimality [143] (Chapter 2), what rules more firmly is the notion of *Pareto efficiency* (also called Pareto “optimality”). Consider the following definition of Pareto-efficiency (adapted from [135,143]):

Definition 8 (Pareto Efficiency). *For a MOO problem M_O where the vector of objective functions $f = \{\phi_1(x), \dots, \phi_m(x)\}^T$ is to be maximized, $x \in S$, a decision vector x' is Pareto-efficient if and only if there does not exist another x so that $\phi_i(x) \geq \phi_i(x')$ for all $i = 1, \dots, n$.*

- A Pareto-efficient decision vector is *strictly Pareto-efficient* if and only if $\phi_j(x) > \phi_j(x')$ for at least one index j . Otherwise, it is *weakly Pareto-efficient*

³⁸ Likert scales are a staple of survey data designed to extract information regarding preferences. They usually involve a small even number of sentences ranked from either the most positive or most negative valence (such as “strongly agree”, “agree”, “indifference”, “disagree” and “strongly disagree”).

We call a set of Pareto-efficient solutions a *Pareto frontier*. Although these are often not computable, we may strive for solutions which *approximate* the Pareto frontier. We say that all Pareto-efficient solutions *dominate* over the rest of the solutions in the feasible region space.

Since the frameworks of MOO and MCDA are commensurable, each decision vector x may correspond to a *decision variant* x .

Let us contemplate some simple examples of evaluation problems in epistemic appraisal for philosophy. Consider a hypothetical metaethicist comparing three constructs, the thesis of moral cognitivism, the thesis of moral noncognitivism and a hybrid theory of both. He holds that four alethic epistemic values are relevant for his evaluation and posits ordinal values under a bounded interval [0, 10]. Table 3 summarizes this scenario:

Table 3. Theory choice in philosophy.

Theory	Internal Consistency	Empirical Adequacy	$\neg ad hocness$	Simplicity
Moral cognitivism	10	5	4	5
Moral noncognitivism	10	7	6	7
Hybrid theory	7	5	2	2

Starting from very instinctive standards of rationality, it is a no-brainer that our model metaethicist should choose moral non-cognitivism over the others for it is either better or equivalent to the alternative positions in every respect. x_2 is the only Pareto-efficient solution of this set of decision variants, and it thus *dominates* the others.

Now, consider a philosopher of mind evaluating theories of personal identity also under four criteria. Table 4 depicts this scenario:

Table 4. Theory choice in philosophy.

Theory	Explanatory Power	Simplicity	Empirical Adequacy	Intuitiveness
Animalism	7	7	6	5
Lockeanism	8	5	5	6
Eliminativism	5	9	6	0

In this example, there is no decision variant dominating. All three options are Pareto-efficient. How does one choose? There exists no transcendental procedure, no single general algorithm that takes a set of efficient decision variants and outputs the most preferred one. Instead, there are several. Engineers may often find themselves in the paradoxical situation of having a second-order MCDA problem when choosing which method to use to solve a particular MCDA problem [144].

In the ordinal MCDA case, although the vast majority of algorithms involve aggregation procedures employing addition and multiplication at some point, there are fortunately some purely “qualitative” strategies. For instance, the approach of *generalized concordance rules* [145], which does not assume the additivity of typical “compare and aggregate” approaches in multicriteria decision-making.

How MCDA may model evaluation problems in fields of inquiry should be easy to see. What about *design problems*? Here things get more complicated. I intend to use the framework of MOO to represent an ideal hunt for constructs that efficiently carry out the goals of the field through the maximization of the associated values.

It is not clear if purely ordinal cases of MOO are feasible. Over the literature, in the context of *stochastic optimization*, so-called “ordinal optimization” procedures exist as an antecedent backstage to eschew computational burden for run-of-the-mill cardinal optimization [137]. Some decision theorists (such as [134] (p. 58), in the context of scalarization techniques) have argued that even though some mathematical manipulations in certain procedures have no *empirical* interpretation, (i.e., are not

*meaningful*³⁹ in a measurement-theoretic sense) they can be justified on *heuristic* or *pragmatic* grounds and be positively informative.

I shall now add another informal companion for Postulate 19 meant to express something on the standards of success of fields of inquiry:

Postulate 20 (Epistemic Effectiveness of a Field of Inquiry). *The epistemic effectiveness of field of inquiry \mathfrak{F} is a function of its power to produce quality constructs in C .*

A received hierarchy of quality of constructs in the context of evaluation and design problems is thus:

- Scalar Optimality, for problems with $m = 1$ functions
- Strict Pareto Efficiency, for problems with $m \geq 2$ conflicting functions
- Weak Pareto Efficiency, for problems with $m \geq 2$ conflicting functions
- Approximations of Pareto Efficient solutions, for problems with $m \geq 2$ functions

Given this crude characterization, a field of inquiry that consistently produces more efficient constructs relative to the problems it entertains is a more *effective* one. This leads us to the following consequence:

Postulate 21 (The Curse of Multiple Goals). *In general, for a field of inquiry \mathfrak{F} , the more goals in G it has, the more ineffective it is at the development of constructs in C which are efficient.*

This conjecture emerges from considerations of Section 5.3 where each goal is associated with a cluster of values which have, as elaborated in Table 2, a direct correspondence with objective functions of a MOO problem.

This claim may look like a trivial truism; of course it is expected that the more targets a field aims to secure, the harder it is to secure them. But the point I'd like to emphasize is that the growth of difficulty is generally *not linear*; it increases dramatically fast as m rises. This is partially due to an assortment of formal phenomena dubbed "the curse of dimensionality" (first exposed by [147], in the context of dynamic programming) that take place with mathematical optimization as the number of objective functions increases.

These complex problems are a breeding ground for the infamous "NP-hard" decision problems where the computational resources required to reach a sufficiently strong solution may grow exponentially. Many families of algorithms effective at attaining or bordering the Pareto front in MOO with a small number of objectives do not scale well with a greater number of objectives. For instance, many evolutionary algorithms struggle to find Pareto-efficient solutions when $m \geq 3$ [148]. Also, one of the most used procedures to test for the quality of two Pareto-efficient sets, the *hypervolume indicator*, has a #P-hard ("Sharp-P") complexity class, being *as hard* to solve as its associated NP decision problem [149].

Up until this point, many criticisms are possible. I'll briefly consider two of them. First, by taking as relevant these results from theoretical computer science in the context of mathematical optimization, we are implicitly representing the production of knowledge in an arbitrary field of inquiry \mathfrak{F} as a classical computational process, a program implementable in a Turing machine. Black box model for black model, it could be argued that professional experts are best modeled as more powerful computational systems (such as oracle machines) and thus, being able to circumvent the imposed difficulties in the formal framework I'm grounding my analysis in, rendering them irrelevant.

³⁹ An extensive discussion of several technical senses of "meaningfulness" in the context of the axiomatic representational theory of measurement is found at [146].

Second, it can also be questioned that since approximate solutions at a small distance from the Pareto frontier scanned by much faster *heuristic algorithms* are often good enough and attainable with fewer resources, by analogy the activities of professional philosophers may be modeled by much more realistic heuristic algorithms.

The first line of argument is congruent with standard practice in operations research. In design problems, *a priori* expert knowledge compacting expectations of what a good solution looks like can be incorporated in the model, relieving burdens (for example, in the context of an evolutionary optimization [150]). In evaluation problems, this is even more obvious as experts are consulted to place decision variants under preference relations, and this feedback is used to build decision-making procedures. Under a formal decision setting, experts can indeed be modeled as oracles of a sort.

However, I claim that, particularly for the less methodologically robust fields of inquiry (such as philosophy and the social sciences), we should be *very skeptical* of the powers of their professional experts to find even “good enough” solutions in the feasibility space—much less efficient solutions (for instance, political psychologist Philip E. Tetlock has documented the underwhelming predictive accuracy of social scientists over even general economic and political trends [151]). Philosophy, in particular, may be the field of inquiry most pessimistic of the status of its cognitive achievements [120,152]. Also, as already acknowledged in Section 3.1, existing empirical evidence on expertise effects behind properly philosophical inquiry (such as epistemology and ethics) is not consistent with philosophers having particularly special epistemic powers.

Under this framework, I posit that the main reason why philosophy, in contrast to science, is more ineffective is due to lack of robust standards under which contradictory efficient decision variants are to be evaluated. Science arguably has the “tribunal of experience” as the primary, if not overriding, standard of excellence, up until the point it faces empirical underdetermination.

