

The Color of Money:
Philanthropy and the Green Revolutions
in India and Sub-Saharan Africa

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Abstract

On September 12, 2006, the Bill and Melinda Gates and Rockefeller Foundations issued a joint statement announcing the establishment of the Alliance for a Green Revolution in Africa, meant to lift 20 million Africans out of poverty and reduce food insecurity by 50 percent. This project models itself after its namesake, the Green Revolution of the post-World War II era. The original Green Revolution dramatically increased agricultural output in regions all over the world, but did so at a steep ecological and social price. In this paper, I will draw upon the example set by the Green Revolution in India to evaluate what we know about the Alliance. To do so, I will examine the role philanthropic foundations have played in these Green Revolutions, specifically looking at the way they construct depoliticized narratives, reorganize class divisions, and co-opt social resistance to perpetuate existing capitalist power structures at the expense of marginalized populations.

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-Introduction-

On September 12, 2006, the Bill and Melinda Gates and Rockefeller Foundations – currently the two largest philanthropic foundations in the country – issued a joint statement announcing the establishment of the Alliance for a Green Revolution in Africa (AGRA). AGRA, a multi-institutional effort to “put at least 15 countries on track for attaining and sustaining a uniquely African Green Revolution”¹ kicked off this campaign with an initial \$150 million grant to bolster the production of genetically enhanced high-yield variety seeds (HYVs). Though the Alliance is still in its early phases, it has since matched its seed program with those that sponsor the distribution of inorganic fertilizers and those that work to reduce the barriers to market entry for smallholder farmers.²

This multipronged institutional effort is named and modeled after the famed Green Revolution that dramatically increased agricultural yield across Latin America and Asia in the post-World-War-II era. Originating in Mexico when Rockefeller-sponsored agronomist Norman Borlaug discovered his Nobel-Prize-winning “miracle” high-yield seeds, the Green Revolution spread around the world at a rapid pace. These seed varieties quickly became the cornerstone of the project, and when couple with additional foreign inputs such as chemical fertilizers, increased grain yields substantially. Within a few years, India went from being a country on the brink of famine to one self-sufficient in food production.³ However, while many consider the Green Revolution an unqualified success, it did come with a number of devastating ecological and social ramifications, wrecking Indian soils and driving farmers who couldn’t afford these new inputs off their land and into the cities. The aftermath of this upheaval is still being felt in India today.

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For any major institution like AGRA to model its efforts after this project demonstrates a short-sightedness that is highly problematic.

It is important to recognize that the geopolitical contexts in which these Green Revolutions have occurred are in many ways dissimilar. The first Green Revolution occurred at the height of the Cold War, when economic development abroad was a key component of the United States foreign policy. Widespread hunger in this context was no longer just hunger; it represented a vulnerability to the creep of communism, and its alleviation via capitalist institutions would represent a victory for the West. Today, on the other hand, we live in a society in which the tenets of late 20th-century neo-liberalism – privatization, deregulation, and the freeing of global trade – remain entrenched in our national ethos, even though the financial downturn may have marked the beginning of the erosion of capitalist hegemony. While leading institutions in the private sector have unsurprisingly long-since championed the economic philosophy behind this economic trend, only recently have public and third-sector actors too begun to appropriate market-based solutions for the advancement of public good. No comparison of the Green Revolutions will suffice without an adequate understanding of the political landscapes in which their architects have and continue to exist.

One key parallel between the two Green Revolutions that has largely escaped scholarly analysis is the unique role philanthropic foundations have played not only in the funding of these projects, but in their planning and execution as well. To analyze this dynamic, however, is to first question the position of philanthropic foundations in American democracy. Although foundations enjoy their substantial legal privileges and the goodwill the public bestows upon them as altruistic organizations, a closer look at

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their institutional structures reveals that they are wholly undemocratic institutions. Often they are governed by boards unrepresentative of demographics their grants target, and accountable only to themselves. The tension between the role of the philanthropic foundation as a redistributive actor and its lack of procedural legitimacy is one that only a few critics have tackled academically, and is one that I hope to develop throughout this paper.

Liberal foundations, the focus of this thesis, are without a doubt the most influential and most controversial of what is an admittedly diverse sector. These foundations – including the Rockefeller, Ford, and Gates Foundations – are defined by the inherent limitations their capitalist biases impose upon their efforts to tackle the roots of society's ills. Indeed, the philosophies dictating the operation of the three aforementioned foundations do mirror the key characteristics of the major corporations from which their philanthropists earned their respective fortunes: the Rockefeller Foundation with its affinity for industrialization, the Ford Foundation with its technocratic and efficient management, and the Gates Foundation with its conviction in the profit-generating potential of intellectual property rights – these are not coincidental.

It should come as little surprise, then, that even the most well-intentioned philanthropic activity on the part of these foundations is guided by institutionalized capitalist biases, which foundations exhibit through various means. In the interest of preserving and exporting American capitalism, liberal foundations engage in the construction and dissemination of narratives that frame deeply rooted political problems as ones that merely require neutral, “technocratic” fixes. This framework allows them to impose market-based solutions that ultimately crowd out inefficient producers and

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exacerbate existing inequalities. Finally, with the influence that great sums of wealth affords, these foundations have the capacity to drown out dissenting civil society voices, implementing what Arnove labels “cultural hegemony.”⁴ As evidenced by my two case studies, liberal foundations paradoxically reinforce exploitative capitalist structures that allow those that already obtain capital to profit at the expense of marginalized populations.

On the one hand, I would be hesitant to generalize all of philanthropic activity, which is obviously comprised of a heterogeneous set of endeavors in fields ranging from education to global health, based solely on the case studies of the two Green Revolutions, the first in India¹, the second in Sub-Saharan Africa. On the other hand, the Rockefeller, Ford, and Gates Foundations, with their sizeable endowments and vested interest in the maintenance of the economic system that allowed for their existences, are the archetypal liberal foundations, and their respective Green Revolutions are among their most touted, if not *the* most touted, of their efforts. For the purposes of this paper, then, I will rely on these two case studies as evidence to support my claim that liberal philanthropic foundations have and continue to operate guided by an underlying philosophy that ultimately undermines or even inhibits their ability to effect the meaningful positive change they (at the very least rhetorically) hope to effect.

¹ Although the Green Revolution of the 20th century was global in nature, spreading most notably across Mexico, India, Pakistan, and the Philippines, I have chosen to focus on India exclusively. I have done so not only due to its massive increase in agricultural output thanks to Green Revolution technologies, but also due to the fact that it is in this context more than any other that I believe the Rockefeller and Ford Foundations’ influence and strategic interests were explicit factors in the implementation of the project.

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Before launching into an analytical comparison of the two Green Revolutions, in the following chapter I will contextualize the work of liberal foundations within the scholarship surrounding philanthropy. Some of this literature is theoretical, deriving the various sources, or lack thereof, of foundation legitimacy in our pluralist democracy. The rest, however, is empirical, and traces the history and evolution of these institutions since their emergence at the turn of the 20th century in America.

Having defined in greater detail the role of the liberal foundation as an unintentionally political actor, I turn in Chapter 2 to a study of the Green Revolution in India in the years following World War II. In this chapter, I will demonstrate how upon entering India, the Ford and Rockefeller Foundations persuaded the young government to abandon social reform in favor of industrialized agriculture, ultimately increasing food production but at the expense of the country's soil and smallholder farmers. In Chapter 3, I will lay out the proposals and early activity of the Alliance for a Green Revolution in Africa. Although the organization is too young to be subject to a thorough scholarly critique, its adherence to Green Revolution values and the ties it shares with major agribusiness corporations give skeptics good reason to believe that the same environmental degradation and political instability that the original Green Revolution entailed will make their way to Africa. Finally, in the concluding chapter of this thesis, I will outline not only the conditions that need to be met for successful alternatives to the Alliance, but also the role philanthropic foundations can play in making these hypothetical situations realities.

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-Chapter 1-
Liberal Foundations

“The system that makes the foundation possible is probably worth preserving.”
*Henry Ford II, former chairman of the Ford Foundation*⁵

Introduction

In the introduction to his 1983 book detailing the influence major philanthropic foundations have had on American foreign policy, Edward Berman expresses incredulity at the lack of research regarding the role these foundations play in shaping major state decisions.⁶ Although the field has become more populated in the nearly three decades since Berman published his book, it nonetheless remains sparse. Philanthropic foundations have by and large escaped scholarly analysis. With the literature that does exist, I will attempt to properly contextualize the cases of the Green Revolutions in India and Africa by surveying the debates surrounding the highly contested nature of foundation legitimacy, trace foundation evolution throughout recent American history, and break down the ways through which these foundations perpetuate exploitative capitalist structures.

While I by no means wish to attack the intentions of those behind philanthropic activity, theoretical and empirical research points to the fact that capitalist biases inevitably guide a certain type of foundations’ institutional behavior and obstruct their ability to address the root of the social ills they seek to cure. Through the construction of misleading narratives to frame their efforts and the monopolization of philanthropic discourse in the third sector, liberal foundations (a distinction I will make clear below) undertake projects that can restructure society in ways that have severe economic and political ramifications for the populations they wish to serve.

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Defining Philanthropic Foundations

The philanthropic foundation explored in this paper is a uniquely American institution.⁷ Although Europe has a thriving sector of charitable institutions, organizations the size of the Gates, Fords, and Rockefeller Foundations are only found in the United States. And, unlike in Europe, the U.S. common law tradition draws no legal distinction between member-based and asset-based institutions, so foundations are legally indistinguishable from all other non-profit organizations. Despite this legal ambiguity, these foundations should not be confused with the much broader non-profit sector, or even smaller philanthropic organizations. Nor should they be confused with large public charities that collect funds from the public. Grant-making private foundations instead tend to derive their funds from a single individual, family, or corporation.⁸ To adopt Howe's definition, a philanthropic foundation is "a non-governmental nonprofit organization having a principal fund of its own, managed by its own trustees or directors, and established to maintain or aid social, educational, charitable, religious, or other activities serving the common welfare."⁹ As non-profit institutions, the government grants these philanthropic foundations significant tax deductions (albeit not the complete tax breaks offered to grant-seeking 501(c) organizations).

Although philanthropic foundations are large, multifaceted, and diverse institutions, in many cases their power lies in the designated board of trustees, which usually consist of only several to a dozen members. "For legal purposes, the trustees are the foundation," writes Kiger.¹⁰ As in the cases of Rockefeller Foundation, Ford Foundation, and now the Bill and Melinda Gates Foundation – of which Bill Gates, Melinda Gates, and Warren

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Buffet are the three trustees¹¹ – many of the larger philanthropic foundations are operated by boards that consist of the donor along with family, friends and business associates.¹² Although foundation staff now can number into the thousands, in the 1950s, it was rare for a foundation’s staff to exceed several dozen.¹³

Foundations exist as an embodiment of the American desire for a limited state and economic liberalism. Arnove, one of the pre-eminent critics of philanthropic foundations, credits foundations’ “unprecedented autonomy” not only to the resources at their disposal, but also to their symbolic position as re-distributional actors within a pluralistic society.¹⁴ Or, if we draw upon Habermas’ theory of “civil privatism” – which he defines as a collective interest “in consumerism and leisure on the one hand, and in a career orientation suitable to status competition on the other”¹⁵ – foundations signify a remedy to a society void of altruistic intent, one that instead venerates competition, achievement, and consumption. They compensate for collective negative externalities yet do not challenge our allegiance to private economic activity.¹⁶

As much as foundations are said to serve to counterbalance individual self-interest, they also seek to occupy a much grander space in global society. Proponents of philanthropic foundations often speak of the role of these institutions in constructing international community, usually employing grandiose rhetoric to do so. Iriye, as just one example, claims that they have taken their place among other non-governmental actors in contributing to “global human well-being, and transnational, transcivilizational understanding.”¹⁷ Given the vast amount of influence the philanthropic sector has acquired over the past century, these ambitions are not entirely out of reach.

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Foundation Legitimacy

A recurring theme in the literature surrounding philanthropic foundations is the issue of foundation legitimacy, the origin of which is a point of contention among scholars. The idea of legitimacy has been heavily debated in the history of political theory. Scholars traditionally discuss the concept of legitimacy as it pertains to public authority in the state system. Though these ideas are not easily transferrable to a discussion of private institutions, we can still draw upon much of these ideas to construct a framework of legitimacy of philanthropic foundations.

Max Weber is a leading scholar in the realm of political legitimacy. In his *Economics and Society*, he outlines a multipronged definition of political legitimacy that is rooted in agreed upon rational rules bound in tradition and vested in personal authority.¹⁸

Heydemann and Toepler in their *The Legitimacy of Philanthropic Foundations* apply this definition to philanthropic foundations, claiming:

“The privilege accorded to foundation assets derives in part from law, yet legal frameworks themselves flow from deeply held and near-universal *traditions* that view charitable giving as an expression of individual and collective virtue. Further, foundations often rely on their standing as the organizational means through which the authority of a *charismatic leader*, the founding donor, acquires a *bureaucratic-rational* form of legitimacy [emphasis mine].”¹⁹

This hybrid definition, they argue, best reflects both the legal and empirical ambiguity of foundational legitimacy.

At the same time, we cannot overlook, as Heydemann and Toepler purposefully do, the distinction put forth by Schaar. He identifies two types of legitimacy: lexical and normative. The more technical lexical legitimacy – or procedural legitimacy, for the purpose of this discussion – he says, is obtained when institutions meet the requirements

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of the law or other authoritative powers. Normative legitimacy, on the other hand, is more a reflection of how society perceives the role of foundations in an altruistic society. It is achieved when the “*behavior* [emphasis mine] of an institution is perceived as fair and just,” thus formally embodying collective values. These two, of course, are not exclusive of one another, but are rather mutually reinforcing: the legal capabilities of an institution naturally inform its behavior. Moreover, when governments grant foundations legal permission to operate in their existing form, they inherently bestow upon them society’s implicit moral approval.²⁰

In discussing the legitimacy of philanthropic foundations, I will adopt a modified version of Schaar’s procedural and normative models. In determining procedural legitimacy, I will question not just if these institutions conform to the basic standards of the law, but also if their governance structure resonates with that of a higher authority, in this case a democratic state. If debates about procedural legitimacy surround issues of the *means* of a foundation’s operations, debates of normative legitimacy surround the *ends*. By that, I mean I will question which values these institutions represent, and what the outcomes are in which these values manifest themselves. Of course, as Heydemann and Toepler are quick to point out, these definitions do overlap. Nevertheless, if we are to analyze foundation legitimacy in an analytical fashion, it is necessary to systematically crack open this disputed term.

Procedural Legitimacy

On most fundamental level, foundations are procedurally legitimate institutions. They are constitutionally protected in the United States, and their operations are prescribed by

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the law. Moreover, proponents argue, they are not bound to the “bottom-line preoccupations” market or governmental actors are, and can thus develop a long-term vision and enact projects that do not require immediate returns.²¹ Nevertheless, probing more deeply into the structure of philanthropic foundations reveals a lack of popular representation and accountability among foundation leadership. These voids in and of themselves do not condemn all foundational philanthropic activity, but they do necessitate, by the most utilitarian standards, a normative legitimacy to justify an otherwise undemocratic means of institutional governance.

Representation

Given that the majority of foundations are governed by wealthy trustees (often from just several families), there is an inherent disconnect between a foundation’s leadership and its intended beneficiaries. This asymmetry is to be expected, of course, and is not in and of itself problematic. Indeed, the government has codified many philanthropic efforts into public policy. In this way, then, foundations serve as the pseudo-research-and-development branch of the popularly elected state and as the “catalyst[s] and broker of ideas.”²²

Nevertheless, Berman points to the alarming tendency of foundations to espouse values of Schumpeter’s “democratic elitism.” In theory, he says, foundations serve those who otherwise might not have a voice in democratic society. By educating and training underserved populations, foundations encourage meritocracy by allowing the most talented of those groups to rise to positions of influence and responsibility.²³ Of course, given that this meritocracy is hardly prescribed in the institutional governance structures

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of most foundations, the “democratic” component of this democratic elitism is only external to the foundation.