Is philosophy doomed? If each goal deploys a portfolio with a myriad of values whose structure we know little about, we appear to be hostages of the curse of dimensionality. Postulate 21 may seem to undermine optimality in truth-seeking pursuits. Or does it? There are two basic routes when engaging with a MOO problem; either one treats it as a MOO problem in its own right and incurs in any computational burdens involved or one attempts to transform it into a much more tractable *single-objective optimization problem* (SOO) through a particular process of *scalarization*. ‘Scalarization’ names families of different algorithms that transforms a vector of multiple objectives $\mathbf{f} = \{f_1(\mathbf{x}), \dots, f_n(\mathbf{x})\}^T$ into a *scalar* $\{f(\mathbf{x})\}$.

In the name of optimism, I thus deploy the following bold conjecture:

Postulate 22 (Scalarization of Vectors With the Same Type of Goal). *For a vector of functions $f = \{\phi_1, \dots, \phi_n\}$ associated with the portfolio of Ω -values from a goal $\langle \Omega, \succ \rangle$, it is assumed that f can be scalarized into $f = \{\phi\}$ without significant loss of information.*

This sums up the optimism that optimality may still be at hand for fields of inquiry that seek truth, and truth only. Also, consider this; take our portfolio of alethic epistemic values $\{\epsilon_1, \dots, \epsilon_m\}$. Given Definition 5, some of these may be just redundant *dummy* alethic epistemic values and thus may be removed. This procedure would be an instance of the technique of *dimensionality reduction* [153] that is employed in MOO.

5.6. Epistemic Appraisal of Politically Correct Fields of Inquiry

We can now characterize more precisely the following subvarieties of epistemic fields; *truth-seeking* fields of inquiry (as I hold philosophy to be) and *politically correct* fields of inquiry (as I claim neither basic science nor philosophy should be) and conclude our inquiry.

Definition 9 (Truth-Seeking Field of Inquiry). *For a field of inquiry \mathfrak{F} , \mathfrak{F} is truth-seeking if and only if:*

- \mathfrak{F} has *truth*, $\langle T, \succ \rangle$, as a goal in G

- All families of evaluation standards S_i have at least one (and probably more than one) alethic epistemic value $\langle E, \succ \rangle$
- For all non-scalarized *design problems*, each function ϵ_i of the vector of objective functions \mathbf{f} is to be maximized
- For all scalarized *design problems*, the scalar of truth $\tau(x)$ is to be maximized
- In the context of any *evaluation problem* M_D , where S_i includes at least one non-alethic epistemic value $\langle \Lambda, \succ \rangle$ with an associated monotonic increasing function ϕ_Λ , no decision variant x_1 where $\phi_\Lambda(x_1) > \phi_\Lambda(x_2)$ may be preferred by a decision maker in A if for at least one $\epsilon_i(x_1), \epsilon_i(x_2) < \epsilon_i(x_2)$

This characterization ensures that no construct even a bit defective on matters of truth will come to dominate other solutions.

Examples of evaluation problems in the field of inquiry of philosophy include not only deciding which intuitions, premises and theories to choose but may also involve activities such as the filling of a finite list of key speakers in conferences and deciding whether to accept or reject a paper given contradictory appraisals of referees. If philosophy is truth-seeking, I argue that those academic activities should also strive to satisfy the above requirements.

Definition 10 (Politically Correct Field of Inquiry). For a field of inquiry \mathfrak{F} , \mathfrak{F} is politically correct if and only if:

- \mathfrak{F} has social justice, $\langle J, \succ \rangle$, as a goal in G
- All families of evaluation standards S_i have at least one politically correct value $\langle P, \succ \rangle$
- For all non-scalarized *design problems*, each function ρ_i of the vector of objective functions \mathbf{f} is to be maximized
- For all scalarized *design problems*, the scalar of social justice $\sigma(x)$ is to be maximized
- In the context of any *evaluation problem* M_D , a decision variant x_1 may dominate a decision variant x_2 when $\epsilon_i(x_1) < \epsilon_i(x_2)$ and $\rho_i(x_1) > \rho_i(x_2)$

This definition is weaker than the preceding, in the name of charitableness; for a field of inquiry to be politically correct, it does not need to assign a priority to political correctness; it merely needs to be taken into account, by being in the portfolio of values involved in the appraisal. One could strengthen this characterization as much as one wants.

We now turn to the final definition:

Definition 11 (Epistemic Appraisal of Politically Correct Philosophy). For the field of inquiry of philosophy \mathfrak{P} , if \mathfrak{P} is politically correct, the epistemic appraisal in \mathfrak{P} can be thus modeled:

- As a *design problem*, it is at best a 2-objective MOO problem representing the search for Pareto-efficient constructs $x, x \in C$ in a *feasible space* X with the vector of objective functions $\mathbf{f} = \{[\tau(x), \sigma(x)]^T\}$ where $\tau(x)$ is the scalar of truth and $\sigma(x)$ is the scalar of social justice and both functions are to be maximized
- As an *evaluation problem* between $n \geq 2$ comparable constructs, $\{x_1; \dots, x_n\} \in K_i$ and a set of evaluation standards $S, S \subset V$, it is an ordinal MCDA problem where:
 - The *decision space* set X is $\{x_1; \dots, x_n\}$
 - The set of *criteria functions* Φ has as elements the functions associated with the values that are truth and social justice-conducting, $\Phi = \{\epsilon_1(x), \dots, \epsilon_r(x), \rho_1(x), \dots, \rho_s(x)\}$

5.7. Consequences of the Model for the Epistemic Appraisal of PC Philosophy

Tying all my considerations together, the *practical* answer for whether a synergistic marriage between truth and social justice is plausible is a resounding “no”.

5.7.1. Consequence #1: PC Philosophy Can’t Reasonably Aspire to Be Truth-Seeking

To say that to carry out philosophy solely in the pursuit of truth is hard would be an understatement. Now, optimization theory provides us with additional *pragmatic* reasons to avoid compromise of *any kind* (and not just political) when doing basic research. If the search for truth is not scalarizable, against the optimistic conjecture in Postulate 22, our effectiveness can be crippled with our problem subjected to everything undesirable that may happen when $m \geq 2$.

Truth-seeking enterprises, given Definition 9, have no place for spurious restraints of non-alethic origin on the truth of statements (i.e., a value such as external consistency may influence the truth of a construct in a truth-seeking field of inquiry, but not a contextual value such as politeness or sensitivity towards the feelings of others).

If truth is scalarizable without significant loss of information, optimality becomes a possibility for philosophical theories.

The best decision-makers of a field are expected to marshal technical expertise under excellent standards of rationality. However, as argued in Section 3, we have reasons to expect professional philosophers, in general, to systematically run short of these aspirations when dealing with politically controversial topics. Given the presented frameworks of MCDA and MOO, I will supply some possible routes PC may compromise truth in philosophy. Here are some of the ways PC biases can be modeled:

- In the context of both evaluation and design problems, the violation, willful or not, of the priority of alethic epistemic values over everything else in the family of evaluation standards S_i employed
- In the context of evaluation problems, the underestimation of the actual values (in the sense of assigned information) of alethic epistemic values associated with politically incorrect constructs.
- In the context of design problems, the placement of unwarranted *a priori* inequality and equality constraints over the objective functions associated with alethic epistemic values which are prejudiciously deemed to be implausible because they are un-PC

For a contemporary example in the philosophy of science, take the thesis in philosophy of biology that *Homo sapiens* not only is *not* a monotypic biological species—the social genus “race” being a natural kind—but that one of the reasons for believing so is motivated by the alethic epistemic value of external consistency with research on cognitive differences across racial groups in contemporary differential psychology and behavioral genetics [154].

This particular thesis incurs in many sins; first, according to the PC worldview, it denies the social construction of the social kind “race” (Postulate 12). In its frank denial of Anthropological Mental Egalitarianism (Axiom 11), it violates the Generalized Difference Principle (Postulate 10) with respect to the social genus “race”, being typified as “racist” and therefore, being socially oppressive.

If one adheres to the PC worldview, one acquires reasons from the point of view of the expressive rationality of identity-protection cognition (Postulate 7) to reprobate this thesis. In our model of a design problem, this can be represented by the supply of low inequality constraints over the empirical adequacy and external consistency of the construct. As an evaluation problem, confirmation bias suggests that a serious PC adherent would be bound to give low scores for the alethic epistemic values of the thesis.

Again, the kind of rationality that is traditionally treasured as guiding philosophy and science is not the expressive rationality of identity-protective cognition; it is a rationality of *objectivity*. It demands us not to constrain the space of feasible hypothesis based on idiosyncratic preference, no matter how personally important. If we allow values such as sexual equality, natural egalitarianism, and extreme politeness to constrain science and philosophy, I predict we will produce worse science and

philosophy due to spurious directions prompted by these values. Politically correct philosophy can only thrive contingently.

5.7.2. Consequence #2: Politically Correct Philosophy is Ineffective as Philosophy

It may be true that human males struggle more than human females with multitasking [155], but I believe that we can be much more certain on the shortcomings of certain fields of inquiry at multitasking. This may still strike as unreasonable; what about the fields of inquiry that are arguably very accomplished at dealing with massive projects involving multiple conflicting goals, such as the various branches of engineering, which consistently supply us with new designs of cars, planes, and satellites?

What explains the success of the engagement with *some* MOO problems in *some* fields of engineering is a conjunction of peculiarities; in the context of design problems, engineers are often privileged with the possibility of developing a precise mathematical description of the problem at hand. For that, they often have the most reliable and tested physical science at their service and may offload a lot of the hard cognitive effort into machines with dedicated computational resources of unmatched power in the hunt for the solutions roaming the Pareto frontier.

Philosophers are not so lucky, the field being largely informal and problems often lacking a precise definition. Perhaps there is truth in the metaphilosophical statement that, for every field of inquiry, philosophy “is what you have to do until you figure out what questions you should have been asking in the first place” [156] (Chapter 2.1). Philosophy in its most pure of intellectual pursuits is, arguably, underperforming (see [118]). If one sincerely wishes philosophy *qua* philosophy to be cognitively progressive, represented as finding the set of highest quality solutions C for a class of problems P (or their nearest neighbors), I submit that one is *irrational* to expect that philosophy can be simultaneously socially progressive. The very same conclusion is generalizable to politically correct *science*. Supplementing a set of obscure criteria with even more obscure criteria is to overload the epistemic appraiser gratuitously.

5.7.3. Consequence #3: Politically Correct Philosophy is Ineffective as Social Justice

The converse is also true; if the goal of social justice is important for a professional philosopher, it may be the case that the veneer of respectability accrued by this field of inquiry may not even be worth it from the point of view of the standards of political success. For, if philosophy is still conceptualized as truth-seeking to a certain extent, this ideal will frequently be frustrating the design goal of maximizing social justice.

Although the output of social justice can be given an economical characterization, causation in social systems is messy and it may be very hard to evaluate the different impacts of social policies, as economists continually struggle.

I second the *prima facie* case that the basic researcher committed to political activism is better at doing pure political activism, without the restraints of a rationality of objectivity mandated by philosophy and science. Unfortunately, it may be that roughly, this is what is already happening across sectors of the humanities and social sciences; the repudiation of alethic epistemic values of formal rigor, semantic definiteness and empirical adequacy that ground *bona fide* science, often under an exorcism of “positivism”, appears to be most prevalent in degenerating research programs.

6. Defending the Epistemic Integrity of Truth-Seeking Philosophy

In this section, I will consider three broad objections against the theoretical and practical feasibility of splitting up truth from social justice in philosophy. Although some of the arguments presented here are primarily targeting empirical science, under my assumption that different avenues of basic research have a shared structure in epistemic values and goals, I argue that these arguments can be generalized to philosophy as well.

6.1. The Objection from Contextual Empiricism

The case I've built on the relative orthogonality of truth and social justice, save for contingent coincidence, has been flatly rejected by several feminist philosophers over the last three decades. Across the literature, we see the claim that values conducive for social justice may be necessary for truth-conducive rational inquiry.

For instance, reiterating themes from critical theory and postmodernism, Sandra Harding [157] advanced the need for scientific knowledge to be socially situated, in particular when it comes to the lives of the socially oppressed. The conventional standards of empiricism are deemed inadequate for the prospect of maximizing objectivity, retrogressing into an "objectivism"—and not true *objectivity*. Paradoxically, in order for science to achieve "strong objectivity", Harding defends that the social identities of scientists themselves need to be critically considered as also constitutive of a given scientific inquiry, and not merely its salient "objects of knowledge". Even more; the necessity of science to engage in "democracy-advancing projects" (i.e., social justice) can be justified on "scientific and epistemological reasons" [157] (p. 69). This idea is the thesis that so-called "contextual" and "non-epistemic" politically correct values may not be non-epistemic after all but rightfully stand as legitimate *alethic* epistemic values⁴⁰.

What reasons do we have to accept this? A strong case comes from the research program of *contextual empiricism* by philosopher of science Helen Longino⁴¹. In her *magnum opus Science As Social Knowledge*, Longino [160] has meticulously described what is perceived to be the intrusion of sexist ideology into the background assumptions of several biological sciences, from paleoanthropology to neuroendocrinology.

The general picture exposed by Longino's contextual empiricism is this; empirical data is underwhelming. Empirical adequacy *simpliciter* does not exist. The evidential relations that ground empirical adequacy, having as *relata* part of the world (states of affairs, facts, events, etc.) on one side and constructs (hypotheses, statements, sentences, etc.) on the other, are fixed by a class of mental events. It is the mind of the scientist, through his *background beliefs*, which prepares his attentive resources to judge parts of the data (and not others) as salient and which projects hypothetical causal structure among particular events as promising, thereby linking evidence from the world to construct. The truth of the statement '*f* is evidence for *h*' must be relativized to the set of background beliefs of the reasoner in question, for it is the content of these mental states which enable evidential reasoning, bridging an alleged "logical gap" between data and hypothesis. Longino's thesis diverges from famous theses associated with Kuhn, Duhem, and Feyerabend on the theory-ladenness of meaning and observation. There exists greater elbow room for objectivity in Longino's argument for "states of affairs, hypothesis and background beliefs are independently specifiable" [160] (pp. 56–57). Also, background beliefs strike as being primarily *pretheoretical*, non-articulated by default. Background beliefs are posited to be a primary mechanism (though not the sole one) through which ideology may influence scientific inquiry.

I isolate two major claims of the program of contextual empiricism, one theoretical and the other, practical. Under the scheme I have presented, the *theoretical* claim is that it is impossible to employ "pure" alethic epistemic values ("constitutive values" under Longino's terminology) to settle disputes on rival hypothesis, which carry within themselves different sets of background assumptions. Under my framework, the *practical* claim can be read this way; to optimize truth, reliance on certain

⁴⁰ Helen Longino used very similar words to summarize her most important work: "I argued in *Science as Social Knowledge* that social or non-cognitive values could and did serve as cognitive values" [158] (p. 41).

⁴¹ Placing this distinguished philosopher in the same cluster as postmodern feminist critics of science whose output is of limited quality is decidedly unfair. This general sentiment is also echoed, for instance, throughout essays in [159].

contextual values is more efficient than reliance on alethic epistemic values. These include *feminist* contextual values⁴².

For what probably is her most famous example, consider explanations for the co-evolution of the hypertrophied neocortex and manual dexterity which are distinctive of our evolutionary lineage. Many dominant models still place significant emphasis on the selective pressures for tool manufacturing which would enable greater efficiency in the acquisition of animal protein by hunting bands of male hominids [161]. Under androcentric background assumptions, the alleles of “Man, the Hunter” become privileged theoretical entities as the female side of evolution, that of “Woman, the Gatherer”, is overshadowed (for a historical overview, see [162]). Alternative empirically adequate models under different background assumptions may have been neglected and undervalued due to implicit sexist attitudes.

Consider now an analogous example in psychology. In what is now a contemporary classic, psychologists Joseph Henrich, Steven J. Heine and Ara Norenzayan have argued that the status of uncountable results from the behavioral sciences, taken to be descriptive of the human species, may have been compromised [163]. This is because disproportionate amounts of cutting-edge research in the behavioral sciences employ what may be the worst data sets possible to construe inductive generalizations meant to be projectable to the whole of humanity. These data sets are populated with information extracted from what the authors have dubbed “WEIRD” people—that is: *Western, Educated, Industrialized, Rich and Democratic*. To put this in perspective, “a randomly selected American undergraduate is more than 4000 times more likely to be a research participant than is a randomly selected person from outside of the West” [163] (p. 63).

Given these two examples in mind (and assuming they are correct), we may present the following case; wouldn’t the presence of undeniably politically correct values of equality, diversity, representativeness, and inclusiveness (of women in the first case, of non-WEIRD people in the latter) make the research more truth-conducive? That certainly appears to be the case; in the context of the research programs implicated in these examples, these politically correct values are also, under my definition, alethic epistemic values.