Furthermore, foundations are by no means bound to distribute funds equitably. There are no checks against foundation privileging institutions that serve their leadership’s best interests, rather than those chosen by elected representatives.²⁴ Arnove notices a similar pattern, writing that the character of most philanthropic endeavors “denotes the ethnocentrism of an elite group from a particular class and cultural background, who arrogate the right to determine public policies in critical areas of culture not only for U.S. society but other societies as well.”²⁵

Accountability

In the case of philanthropic foundations, a lack of representation goes hand in hand with a lack of accountability, a facet of foundations that has been well documented. Nobody discusses the issue in as much detail as Frumkin, who lists three of the most commonly cited factors behind the demands for such accountability: tax breaks redirect government revenues to wealthy private actors, philanthropic spending can have profound implications for the well-being of entire populations, and the relationships forged out of this spending are inherently characterized by power asymmetries.²⁶ In recent years, Congress and non-governmental actors have called for greater foundation accountability, but these orders have lacked specificity and have thus gone largely unheeded.²⁷

Accountability is a key underlying theme of American democracy; indeed, most major actors in the United States are held responsible to some form of authority, be it

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internal or external to their institutions. Obviously, public officials must uphold the demands of their constituents to remain in office, just as CEOs of for-profit corporations are bound to the wishes of board members and company shareholders. Even operating non-profit organizations, as opposed to foundations, derive their funding from stakeholders, such as universities or hospitals, that can withdraw their donations if they are dissatisfied.²⁸

At the risk of generalizing what is admittedly a very diverse group of institutions, philanthropic foundations are not held to the same standards of accountability as their public, private, and fellow non-profit counterparts. They do operate, of course, with a degree of internal accountability, in that foundation staff must carry out the orders of trustees, but this already minimal accountability is undermined by the fact that trustees are accountable only to themselves. Foundations have neither share- nor stakeholders to whom they must answer, nor are they obligated to meet the desires of their intended beneficiaries, like institutions in the public and private sector are. Says Fleishman,

Among grant-seeking non-profits, Darwinian survival of the fittest is the rule: when money dries up because donors lose faith in a particular non-profit, it disappears. Yet foundations rarely go out of existence, no matter how effective or ineffective they are perceived to be. In other words, unlike in the public and profit sectors, and the grant-seeking civic sector, there is no functioning “market” in the grant-giving sector.²⁹

The freedom to act unhampered by restrictions set by others is only minimally impacted by foundations’ relationship with peer institutions. While the number of watchdog organizations has certainly shot up in recent years, their ability to effect any sort of substantial change is still heavily curtailed by foundations’ substantial legal privileges.³⁰

To understand this lack of accountability more systematically, I return to Frumkin. He points out two standards of accountability to which society holds its institutions, both of

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which foundations meet insufficiently. The first of the two, democratic accountability, exists when a democratic vote binds representatives to their constituents.³¹ “The right to vote breathes meaning into the idea of accountability because it expresses consent and creates a sanctioning mechanism that can be applied if the behavior of the representative is not faithful to the interest of constituents,” he says.³² As demonstrated above, appointed-for-life trustees need not worry about such checks on their influence. Though Frumkin speaks only of democratic governance, this standard of accountability can be loosely exported to the private sector as well: instead of the vote, consumers vote with the dollar, and those corporations the public deems inadequate simply do not earn a profit and go out of business.

The second kind of accountability, mutual accountability, is not as enshrined in our political values. It requires a commitment between all involved parties of an interaction to uphold their agreed upon responsibilities to one another.³³ In that except when they voluntarily consult with elected public officials or civil society leaders foundations give grants almost entirely on their own terms, they all but fail to meet this standard as well. Because grants are “one-way streets” limited by few rules or regulations, he goes on to argue, philanthropic foundations do not operate wholly within the sphere of accountability.³⁴ This dynamic does have its advantages, as it allows for the efficiency and risk-taking difficult in an elected and representative body, or one that requires an earned profit.³⁵ Moreover, foundation spokespeople claim, foundations have become increasingly transparent in recent years. But institutional transparency cannot substitute for an official mechanism of accountability. Ultimately, foundations lack the degree of internal or external accountability we expect from such major concentrations of power.

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The fact that foundations can allocate funds according to their own agendas and largely unchecked by countervailing actors is cause for concern in a society that prides itself in a degree of reflexivity between the public and its sources of authority.³⁶

Normative Legitimacy and Liberal Foundations

Thus far, I have discussed philanthropic foundations as a homogenous unit, all with the same structures, motivations, and strategies. While some foundations share similar traits, as a whole they can be subdivided into several categories. And because normative legitimacy is so deeply predicated upon the behavior of a foundation, which differs by genre, it is important to hold off here on any discussion of normative legitimacy and first speak in greater specificity about liberal foundations, where the focus of this paper lies.

Liberal Foundations

Though these subcategories differ by scholar, for the sake of simplicity, I will draw upon the three put forth by Faber and McCarthy: progressive, liberal, and conservative.² Progressive and conservative foundations, as their labels denote, abide by explicitly partisan agendas, be they the fight for social and economic justice by the former or the bolstering of New Right think tanks by the latter. Liberal foundations, however, are the most successful and powerful of the three.³⁷ According to McCarthy and Faber, they

often appear willing to fund grassroots organizations and movements for social change, their true intent is to push for the types of limited reforms that address various social problems in a manner that does not challenge the prevailing power structure of American capitalism.³⁸

² Faber and McCarthy include a fourth genre, alternative funding institutions, but since they bear little resemblance to their progressive, conservative, or liberal counterparts, they fall outside the scope of this discussion.

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I am cautious to assign intent to the actions of these foundations. Indeed, there is much evidence to support the fact that foundation trustees strive to find innovative means of helping others as efficiently and as effectively as possible. At the risk of minimizing the agency of the trustees, one can argue that operating in a society that not just encourages but *necessitates* economically liberal activity, their goals and strategies are bound to disregard the true origin of the social ills they seek to remedy. History has demonstrated that the outcomes of this strategy are sometimes problematic. As explicated below and in the following chapters, the three foundations featured in this thesis – Rockefeller, Ford, and Gates – are all archetypal liberal foundations, and their respective Green Revolutions, in which industrialized agriculture has preempted social reform, are emblematic of their underlying philosophies.

Roelofs describes liberal foundations in more depth. With the original goal of remedying society's most pressing issues, these foundations – whose peers include the Carnegie and Sage Foundations – are in this way based in the most fundamental sense in the progressive ideology of the early 20th century. But they by no means are left-leaning organizations. In all other aspects, she says, they are much more rooted in the pro-capitalist mindset of mid-century and now 21st-century neoliberal politics. Largely as a product of their governance structures, foundations as institutions are inherently biased in favor of the capitalist and only implicitly political principles upon which they were founded.³⁹ Initiatives sponsored by liberal foundations can include everything from community development corporations – “residents are not likely to revolt against a system because of its inconsistency when they are receiving pragmatic gains,” Roelofs says – to, more recently, microenterprise programs.⁴⁰ In this way, she says, liberal

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foundations divert civil society resistance to “safe” channels within a capitalist sociopolitical landscape,⁴¹ an idea that will be explored more thoroughly below. As a result, she argues, liberal foundations can at best affect only limited social change, and at worst exacerbate the problems afflicting their supposed beneficiaries.

Here, we can unpack how liberal foundations in particular capitalize on their veil of universality and lack of oversight to engage in practices that are not wholly legitimate. The issue is not that these foundations in and of themselves are contradictory institutions; rather, it is that liberal foundations are not fully justified in seeking normative legitimacy out of their supposed embodiment of collective American values.

“Pluralism” and Hegemony

Proponents of philanthropic foundations point to the contributions to American pluralism these private institutions make. They provide public goods, the argument goes, but can resist an interventionist government. These non-profits serve as the voice for those the private and public sectors deem unworthy of protection.⁴² These claims might hold weight were liberal foundations not guilty of what Italian scholar Antonio Gramsci refers to as cultural hegemony. He puts forth the theory that simply through the dissemination of ideas, the ruling elite can dictate the collective activity of even a heterogeneous society. By flooding the less-educated non-elite with cultural and ideological symbols, the privileged classes could imperialize the masses and inspire certain behavior within, rather than forcibly imposing it from above.

Gramsci, who spent the later years of his life imprisoned by the ruling Fascists, divides the ruling elite into two classes that share the same interests: the state and the

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dominant “intellectuals” of civil society, or those who control society’s “major productive resources.”⁴³ Writes Arno, “For Gramsci, intellectuals and schools were crucial to the development of consensus in society, to the rationalization and legitimation of a given social order. Cultural hegemony mitigated the necessity for the state to use its coercive apparatus to control groups which might otherwise be disaffected.”⁴⁴ If the state could rely on the intellectual elite to guide the attitudes of the state’s constituents via education and culture, the state could preemptively strike against potential situations of unrest.⁴⁵

Although Gramsci was referring predominantly to the Catholic Church in his discussion of intellectuals, the same holds true for philanthropic foundations today. Especially in the case of economic development domestically or abroad, philanthropists act as theoretically apolitical “salesmen” of ideas.⁴⁶ Liberal foundations have a history of establishing universities in politically unstable regions to ensure the training of future leaders to promote economic and political strategies that will ultimately be in the best interests of the dominant American class. In doing so, writes Berman, foundations effectively take the place of (or distract from) “more overt forms of economic and military imperialism that are so easily identifiable.”⁴⁷ Much of this hegemony is derived from the near lack of accountability explicated above. In the case of liberal foundations, the supposed neutrality of foundational behavior contributes to the readiness of targeted populations to accept their initiatives. Liberal foundations, then, have the capacity to create vehicles through which they can construct their vision of the public good.

Preserving the Status Quo

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“The best philanthropy involves the search for cause, an attempt to cure evils at their source,” said Rockefeller.⁴⁸ The ability to produce social change is, says Prewitt, “no doubt the strongest candidate to justify the special privileges of private foundations.”⁴⁹ The problem with liberal foundations is not that they stifle change all together. Indeed, foundations have made great inroads, among many things, the reduction of disease, the bolstering of infrastructure, and protection of the environment. The issue is that, as will be discussed in greater detail below, the solutions to social ills these foundations seek are inevitably limited. They are reactive: they make up for market failures, without truly addressing the factors that contribute to these failures. Of course, the onus should not lie on foundations to trigger such structural changes, but their methodology is generally marked by a rejection of strategies that would better help them achieve their lofty stated goals. Despite Rockefeller’s claims, liberal foundations are designed not to attack but rather to preserve the sources of inequality that facilitate the accumulation of excess wealth, and they have a history of promoting capitalist institutions whose continued existence prohibits necessary structural reform.

Thus, we see that though foundations in general have positioned themselves as contributors to pluralist society,⁵⁰ liberal foundations demonstrate neither full procedural nor normative legitimacy by democratic standards. Yet it is an assumed legitimacy that has allowed foundations to quietly evolve under a benign façade that is only deserved in some circumstances. Though American history is dotted with instances of resistance to foundations’ philanthropic efforts, their means of allocating funds have gone largely

ignored by the media, which have allowed some foundations to pursue – regardless of actual intent – strategies of civic disempowerment.

History of Philanthropy

Having established liberal foundations as semi-illegitimate actors, we now move onto an examination of the history of philanthropy in the United States. Because the Rockefeller, Ford, and Gates Foundations are three of the most prominent liberal foundations, an overview of their basic histories fits neatly into this discussion. Dowie breaks up the 20th century into three waves of philanthropy, all overlapping and “imprecisely bounded by particular historical events.”⁵¹ They are as follows:

First Wave

The first of these waves began at the turn of the century, in the heart of the Progressive Era. In 1910 and 1913 respectively, Andrew Carnegie and John D. Rockefeller, the nations’ two wealthiest industrialists, established foundations as a means of channeling their overwhelming fortunes into formal institutions to address what they saw as the most pressing needs of society. Immediately it was clear that if grant making was the vehicle of philanthropy, rationality was behind the wheel. In line with the prevailing thought at the time, Carnegie, Rockefeller, and their successors developed their foundations with an emphasis on the social sciences and professionalization of charity. They “shared a conviction that society was advanced by the generation and sharing of knowledge. They believed that new learning would create progress, expand wealth, and advance civilization and human welfare,” writes Dowie.⁵² In this first wave,

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an explicit support for capitalism had yet to emerge; rather, major investments in education and science were the product of the movement's underlying philosophy.

Unburdened by Congressional regulation,⁵³ these millionaires were essentially given free license to do what they wished with their funds. In a rapidly industrializing society rife with emerging ideas regarding political economy, foundations had the power to allocate resources to the institutions and projects that best suited their founders' interests. Say Slaughter and Silva, "The foundations, in effect, subsidized the manufacture and distribution of some ideologies and not others, eventually to the extent of trying to create a consuming public for their subsidized wares."⁵⁴

Nevertheless, it was due to this saturation of new ideas that the Rockefeller Foundation actually floundered initially. Though the Foundation and its affiliated corporation were two legally separate entities, it was deeply embedded within the corporate structure, sharing offices, staff, and prominent decision-makers with the business. Moreover, Rockefeller exported the vertical corporate structure of his Standard Oil Company to his new foundation, sitting atop it among a board of trustees comprising fellow industrialists.⁵⁵ Naturally, then, tied to an institution that had reaped the benefits of a deregulated industrial society, the Foundation launched a series of projects that collectively comprised a thinly veiled attack against the union forces that were threatening their "capitalist control of American industrialization."⁵⁶ But in a period marked for its shift towards unionization and other more socialist policies, even the wealth of resources at the Foundation's disposal could not sway a disgruntled public that was calling the hegemony of capitalism into question. As space opened for a more vocal public, civil society leaders decried the concentration of wealth in the hands of the few.⁵⁷

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In these early years, the Foundation struggled to cement its place among an array of groups disseminating their own competing ideologies, and few of its projects could be considered unqualified successes.⁵⁸

The Second Wave

The second wave of philanthropy, which Dowie locates in the immediate post-World-War-II era, was, in a sense, characterized by the juxtaposition of two competing paradigms. On the one hand, it retained the Progressive Era's fetishism of knowledge but placed a much greater emphasis on science and engineering. Fresh off a war in which the United States demonstrated its technological prowess, the political climate was receptive to advances in engineering and scientific research. On the other hand, foundations increasingly placed social issues such as poverty and inequality under the microscope, as they "used the power of grantsmanship to create links among nonprofit organizations, social science researchers, reformers, and government agencies."⁵⁹ This ideological shift reflected the geopolitical reconfiguration that the post-war reconstruction entailed. This new order elevated the notion of the nation-state (and would come to serve as a precursor to the Western-Soviet dichotomy of the Cold War). Eager to launch a preemptive strike against communism's creeping influence abroad, the United States wasted no time rebuilding a war-torn Europe in the capitalist tradition, and foundations staked their claim in this multilateral nation-building project.⁶⁰ To reconcile these two perspectives, foundations collectively assumed a strategy that identified the natural sciences as a guaranteed means of remedying social inequalities.

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In this second wave, the Rockefeller and Ford Foundations (the latter of which was founded in 1936) expanded their programs domestically and internationally; indeed, it was in this era that they truly flourished. They successfully launched numerous projects, many of which were squarely aligned with the objectives of the United States following the war.