However, I claim that they are all *dummy* alethic epistemic values (Definition 5). That is, theoretically, they could all be replaced, without loss of aptitude, with alethic epistemic values such as *statistical rigor* and good old-fashioned *empirical adequacy*. Statistical rigor ensures that no sampling errors are perpetrated and that sound methodology in data gathering is enforced (for instance, in the design of stratified sampling). These alethic epistemic values are preferable since they do not prompt spurious ideological content.

In order not to merely beg the question, I’ll briefly advance some of the arguments brought forth by philosopher of science Stéphanie Ruphy [164] in her defense of the ideal of what is commonly called “value-free” or “value-neutral” scientific practice, taken to be the picture of scientific practice exempt from contextual or non-epistemic values.

First, background beliefs, even if largely pretheoretical, may be reconstrued and expressed as factual claims. For instance, the background beliefs that motivate androcentric paleoanthropology involve factual claims on the preeminence of selection processes in the evolutionary history of one of the sexes (and not the other). If evidential relations are contingent upon background beliefs and background beliefs, being bearers of contextual values, can only be criticized in the light of other contextual values, this appears to lead to a regress of background beliefs embodying contextual values

⁴² Some of the feminist values or “feminist theoretical virtues” Longino advances to guide scientific reasoning, such as old-fashioned empirical adequacy and theoretical novelty, are difficult to be framed as properly “feminist” or even as related to social justice [158]. But criteria such as “applicability to human needs” as in preferring scientific knowledge that “improves the material conditions of human life” instead of mere science “for knowledge’s sake” and “diffusion of power”, under which explanatory models that incorporate “dominant-subordinate relationships” are to be deferred, decidedly strike us as politically correct values.

battling against each other, *ad infinitum*. Also, the program of contextual empiricism is itself deploying an empirical theory on the causal constituents of the cognitive processes involved in evidential reasoning and ultimately theory choice and thus, may be confronted with alternative accounts of these phenomena throughout the history of science. It also predicts rampant empirical underdetermination.

As Ruphy argues in her analysis of key historical cases discussed by Longino, the settlement of seemingly empirically equivalent rival theories sporting different background assumptions and targeting the same data appear to be best explained as being eventually achieved when this equivalence becomes an inequality and that it is possible for evidential support, externally considered from the diverging sets of background assumptions, to point a favorite. It does not have to be unequivocal; if the settlement is secured by non-contextual criteria pointing to a direction, this shows that it is not impossible.

For instance, since Longino authored her opus nearly three decades ago, genetic paleoanthropology has advanced dramatically. Strains of DNA from humans and extinct hominins with over a hundred thousand years of age have been extracted from bodily remains and researchers have devised strict protocols to enable their genetic sequencing with the highest fidelity [165]. Statistical methods designed to detect the presence of natural selection in genomic data are being continuously improved [166]. In the light of these technical accomplishments, the story of “Man, the Hunter” against “Woman, the Gatherer” may no longer be a more hermeneutical exercise of “just-so stories” over the deep history of piles of broken bones but a more precise direction course can be ascertained.

It can also be stated that contextual empiricism appears to render as vacuous distinctions between science and seemingly obvious pseudoscience. For instance, flat-earthers reject the phenomena of ships vanishing in the horizon (which may be as good as it gets as an example of an observation low in theoreticity) as evidence for the hypothesis of a round earth. Some flat earthers (for instance, [167]) have claimed that naked eye observations of such phenomena are nonveridical experiences, perceptual illusions which vanish by aiding the human eye with optical magnification (an ad hoc that can be readily falsified by experiment). Under contextual empiricism, both conceptions may be just as empirically adequate, relativized to their underlying assumptions. Following Ruphy, I take it to be implausible that the standard normative stance endorsed by practicing scientists is creating a delusion by positing a vast asymmetry on the empirical adequacy of these hypotheses.

Also, even in cases of full-blown empirical underdetermination, there also appears to be no theoretical or practical impossibility for the employment of other “constitutive” alethic epistemic values, such as ontological simplicity. Finally, the underlying claim that there cannot be a “value-free” formalization of the relation of evidential relevance singling out the appropriate reference classes for the *explanandum* of a theory can be disputed (for instance, [69] (p. 77)).

If the replacement of inadequate background assumptions for better ones is better explained by old-fashioned, “contextual value-free” standards of empirical success, then the very case of feminist criticism of androcentric ideology across the sciences becomes more robust. It would stand not as a ploy involving arbitrary political victories of background assumptions from one ideology to another, but as the replacement of constructs less conducive for truth for others more conducive for truth screened out under standards of objectivity. The vibrant panorama issued by Helen Longino where scientific knowledge achieves higher degrees of objectivity as an effect of the distributed cognition enacted in communities of scientists with a culture of internal criticism where background beliefs are put into question may remain intact. As for the *practical* or *pragmatic* claim that *locally*, there may be contextual values carrying the status of dummy alethic epistemic values which are indeed more efficient than pure alethic epistemic values at attaining the epistemic goal of truth, I will have something to say on the matter in both the next subsection and in Section 7.3.

6.2. The Objection from the “Feminine Voice” in Ethics

Starting in the 1980s, researchers in moral philosophy and moral psychology have advanced another compelling case for the pervasive presence of epistemically detrimental ideological bias of a sexual nature in both contemporary moral philosophy and empirical accounts of moral development [168,169].

Just as in paleoanthropology, the general sentiment entertained by this researchers is that normative ethical theories have been misconstruing moral psychology by taking male human cognition as prototypical. Those marshaling an *ethics of care* grounded in a distinguishable “feminine voice” in morality have claimed that academic normative ethics has been disproportionately oriented towards (so-called) *masculine* moral values and meta-values such as abstract rule-following, individualistic autonomy and rational disinterestedness at the expense, ignorance, and deprecation of (so-called) *feminine* values such as person-to-person interaction, social connectedness, and empathy.

The clashes between a communitarian virtue ethics exposing the “feminine voice”, where caring, needs and responsibilities are central and a “masculine” liberal deontological or consequentialist ethics grounded in justice, rights and duties range may appear hopeless at first sight, but possible routes for complementarity and synergy have been advanced [170].

From reasonable assumptions of the supervenience of moral action and judgment onto human social behavior and cognition, the possibility that the distinct contributions to moral reasoning by about *half* of the agents involved in these interactions have been neglected rises. And from this, a *prima facie* case for the conclusion that traditional moral theories exposed by professional philosophers can be significantly *defective* emerges. More; it could allegedly show an actual nontrivial instance of truth and social justice going hand in hand. I shall construct such as argument, whose general form is potentially generalizable for other examples.

From The Ethics Of Care To social justice

- P1 Normative ethics is a truth-seeking field of inquiry
- P2 The constructs devised by a truth-seeking field of inquiry ought to be truthful
- P3 For (the constructs of) normative ethics to be truthful, it ought to be sensitive to moral psychology
- P4 Moral psychology comprises feminine values
- C1 Therefore, to be truthful, normative ethics ought to be sensitive to feminine values
- P5 For normative ethics to be sensitive to feminine values, it cannot over-privilege the role of masculine values in moral psychology
- P6 Normative ethics over-privileges the role of masculine values in moral psychology
- C2 Therefore, normative ethics is not truthful
- P7 For a given field of inquiry, an alethic epistemic value is a value that increases the truthfulness of their constructs
- P8 Truth-seeking fields of inquiry must endorse their respective epistemic values
- P9 Sexual inclusiveness of women in normative ethics is a value that increases the sensitivity towards feminine values
- C3 Therefore, for the field of inquiry of normative ethics, the sexual inclusiveness of women is an alethic epistemic value
- C4 Therefore, the field of inquiry of normative ethics must endorse the value of sexual inclusiveness of women
- P10 Sexual inclusiveness of women is also a politically correct value that enhances the goal of social justice
- C4 Therefore, normative ethics ought to adopt a value that enhances the goal social justice
- P11 If a field of inquiry ought to adopt a value that enhances the goal of social justice, then it is compatible with social justice
- C5 Therefore, normative ethics is a truth-seeking field of inquiry that is compatible with social justice

As it is, for this argument to work, it appears to assume the truth-aptitude of the constructs outputted by normative ethics (P1), which in turn may require metaethical commitments such as moral cognitivism. Let us grant this.

First, I repeat the same strategy from the subsection above; I argue that in this case, the sexual inclusiveness of women is a *dummy* epistemic value. It is indirectly tracking the *empirical adequacy* and *statistical rigor* of the content of human moral psychology onto the content of normative ethics due to a sampling error. If moral philosophers were to diligently examine their biases and conclude that they are not feasible according to truths of human social cognition, there would be no need for the value of sexual inclusiveness.

Second, the conclusion is too modest; compatibility of social justice with truth-seeking fields of inquiry. This compatibility cannot easily be transformed in necessity. The adoption of a value that enhances social justice as a *byproduct* does not imply that social justice must be a conscious goal. The fact that philosophy may accidentally promote social justice is a trivial matter, already acknowledged previously.

Alas, we can be charitable and circumvent this reply with some additionally reasonable premises:

- P12** For a truth-seeking field of inquiry, if the adoption of a dummy epistemic value tracking an epistemic value is more efficient for attaining truth than its avoidance, then the field of inquiry ought to adopt it
- P13** The adoption of sexual inclusiveness of women in normative ethics is more efficient for attaining truth than its avoidance
- C5** Therefore, normative ethics ought to adopt a value that enhances social justice
- C6** Therefore, normative ethics is a truth-seeking field of inquiry that requires the promotion of social justice

Given the pessimistic picture I have issued with a model of epistemic appraisal, the pragmatic power of dummy epistemic values cannot be understated and now appears to bridge a strong connection between at least a major branch of philosophy with the ideal of social justice. However, I hold that this particular case is not compatible at all with social justice. For that, I shall phrase a counter-argument; for the sake of it, let us consider only endorsements of the value of sexual inclusiveness of women which are motivated by considerations stemming from the ethics of care:

- P11** If the adoption of a value by a field of inquiry assumes the truth of a politically incorrect hypothesis, then the field of inquiry is incompatible with social justice
- P12** The adoption of a value by a field of inquiry ought to be rational
- P13** The adoption of the value of sexual inclusiveness of women in normative ethics ought to comply with certain standards of rationality
- P14** The adoption of the sexual inclusiveness of women in normative ethics implies acknowledging the truth of variation in the moral psychology of men and women
- P15** The variation in the moral psychology of men and women demands an explanation
- P16** To rationally endorse a proposition which includes an *explanandum* requires the endorsement of the best *explanans* available
- P17** The best explanation for the existing variation in the moral psychology of men and women implies the existence of significant genetic causes
- C7** Therefore, to rationally adopt the value the sexual inclusiveness of women in normative ethics is to acknowledge significant genetic causes in the variation of moral psychology
- P15** To rationally acknowledge the truth of an empirical hypothesis is to endorse the research methods that have led to this truth and their other truthful results
- P16** The research methods that have led to the truth of the variation in the moral psychology of men and women have concluded that there are socially appraisable traits where men fare in average better than women due to significant biological causes

- P17** To rationally adopt the value of sexual inclusiveness of women in normative ethics implies acknowledging that there are socially appraisable traits where men fare in average better than women due to significant biological causes
- P18** The hypothesis that there are socially valuable traits where men in average fare better than women due to significant genetic causes is politically incorrect
- C8** Therefore, the adoption of sexual inclusiveness of women in normative ethics (due to considerations stemming from the ethics of care) is incompatible with social justice

The empirical evidence for the case that existing patterns of cognitive, affective and behavioral sexual dimorphism which are cross-culturally robust in humans are partly mediated by heredity is compelling (see for example [171–173]; for some social constructionist and environmentalist responses, see [174,175] (Chapter 9) and [176].

If the above argument is safe and sound, this means that the lessons from the ethics of care are not really socially progressive in the sense I have exposed. The acknowledgment of truths about human sexual diversity rationally entails truths perceived to be politically incorrect. Theorist Nel Noddings places the epicenter of the ethics of care is instinctive maternal love which predates humanity, and that is shared with all mammals, linking evolutionary biology with normative ethics.

This line of thought is not new. It, I argue, is what may be lying beneath criticisms of the ethics of care on the ground they expose “essentialist stereotypes” of men and women, violating the general thesis of the social construction of sex and gender.

One could also argue that this very ideal of a steadfast disinterested pursuit of truth just is more androcentric and sexist ideological introgression, the product of unfairly eulogizing and cultivating tendencies of the male psyche⁴³. If this is true, then science and philosophy guided by standards of objectivity can be accused by PC adherents of unfairly manifesting a “masculine voice”. For instance, it has been argued that women who enter the scientific community need to adopt a “masculine rationality” at either “conscious or subconscious level” and that “the scientific method incorporates *masculine features* such as the objectification of nature” [177]. If this hypothesis in cognitive anthropology is correct, it will make standards of objectivity illegitimate; that would be a genetic fallacy. The fact that the etiology of alethic epistemic values could originally involve as precursors the interests and tendencies manifested in the minds of denizens of so-called oppressive groups does not imply that alternative modes of inquiry with equivalent epistemic prowess at extracting truths about the world built upon other cognitive tendencies and values are possible (as argued by postcolonial theorists and feminists who defend the possibility of “Afrocentric” and “feminist” sciences).

6.3. The Objection from Political Philosophy

An obvious observation appears to make the case of removing political values from philosophy strike as ludicrous. For *political philosophy* has been developed in both the East and the West since at least since the 6th century BCE by Confucius and Pythagoras and political philosophy is, presumably, a legitimate field of inquiry. Following this attitude, Mario Bunge goes as far as to claim that “the very notion of an apolitical political philosophy is an oxymoron” [11] (p. VIII).

The problem with political philosophy is not *political* content *per se* but the *a priori* unwarranted presumption of degrees of truth and falsity for constructs motivated by a pre-established ideological core and the introduction of contextual values with spurious, non-truth-conducive, propensities. As philosopher Bas van der Vossen argues, “the task of the political philosopher is to seek the truth about politics”, and empirical evidence supports the thesis that political *activism* may significantly debilitate the tools of thinking of political philosophers through cognitive biases modulated by the worldview of the philosopher [178].

⁴³ And of the psyches of potentially other oppressive groups, such as White people

Critics may object that while that may be reasonable for *descriptive* political theory, not so for *normative* political theory. And isn't the very same thing true for other normative fields such as ethics or epistemology? It appears to be the *telos* of any normative theory to carry built-in *practical* goals. For instance, standards of *persuadability*—good normative theories must be cogent for a particular range of agents to be implementable.

If this is true under the framework I have described, it means that we should expect normative theories to suffer from additional burdens in comparison to basic research. It is a testimony to how difficult these disciplines are. The intrusion of practical goals would make normative theories both less effective at attaining their goals and more susceptible to ideologies. This matter imposes upon us additional reasons of why we ought to be extra careful at evaluating political philosophy. If ideology is inescapable, then given the pervasiveness of cognitive bias, I contend that normative political philosophies as *fields of inquiry* are at the imminent danger of becoming indistinguishable from political philosophies as *political ideologies*. It is no accident that terms such as 'libertarianism' and 'conservatism' name both political ideologies and families of theories in political philosophy and political science.

7. Epilogue: Make Philosophy Truthful Again

We now enter a very perilous terrain: the domain of prescription under practical goals. For the sake of consistency with my project, this entails caution.

It is an old sociological sleight of hand to claim that criticism of political ideology is itself politically ideological. It may be so; however, this is no defeater for this project. If basic fields of inquiry cannot exist without underlying ideology, and always carry within themselves a residue of militancy and fanaticism, the best we can do is to make sure it this militancy and fanaticism are focused in the pursuit of truth. Let us use, when possible, our top-down cognitive processes to intelligently design and enforce self-corrective memetic mechanisms onto the philosophical *Leitkultur*.

With truth unrestrained from biases, basic fields of inquiry are bound to output many true statements that are *contingently* politically correct. However, the contingency that there could exist domains of rational inquiry in philosophy which are impervious to social justice is not worth the shot. By the standards of critical theoretical and postmodern philosophers and sociologists of knowledge who are trained to see the workings of oppressive ideology *everywhere* (and by *everywhere*, I mean even in chemical thermodynamics, i.e., [179]) there may exist no such academic "safe space" in communities nurturing the PC memplex.

7.1. A Call for Radical Separation

For the truth-seeking partisan, the truth is too important to be compromised by petty ideology, be it of "right", "center", "left" or any other dimensional axis.

I call for a *radical separation* of not only social justice from philosophy but of any content motivated by social, political or religious ideology that consciously or unconsciously imposes constraints on the truth of statements as safeguards for their ideological cores. Following the very same prescription by Haidt [1], this can happen at the institutional level of universities, but one can imagine it happening at various other settings. Such segregation has already been willfully performed by believers of certain worldviews. For instance, those adhering to the worldview of Biblical literalism have devised their very own peer-review journals which are explicit in their ideological commitments. All the editors of the *Journal of Creation* ⁴⁴ publicly adhere to a statement of faith which include the religious belief that the first chapters of the Book of Genesis are literally true. One can imagine similar journals being formed under the allegiance of core tenets of PC (or even existing ideologically committed journals becoming more transparent in their pre-existing and non-negotiable ideological commitments).