In 1939, the Rockefeller Foundation made a series of grants to the Council on Foreign Relations as part of a “War-Peace Studies Project” that the government eventually integrated into its foreign policy strategy. These projects called for greater corporate investment abroad and increased access to raw materials “deemed essential to the expansion of the national economy” and to national security.⁶¹ Education remained a recurring theme in foundation grants; starting in the mid-1950s, the foundation allocated nearly \$5 million every year to research universities abroad.⁶²

Though the initial founder had ceded control, the same conservative leanings dictated the actions of a new board of trustees that, like Rockefeller, was recruited from the high ranks of society and thus had a vested interest in preserving the competitive economy in which they had acquired their fortunes. In the 1950s, the board was not necessarily opposed to the idea of change. Always looking to evolve to “a more efficient functioning of colonialism” and “to ways of controlling the trade cycle,” it even welcomed innovation that would increase efficiency and greater industrialization. This ideology Fisher brands “sophisticated conservatism.”⁶³

Just as the Rockefeller Foundation’s structure mimicked its affiliated corporation, the Ford Foundation’s technocratic leadership reflected the managerial structure of Ford’s corporation, famed for its assembly-line efficiency.⁶⁴ But instead of automobiles, the

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Ford Foundation's stated number one priority was the establishment of peace.⁶⁵ Like its counterpart at Rockefeller, Ford Foundation leadership took a strong interest in promoting education abroad, funding training programs for both the social and natural sciences, with the explicit hope of maintaining stability in these developing countries.⁶⁶

Moreover, it quickly became a stand-in for U.S. government abroad when the state was unwelcome. Writes Bell, "Moral and developmental goals, technocratic and professional standards, and relative institutional independence endow large foundations with a degree of legitimacy and political aloofness."⁶⁷ This perceived autonomy allowed it to facilitate in the mid-1950s a "steady stream of scholarly exchange" with the Soviet Union, no small feat in the height of the Cold War.⁶⁸ The willingness with which foreign officials accepted the diplomatic activities of the Ford Foundation in particular abroad gave the institution a great degree of freedom in the execution of their development projects.

This second wave marked a monumental shift for the Rockefeller Foundation, and set the state well for the ascendancy of the Ford Foundation. It was in this wave that the two first established their agricultural development projects that would later comprise the Green Revolution.

Third Wave

The third wave, which is predominantly outside the scope of this thesis, emerged in the 1960s and signaled the rise of explicitly partisan philanthropy. With an eroding faith in the ability of governments to solve the world's most pressing social issues, many of the new philanthropists of this era steered their foundations away from state-foundation

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partnerships and towards the realm of civil society: “Social movements, they concluded, were necessary catalysts to such change.” The causes these foundations cautiously endorsed included civil rights, environmentalism, and feminism. (Unsurprisingly, writes Dowie, organized labor was the only social movement excluded from this paradigmatic shift).⁶⁹

The landscape of philanthropy showed signs of heterogeneity for the first time during this period. Foundation support of social movements quickly became a highly contentious issue, with progressive and conservative foundations positioning themselves on opposing sides of the debate. “Politics,” says Dowie, “became a philanthropic issue.”⁷⁰ The new era of philanthrocapitalism (which I will discuss momentarily) is in the process of displacing this third wave, and many progressive foundations that have not dissolved remain limited in size. Still, several of the major foundations that emerged out of this period – particularly the Macarthur Foundation on the left and the Hoover Institute, American Enterprise Institute, and the Heritage Foundation on the right– still enjoy a great degree of influence today.

“Fourth” Wave

It would be presumptuous to label the present era as the fourth wave of philanthropy. But, as posited by more than one scholar, philanthropy has undergone a significant change since the end of the 1990s, namely with the advent of “philanthrocapitalism,” or the use of market mechanisms through the vehicle of philanthropy to affect social change. In essence, the goal of philanthrocapitalism, or “venture philanthropy,” is to break the cycle of poverty by reducing the barriers to the global market that low-income producers

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face and increasing their access to necessary material assets.⁷¹ “As the philanthropists see it,” writes Green, “if they can use their donations to create a profitable solution to a social problem, it will attract far more capital, far faster, and thus achieve a far bigger impact...than would a solution based entirely on giving money away.”⁷² It should be noted there is an important distinction to draw between philanthrocapitalism and corporate philanthropy. While the former denotes an approach to giving that employs business tactics, the latter refers simply to charitable giving on the part of private corporations.⁷³

Somewhat paradoxically, we can view philanthrocapitalism through two opposing frameworks. Understood one way, the rise of philanthrocapitalism mirrors the emergence of the Rockefeller Foundation in the Progressive Era, in that it is a similar response by the world’s wealthiest individuals to a society that is growing increasingly skeptical of free-market economics following the crash of 2008.⁷⁴

But examined from a different perspective, one that traces the movement’s history beyond the immediate past, philanthrocapitalism is simply the perpetuation of the neo-liberal policies of the 1990s, which are rooted deeply enough in our political economy to withstand the challenge posed by the existing economic crisis. Faber and McCarthy speak of this paradigmatic shift, pointing to “the political vacuum created by the declining role of the neoliberal state in ‘nurturing’ civil society” – domestically and abroad – “coupled with the increased dependency of revenue-starved government agencies” on philanthropic endowments as sources of foundation authority. It is this authority that encourages these foundations to employ strategies that privatize and deregulate actions and decisions once undertaken by the public sector.⁷⁵

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Both frameworks lend evidence to the idea put forth by Michael Edwards – one of the young movement’s few scholarly critics – that philanthrocapitalists are quietly (though, again, most likely unintentionally) replacing more substantial social reform from the agenda with superficial fixes.⁷⁶ The latter, however, bases the idea in a history beyond the immediate politico-economic context, and thus allows us to understand how years’ worth of political activity have enabled the movement to take shape.

Due to its sheer size, the Gates Foundation, with which the term “philanthrocapitalism” is heavily associated, influences not just the behavior of its grantees, but also the trajectory of philanthropy itself. The term “philanthrocapitalism” is rarely used not in conjunction with the Gates Foundation. Because the institution is so new, few people have analyzed the foundation scholarly and systematically. Nevertheless, enough information exists to confirm that the Gates Foundation falls under the umbrella of a liberal philanthropic foundation.

In several ways it mirrors the major foundations of fifty years ago, such as the Rockefeller and Ford Foundations (as they existed in the Cold War era). While the Ford and Rockefeller Foundations have gone on to diversify their structures of governance since the days of mid-century homogeneity, the Gates Foundation lists only three trustees – Bill Gates, Melinda Gates, and Warren Buffett – and has no independent directors.⁷⁷ Like the Rockefeller and Ford Foundations, the Gates Foundation engages in a well-meaning promotion of technologies and capitalist institutions that earned its namesakes their fortune. As Green puts it, “Gates has no doubt about the importance of technological solutions.”⁷⁸ So while its rhetoric might no longer frame the idea of philanthropic giving

as one of strict politics, the same worrisome biases of the 1950s reoccur in the Foundation's structure today.

Thus, it is the second and “fourth,” as we will call it, waves of philanthropy that will be the focus of this thesis, for it is these two that are the most conducive to the rise of liberal foundations like the Rockefeller, Ford, and Gates Foundations that are the wealthiest and most controversial within the philanthropic landscape. During the first and third waves, major philanthropists did not disguise the political motives of their actions. In the second and fourth, however, the principal actors, though operating under different rubrics, have worked to achieve similar goals. Both periods, if we are to adopt the second philanthrocapitalism framework that locates the movement as an extension of neoliberalism, reflect a political landscape that privileges the private sector over its private and non-profit counterparts when it comes to large-scale economic decisions. In this context, the liberal foundations described can and have capitalized on the prevailing social norms to intentionally or not promote capitalist development in the image of substantial social change.

The Perpetuation of Exploitative Capitalist Structures

We have explored the bases (or lack thereof) of the legitimacy of liberal philanthropic foundations and the sociopolitical contexts that have allowed them to flourish. We can now use this much deeper understanding of these institutions to revisit the various ways through which they reinforce the very capitalist institutions that have served their interests in the past, and which foundation leadership in all likelihood sees as the ideal means of modernization. These components of state capitalism – such as a limited state,

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open channels of trade, and privatized property rights – are mutually exclusive of competing progressive norms that include collective market regulation and economic activity. These latter objectives do much more to undermine the basis of accumulation and exploitation on the part of the dominant class. In the interest of preserving and exporting American capitalism, liberal foundations engage in the rewriting of deeply political problems, implementation of short-sighted and exclusionary market-based solutions that ultimately disempower lower classes, and the co-optation of civil society resistance. In the following chapters, these practices will serve as a framework for our analyses of the two Green Revolutions.

Narrative Formation

Before even breaking ground in their developmental projects, liberal foundations have historically undermined social change by de-politicizing their inherently political projects – openly rejecting “unscientific” ideology.⁷⁹ These foundations, whose leaders are instrumental in the American economy, have little incentive to delve into the more deeply rooted sources of the social ills they wish to alleviate. So, they construct (and buy into) narratives that privilege “neutral,” technocratic fixes – such as technological development or managerial reorganization – to the host of problems they address. This neutrality is in line with a broader American political philosophy rooted in “technology and managerial rationality” that has guided everything from wartime strategy to economic development. This approach’s lack of explicit ideology protects it against controversial political polarization. The problem is, then, that these technocratic solutions are inadequate in their capabilities.⁸⁰

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The Rockefeller and Ford Foundation's mid-century emphasis on behaviorist sciences embodies these limitations. To accompany their increasing focus on the more "professional" natural sciences, they looked to solutions that framed the social sciences as the collective product of individual behavior as it pertained to civic engagement.⁸¹ Says Roelofs, "Behavioralists are naturally drawn to matters that are measurable and accessible, so we learn much more about 'the man on the street' and little, if anything, about the politics of corporate boardrooms."⁸² An attempt to explain group behavior that ignores an examination of the conditions that necessitate these choices, and as a result advocates solutions to amend individual behavior, is entirely superficial.

The influence these foundations wield can drown out competing voices, sometimes to the point of near ideological monopoly, and undermines all discussions of rethinking the existing economic relationships and inherently unequal power dynamics. "The thrust of foundation funding," writes Berman, has been to encourage and support perspectives that were both non-revolutionary and pro-capitalist."⁸³ Foundations rely on the research institutions – including existing universities like the London School of Economics and new ones in developing countries – and the publications they endow to disseminate their ideas.⁸⁴ But, as Bell points out, "granting funds affects the distribution of resources, including power, within (often critically important) institutions. The criteria for selection may be scientific or professional, but the meaning of who gets what is manifestly political."⁸⁵ Meaningful positive change almost always requires decision-making on the part of the people – be that directly, through civil society actors, or via representative government – a type of decision-making the liberal approach to philanthropy largely precludes.

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Restructuring of Class Divisions

What follows naturally from this misdiagnosis of social symptoms is the emphasis on stop-gap solutions – in realms ranging from medicine to agriculture – that promote the private accumulation of wealth by serving only those with a certain degree of assets already. The line of thinking, as Berman describes, is as follows: “Once the issues are transformed into technical problems – generally couched in social science jargon and thereby authorized by that impartial arbiter, science – the appropriate technique can be produced to resolve the issue at hand.”⁸⁶ The distinction between the construction of ideology and the implementation of solutions is subtle but important: while the former determines which problems all involved actors address (and which they do not), the latter dictates the true winners in foundations’ philanthropic efforts.

Although foundation leadership in the Cold War appealed to democratic elitism in claiming that solutions involving the promotion and necessary training of technological solutions would foster the meritocratic ascendance of a new professional class,⁸⁷ the reality is that many of these fixes have and continue to serve only those with preexisting stores of *cultural capital*, or the knowledge and skills needed to succeed under the rubric of the dominant class.⁸⁸ In China, Rockefeller’s medicinal program served only the wealthy groups and individuals that were familiar with the endowed health clinics in the first place;⁸⁹ in Latin America, the numerous foundation-sponsored research universities drew students only from the elite classes that knew to seek out the programs offered.⁹⁰ While this pattern is by no means limited to foundations and naturally characterizes many

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realms of society, the fact that an institution designed to serve those in need perpetuates this old dynamic is worrisome.

Other times, these solutions require not just symbolic but also actual, physical capital on the part of the grantees. As we will see in the cases of both Green Revolutions, the farmers who benefit the most from these philanthropic projects have been those that can afford the foreign inputs the foundations prescribe. At the end of the day, those who do not possess the empirical knowledge or financial assets to properly use these tools and services – usually those that need the help the most – are the ones left behind, only further exacerbating economic inequality. When these philanthropic efforts are targeted at not merely a limited demographic but rather whole swaths of societies, the outcomes can have profound implications for class divisions. Instead of serving equalizing or stabilizing functions in these underdeveloped regions, these projects can instead breed new degrees of poverty and even violent conflict.

Social Control

Both as a means of and a product of operating under an overarching narrative that justifies their misguided funding of these band-aid solutions that are more technological distractions than anything else, liberal foundations engage in practices that ameliorate, displace, and co-opt potential social movements that could undermine their development strategies. “They have secured their own positions against those who might dispute them and their own positions against those who might displace them and thus have avoided revolt,” writes Ross.⁹¹ In their overview of philanthropic foundations, Faber and McCarthy recognize this pattern and label it “philanthropic colonization;” another

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appropriate term that I will adopt is “social control.”⁹² By drawing upon their legitimacy as actors autonomous from any state government, liberal foundations advocate a sort of pseudo-pluralism: in public statements they extol their own virtue as contributors to the rich fabric of the development community, all the while they are in fact undertaking projects marked by the cultural hegemony discussed above.⁹³

In doing so, they alter not only the way in which external actors, such as other institutions of international development, view grant recipients, but also the self-perception of the recipients themselves: Says Arnove, “The effects of foundation sponsorship are such that individuals become increasingly attached to viewing themselves in certain ways and conducting research which accords with [foundation] views of appropriate scholarship.”⁹⁴ Indeed, philanthropic efforts can trigger rivalry or even fragmentation among otherwise allied social movements that now find themselves competing for limited resources.⁹⁵ By undermining the very individuals that live amidst and thus most thoroughly comprehend the complex problems they wish to eliminate, foundations have and continue to act as impediments to substantial social change.

Conclusion

Philanthropic foundations occupy a unique space in the landscape of American democracy. Their vast sums of wealth, independence from the private and public sectors, and ambiguous legal status grant them the ability to operate with a degree of creativity and efficiency that is difficult in the public or private sectors. But though philanthrocapitalists may reject the “political” label, philanthropic activity does have political implications. The autonomy and subsequent lack of accountability foundations enjoy denies them adequate procedural legitimacy for such significant global actors, thus

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grounding foundation legitimacy in the norms and values they espouse. In the case of liberal foundations, an adherence to capitalist structures obstructs their ability to affect the type of social reform they claim to enact. As I will demonstrate in the following two chapters, through constructing misleading narratives, offering limited solutions, and co-opting social resistance, these foundations can and have undertaken projects that have severe consequences for the populations the foundations mean to serve. Only until foundations derive their source of legitimacy from a source other than their behavior as institutions can we expect to see the type of change they purport to effect.

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-Chapter 2- The Green Revolution in India

“It is axiomatic that a well-fed world is a peaceful world.”
-J. George Harrar, *Rockefeller Foundation*⁹⁶

Introduction

Advocates and critics of liberal foundations alike herald the Green Revolution as one of the 20th century's greatest achievements in the advancement of the well-being of Third World populations. The Green Revolution, a term that was first used in 1968, was a global endeavor, beginning in Mexico in the 1940s and reaching everywhere from Pakistan to the Philippines. But nowhere was the Rockefeller and Ford Foundations' presence felt more so than it was in India in the decades following World War II. Fresh off the success of the Marshall Plan, the United States tackled the growing threat of communism abroad by taking on the responsibility of what many considered long-overdue industrialization in developing countries. In the early 1950s, India, with its proximity to China, recent struggles with starvation, and cooperative and enthusiastic young democracy, was the ideal nation for the American political and economic elite to demonstrate to the world the potential of a capitalist economy to lift millions out of poverty.

For over a decade, the Rockefeller and Ford Foundations, whose leaders shared many ties with high-ranking U.S. government officials, sowed the first seeds of agricultural development. In 1964, they watched this modernization, marked for its high-yield variety seeds (HYVs), enhanced fertilizers, and other advances in technology, take off. Output, particularly in the more fertile northern regions, rose dramatically, and India made noticeable steps towards food self-sufficiency. This success allowed the foundations to

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help the U.S. government shape a development strategy that would dictate its foreign policy in the following decades.

But this success came at a steep ecological and social price, as the Green Revolution devastated Indian land, destroyed a rich biodiversity, devalued indigenous knowledge, and drove farmers that could not afford the necessary inputs off their land and into the cities. If we situate this case within the literature of liberal foundations, it is evident that the work of the foundations in the Green Revolution also propagated exploitative capitalist structures at the expense of marginalized populations. Together, Rockefeller and Ford framed the issue as one of insufficient production instead of unequal power structures, implemented solutions that benefitted only those with existing stores of capital, and silenced any potential civil society resistance.