⁴⁴ <http://creation.com/journal-of-creation-writing-guidelines>

The conflict I have depicted is not a clash between a “cold” disembodied reason against “warm” bodily feeling; its values *all the way down*. It’s a war where I hope values which are conducive for objectivity in the quest for truth will overthrow values which are not.

If it is true that PC has wrecked the epistemic integrity and quality of academic philosophy, how may we reverse the damage that has already been done? I have thus chosen three values which I stipulate could help attain this goal. The first needs to be embodied in philosophical theory and practice, the second at the institutional level and the third, onto the characters of philosophers.

7.2. *The Alethic Epistemic Value of Empirical Adequacy*

PC exists in between a mismatch at how the world *is* and how many would *want* the world to be. The coalescence of social constructionism, critical theory and postmodernism may have given to many the appearance that social phenomena are indefinitely malleable by good will and social engineering, erecting a misleading folk anthropology in the process, particularly when it comes to the truths of human biological diversity. I thus claim that the key is securing the *empirical adequacy* of our representations.

If metaphysical naturalism is true, the groundwork of reality does not care about our personal feelings and sensibilities. Only local aspects of reality, like us, do. Reality is not—and never will be—a “safe space.” Reality, in all its exuberance and diversity, is big enough to supply us with endless permutations of unwelcome facts. There are plenty of actual and potential empirical truths ready to offend denizens of the entire political spectrum, not just “left-wingers”. There are conservatives who are appalled at the thought of having nonhuman ancestors or of homosexuality having hereditary components. Libertarians who reject by fiat empirical results on the constraints of human rationality and aspects of human nature which point towards social dependency and collectivism also exist. Even the few monarchists lurking around may be reticent to be informed on the historical record of tyrannical royal dynasties or the phenomenon of regression to the mean which makes wise kings father rather underwhelming princes.

How may one strive for greater empirical adequacy in factual domains reeking of ideology and minimize the *moralistic fallacy*, the inference from moral reprobation to factual falsity? I second a Bayesian methodological recommendation⁴⁵ issued by a recent (and very politically incorrect) paper by evolutionary psychologists Bo Winegard, Benjamin Winegard and Brian Boutwell [180]. Although the stipulated approach is advised by the authors for behavioral scientists dealing with inquiries on etiologies in the nature-nurture debate, the general strategy could be applied to any problem in philosophy that potentially carries politically incorrect empirical content. Here is how it goes; if a given topic or research field has been ideologically compromised (such as the ontology of a given social genus), it probably is the case that it has already accumulated too much conceptual rubble, such as unwarranted inferences and biases of all kinds. The cognitive effort at separating the men from the boys may not be worth it from a cost-effective analysis. Instead, let us start from a slate as clean as possible by assuming a situation of complete ignorance and positing equal priors for the contending constructs. Then, piecemeal-wise, proceed by deploying argument after argument and after each evaluation of the evidence, adjust the priors accordingly. Record the accumulated inferential history so that it can be replicated by other researchers.

Naturally, this is much better said than done. Such an approach is bound to have more success given the appropriate social setting, which brings us to our next value.

7.3. *The Dummy Alethic Epistemic Value of Political Diversity*

The greatest threat of existing “echo chambers” across higher education may be the construction and maintenance of *institutionalized disconfirmation*: nurturing academic settings where it is expected

⁴⁵ Winegard et al. in turn are mentioning the approach originally described in [181].

that your axiological and theoretical unequals will challenge your most treasured propositions [40]. Such scenario has the effect of suppressing confirmation bias and potentially disrupting epistemically illegitimate consensus. Concerning a PC “echo chamber”, a way this can be built is by enhancing the *political* diversity of the community towards the “right-wing” end of the spectrum. Diversity, so much hailed with PC adherents, does not apply to political belief for many political beliefs are seen, according to my analysis, as the breeding grounds of social *injustice*.

Political diversity is hereby posited to be a *dummy* epistemic value. It just is a *proxy* for what ultimately matters, epistemically—statistical rigor, explanatory power, empirical adequacy, and so on. It may be, however, of enormous *pragmatic* value and the most effective way to build institutionalized disconfirmation.

How may professional philosophy come to honor this value? A strangely ironic political dilemma emerges; translated into policy, does this mean affirmative action quotas for non-PC philosophers? Even if institutionalized disconfirmation could be achieved under a relatively low threshold of non-left wing philosophers, this proposal is bound to elicit discomfort for conservative and libertarian philosophers who are strongly opposed to affirmative action as a matter of ethical principle.

This prescription is congruent with Helen Longino’s [158] picture of optimized scientific engagement grounded on “critical interactions among scientists of different points of view”. If this is the most effective way to attain objectivity, so be it.

But how well does this translate into philosophy? There are differences between science and philosophy which hint at institutionalized disconfirmation being potentially less effective for philosophy. Institutionalized disconfirmation requires nontrivial publicly shared evaluation standards which may not exist across different philosophical traditions. For instance, inside the analytic tradition of philosophy, a Thomist metaphysician may staunchly disagree with a scientific metaphysician concerning the epistemic authority of pre-theoretical intuitions and the boundaries of *a priori* knowledge, which in my model translates into different rankings by both parties on the importance of alethic epistemic values such as intuitiveness and self-evidentiality. An optimistic answer to this is that successive critical metaphilosophical engagement between different philosophical traditions may result in greater epistemic commensurability over time. A pessimistic answer is that if the epistemic field of philosophy is bound to be an aggregation of robustly self-encapsulated subfields, the phenomenon of institutionalized disconfirmation will only be local.

7.4. The Virtue of Moral Courage

Contemporary ethicists make a distinction between *physical courage* and *moral courage*. *Physical courage*, or valor, is the virtue to thwart fear from preventing one to do what is right, at the risk of having his *bodily* integrity harmed - the cutting of flesh, breaking of bones and spilling of blood up to complete *physical annihilation*. Moral courage, in turn, is the virtue to thwart fear from preventing one to do what is right, at the risk of having your *social* integrity harmed - the loss of friends, the ruin of professional careers and the damaging of reputation up to complete *social annihilation* [182].

Up until recent history [183] (p. 90), there was no sharp bifurcation between valor and moral courage. Ancient philosophers simply called it ‘courage.’ For to rise against established despotic authority was the same thing as jeopardizing his bodily integrity, putting your own life at stake ⁴⁶.

In today’s world, I speculate that the current political homogeneity in Western academia has stimulated an increase of *moral cowardice* among philosophers that do not align politically with the current left-wing trend. In particular, those who are at the beginning of their careers. It is understandable; many young philosophers, often struggling economically, face a very hard

⁴⁶ Not many centuries ago throughout Medieval and Modern Era Europe, this could have been a *literal* stake depending on which heretical thoughts you uttered.

multicriteria decision-making problem, one in which the virtue of prudence emerges as a heuristic to stomp any dangerous desires and prevent the prospects of academic suicide.

If this is true, one of the most tragic effects of this state of affairs could be the existence of an invisible but prevailing *self-censorship*. How many truth-seeking thoughts of prime epistemic quality in a myriad of important topics may not have been recorded and shared out of fear? This imposition of conceptual barriers over what can and what cannot be pursued by human intelligence may be crippling for philosophical creativity.

Rome wasn't built in a day, nor was the enormous social infrastructure that supports PC. It took decades of cultural evolution (Postulate 2.1). Reversing this trend will require hard work. I finish this paper with a call for the masses of disenfranchised philosophers to embrace this heroically. To provide a fitting end to my case, I have taken the poetic liberty to borrow some of the words as well as some of the spirit of a certain German philosopher who was particularly articulate⁴⁷.

Think dangerously! Build your conferences at the plain sight of social justice warriors!
Submit your truth-seeking politically incorrect papers into academic safe spaces! Live at an
intellectual war with your academic peers and yourselves! Be brave and uncompromising
free thinkers for as long as the PC thought police subsists, you seekers of true knowledge!

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Appendix A

Appendix A.1. Preliminaries from Measurement Theory

I'll work under naïve set theory and first-order logic with equality and shall liberally assume on the fly any mathematics I need (such as arithmetic with the operation of division). All sets presented are by default taken to be finite and nonempty except for set of real numbers \mathbb{R} . For the sake of brevity, any mention that a set 'is' a particular entity will be an abbreviation for 'represents' a certain entity.

For the following measurement-theoretical constructs, I'll assume the theory of functions.

Definition A1 (Generic Relational Structure). A generic relational structure \mathfrak{S} is an ordered n -tuple $\langle A, R_1, \dots, R_n \rangle$ where A , the domain of \mathfrak{S} , a set whose elements represent objects of a certain class and each R is a k -ary relation among these objects (not necessarily of the same arity).

Definition A2 (Comparative Structure). Let $\langle M, \succ \rangle$ and $\langle \mathbb{R}, \geq \rangle$ be a pair of relational structures where M is the domain of a generic relational structure and \succ is an ordering relation. Then $R = \langle M, \succ \rangle$ is a comparative structure if and only if (adapted from [184]):

- An homomorphism $\phi : M \rightarrow \mathbb{R}$ exists
- For all $x, y \in M, x \succ y \rightarrow \phi(x) \geq \phi(y)$ (ϕ is isotone)

The function ϕ is also called a *monotonically increasing function*. These structures form so-called *ordinal scales*.

⁴⁷ The excerpt was adapted from Friedrich Nietzsche's *The Gay Science*, § 283

Theorem A1. For a relational structure $\langle M, \succ \rangle$, if an ordering relation \succ is total and transitive, $\langle M, \succ \rangle$ is a comparative structure (for proof, see [185])

Definition A3 (Extensive Structure). Let $\langle M, \succ, \oplus \rangle$ and $\langle \mathbb{R}, \geq, + \rangle$ be a pair of relational structures where M is the domain of a generic relational structure, \succ is a binary ordering relation and \oplus is an empirical binary operation of concatenation. Then $R = \langle M, \succ, \oplus \rangle$ is an extensive structure if and only if (adapted from [184,186]):

- An homomorphism $\phi : M \rightarrow \mathbb{R}$ exists
- For all $x, y \in M, x \succ y \rightarrow \phi(x) \geq \phi(y)$ (ϕ is isotone)
- For all $x, y \in M, \phi(x \oplus y) = \phi(x) + \phi(y)$ (ϕ is additive)
- For all $x \in M$ and $z \in \mathbb{R}_+$, if $\phi'(x)$ is isotone and additive, then $\phi'(x) = z \cdot \phi(x)$ (ϕ is ratio-scalable)

Given the prevalence of prototypical physical quantities such as duration and mass in the experimental sciences, the classes of structures that uniquely specify ratio scales have been the most studied in the axiomatic representational theory of measurement. Several different accounts for the sufficient conditions for such an homomorphism to exist have been provided (see for instance [146] (p. 226), [184,186,187]), often motivated by constraints of empirical decidability. I employ a structure of this kind to characterize material wealth, but I leave it open which axioms are required to flesh it out properly. For instance, it is unclear whether we need an axiom of density [146] (p. 226) for there may be an *infimum* of monetary value (a certain fraction of a cent in an arbitrary currency).

Appendix A.2. An Ontology of Collectives

I adapt the following results extensively from Mario Bunge [188] (pp. 27–33). This subsection will liberally assume several constructs from abstract algebra.

Definition A4 (Mereological System). A mereological system is a semigroup $\langle S, \circ \rangle$ where:

- S is a finite set of individuals, called *atomic individuals*
- \circ is a *finitary, associative, binary operation* that is *closed* in S , the operation of *aggregation*
- Members of S are *idempotent*, so that for $x \in S, x \circ x = x$

The operation of aggregation is used to represent broad types of arrangements between individuals, like those characterized by natural law (such as having cells with a certain karyotype) and social convention (such as self-reporting a particular gender).

Definition A5 (Part-Whole Relation). For a mereological system $\langle S, \circ \rangle$, a part-whole relation \sqsubset is a relation where:

- \sqsubset is *transitive, reflexive* and *anti-symmetric*
- If $x \circ y = y$, then x is a *part* of the *whole* y , i.e., $x \sqsubset y$

Any whole whose atomic individuals are individual human beings will be called a *human population*.

Theorem A2 (Suprema of Aggregates). For any two individuals x and y which are elements of S , the association $x \circ y$ is the supremum for x and y with respect to the part-whole ordering relation \sqsubset .

- Proof: see [188] (p. 31)

Postulate 23 (Suprema of Mereological Systems). Every set S from a mereological system $\langle S, \circ \rangle$ has a supremum, denoted by $[S]$.

Definition A6 (Aggregation of Individuals). For a mereological system $\langle S, \circ \rangle$, the aggregation $x_1 \circ x_2 \circ \dots \circ x_n$ of all the members of S is its supremum $[S]$.

This development was made explicit to allow the following; take the elements of S to designate the 23 football players from Brazilian National Football Team. Then $[S]$ is the aggregation $x_1 \circ \dots \circ x_{23}$. Since the part-whole relation is reflexive, then $[S]$, the Brazilian Football Team is itself a logical individual $z, z \in S$.

Appendix A.3. A Social Taxonomy of Human Populations

First, we describe a generic taxonomy, a nested hierarchy of *species* and *genera* (adapted from the conjoint work of Mario Bunge and Martin Mahner, [189] (p. 255)). We view a certain *equivalence class* as $K = \{x \mid Px\}$, where P is either a property or a conjunction of properties.

Definition A7 (Species of a Population). For an aggregate $[S]$ and an equivalence relation \sim_1 over S .

- The set of *species* $\mathcal{S} = \{S_1, \dots, S_n\}$ of S are the equivalence classes produced by the quotient set S / \sim_1

Definition A8 (Genus of a Population). For a set of species \mathcal{S} and an equivalence relation \sim_2 over \mathcal{S} .

- The *genus* \mathcal{G} of S is the *equivalent class* produced by the quotient set \mathcal{S} / \sim_2 where \sim_2 picks a nontrivial superordinate property or set of properties shared by all members of \mathcal{S}

In Social Oppression Theory (Appendix A.3), each social genus has at least two species. We now deploy other adapted Bungean constructs, those of *monospecific* and *polyspecific* populations [188] (p. 154).

Definition A9 (Monospecific Population). An aggregate $[S]$ is a monospecific population with regard to a genus \mathcal{G} with n species if and only if $S \subseteq S_{i \in I}, I = \{1, \dots, n\}$.

Definition A10 (Polyspecific Population). An aggregate $[S]$ is a polyspecific population with regard to a genus \mathcal{G} with n species if and only if there exists at least two atomic individuals x and y inside S where $x \in S_{i \in I}$ and $y \in S_{j \in I}, I = \{1, \dots, n\}$.

Appendix A.4. A Toy Model of Wealth

This subsection will assume the construct of an *extensive structure* from measurement theory (Appendix A.1), which brings with itself the theory of functions. We'll also deploy the constructs from the Ontology Of Collectives (Appendix A.2) where we form populations by aggregating atomic individuals.

Definition A11 (Material Wealth). A theory of material wealth is 4-tuple $\mathfrak{E} = \langle \mathfrak{S}, \mathfrak{W}, \mathfrak{N}, \triangleleft \rangle$ where:

- \mathfrak{S} is a mereological system $\mathfrak{S} = \langle S, \circ \rangle$ where:
 - S is a set of *atomic individuals*, the individual human beings $S = \langle \alpha, \beta, \gamma \dots \rangle$
 - \circ is an associative binary operation of *aggregation* among elements of S
 - x, y, z, \dots are *human populations* inside S formed by the operation of aggregation
 - The largest population of S , $[S]$, is the *human society* being analyzed
- \mathfrak{W} is an *extensive structure* $\mathfrak{W} = \langle W, \succ, \oplus \rangle$ where:
 - W is a set of assets with monetary value u, v, w, \dots

- \succcurlyeq is the binary relation “more or equal in value than”
- \oplus is an empirical commutative and associative operation of *concatenation*
- \mathfrak{N} is a *numerical relational structure* $\mathfrak{N} = \langle N, \succeq, + \rangle$ where:
 - \mathbb{R}_+ is the set of positive real numbers
 - \succeq is the formal relation “greater or equal than”
 - $+$ is the arithmetic operation of *addition*
- \triangleleft is a binary relation of *ownership* between elements of S and elements of W

Axiom 12. The binary relation \triangleleft is asymmetric (*irreflexive, transitive, anti-symmetric*).

Axiom 13. For all $\alpha \in S$ and $u, v \in W$, if $\alpha \triangleleft u$ and $\alpha \triangleleft v$, then $\alpha \triangleleft u \oplus v$.

Axiom 14. For all $\alpha, \beta \in S$ and $u \in W$, if $\alpha \triangleleft u$ then $\neg(\beta \triangleleft u)$.

This axiom is *prima facie* false for it makes co-ownership of a same individual asset impossible. It was stated for purposes of simplification. A way to secure its plausibility is with the following ad hoc: for an asset t allegedly co-owned by human beings α and β , t can be decomposed as the concatenation of two distinct objects $t = u \oplus v$ and we may have $\alpha \triangleleft u$ and $\beta \triangleleft v$.