India Post-Independence

In the wake of the Second World War, India declared its independence from Great Britain in 1947. But despite its newfound political freedom, the country still languished economically. The partition of British India had a devastating impact on the Indian agricultural sector, as the Northern regions most conducive to farming fell outside of India's borders and within Pakistan's.⁹⁷ With no way to feed its population, India had to rely on Pakistan for imports of primary goods,⁹⁸ semi-feudal structures remained predominantly in place,⁹⁹ and agricultural productivity still struggled to recover from the catastrophic Bengal Famine of 1943.¹⁰⁰ Contrary to the picture presented years later by the Rockefeller and Ford Foundations, and then by United States government, this lack of productivity was not simply the product of poor agricultural practices on the part of the

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peasantry. Rather, a century's worth of unequal resource distribution British colonialism left farm workers unable to provide for a country wounded from World War II's interruption of regional trade.

To be fair, the blame does not lie entirely with the British Raj, for these feudal structures that subordinated rural workers to the ruling elite were embedded into India's caste system before the start of imperialism in the mid-19th century. British colonialists did, however, appropriate these systems in ways that foreshadowed the Green Revolution that would follow fewer than 20 years later. The British cemented a land distribution pattern designed to extract peasant revenue on behalf of British military presence at the expense of the peasantry.¹⁰¹ Moreover, the state and its landlords required its small farmers to grow not staple crops but rather those necessary to fuel the British Industrial Revolution and booming textile³ industry.¹⁰² At the time of independence, 78 percent of Indian landholdings did not meet India's minimum 10-acre standard for any economic holding.¹⁰³ The class-based resentment this inequality bred among the peasantry culminated in violent uprisings during the late 1940s.¹⁰⁴

Upon assuming his role as India's first prime minister, then Jawaharlal Nehru found himself with the responsibility of reducing poverty in India's rural states. Following in the steps of his mentor, Mahatma Gandhi, Nehru and his supporters pushed an agenda of wealth redistribution in India's rural regions that complimented his turn towards import-substitution industrialization, a modernization strategy that theoretically reduces dependency on foreign imports through the subsidization of local production. His

³ The infusion of this industry into the Indian countryside displaced local craft production, further concentrating wealth distribution in favor of moneylenders and landlords. (Ross, 440)

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administration modeled his new strategy off China's cooperative system, which he credited with increased agricultural investment and low food prices in urban areas.¹⁰⁵

As outlined by his Five Year Plans,¹⁰⁶ his initiatives included: the abolition of *zamindari* estates (which gave revenue collectors ownership over the land they taxed), new credit and storage institutions, and the limitation of estate size. However, these reforms were robbed of their chance to take full effect, and their potential to reduce poverty remained unrealized. Despite the fact that India actually experienced an agricultural export boom in the 1950s,¹⁰⁷ a drop in agricultural productivity as the result of a 1957 monsoon led people began to question the effectiveness of these projects.¹⁰⁸ The village elite capitalized on this skepticism by lobbying the Indian government to return to the previous status quo, exploiting the disorganized bureaucracy, and further manipulating their peasant workers. As a result, the 1950s marked another turbulent period in rural India.¹⁰⁹

The Ford and Rockefeller Foundations Abroad

Across the globe, two foundations were addressing the issue of agricultural productivity, but doing so from a strictly scientific perspective. Within the span of several years, the Ford and Rockefeller Foundations deeply embedded themselves in the landscape of Indian agriculture and changed the definition of agricultural productivity in a manner that has been subject to only limited scrutiny. To discuss just how these two American foundations transformed the face of another country's political economy, it is important to first revisit the foundations themselves.

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Ford Foundation

The “establishment of peace” was the primary objective of the Ford Foundation, a goal that while admirable lacked any stipulations for democracy or equality. The Ford Foundation had long earned itself a reputation as a legitimate international actor. It had a history of substituting for diplomats abroad when the state was not welcome, and actively sought an apolitical identity. Thus, its influence was less a product of its resources than it was of its “independence, flexibility, persistence, professionalism, speed of action, and the capacity for innovation, experimentation, and demonstration.”¹¹⁰

The foundation, founded in 1936, was not always so international in scope. According to Ross, its mission underwent a dramatic shift in years during the Cold War. Previously domestic in its funding, its new underlying philosophy was embodied by a report written by former foundation president H. Rowan Gaither. The 1957 report claimed that poverty, disease, and hunger “produce unrest and social instability, and these, when aggravated by ignorance and misinformation, produce a climate conducive to conflict.” In subsequent years, this report would go on to shape not just the direction of the Ford Foundation, but much of U.S. foreign policy as well.¹¹¹

Rockefeller Foundation

The Rockefeller Foundation pursued a goal similar to that of the Ford Foundation, to “serve the welfare of mankind throughout the world.”¹¹² Even more so than their counterparts at Ford, the Rockefeller trustees shared the “deep and abiding faith in science” that characterized the post-war era, and believed in its power to deliver positive social change. Although the organization was founded in 1913, it was reorganized in

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1928 to include new medical and natural science divisions, which both became principal to its operation.¹¹³

One of its earliest major projects in this realm was the development of HYVs in Mexico. In the several decades prior to the foundations' work in India, the Foundation sponsored Norman Borlaug's experimentations with genetically enhanced strains of wheat. Borlaug, whose name is almost synonymous with the Green Revolution, worked with the International Center for the Improvement of Maize and Wheat (CIMMYT) in Mexico to develop groundbreaking varieties of climate- and disease-resistant crops whose output far out-passed their natural counterparts.¹¹⁴

Borlaug did not spend roughly 20 years in Mexico by chance. In the 1930s, the Rockefeller family watched Mexican president Lázaro Cárdenas implement a series of reforms that threatened its economic interests. These reforms, which included the transformation of large estates into communally held *ejidos* and the nationalization of industry, posed a direct challenge to the Rockefeller-controlled Standard Oil. Once the U.S. government helped oust Cárdenas and bring to power the much more conservative Institutional Revolutionary Party, the Rockefeller Foundation saw its opportunity to reverse Cárdenas reforms and advance capitalist means of production. It did so in large part by introducing HYV seeds to bolster wheat production, seeds that were inherently ill-suited to the maize *ejidos*. Those farmers that remained in the *ejidos* watched as support for their way of life rapidly eroded: even the *Ejido* Bank supported the new wheat varieties, all but forcing its clients to abandon corn. Within no time, the *ejido* sector collapsed.¹¹⁵

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Especially given that Mexico marked the first time the Rockefeller Foundation took on a hands-on, operational (as opposed to purely grant-making) approach,¹¹⁶ this pattern anticipated the decimation of indigenous agricultural systems in India (and other countries in South East Asia) nearly two decades later. Because only the wealthiest farmers had the resources to utilize such seeds, within one decade of reform implementation, only 3 percent of all farms accounted for 55 percent of agricultural output, and 87 percent of *ejidatarios* lived below the poverty line.¹¹⁷ Nevertheless, these “miracle” seeds – which years later earned Borlaug a Nobel Peace Prize – would go on to become a crucial component of the Green Revolution.¹¹⁸

The Green Revolution Comes to India

The foundations first laid the groundwork for the Green Revolution in 1951, when Paul G. Hoffman, the administrator of the Marshall Plan, was appointed president of the Ford Foundation. A “convinced cold warrior,” he traveled that year to India to determine if and how the Ford Foundation should become involved in the country that he declared was “of great importance to the United States from the standpoint of maintaining peace in the world.”¹¹⁹ Within just four months, the Foundation and the Indian state signed an agreement that allowed the Foundation to use a \$2.2 million grant to begin agricultural development in India.¹²⁰

Curiously (or at least at first glance), a significant – \$1.2 million – portion of that grant went towards 15 Community Development (CD) projects.¹²¹ Modeled after a 1948 pilot project in the Indian state of Uttar Pradesh, these projects were in line with Nehru’s then-commitment to social transformation via his second Five-Year Plan. According to

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Perkins, these projects were not designed to fuel scientific research. “Rather, they were designed more to tap the wealth-creating potential of social reform, supplemented by the spread of existing knowledge.”¹²² But by the end of the decade, amid criticism that the CD programs did not deeply enough address structural disparities in land ownership,¹²³ a team of Ford Foundation agronomists decided that expanding the model to all of India’s 550,000 villages would be impossible. Though the Foundation pulled the program in 1959, CD in many ways served as a precursor to Green Revolution policies. Fittingly, next year, the Ford Foundation definitively signaled its shift towards scientific research with the establishment of the Intensive Agricultural District Program (IADP), which “totally replaced an indigenous, bottom up, organic-based strategy for regenerating Indian agriculture with an exogenous, top-down, chemically intensive one.”¹²⁴

The Rockefeller Foundation was close behind. In 1956, it followed suit with a \$1.4 million grant, which went towards (among other things) the Indian Agricultural Research Institute in New Delhi and a cereals improvement program.¹²⁵ From the start, the Rockefeller Foundation’s emphasis was on the advancement of scientific knowledge. With this agreement, the two foundations teamed up and the Green Revolution was officially underway.

On one level, the Green Revolution was a benign attempt by non-political actors to guide India towards food self-sufficiency. Indeed, from the beginning, the foundations envisioned themselves as entities separate from the United States government. They used this self-proclaimed independence, and the efficiency advantage it gave them over the U.S. embassy, to convince the Indian government that this partnership would be mutually beneficial.¹²⁶ Borlaug’s seeds were touted as the couriers of peace and prosperity.

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Marketing their efforts in solely scientific, neutral terminology, the Ford and Rockefeller Foundations advanced a model of agricultural development that was strictly depoliticized.

Foundations and Neo-Malthusian Politics

Of course, such a depoliticization was impossible. According to Bell:

If the impulses which led the Ford Foundation beyond the United States were largely ethical and nonpolitical, the criteria which guided its allocation of staff time and grant resources to different areas of the world were in large measure geopolitical.¹²⁷

To say so is not to detract from whatever humanitarian intentions upon which foundation officials acted, or even to downplay the extent to which they believed overpopulation would breed instability. Rather, it suggests that even in trying to act morally, foundation trustees were guided by their own economic interests, which aligned with those of the political elite fighting the Cold War on behalf of the West. Indeed, the promotion of a capitalist global economy was the cornerstone of developmental theory post-World War II.¹²⁸ Perkins labels this line of thinking population-national security theory (PNST). This theory “purported to link causally overpopulation, resource exhaustion, hunger, political instability, communist insurrection, and danger to vital American interests.”¹²⁹ According to this logic, increasing agricultural productivity and thus the national food supply was crucial to curtailing the creeping threat of communism.

PNST emerged in the context of a broader Malthusian politics, named for the influential demographer and advocate of population control. In the late 18th century, Thomas Malthus famously argued, “Poverty, underdevelopment, and associated patterns of mortality and environmental degradation can all be regarded chiefly as products of

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human population pressure on the means of subsistence.”¹³⁰ To Malthus, misery was inevitable: even improvements in human welfare – be they medical, agricultural, or economic – would only lead to a population explosion that would in turn return society to its state of poverty and hunger.

After over a century of irrelevance, this ideology became in vogue once again in mid-20th century United States, albeit with slight modifications. These neo-Malthusians shared a belief with their namesake that the root of all social ills lay in overpopulation, but rejected his sense of fatalism. In the wake of the innovation World War II spawned, much of the American political elite became convinced that sufficient technological advancement could combat the pressures dense populations put on natural resources. Famines, by this logic, were merely natural hardships that scientific research and adequate social planning can prevent.¹³¹

This paradigm was later supplanted by one that won famed economist Amartya Sen a Nobel Prize in Economic Sciences in 1998. He explicated his theory most thoroughly in his *Poverty and Famines: An Essay on Entitlement and Deprivation*, published in 1981 (three decades after Hoffman first traveled to India). According to Sen, famines are the product not necessarily of a lack of food, but much more so of an unequal distribution of food. “Starvation is the characteristic of some people not *having* enough food to eat,” he wrote. “It is not the characteristic of there *being* not enough food to eat.”¹³² He linked widespread hunger to a condition he termed “direct entitlement failure,” marked by vast unemployment, reduced wages, and increased food prices.¹³³ Looking back through history, he noted that those living in poverty when famine struck in Ireland in 1845 and India in 1943 (like he was, at age nine) were the ones to experience a lack of food while

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privileged groups around them hardly struggled to put food on the table. In contrast, the United States and England would never face mass starvation, he said, due to social security protections.¹³⁴ Unlike neo-Malthusianism and the subsequent PNST, then, this analysis, still frequently cited today, did not ignore the ramifications of structural inequalities, but rather shifted the spotlight back onto them. Despite the growing movement by the 1970s to re-conceptualize famine under this framework, however, neo-Malthusianism had established itself as the dominant discourse in the politics of economic development.¹³⁵

Though they were by no means the only ones pushing a PNST narrative, Rockefeller and Ford experts were able to attract a significant amount of attention in Washington by framing the issue of insufficient agricultural productivity as one of the United States national security.¹³⁶ One key member of their team was Frank Notestein, a demographer funded by the Rockefeller Foundation. Notestein, whose résumé included positions at Princeton and the United Nations, was a leading advocate of this neo-Malthusian politics. After a trip to Southeast Asia, Notestein concluded, “The subcontinent of India, precariously divided between Hindu and Muslims, comes most forcibly to mind as the next possible location for a serious outbreak of communism.”¹³⁷ The implications of this statement dovetailed conveniently with the interests of both the United States government, which actively supported anti-communist economic policies abroad, and the Indian government, which needed a way to quell peasant uprisings.¹³⁸ Within no time, writes Perkins, foundation and U.S. government workers were essentially indistinguishable.¹³⁹

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Reports

The foundations fashioned this narrative through numerous means. Of the more prominent strategies was the funding and promotion of reports and books that made the case for the development of agricultural technology as an alternative to land reform, a theme that would come to define the Green Revolution. Two of these reports coincided with Hoffman's first visit to India in 1951. Both *The Population of India and Pakistan* (1951) and *The World Food Problem* (1952), financed in part by the Rockefeller Foundation, misdiagnosed India's persistent struggle with poverty as one marked by "primitive techniques of cultivation" and overpopulation. Conversely, they minimized the impact of existing inequities in economic structures, namely land-ownership.¹⁴⁰

Finally, *India's Food Crisis and Steps to Meet It*, a report released in 1959 by a team led by the Ford Foundation's Douglas Ensminger, put the nail in the coffin of India's past commitment to social reform. The report emphasized the need for India to direct its policies away from those that backed cooperative agriculture to those that facilitated the deliverance of HYV seeds, fertilizer, credit, and agricultural equipment to farmers with enough land to support increased production. Critics took to the report harshly, calling into question the methodology of the researchers, and, fearing a Western intention to stifle India's burgeoning industrial sector, the underlying motivations that informed this methodology.¹⁴¹ These objections aside, however, the report worked. After a personal meeting with the report's authors following its release, Prime Minister Nehru dropped his objections and began to devise ways to make the report's recommendations a reality.¹⁴²

Scientific Research

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The role Borlaug and his HYVs played in shaping the discourse of mid-century modernization cannot be overstated. His discoveries in Mexico laid the groundwork for neo-Malthusianism, an ideology predicated on the tenet that technological advancement could outpace an otherwise destructive and destabilizing rise in population. Though major public and private actors still dedicated much time and effort towards other means of population control, these seeds by and large justified a key component of the United States' foreign policy. Borlaug, a neo-Malthusianism himself, once said that his work served to buy time against the "population monster."¹⁴³ And, though the Ford Foundation more so than Rockefeller took the reins in the shaping and funding of the Green Revolution, it was the Rockefeller Foundation, with its commitment to privatize and industrialize Mexican agriculture, that was instrumental in the trajectory of Borlaug's research.¹⁴⁴

Institutionalization

The implications of these reports took very tangible shape in the form of research institutions. Most directly, the aftermath of *India's Food Crisis* culminated in the establishment of the IADP, which served as the "organizational framework for the Green Revolution." At its inception in 1960, the Ford Foundation agreed to contribute \$10.5 million dollars – a third of its final cost.¹⁴⁵ Particularly under the supervision of the post-Nehru state in 1964, this program, which established agricultural universities and further developed existing research centers, could not have been further away from the Ford Foundation's first attempts at community development.¹⁴⁶

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Much of this institutionalization was underway immediately following the foundation representatives' first visits to India earlier that decade. The Ford Foundation, which had a close relationship with the CIA, worked with Julius Stratton of MIT to develop the Center for International Studies (CENIS) in 1951, a strictly anti-Marxist institution dedicated to the idea that modernization and capitalism were means to the same end, and that political stability should be prioritized above all else.¹⁴⁷

The foundations did not stop there. Having previously spearheaded the establishment of the CIMMYT in Mexico, the Rockefeller Foundation together with the Ford Foundation developed its Southeast Asian counterpart, the International Rice Research Institute (IRRI) in 1960, which developed “miracle rice” to complement CIMMYT’s “miracle wheats.”¹⁴⁸ The research that came out of these and likeminded institutes all advanced – albeit indirectly, in some cases – the main tenets of PSNT: only technological innovation within a capitalist framework could prevent communism from overtaking an already vulnerable India and lead – finally – to peace and prosperity.

The neo-Malthusian approach taken by the foundations was well suited to the interests of the Indian and American governments. With two major independent institutions approving its actions, the Indian government was free to address the issue of rampant hunger and poverty without having to upset its wealthiest and most powerful constituents, as it would have had it followed a policy of land redistribution.¹⁴⁹ From the perspective of American actors, this outlook justified on the basis of humanitarianism a legacy of Western intervention that government officials were keen on perpetuating.

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Other Major Actors

To imply that the Rockefeller and Ford Foundations were the only two external actors in shaping the mid-century modernization in India is misleading. Particularly as agricultural output showed signs of increasing, much of the international community turned its sights to economic development in India. The Indian and American governments were, naturally, especially critical to the unfolding of the Green Revolution. Even so, the involvement of these external entities would in all likelihood not have taken the shapes they did had they not cultivated relationships with the foundations along the way, the Ford Foundation in particular.

The United States Government

Without a doubt, the funding of the U.S. government greatly exceeded that of the foundations. The Ford Foundation's initial grant of \$1.2 million in 1951 was met by a \$50 million grant from the U.S. government (not to mention an \$86 million from India the following year).¹⁵⁰ Although the United States granted international food aid starting in 1954 on an *ad hoc* basis under its Public Law 480, government activity in India remained fairly detached for the next ten years. But by the mid-1960s, that had changed. For reasons that were both domestic and international, the Johnson administration prioritized the prevention of famine in India. The president faced a dual pressure to foster Indian self-sufficiency: in line with PNST, a hungry nation was a nation vulnerable to communism, and the United States government needed all the allies it could get heading into Vietnam. At the same time, Johnson faced loudening opposition from the Senate for draining government pockets for the sake of foreign aid. To protect his own political

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standing and the nation's, then, he favored any policy or technological developments that would quickly modernize Indian agriculture through direct action.¹⁵¹

However, the government had a strained relationship with the Indian state by this time that complicated this agenda: to induce self-sufficiency, in 1966 Johnson reversed P.L. 480 by reversing a “short-tether” policy by which the United States would only grant food aid one month prior to its delivery. The Indian government, unsurprisingly, was displeased with this dependency on foreign aid, particularly from a country with a track record as inconsistent as the United States'. Indian officials interpreted this short-tether policy as America flexing its muscle to bully India to bend to U.S. policies towards Vietnam. “It made clear an Indian dependence upon the United States that the Indian leaders were determined to end as soon as possible so India would no longer be subject to aid policy,” writes Rosen.¹⁵² In this respect, though governmental financial contributions far outstripped those of the foundations, the foundations more than the U.S. government positioned themselves as trustworthy allies to the Indian state.

The Indian State

It goes without saying that the Green Revolution would not have happened without the support of the Indian state. Spurred on by the introduction of new technology, the post-Nehru government implemented numerous policies that facilitated widespread adoption of HYVs. Most notably, it put into place domestic price supports and subsidies on foreign inputs to incentivize industrialized agricultural production.¹⁵³ Of course, in doing so, the state revealed its malleability to the pressures of foreign aid agencies. As described above, in enacting policies to directly bolster food production, the state – even

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when led by Nehru's daughter, who shared her father's commitment to social reform – broke away from the policies of wealth redistribution and community development it had once pursued. But as will be explicated below, in freeing itself from dependency on U.S. food aid by welcoming Green Revolution technology, the government merely shifted this dependency to one on U.S. industry.

That said, no discussion of activity on the part of the Indian state is complete without explaining the interrelation between it and the Ford Foundation. It viewed the foundation as more objective than United States government, which was explicitly beholden to the demands of the American farm lobby that outright rejected the bolstering of a competing nation's agricultural sector. Moreover, it thought as a privately operated institution, the foundation could draw from a more diverse group of actors and act more efficiently than a team of state officials.¹⁵⁴ This analysis, however, was superficial, for the foundations carried with them the same economic biases as much of the American economic elite, and could draw upon their dissociation from the public sector to couch their hegemonic influence as one of fostering an independent Indian state.

International Donor Community

To differentiate between the Ford and Rockefeller Foundations and other international bodies is somewhat misguided, in that the foundations had a hand in the collective behavior of the community as a whole. Most significantly, perhaps, was the foundations' lobbying for the creation of the United States Agency for International Development (USAID). USAID, established in 1961, quickly became the "central banker" for the Green Revolution for that decade. Later, when USAID began to phase

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itself out of India, the foundations convinced the World Bank to take its place. The bank agreed, offering credit to farmers on the condition that they would follow the strict guidelines outlined by the foundations. Writes Dowie, “The foundations offered no resistance as the bank pursued its established practice of expanding wealth by providing assistance to the wealthy.”¹⁵⁵ In these secondary institutions, the foundations ensured that once they had phased out direct assistance, others would carry out their initial efforts.

Prior to Ford and Rockefeller intervention in India, the U.S. government struggled to attract international attention to what it perceived to be the twin threats of hunger and communism.¹⁵⁶ The early successes of the Green Revolution, however, revitalized the donor community. Largely at the behest of the foundation leadership, the World Bank, Consultative Group on International Agricultural Research, other aid agencies restructured their strategies by the end of the 1960s to address “basic needs deficiencies” in developing nations. This new approach entailed the further institutionalization of the Green Revolution.¹⁵⁷

Thus, there is evidence to suggest that the two philanthropic foundations were among the most, if not *the* most, instrumental factors in the genesis and execution of the Green Revolution over the course of the 1950s and 1960s. Multiple researchers have stated that without the work of the foundations, the Green Revolution would have been a much more trivial undertaking, if one at all.¹⁵⁸ Foundations took a leading role in the design of the project, one that went above and beyond the typical position of philanthropic actors. Writes Perkins, “Expenditures of the U.S. government dwarfed those of the Ford and Rockefeller Foundations. Nevertheless, the programs of the foundations were to have

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critical, catalytic effects that were far more important than the size of their budgets suggested.”¹⁵⁹ The Green Revolution may have still taken place without the foundations, but it would have been much smaller in scope, and its character would have been drastically altered.

As demonstrated above, even those actions taken or resources provided directly by actors other than the Ford and Rockefeller Foundations were at the least inspired by foundation activities, if not at the explicit bidding of the foundations. It does not require a great stretch of the imagination to claim that were it not for the efforts of the foundations beginning in the early 1950s, the Green Revolution would have never made it to India at all.

The Green Revolution Takes Effect

“Shackles of the past.”¹⁶⁰ That was how the Ford Foundation referred repeatedly to the preexisting indigenous practices that it sought to replace with intensive agriculture. These indigenous practices were based on thousands of years’ worth of shared knowledge and procedures. Among these practices was the conservation of seed varieties between seasons. According to Shiva, “Throughout India, even in years of scarcity, seed was conserved in every household, so that the cycle of food production was not interrupted by loss of seeds.”¹⁶¹ Moreover, farmers even shared seed varieties with one another to protect local biodiversity, a collective habit unsurprisingly portrayed as backwards or inefficient by those accustomed to capitalism’s privatization.

As a product of Rockefeller and Ford Foundation intervention, Indian agriculture quickly underwent a number of dramatic shifts in the 1960s: foreign inputs quickly

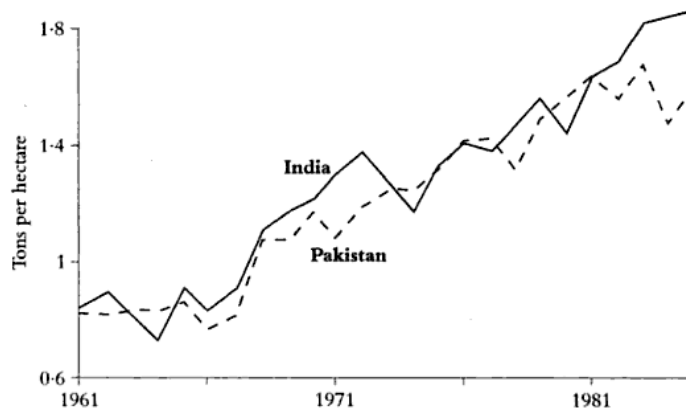


Figure 1 Growth in wheat yields in India and Pakistan (Conway, 56)

replaced those produced domestically; biodiversity took a backseat to the monocultures of HYVs; and all regard for regional climatic diversity was disregarded in the name of synthetics.¹⁶² Although native seed varieties when fertilized organically actually delivered nearly the same biomass⁴ as the new varieties, they were unable to withstand the onslaught of chemicals these new pesticides and fertilizers entailed. The IADP thus deemed them inadequate,¹⁶³ and by 1968, Indian farmers had planted 30 million acres of these HYVs.¹⁶⁴

Those who boast of the Green Revolution's success in India do so with legitimate reason. In the consecutive years of 1966 and 1967, monsoons struck regions integral to Indian agricultural, dramatically increasing hunger.¹⁶⁵ Though the Western media was quick to blow this "famine" (no deaths were reported) out of proportion,¹⁶⁶ starvation was a reality for thousands of Indians.

Speaking in terms of material output, the results of this new strategy were impressive. Before the Green Revolution, India produced a record of 12.3 million tons of wheat in the

⁴ It should be noted that biomass and yield are dissimilar. In this case, "biomass" refers not just to the edible output of a single crop, but also the components that would serve as organic inputs for future harvests.

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1965 agricultural year; 1968, 1969, and 1970s recorded outputs of 16.5, 18.7, and 20.0 million tons, respectively. Between these five years, total food production rose from 88.4 million tons to 106.¹⁶⁷ (See Fig. 1) So much food was produced, in fact, that the excess crops began to strain storage facilities. Writes Cullather, “Railways ran out of freight cars, and the government began filling school buildings, sugar mills, and theaters with grain.”¹⁶⁸ Most significantly, only two years after sitting precariously on the brink of famine, India’s government was able to declare itself self-sufficient in the production of food.¹⁶⁹

But what you will not find in self-congratulatory foundation memos or speeches are details of the price India and its farmers paid for this agricultural boom. Ecologically, the Green Revolution took a disastrous toll on Indian agricultural lands. The growth the foundations boast of to this day was in many ways a zero-sum game, as it was counteracted by depravity in biological diversity. Prior to the adoption of Green Revolution technologies, Indians used their crops not just for food, but for fertilizer and cattle feed as well. The new chemicals and fertilizers made that system an impossibility. Wheat displaced numerous traditional crop varieties, and due to the high costs of inputs, for all but the largest farmers the rate of return on this crop rapidly diminished over the years.¹⁷⁰

It’s important not to romanticize traditional agriculture, which certainly insufficiently fed India’s population by the start of the Green Revolution. Nevertheless, there is evidence to support the claim that indigenous seed varieties, given the proper ecological support of local resources and cropping systems, had the potential to perform nearly as productively and far more sustainably.¹⁷¹ And with the proper political support in the

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form of, for example, equitable land distribution, smallholders may have been able to afford the very food they would be producing.

Landless workers suffered immensely as a result of the Green Revolution. The mechanization it entailed proved to be a double-edged sword, displacing more rural employment than it created. In the state of Uttar Pradesh, the technology the new wheat and rice systems introduced increased demands for labor by 60 hours by hectare, but the new tractors decreased it by over 110 hours for the same area.¹⁷² Not only did this new means of agriculture greatly reduce their opportunities for workers to earn sufficient wages, it also effectively eliminated the social networks upon which these workers depended for survival. Writes Conway,

A more subsistence-based, communal self-help system of agriculture has been replaced by one which relies entirely on market forces. The poor and the landless who, in the past, could obtain food for work, or from labor-exchange schemes, or indeed gather food from communal or undeveloped land, no longer can do so.¹⁷³

Although census numbers from post-war India are hard to obtain, the massive wave of urbanization that took place in the wake of the Green Revolution indicates that with the industrialization of agriculture, residing in these rural regions simply stopped being a feasible option for many landless workers.

The Green Revolution had a similarly devastating impact on small farmers. Although the Indian state did impose artificially high prices to protect smallholder farmers suddenly faced with the inconsistency of the global grain market, they were not enough to compensate for the costs of the new fertilizers needed to accommodate the new seed varieties. Thus, rendering these farmers unable to afford the high costs of foreign inputs

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and prevent estate farm expansion, the Green Revolution and its “miracle seeds” drove them off their lands and into the cities as well.

Of course, it would be fair to ask, if the Green Revolution was so devastating to smallholder farmers, why did they not simply revert back to the traditional practices of the pre-Ford and pre-Rockefeller era? After all, the government did not mandate the adoption of HYV packages; nobody was forcing smallholders to participate in the Green Revolution. This line of thinking overlooks the reality that Indian farmers hardly had this choice to make, as Green Revolution packages disrupted both the integrated social and scientific systems upon which these practices were built. Communal knowledge and seed-sharing served as the foundation of dynamic systems that fell apart under the privatization and social atomization of the Green Revolution. Moreover, these systems were predicated upon sustainable cropping rooted in the maintenance of a nutrient cycle. The new “land-degrading technology,” as Shiva puts it, replaced crucial nitrogen-fixing crops, and in doing so destroyed the soil even for those who rejected the foundations’ HYVs.¹⁷⁴

Fearing a sudden collapse in prices, the Indian state responded to the sudden market influx of crops by stockpiling excess products in storage warehouses. Employment and wage rates remained, by and large, static.¹⁷⁵ A retrospective review of over 300 studies published during 1979 and 1990 found that 80% of researchers concluded that the technologies and policies of the Green Revolution exacerbated existing income inequalities.¹⁷⁶ By the early 1970s, land prices had risen by nearly 500 percent;¹⁷⁷ in Punjab, a crucial region to Indian agriculture, Shiva reports a decline of nearly 25% in land holdings between 1970 and 1980.¹⁷⁸

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This process, known as depeasantization, reflects an overall national increase in income inequality as a product of the vertical consolidation of agribusiness that ensued with Ford and Rockefeller's arrival. According to Dowie, "An agricultural system in which village life and livelihoods had revolved for thousands of years was virtually destroyed. Faith in knowledge triumphed. Biological science prevailed over social science, and industry trumped culture."¹⁷⁹ On top of the disastrous ramifications these chemical inputs had on the environment and public health, this modernization project contributed to the dismantling of India's social system, just as it did in Mexico several decades prior. This time around, though, the intensity with which the foundations and Indian government pushed these HYV packages into all realms of the agricultural sector reconfigured Indian society to an extent unseen in Mexico.

The widening of the income gap did eventually take its toll on the very stability the foundations were seeking to ensure. A violent incident in which 43 peasants were burned to death following wage clashes served as a precursor to the class struggle that would ensue; the following year, by one measure the number of agrarian conflicts in India rose from 19 to 41.¹⁸⁰ Once the foundations retreated from India, the state, already burdened with a rapidly modernizing agricultural sector, could not contain the growing unrest. By the mid-1980s, this class conflict had devolved into a full-blown crisis. In the Punjab region alone, class conflict killed over 1500 people in 1988. In 1989, 3000.¹⁸¹

The Green Revolution and Capitalist Power Structures

Having detailed the build-up to and ramifications of the Green Revolution, we can now revisit foundation literature to more thoroughly comprehend how through processes

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of narrative formation, exclusionary market-based changes, and social control, the liberal Rockefeller and Ford Foundations reconstructed Indian society in the interest of Western economic and political elite and at the expense of the populations it claimed to be saving.