Axiom 15. For all $\alpha, \beta \in S$ and $u, v \in W$, if $\alpha \triangleleft u$ and $\beta \triangleleft v$, then $\alpha \circ \beta \triangleleft u \oplus v$.

Through aggregation, we may form human populations of certain social kinds. The *collective wealth* of a social group thus simply is the concatenation of all the assets owned by its members.

Axiom 16. For a fixed system of currency $\$$ and a concatenation of material goods $w \in W$, the monetary value m of w is the image of a function $f : W \rightarrow \mathbb{R}_+$.

This axiom is merely the lawful assignment of monetary values to a collection of material assets. Assuming the ratio-scalability of monetary value, the function f is of the form $y = ax$, where a is a real number greater than zero. Conversions other currencies are achieved by multiplication with the proper positive real number.

This axiom is inconsistent with the possibility of *negative wealth* due to debt. I am deliberately excluding this possibility also for the sake of simplicity. Under this framework, debt would be interpreted as the possession of an asset with negative value of worth.

Appendix A.5. Social Oppression Theory

For this subsection, I'll assume the preceding theory of equality of outcome alongside the described social taxonomy for human populations (Appendix A.3)

Definition A12 (Social Oppression Theory). A theory of social oppression is a 7-tuple $\mathfrak{O} = \langle \mathfrak{S}, \mathcal{G}, \mathfrak{W}, \mathfrak{R}, O_i, P_i, f \rangle$ where

- \mathfrak{S} is a *mereological system* $\mathfrak{S} = \langle S, \circ \rangle$ where:
 - S is a set of *atomic individuals*, the individual human beings $S = \langle \alpha, \beta, \gamma \dots \rangle$
 - \circ is the associative binary operation of *aggregation* among elements of S
 - The largest population of S , $[S]$, is the *human society* being analyzed
- \mathcal{G} is a subset of S , the superset of *social genera* $\mathcal{G} = \langle \mathcal{G}_1, \mathcal{G}_2, \mathcal{G}_3 \dots \rangle$

- x, y, z, \dots are human populations inside \mathcal{G}
 - * n_j designates the number of atomic individuals composing a population $j \in \mathcal{G}$
- Each social genus \mathcal{G}_i has as a subset a superset of social species \mathcal{S}
- $\mathfrak{R} = \langle \mathfrak{M}, \mathfrak{N}, \phi \rangle$ is the fixed *representational standard* for monetary value
 - \mathfrak{W} is an *extensive structure* $\mathfrak{W} = \langle W, \succ, \oplus \rangle$, the *material wealth* of the society
 - \mathfrak{N} is the *numerical relational structure* $\mathfrak{N} = \langle \mathbb{R}+, \geq, + \rangle$
 - * $m_k \in \mathbb{R}+$ is the monetary value of owned concatenations of assets by a population $k \in \mathcal{G}$
 - ϕ is an homomorphism $\phi : W \rightarrow \mathbb{R}+$
- O_i is a family of relations closed on S , the relations of *social oppression*
- P_i is a family of relations closed on S , the relations of *privilege*
- f is a function $f : O_i \rightarrow \mathcal{G}_i$

The following axioms are the regimented versions of Axioms 1-7 in the main text (Section 4.6):

Axiom 17. A relation of oppression xO_iy is asymmetric (irreflexive, transitive, anti-symmetric).

Axiom 18. The function f that assigns relations of oppression to social genera is bijective.

This axiom was defined this way to avoid cumbersome quantification over predicates, which would require a second-order logic.

Axiom 19. For all $x, y \in S, xOy \rightarrow x, y \in \mathcal{G}_i$.

Axiom 20. For all $x, y \in \mathcal{G}_i$:

- $(xO_iy) \wedge (|\mathcal{S}_i| = 2) \rightarrow (x = [\mathcal{S}_1]) \wedge (y = [\mathcal{S}_2])$
- $(xO_iy) \wedge (|\mathcal{S}_i| > 2) \rightarrow (x = [\mathcal{S}_1]) \wedge (y = ([\mathcal{S}_2] \circ \dots \circ [\mathcal{S}_n], n = |\mathcal{S}_i|))$

Axiom 21. For all $x, y \in S$, for all $m \in n \in \mathbb{R}+, xO_iy \rightarrow \frac{m_x}{n_x} > \frac{m_y}{n_y}$.

Axiom 22. For all $x, y \in \mathcal{G}_i$, for all $m, n \in \mathbb{R}+, \exists z, w \in \mathcal{G}_j, \frac{m_1}{n_1} > \frac{m_2}{n_2} \rightarrow (zO_jw \wedge (\mathcal{S}_i \cap \mathcal{S}_j \neq \emptyset))$.

Axiom 23. For all $x, y \in S, xO_iy = xP_iy$.

Appendix A.6. Anthropological Mental Egalitarianism

AME will deploy the preceding constructs plus the theory of probability and statistics.

Definition A13 (Anthropological Mental Egalitarianism). A theory of anthropological mental egalitarianism is an 8-tuple $\mathfrak{A} = \langle \mathfrak{H}, \mathcal{G}, \mathfrak{M}, I, \mathfrak{N}, \mathfrak{R}, \Omega, \Theta \rangle$.

- \mathfrak{H} is a mereological system $\mathfrak{H} = \langle H, \circ \rangle$ where:
 - H is a set of *atomic individuals*, the set of all individual human beings $H = (x, y, z, \dots)$
 - \circ is the associative binary operation of *aggregation* among elements of H
- \mathcal{G} is a subset of H , the superset of *social genera*, $\mathcal{G} = (\mathcal{G}_1, \mathcal{G}_2, \dots)$

- Each social genus \mathcal{G}_j has as a subset a superset of *social species*, $\mathcal{S}_i = (\mathcal{S}_{j1}, \mathcal{S}_{j2}, \dots)$
- \mathfrak{M} is a superset of k comparative structures $\mathfrak{M} = \langle H, \succ_{i \in I} \rangle$, the *mental attributes*, where:
 - $\succ_{i \in I}$ is an *empirical relation of comparison* “greater or equal than”
- I is an *index set* $I = (1, \dots, k), k \in \mathbb{N}$ designating specific mental attributes
- \mathfrak{N} is a *numerical relational structure* $\mathfrak{N} = \langle \mathbb{R}, \geq \rangle$ where:
 - \mathbb{R} is a set of real numbers $\mathbb{R} = (n, o, p, \dots)$
 - \geq is the formal relation “greater or equal than”
- \mathfrak{R} is a superset of k triples $\mathfrak{R} = \langle \mathfrak{M}, \mathbb{N}, \phi_i \rangle$, the *representation standards* for mental attributes
 - ϕ_i is a homomorphism $\phi_{i \in I} : M \rightarrow \mathbb{R}$, the assignment of a numerical value to a human being for a particular mental attribute
- Ω is a subset of \mathbb{R} , the set of *upper bounds* of mental attributes
- Θ is a set of k functions $\Theta = (\iota_1, \iota_2, \dots)$, the *functions of socioeconomic significance* $\iota_{i \in I} : A \times A \rightarrow [0, 1]$

The following axioms are the regimented versions of Axioms 8-11 in the main text (Section 4.9):

Axiom 24. For all $x \in H$, for all $i \in I$, there is one and only one $n \in \mathbb{R}$ so that $\phi_i(x) = n$.

Axiom 25. For all $x \in H$ and for all $i \in I$, there is one and only one $n \in \mathbb{R}$ so that if $\phi_i(x) = n$, then there is one and only one $\omega \in \Omega$ and $n \leq \omega$.

Axiom 26. For all $x \in H$, for all $y \in H$, for all $i \in I$, there is one and only one $\omega_x \in \Omega$, there is one and only one $\omega_y \in \Omega$ respectively for $\phi_i(x) = n$ and $\phi_i(y) = o$. Then:

- If the interval $[\omega_x, \omega_y]$ is *socioeconomically significant*, $\iota_i(\omega_x, \omega_y) = 1$
- If the interval $[\omega_x, \omega_y]$ is *socioeconomically insignificant*, $\iota_i(\omega_x, \omega_y) = 0$

Axiom 27. For all $x \in \mathcal{S}_{j1}$, for all $y \in \mathcal{S}_{j2}$, for all $i \in I$, assuming that x and y are independent and identically distributed random variables over \mathcal{G}_j , then $\Pr(\iota_i(\omega_x, \omega_y) = 0) > 0.5$.

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