Narrative Formation

The paradigm the Rockefeller and Ford Foundations constructed was if nothing else a perpetuation of the dominant government-sponsored ideology of the Cold War. In the late 1940s and 1950s the United States and its allies launched a multi-faceted effort to modernize developing nations in the capitalist tradition to develop political and economic partners against the ever-present communist threat. “What made this Revolution a ‘green’ one?” asks Perfecto. “After all, fields were green before this revolution in agricultural technology. The point was that the revolution was *not* ‘red.’”¹⁸² India, as the largest non-communist country bordering the largest communist country in the world, served as the ideal venue for the American elite to demonstrate capitalism as the superior economic model and to prop up the image of the West.¹⁸³ These foundations – particularly Ford, which had a precedent of intervening where U.S. diplomats were unwelcome – drew on their status as autonomous actors to fashion this narrative in a more philanthropic, and thus theoretically objective, mold.

This is not to say that the foundations were operating with the explicit intention of exacerbating existing inequalities. Nor did all prominent members of the foundations’ governance structures agree on this ideology. Ensminger himself, who spearheaded the research that culminated in the game-changing *India’s Food Crisis* report, shared an abiding faith with the Nehru administration in the necessity of democratic development

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based on community development.¹⁸⁴ His desires, however, were subject to the institutional interests, embodied in then-Ford-President Henry Heald. When Ensminger pushed Heald to extend the life of the community development grants, Heald retreated into the veil of neutrality. “Heald, an engineer, felt the foundation’s role should be primarily technical, and that it should not be playing even indirectly a political role,” says Rosen. Seeds and chemical inputs, not social reform, were on the foundation’s agenda.

The implications of presenting a technocratic solution to an inherently sociopolitical problem resulted, in some respects, in a rewriting of history. In line with this post-World-War-II neo-Malthusianism politics, this ideology denied the loudening call for land reform and community development among India’s poorer citizens. Moreover, it justified the structures of Western economies, thereby exonerating the social injustices brought upon by nearly a century of English colonial rule. India had a long-standing tradition of exploitative feudal relationships that contributed to the great disparity in income even following Indian independence. This account was not unique to India; indeed, it governed much of U.S. foreign policy at the time. In India and elsewhere, writes Perkins, “the population-national security theory was blinded by an uncritical assumption of Malthusian misery and an inability to fathom the smoldering resentments born of unequal distributions of wealth and power in the third world.”¹⁸⁵ By blaming “primitive” agricultural practices and irresponsible reproductive behavior (overpopulation was a trend that had worried Indian officials since the 1940s) for food scarcity, these foundations misdiagnosed the root of peasant suffering, all but explicitly claiming it was self-inflicted.¹⁸⁶

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In India, the Rockefeller and Ford Foundations drew upon PNST to frame the underlying issue as one of a mere lack of supply rather than one of stifled demand. The natural line of thinking, then, would be that an increased output would be the panacea to food insecurity. There was an abundance of evidence to support this belief, so to speak: the problem was that the Foundations drew exclusively on research from groups designed to promote this very technological development.¹⁸⁷ Moreover, the migration of numerous scholars from universities to the foundations is indicative of the fluidity between the two types of institutions.¹⁸⁸ Of course, as Dowie writes, “if you don’t have the land on which to grow food or the money to buy it, you go hungry, no matter how dramatically technology pushes up food production.”¹⁸⁹ But as private actors operating within the neo-Malthusian political climate of the Cold War, Rockefeller and Ford overlooked this crucial concept.

By implicitly acquiting the legacy of British colonialism for the preexisting unequal power dynamics in place at the start of the Green Revolution, Rockefeller and Ford could situate themselves as the bearers of the cure-all technology. While their private-public relationship with the Indian government might indicate deference to the necessity of the state, it rather signifies their ability to shift accountability to external partners. The Green Revolution “is an example of how contemporary scientific enterprise is politically and socially created, how it builds its immunity and blocks its social evaluation,” writes Shiva. “It is also an example of how science takes credit for successes and absolves itself from all responsibility for failures.”¹⁹⁰ A private foundation, unlike the government, is not tied to constituents, and can without real consequence opt out of any endeavor when most convenient, as the foundations did by the 1970s.

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Their supposed autonomy from the public sector served the foundations well, especially when observers began to point out the glaring disparities between the rhetoric and the results of the new technology. Even Gordon Conway, the former president of the Rockefeller Foundation who in his *The Doubly Green Revolution* admits that the Green Revolution resulted in gross income disparities, does not recognize a flaw in the fundamental strategy of the foundations. Rather, he says, it needs to be modified and extended to regions that the programs “bypassed.”¹⁹¹

Had the foundations first not primed the public through various publications and formal statements to believe that overpopulation paired with a severe lack of food would drive peasants into the welcoming arms of capitalism, it is difficult to imagine the Green Revolution gaining as much traction with high-ranking officials as it did. Regardless of what were at least in part good intentions to reduce hunger in India, the foundations blinded their partners and themselves not just to the source of malnutrition in the Third World, but also to the neocolonial implications of their actions. Writes Dowie,

“Expanding agricultural production and global food supplies was a way to avoid addressing the more controversial issue of population control, which so often begets indictments of racism, imperialism, economic privilege, and Euro-American hegemony.”¹⁹²

Technology provided a convenient silver-bullet, and the foundations pulled the trigger.

Restructuring of Class Divisions

The rapid adoption of agricultural technology had more than a material impact on Indian agriculture; it reorganized society in a way that subordinated the state and the majority of its farmers alike to the forces of the volatile global market. Though this shift was many years in the making, it was not until Borlaug developed an even sturdier seed

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variety for Rockefeller in 1964 and the Ford-supported IADP garnered support among the post-Nehru Indian state that same year that the ideas of the foundations and U.S. government came to fruition.¹⁹³ These new HYV seeds required both foreign inputs and pre-existing conditions (such as irrigation), which wealthier farmers of course disproportionately possessed. It is unsurprising, then, that foundation and government officials turned to these farmers first for early implementation.¹⁹⁴ Although available credit did make some necessary inputs temporarily available to peasant farmers, this prosperity was very short-lived, as these farmers found themselves facing insurmountable debt. By 1974 in the Punjab region, farmers with land holdings under five acres, a group that comprised 48.5% of the regions landowners, ran collective yearly deficits, while farmers with land holdings greater than five acres on average experienced profits, with the largest estates predictably garnering the greatest returns.¹⁹⁵

In their drive to increase the efficiency of India's agricultural sector, foundation and government workers alike overlooked the intensive exploitation of the very farmers this project was designed to feed. Because this mode of capitalist production requires a high level of investment, producers increased food prices to sustain such a suddenly high level of output.¹⁹⁶ Unable to keep up with the rapidly expanding estate farmers – and finding themselves displaced by the new machinery for which the wealthier farming class lobbied the government¹⁹⁷ – and unable to afford the very foods they were producing, peasants were forced to give up their land and join the swelling labor force. Producers, of course, responded in turn only by driving down already meager wages. Perfecto writes, “This distancing of workers from the consumption society is extremely efficient for the export sector, unconcerned as it is about local consumer demand, and thus able to drive wages

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down to minimum levels.”¹⁹⁸ Dispossessed of their labor entirely, many smallholders had little choice but to move to the cities, which were unprepared for such an influx of job seekers.

As asymmetrical growth tends to foster instability, this reallocation of capital ultimately sparked class-based conflict across the country, thus undermining the very stability it sought to ensure in the first place.¹⁹⁹ While class conflict was admittedly a constant in pre-Revolution Indian society, the conflict bred by the new technologies was, according to Sharma, of a different character “qualitatively and quantitatively.” While class-based differences fueled peasant uprisings in the 1940s and 1950s, infighting between factions of rural landowners made up the majority of such rural conflicts. Moreover, she says, earlier peasant movements lacked the sharp focus and leadership of those following the modernization of the 1960s.²⁰⁰

It bears repeating that technological innovation does not automatically breed instability. This violence could have been prevented had the foundations’ new technological packages been coupled with the necessary protections to disaffected workers. But the Indian government, too dependent upon American development aid, did not enact the necessary changes nor provide the necessary safety nets; instead, it left its most vulnerable constituents at the mercy of a competitive world economy.

Social Control

It was no secret that the foundations prioritized stability above all else, so it should come as no surprise that they had little problem with a stagnant civil society, were its evolution to impede their top-down approach to development. Said Rockefeller’s David

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Hopper, the goals of growth and political participation were “not necessarily incompatible, but their joint pursuit in unitary action programs are incompatible with development of an effective strategy for abundance.”²⁰¹ To the foundations, social control during the Green Revolution was not necessarily an objective, but rather an inevitable consequence of their brand of modernization.

Sharma then poses the following puzzle: if people were aware of these motivations, why did they accept this sudden shift to capital allocation and emphasis on technology, just as the government was demonstrating a strong interest in social reform?²⁰² Here, we can point to the short-term economic results the Green Revolution delivered, particularly to regions like the Punjab with the proper infrastructure already in place. Farmers in these regions enjoyed generous food subsidies that ultimately created an “artificially profitable economic package,” one that resulted in increased indebtedness as the need for credit accumulated with the rising cost of inputs.²⁰³ By the time this prosperity revealed its ephemerality, suffering farmers found themselves powerless to the Green Revolution’s intractable momentum.

To borrow a term from Marx, these farmers witnessed the rapid commodification of their relationships with one another. This new mode of production even industrialized the social norms of traditional villages. Prospering farmers “introduced brazenly acquisitive values to rural life and work, demanding tractors and tubewells as marriage dowries and enforcing strictly contractual relations with tenants,”²⁰⁴ explains Cullather. More importantly, the displacement of regional and seasonal specialization with HYVs and monocultures had a homogenizing effect on rural society. In this new sink-or-swim

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environment, neighbors went from viewing each other as cooperators to competitors for costly inputs and land holdings.

As horizontally organized communities disintegrated into “atomized individuals linked vertically to state power through electoral politics,” this newfound corporatism entailed a loss in peasant organizing power.²⁰⁵ This closing of channels of collective political action mirrored the increasing privatization of all rural economic activity. It is in this way that the foundations provided the government with technology that served as, to use Cleaver’s terminology, a “political weapon.”²⁰⁶ The state could now point to the sharp increase in output and steps towards self-sustainability as justification for abandoning the much riskier policies of land redistribution, all the while serving the interests of its wealthiest and most powerful constituents.

Of course, as demonstrated above, this philanthropic colonization was ultimately unsustainable. Sharma extends Perfecto’s claim that this revolution was green for the very reason that it was not “red” one step further, comparing the situation in rural India to a watermelon: “green on the outside and red inside.”²⁰⁷ The homogenization of society was nominal only; even the most sophisticated technology could not compensate for years’ worth of British colonial semi-feudal relations. In the 1980s, tensions finally came to a head, but by then, the foundations had long pulled out of India. They left behind them a nation not only wracked with starvation, environmental degradation, and overwhelming urbanization, but also marred by tragedy.²⁰⁸

Conclusion

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Though the sustained rise in agricultural output has continued to feed millions of hungry Indians, the miracle of the Green Revolution is a myth. The economic prosperity it ushered in was short-lived at best, and non-existent for many. By eliminating the chance for genuine social reform on the part of the once-progressive Indian state, the Rockefeller and Ford Foundations, working in tandem with the United States government, tossed traditional harvesting practices aside, destroyed both soil and integrated agricultural systems, and threw Indian farming into the tumult of the world economy. Smallholders in particular floundered; previously wealthy estate farmers – and the multinationals that could prey off of this sudden reserve of labor – flourished.

The fact that Bill Gates and his “philanthrocapitalist” foundation are modeling – even naming – their new development endeavor in Africa off of this project without even acknowledging the extreme ramifications it had for India’s ecology and population is disturbing, to say the very least. It is to this new Green Revolution that we turn in the next chapter.

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-Chapter 3-
A Green Revolution in Africa

“You come. You buy the land. You make a plan. You build a house. Now you ask me, what color do I want to paint the kitchen? This is not participation!”
*Member of the Eastern and Southern Africa Small-Scale Farmers’ Forum*²⁰⁹

Introduction

“I’m still frustrated over the fact that the Green Revolution that we introduced into India in the 1960s, we haven’t yet introduced into Africa in 2009,” Obama said to African news agency allAfrica in July of 2009. “In some countries, you’ve got declining agricultural productivity. That makes absolutely no sense.”²¹⁰ His vice president agreed with him: said Joe Biden, “What the world needs is a second Green Revolution.”²¹¹

Since the publication of Gordon Conway’s *The Doubly Green Revolution* in 1999, many have called for a second Green Revolution in Africa. In 2006, the Rockefeller and Bill and Melinda Gates Foundations answered their wishes when they announced the establishment of the Alliance for a Green Revolution in Africa (AGRA). The Alliance, chaired by former United Nations Secretary General Kofi Annan, is a coalition of private, public, and third-sector actors who claim to sustainably promote the development of smallholder farmers in 14 Sub-Saharan nations.²¹² The predominant features of AGRA’s strategy, however, are technological innovation and market integration of smallholder farmers, causing many to fear that this second Green Revolution, like the first, will only exacerbate existing inequalities.

AGRA arrives on the heels of several decades of financial and food crises throughout the Sub-Saharan region. While some, including AGRA leadership, hail HYVs and reduced market barriers as cure-all solutions, critics see the obstacles the Alliance faces as much more intractable. “Proposals to end poverty and hunger in Africa must

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come to grips with the fact that since colonial times, Africa's food systems and natural resources have been relentlessly appropriated by foreign capital, frequently in collusion with national elites," write Holt-Giménez and Patel.²¹³

It is impossible to say for sure where AGRA situates itself as part of a development paradigm, as its architects do seem to recognize the ecological and social implications of replicating the original Green Revolution. Looking beyond their lofty promises, though, their actual procedure proposals reveal little in the way of specificity to substantiate their convincing rhetoric. Furthermore, drawing upon the foundation literature illuminates not only that AGRA appears to be yet another venue for private interests to profit off the struggles of others, but also how it is paving the road for the same ecological and social consequences from which India is still recovering.

Proponents have a tendency to misread concerns about a second Green Revolution; scholars like Holmén have reassured skeptics that the technological packages of the 20th century are in fact transferrable to the far more hostile African soils.²¹⁴ While this concern certainly resonates with many of AGRA's critics, the fear as articulated by resistant civil society actors is not that the Green Revolution will once again not work in Africa; the fear is that it will.⁵

African Agriculture: Decades of Deagrarianization

As with the case of India, the story of Africa's Green Revolution dates back to the middle of the 20th century. In the decades following the Second World War, a wave of

⁵ Like the food crisis itself, the concept of an African Green Revolution is still emerging. As a result, there is not a great deal of scholarly work analyzing the movement as a whole and its components. Unlike elsewhere in my thesis, sources for this chapter predominantly include, but are not limited to: material put out by AGRA and its proponents, evaluations of AGRA, policy briefs, and critical activist writings.

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independence swept through Africa, as nation after nation – 31 by the end of the decade – shed its colonial chains.²¹⁵ For all the volatility that such political upheaval can usher in, the 1960s were a relatively prosperous decade for African economies, particularly the agricultural sectors. The continent was largely food-sufficient, and exported an average of 1.3 million tons of food each year.²¹⁶ From 1965-1973, the agricultural sector grew at an average annual rate of 2.2%.²¹⁷ Now, 50 years later, it imports nearly 25% of its food (see Fig. 1).²¹⁸ An explanation of this devolution in fact draws on the precedent set by the first Green Revolution in South Asia.

Inspired by boasts of yield increases across the globe, governments looked to replicate the so-called successes of the Green Revolution by subsidizing seed and fertilizer packages in the early 1970s. At the same time, many states implemented national marketing boards that helped stabilize prices in an otherwise volatile market.²¹⁹ Though yields rose in this period, the oil crisis and subsequent economic shock of the mid-1970s proved these producer protections to be extremely fragile. Because the dispersal of peasants required a great deal of transport between production and the market

itself, the spike in oil prices acutely affected smallholders. With government pockets suddenly much shallower, states could no

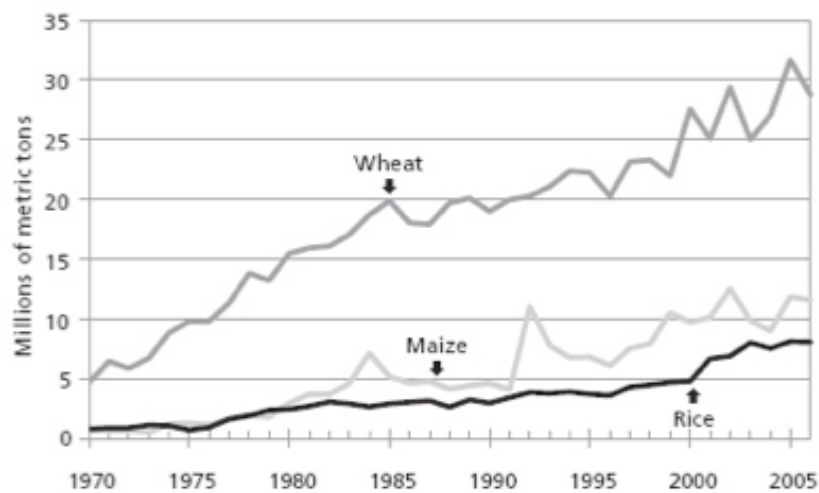


Figure 1 Grain imports to Africa, 1970-2006 (FAO)

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longer afford to maintain these already episodic safety nets, and they cut back on subsidies and crop marketing boards.²²⁰ By the end of the 1970s, reliance on cheap imports of maize, rice, and wheat had become the more pragmatic policy option, and any support that the states did give to their agricultural sectors was to bolster the estate farms that specialized in export crops.²²¹

The 1980s were Africa's "lost decade" of development. After years' worth of borrowing at high interest rates, African states turned to the World Bank and International Monetary Fund (IMF) to finance their heavy debts. In line with the neo-liberal paradigm of the Reagan and Thatcher era, these two institutions imposed a series of structural adjustment programs (SAPs) meant to reduce the role of the state in the economy. These programs entailed currency devaluation, the removal of price controls on agricultural commodities, and a massive reduction in infrastructural investments.²²² For African smallholders, these programs in effect signaled the complete erosion of the peasant agricultural sector. Says Bryceson,

SAPs starved the peasant sector of capital investment and productive infrastructure, and economic liberalization exposed a weakened smallholder sector to competition from highly subsidized large-scale Northern farmers, while encouraging staple food import dependency in African cities as well as migration to the cities.²²³

Thompson and Mushita point to Namibia as the paradigmatic example of Sub-Saharan Africa after a decade of SAP: at its independence in 1990, a mere 4,000 landowners (all white) owned 50 percent of all arable land.²²⁴

The ramifications of the SAPs have yet to release their stranglehold on African smallholders, and the economic downturn and resulting food crisis of the late 2000s have only widened an already vast wealth gap. Today, nearly 70% of Africa's population relies

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on subsistence farming for a living.²²⁵ Despite this demographic, the majority of Sub-Saharan African countries have built their economies around the export of primary commodities, and are thus vulnerable to the volatility of both the climate (96% of Africa's arable land lacks proper irrigation and thus requires landfall²²⁶) and global markets. Moreover, the growing demand for agrofuels has intensified the commodification of rural agriculture: foreign investors command tens of millions of hectares of land on the African continent predominantly for the purpose of foreign consumption, with little regard for the fact that millions of Africans are poor and malnourished.²²⁷

Land reform, as in India, has remained unrealized for the rural peasantry: "The demands for land by the poor (rural and urban) and elites are founded on the contradictory objectives of enhancing the livelihoods of the former and the accumulation strategies of the latter," writes Sam Moyo.²²⁸ Scholars and activists have declared Africa in a state of "food crisis" for the past two decades. The privatization of enterprises that once lay in the democratic public sector (albeit imperfectly, Holt-Giménez et al. admit) has left rural farmers without the prices, credit, and venues needed to grow and sell crops, and consumers without the adequate funds to afford food.²²⁹

Since the 1960s, a massive influx of foreign aid has funded numerous development models, all of which have induced further dependency on aid and have severely hindered the smallholder agricultural sector. With her 2009 *Dead Aid*, Dambisa Moyo became an overnight success by claiming that aid to Africa has historically been "an unmitigated political, economic, and humanitarian disaster."²³⁰ Various attempts by national

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governments to lift their constituents out of poverty via import substitution or market deregulation have similarly failed. The vast majority of the benefits the liberalization of the late 20th century introduced accrued only among the already wealthy, and failed to reach rural villages, where millions of Africans still live in poverty.

The Advent of Philanthrocapitalism and the Gates Foundation

Now, a new type of assistance is making its way to the continent. A group of influential individuals, organizations, and businesses comprise the “philanthrocapitalism” movement, or the use of market mechanisms through the vehicle of philanthropy to affect social change. Philanthrocapitalism at its essence is about the application of business strategies to charitable giving, about implementing the profit motive in a socially responsible manner to induce economically efficient behavior where it is most needed. In doing so, they hope, their strategic donations will attract foreign capital at a far faster rate than traditional philanthropy can.²³¹

With his \$36.7-billion-dollar philanthrocapitalist Bill and Melinda Gates Foundation, Bill Gates is trying to restructure the way the West does philanthropy.²³² Since early on, the foundation’s primary focus abroad has been on global health, always abiding, of course, by philanthrocapitalist principles. To correct what Gates called a “market failure on the research side” of disease eradication, by 2007 his foundation had poured \$8 billion into drug research, partnering with major private corporations for research and development, and with national governments for the purchasing and distribution of health care products. Ultimately, foundation leadership hopes to provide a model that can be scaled up to induce further corporate investment, the yardstick by

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which he measures progress: “We would be a failure if we weren’t increasing the overall money going into global health,” he said. “And we are increasing it, very substantially.”²³³

The Alliance for a Green Revolution in Africa

Despite the well-documented failure of foreign aid to economically develop the region for the past fifty years, philanthrocapitalists are now tackling the issue of widespread poverty in Sub-Saharan Africa. On September 12, 2006, the Gates and Rockefeller Foundations – the two largest philanthropic foundations – issued a joint statement announcing the establishment of the Alliance for a Green Revolution in Africa.²³⁴ And while the World Bank and the African Development Bank especially have helped the Alliance mobilize resources, the Gates and Rockefeller Foundations have been the two principal actors, with the former pledging an initial \$100 million, and the latter another \$50 million.²³⁵ In one respect, the founding of the Alliance marks the formal institutionalization of philanthropic development through a structure the original Green Revolution lacked.

Conway, president of the Rockefeller Foundation from 1997 to 2004, laid out the template for the Green Revolution in Africa in his *Doubly Green Revolution*. While crediting the Green Revolution in Asia as instrumental in the alleviation of hunger across the globe, he acknowledged the environmental ramifications of the technological packages, as well as the skewed distribution of accrued income.²³⁶ The “doubly Green Revolution,” he said, should “repeat the successes of the old one through the development of high-yield agricultural techniques while at the same time being

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ecologically safe, sustainable and equitable.”²³⁷ This framework has implicitly served as the guiding philosophy of the Green Revolution in Africa.

This movement for a “new” Green Revolution takes a multipronged approach to agricultural development. AGRA’s goals across the food production chain can be summed up by the following statement on its website:

These challenges involve access to farmer inputs: high quality seeds, organic and mineral fertilizer, and systems of reliable water management. They also involve access to ‘output’ markets – to the crop storage, processing transport, and finance that ultimately allow small-scale farmers to sell their harvests and make a profit.²³⁸

According to the Alliance website, its four primary programs are as follows:

- *High-yield variety seed (HYV) development* – “Across Africa, smallholder farmers have very limited access to responsive, high-yielding, locally adapted varieties of their staple food crops,” its website says. Through its Program for Africa’s Seed Systems, AGRA is both training plant breeders and developing hybrid seeds that boost output and are resistant to abiotic and biotic stresses. The program uses genetic engineering and conventional breeding methods, though it explicitly does not distribute genetically modified organisms (GMOs), which controversially borrow genetic material from separate organisms. To disseminate these seeds, AGRA is working to establish networks of agrodealers. In one year, the website boasts, agrodealers in Malawi, Kenya, and Tanzania sold \$45 million worth of seeds through these networks.²³⁹
- *Soil fertility management* – Due to a lack of volcanic rejuvenation, high acidity, and poor management, Africa’s soils are notoriously inhospitable: more than three-quarters of sub-Saharan Africa’s arable land has fertility-related problems.

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Thus, as part of its “integrated approach to soil health,” AGRA plans to strengthen both inorganic fertilizer manufacturing capacity and local fertilizer distribution systems.²⁴⁰

- *Market access program* – The organization has undertaken many initiatives to integrate sub-Saharan smallholders into the both the input and output markets. This program provides farmers with microcredit loans, inventory and crop-grading services, and means for connecting with potential traders and consumers. In Tanzania, Uganda, Kenya, Mozambique, and Ghana, AGRA has leveraged over \$170 million in microloans for smallholder farmers, with the aim of providing them²⁴¹
- *Public policy program* – The final pillar of AGRA’s approach is to partner with local research institutions and civil society actors to lobby on behalf of policies that would expand markets and enable the aforementioned three programs.²⁴²

Much of AGRA’s language inspires hope that its principal architects will learn from the failures of the first Green Revolution. Indeed, some changes have been welcome. Deputy Director of Agricultural Development Roy Steiner took a play from Conway’s book in acknowledging the “poor policy choices” in the past that resulted in the depletion of water tables and the overuse of fertilizer. Moreover, AGRA recently funded the African Centre for Crop Control, which trains African scientists in Africa, thus preventing the “brain drain” that is so common in developing nations. Finally, with the encouragement of the Gates Foundation, research institutions have in recent years placed a special focus on educating women in pursuit of PhDs.²⁴³

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Beyond these admirable steps forward, however, there are few signs that the Alliance will do much more than tweak the initial Green Revolution formula. This is evidenced particularly in the continued emphasis on the type of potentially labor-displacing technology that necessitates a dependency on foreign inputs. These inputs fall largely under the umbrellas of inorganic fertilizers and genetically enhanced seeds. As Cullather writes, “Technological idealism is back in style.”²⁴⁴ Roughly one third of the now \$1.3 billion that the Alliance has invested has gone towards scientific and technological developments; 30% of the grants in 2008 specifically funded biotechnology research.²⁴⁵

Patel et al. notice a further parallel. In examining the roles of the foundations specifically in the two Green Revolutions, they note the privileging of the specific capitalist enterprises that earned the philanthropists their fortunes in the first place: in India, the Rockefeller Foundation, so closely affiliated with the Standard Oil Company, pumped money into the development of chemistry- and oil-based agricultural technologies; in Africa, the Gates Foundation is adhering to a model that prioritizes proprietary intellectual property, a capitalist institution that has without a doubt served Microsoft very favorably.²⁴⁶ This déjà vu certainly lends support to the credence that these Green Revolutions are merely new ways of doing business in the name of philanthropy. It is conspiratorial to claim that the foundations are doing so out of malfeasance; rather, I mean to suggest that they are acting simply out of inherent institutional biases and a desire to protect self-interests.

Still, there is good reason to believe that AGRA’s leadership bears little allegiance to the values it espouses in the organization’s mission statement. A leaked internal memo

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states, “Over time, this [strategy] will require some degree of land mobility and a lower percentage of total employment involved in direct agricultural production.”²⁴⁷ While it is again difficult to determine the true intentions of the organization’s leadership, what is clear is that what were unintended consequences in South Asia will be expected – and accepted – procedures in Africa. Some economists recognize this displacement as a necessary evil of macro level modernization. Paul Collier has actually advocated “land mobility” elsewhere, claiming, “Large-scale agribusiness in Brazil will drive farmers off their land to the cities, where they will find ‘local wage jobs.’”²⁴⁸ But it is crucial that the necessary protections, which are by and large missing in Sub-Saharan Africa, accompany such market-led modernization. “A *laissez-faire* perspective,” writes Bryceson, “arguing that smallholder farmers should simply find work elsewhere and let small-scale agriculture disappear, amounts to gross negligence in the absence of any policy provision for alternative non-agricultural employment.”²⁴⁹ Especially given the explicit commitment AGRA has made to improve the welfare of Africa’s small-scale farmers, treating already vulnerable populations as collateral damage is problematic.

AGRA’s proponents point to Malawi’s recent success as justification for Green Revolution policies.²⁵⁰ In 2002, a severe drought led to a devastating food crisis; by 2005, Malawi was once again a food exporter.²⁵¹ Many thank government subsidies of imported fertilizers for this quick reversal, and AGRA has since proposed and lobbied on behalf of “market-smart subsidies” in Kenya that distribute vouchers to stimulate demand for fertilizers.²⁵² True, output in Malawi did increase dramatically. Nevertheless, this fix is shortsighted, as cheap inorganic fertilizer disincentivizes sustainable soil maintenance. More importantly, the ease with which the oil shock dismantled subsidies of foreign

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inputs in the 1970s demonstrates the susceptibility of government assistance to price fluctuations on the global market.²⁵³ AGRA, then, is modeling this multifaceted effort off what might be the beginning of another cycle of aid dependency and smallholder displacement.

Other Major Players in the New Green Revolution

Although the Alliance, in many ways the vehicle through which the Gates and Rockefeller Foundations operate, is the most prominent actor in the Green Revolution for Africa, as in the case of India in the 20th century, other institutions are naturally involved as well. Unlike in the case of India, the majority of major players this time around share very similar philosophies when it comes to this type of agricultural development, which makes systematically analyzing their various roles' more challenging. What is clear, however, is the fact that AGRA, with its vast wealth and resources, is commanding the lead in this Green Revolution.

Supranational Bodies

A substantial number of multilateral bodies, including the African Union (AU), the United Nations (UN), and the World Bank (which has since backed away from the staunch neoliberalism of its SAP days) have laid the groundwork for AGRA in several key ways. Of all these institutions, the AU's support more than others has really been in name only. Though in 2003, member states pledged to devote at least 10 percent of national budgets to agricultural programs, five years later only Rwanda and Zambia had upheld that promise. When considering that in the last two decades of the 20th century,

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funding for agricultural science fell 27 percent (it rose 30 percent in the rest of the developing world), this lack of commitment only reflects a broader trend of underfunding of the agricultural sector by the majority of African countries.²⁵⁴

Although the UN has not been quite as explicit a proponent of the Alliance as other bodies, it has indirectly paved the way for a new Green Revolution in the form of its UN Millennium Project. In 2005, the UN formally declared its Millennium Development Goals, which aimed to, among other things, halve the proportion of the population suffering from hunger by 2015. As part of this endeavor, a team led by economist Jeffrey Sachs has established 80 Millennium Villages in ten Sub-Saharan African countries. These villages have relied upon technological innovation to dramatically raise crop yield in previously “hunger, poverty, and disease” hotspots.²⁵⁵ The Alliance has pointed to the success this project has had in transforming food deficits into food surpluses as a model for future AGRA efforts.

Agribusiness

One major discrepancy between the two Green Revolutions is the influence of agribusiness. At the foundations’ explicit invitation, major transnational corporations have taken explicit steps to bolster the Alliance’s efforts by investing in the production and dissemination of biotechnology to increase agricultural output. As Shiva bluntly put it when interviewed, “The difference between the two is that the first Green Revolution was led by the public sector: government agencies controlled agricultural research and development. The second Green Revolution is led by Monsanto.”²⁵⁶ While this claim is

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certainly melodramatic, she is correct in indicating that the influence these corporations wield is much greater than in the previous case.

It should be noted that AGRA has yet to make an explicit commitment to GMOs. Still, Monsanto, the multinational biotechnology corporation that controls roughly half the hybrid seed market in Africa, is inextricably linked with AGRA.²⁵⁷ Not only is its former senior vice president Robert Horsch AGRA's Senior Program Officer of the Global Development Program, but over \$100 million in grants thus far have gone to enterprises affiliated with the corporate giant as well. In expanding their markets to Sub-Saharan Africa, Monsanto and similar biotechnological corporations are targeting the "bottom of the pyramid" consumers: poor but numerous farmers.²⁵⁸ In presenting the incorporation of Monsanto into its operative strategy as "creative capitalism," AGRA is setting loose, in Daño's words, a "Trojan horse."²⁵⁹

Monsanto is not the sole corporate sponsor. Yara International, the leading supplier of mineral fertilizers, has a vested interest in AGRA as well. Since 2005, its philanthropic Yara Foundation, which was established specifically for the purpose of advancing the African Green Revolution, has awarded the Yara Prize for a Green Revolution to "commend outstanding efforts to increase food production and availability." The Foundation came under fire, though, when it awarded the prize to Ethiopian President Meles Zenawi, who has been accused of rampant "corruption, political manipulation, and acts of repression."²⁶⁰ Although philanthrocapitalism proponents repeatedly cite the potential of major corporations to attract much needed investment to regions of depravity, the twin interests of Monsanto and Yara in this new Green Revolution have raised legitimate concerns among observers as to who really stands to profit from these efforts.

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Conway's book foreshadowed this development. His goals, while certainly well intentioned and more forward-thinking than those of his colleagues at Rockefeller, ultimately undermined one another. He said he hoped to simultaneously increase farmer participation and modern ecology, two historically incompatible strategies. Although he called for a decreased dependency on chemical inputs, he did not mean a shift towards organic agriculture, but instead as a push for genetically modified seeds to replace chemicals.²⁶¹

This shift encouraged by Conway and these corporations would disrupt years' worth of seed-sharing practices in many small villages across the continent. When seeds are not handed down between generations but are instead purchased each year from major corporations, farmers lose the autonomy they once enjoyed over their own means of livelihood. This is the direction AGRA appears to be heading, one that will be discussed in further detail below.

AGRA and the Abuse of Capitalism

As in the case of the Indian Green Revolution, we can now turn to the literature surrounding liberal foundations to better analyze how, through narrative formation, the restructuring of class divisions, and social control, these private institutions are merely relocating temporally and geographically their perpetuation of the exploitative capitalist structures of the first Green Revolution.

Narrative Formation

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As demonstrated in the previous chapter, in the height of the Cold War, the political and economic elite of the United States had a vested interest in promoting capitalism abroad. At the risk of oversimplifying, they did so in the case of the Green Revolution in India by promoting “neutral” technological development. Once again, we see philanthropic foundations ascribing hunger in developing countries to a “technical deficiency” rather than to decades’ worth of ineffective aid and neo-colonialism.²⁶² Foreign inputs are once more at the forefront of this scientific revolution, and as before carry with them the same implications of power imbalances.

This time, too, the foundations have the luxury of history to craft a paradigm that best frames their interests. “Revisionists,” as Cullather calls them, have, with several notable exceptions, recast the first Green Revolution in a wholly positive light. In this new retelling, the technologies of the 1970s lifted South Asia and Latin America out of hunger, and the set of policies the project spawned served as a precursor to the free-market solutions of today.²⁶³ They even de-politicize the man behind it all, Norman Borlaug himself: “While all accounts pay homage to Borlaug,” writes Cullather, “they cast him as a technologist rather than as a scientific ambassador who counted prime ministers and dictators among his personal friends.”²⁶⁴ Now, philanthrocapitalists, with their emphasis on returns to investments, similarly make no mention of the political implications of the technocratic solutions they prescribe.

It should be noted, though, that the broader geopolitical contexts in which these foundations have situated themselves then and now share few similarities. Gone is the Cold War mentality that equated hunger with vulnerability to communism. Today, development economics are instead increasingly driven by a submission to the global

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market, one that is “much more restrictive to trade from poor countries that have no chance of competing with the heavily subsidized commodities of rich countries.”²⁶⁵

Regardless of this reality, the architects of the Alliance – even more so than in India – see market integration as the next logical step after technological advancement.

From this perspective, it is time for the private sector to accomplish what the inefficient and corrupt public sector has tried and failed. Of course, this line of thinking assigns to this sector a set of normative values bordering on altruism that is all but absent in today’s neo-liberal environment. In Sub-Saharan Africa, the privatization of government services has all but eliminated necessary agricultural training programs, and the private sector has yet to fill the remaining void. Says Holt-Giménez,

The Rockefeller Foundation’s notion that small rural shopkeepers will somehow provide farmers with agronomic technical assistance needed to maintain complex integrated soil management programs, crop improvement, or stable marketing environments is ludicrous.²⁶⁶

As great a cause for concern the fetishization of technology continues to be, it is the pairing with a blind adherence to free-market principles that should worry African farmers the most.

Restructuring of Class Divisions

Having shown signs of advancing the same technocratic solutions as before (just with new technologies), AGRA seems as if it will replicate the landscape of monoculture and smallholder dispossession that came to define the Green Revolution for so many Indian peasants half a century ago. It should be reemphasized that technology in and of itself is not the point of contention; scientific advancement clearly holds great value. Rather, it is the free-market ends to which this technology is a means that should concern small-scale

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African farmers. “Technology must be owned and controlled by the people who are not driven by profit motives, otherwise it will deepen the power imbalances between smallholder farmers and transnational corporations, represented by the ‘local’ agro-dealers and regional wholesalers,” writes advocacy group ActionAid.²⁶⁷ In the speeches and publications issued by AGRA and its proponents in the past five years, the concepts of resource redistribution and land reform have been all but absent. In calling for these alternatives, I do run the risk of committing AGRA’s mistake of reducing all of Sub-Saharan Africa to a single unit; indeed, these two proposals are highly dependent upon the specifics of any given region or context. Nevertheless, the foundations’ failure to even consider these as options is indicative of the fact that the Gates and Rockefeller Foundations have little intention of upsetting the power structures upon which wealthy, male landowners sit.²⁶⁸

As in India, AGRA is likely to increase the collective debt-dependency of smallholders and push those with insufficient yields out of the market. As part of its market access program, AGRA plans to implement short, high-interest lending periods (up to 12% interest in Kenya) that are simply infeasible for the majority of Africa’s agricultural sector.²⁶⁹ When land inevitably starts to concentrate as it did in India, then, these farmers will find themselves with few options. Some, like Collier, might argue that this much-needed increase in agricultural efficiency would justify any unfortunate short-term dispossession of small farmers. Given the inability of most Sub-Saharan states to provide adequate social services to compensate for this displacement, though, this logic seems to overlook the strain this new class of landless individuals will put on cities, to where, like in India, they are likely to migrate. What farmers need access to are not

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exploitative financial institutions but rather secure land acreage, affordable resources, and the ability to harvest their own crops sustainably.

Moreover, the fact that AGRA and the Gates Foundation have indicated that in the future they will advocate for the adoption of GMOs in Africa suggests that the social transformation of the first Green Revolution could occur at an even faster and more severe rate.²⁷⁰ GMOs – which are heavily patented by major agricultural transnational corporations like Monsanto, Dupont, and Sygenta, all of which have recently cooperated with African research centers to bolster new technologies and seed distribution networks²⁷¹ – are particularly troublesome for African smallholders, in that their usage threatens the viability of local varieties.

With the introduction of HYVs in India nearly fifty years ago, even those who opted out of the Green Revolution witnessed as the entire endeavor disrupted the complex dynamic that held together their community farming systems, effectively preventing a return to traditional methods. Even without AGRA, a similar trend is taking place in Sub-Saharan Africa, Bryceson writes,

The undermining of local economies of rural communities due to sudden market shocks or gradually worsening terms of trade, market disincentives, an obstacles has already and will continue to undermine personal welfare, leading to social upheavals and political destabilization.²⁷²

Already, the general shift towards the production of export commodities in the region has entailed the monetization of even the most informal exchanges, putting those with minimal capital at a new disadvantage. “Activities formerly done on an exchange basis or as a contribution to village life are increasingly performed for cash,” she adds.²⁷³

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Nevertheless, it is this very trend of global market integration upon which the Alliance has chosen to capitalize.

Particularly if AGRA makes explicit its currently implied commitment to GMOs, the new Green Revolution will restructure agriculture for all of the region's smallholder farmers. Essentially, while those who adopt GMO seeds would have to pay the hefty access fee to these foreign inputs, those who do not could unexpectedly face lawsuits in the case of potential gene contamination.²⁷⁴ "Genetically engineered crops create opportunities for transnational corporations to control and profit from every step of the smallholder production processes," write Holt-Giménez et al.²⁷⁵ Whereas the HYVs of the Green Revolution in India drained peasant farmers of their already minimal resources (as is likely to happen here as well), GMOs could spell a total dismantling of individual farmer autonomy in Sub-Saharan Africa.

Finally, this time around, not only can we expect this modernization project to further divide the affected populations along class lines, but along gendered lines as well. In many regions in Sub-Saharan Africa, previous government policies that discouraged agricultural work drove men into the cities and left the women to care for the land. As a result, while men often still control household finances, women are the ones with years' worth of agricultural know-how and practice. "Rather than supporting and building on women's agricultural knowledge systems," write Patel et al., "cash-based agricultural technology allows men with the economic wherewithal to displace women as farmers."²⁷⁶ These market-based solutions that fail to take into account regional and cultural diversity will not provide the change these smallholders are looking for. For the Alliance to have the type of positive, meaningful impact on the livelihood of African farmers its mission

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claims, it is crucial that it carefully examine existing power dynamics such as these and determine their capability to disrupt even the most well-intentioned endeavors.

Unfortunately, it does not appear as if the Gates or Rockefeller Foundations have fully taken such concerns into consideration, and are heading down the familiar path of inducing inescapable debt, output commodification, and class conflict. As Holt-Giménez and Patel say,

When combined with the same social and technological paradigm that has driven the Green Revolution for four decades, and given the present economic and political limitations of many weakened African states, potential for renewed structural violence against poor rural communities is great.²⁷⁷

With the absence of the African development state of the 1960s, there are few barriers standing in the way to such disintegration.

Social Control

Although AGRA leadership claims that the coalition is, like the first Green Revolution, a public-private partnership – one that works primarily to increase the wellbeing of smallholder farmers – its financial and governance structures indicate otherwise. As of 2009, major philanthropic actors funded the project almost exclusively; no African governments had made any significant financial contributions.²⁷⁸ But more important than the limited sources of funding is the lack of space for important civil society actors. As it is now, AGRA is meant to be an organization for struggling farmers, but not one with them.

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By proclaiming itself a non-government organization (or at the very least a partner of NGOs), AGRA, with its comparatively infinite budget and influence, monopolizes civil society discourse and crowds out coalitions of grassroots activists. Write Patel et al.,

Just as in India, where peasant demands for land reform in the 1960s that might have led to more sustainable and durable progress (as such reforms did in China, Japan, Taiwan, and South Korea) were ignored, African farmers advocating their own solutions to the food crisis are being marginalized.²⁷⁹

As will be explored in greater detail in the following chapter, frustrated farmers and civil society activists have come together to collectively demand alternatives to AGRA's pro-business, industrial means of doing philanthropy. These demands have gone largely unheeded.²⁸⁰ Given that output is certain to rise in the initial phases of the new Green Revolution, the foundations will once again have this set of statistics on their side, which may be enough to ameliorate less informed skeptics. As Shiva put it succinctly in an interview, "If [AGRA] controls seeds, it controls foods; it knows that, and that's its strategy. It's more powerful than bombs or weapons; it is the best way to control the people of the world."²⁸¹ While a rise in agricultural productivity would be no small feat, for the sake of widespread applicability and sustainability, it is crucial to pursue this increase with an understanding of the concerns of those whom it will directly affect.

A new initiative does indicate that AGRA may be willing to learn from any mistakes it makes along the way: it recently distributed cell phones to over 10,000 farmers to allow them to give AGRA headquarters feedback regarding what works and what does not. "It's unusual in the world of foundations to have such a strong commitment to correcting mistakes. In its flexibility and openness to reform, the Gates Foundation seems ready to depart from the trajectory of the first Green Revolution," Patel et al. write

optimistically.²⁸² At the same time, this project is emblematic of the degree of “change” to which the foundations are committed: how much feedback can a farmer give about unequal land distribution or chronic indebtedness via a phone call?

Although any definite claim that AGRA formally excludes the very people on whose behalf it claims to exist would be premature, if its operative strategy remains unchanged, there is little reason to be hopeful. When considering that philanthropic decisions are substituting for democratic decisions – whatever they may be – the Alliance assumes an air of neo-colonialism.

Conclusion

The jury is still out on the Alliance for a Green Revolution in Africa; it is too early to say for sure what the implications – beneficial or detrimental – will be for Sub-Saharan Africa’s 70 percent smallholder population. What is increasingly apparent, however, is that by framing Africa’s food crisis as one that can be saved by technological advancement and free-market principles, pushing the same types of costly inputs that that cost many Indian farmers their livelihoods beginning in the 1970s, and denying local civil society organizations a voice, the Rockefeller and Gates Foundations through the Alliance will do more to export institutions of Western capitalism than reduce hunger and poverty in the regions. A number of activists domestically and abroad, however, have proposed alternatives rooted in ecological sustainability and farmer participation. It is to these that I turn in the conclusion.

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-Chapter 4- Conclusion

“Enough is enough. I am not going to go on my knees to beg for food. Let us grow the food ourselves.”

*President of Malawi Bingu wa Mutharika*²⁸³

The Green Revolutions Revisited

While the material benefit of the original Green Revolution remains a point of contention, scholars on the whole agree that the significant increases in agricultural output did introduce a new class of ecological and social problems to an already volatile rural society: smallholders that bought into the promise of higher yields were driven into debt as a result of costly foreign inputs; mechanization displaced the labor of landless workers at a greater rate than it created new job opportunities; and smallholders who rejected Green Revolution technology or wished to return to traditional farming methods saw their integrated farming systems disrupted and the soils upon which they farmed destroyed.

Some, like Gordon Conway, chalk up these issues, particularly those pertaining to income inequality, to the Green Revolution “bypassing” smallholder farmers.²⁸⁴ Granted, he may be correct in claiming that many farmers did reap the benefits of these new HYVs while those unable to purchase the foreign inputs the Green Revolution fled to cities that were unprepared for such rapid urbanization. The validity of his statement, however, is then predicated on the belief that for this model to be exported to a needy region like Sub-Saharan Africa, it simply needs to be deepened – a “doubly Green Revolution.” While for a then-president of the Rockefeller Foundation he does offer surprising insight into the social and ecological ramifications of the Green Revolution, his perspective entirely overlooks the fact that these environmental and economic ramifications are all

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but inherent to the Green Revolution model. This model facilitates the private accumulation of capital and industrialized agriculture at the expense of bio-diverse, cooperative sustainable farming practices that have assisted small landholders in the past at a fraction of AGRA's budget.²⁸⁵ Furthermore, this outlook fails to examine the key role American philanthropic foundations (specifically, liberal foundations) have played in shaping these projects in a manner that perpetuates the exclusionary capitalist system that has allowed the foundations to exist in the first place.

Though scholarship on American foundations is limited, from the existing literature we can discern three notable practices in which liberal foundations engage when carrying out their philanthropic efforts: the construction of depoliticized narratives to justify their behavior, restructuring of class dynamics through the promotion of capital-intensive solutions, and the co-optation of social resistance. This framework has guided my analysis of the work of the Rockefeller and Ford Foundations in India in the Cold War era, and that of the Rockefeller and Bill and Melinda Gates Foundations in Sub-Saharan Africa today. Though even skeptics are hesitant to pronounce the new Alliance for a Green Revolution in Africa a certain disaster, the increasing emphasis on genetically enhanced seed varieties, inorganic fertilizers, and free-market principles are enough cause for concern that the new Green Revolution is similarly poised to raise food production but doomed to repeat the failures of its namesake.

Alternatives to AGRA

As I have presented in the preceding chapters, the Green Revolutions of the 20th century and of today are today are at best efforts to end hunger, and at worst a means of

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preserving unfair capitalism institutions at the expense of society's most vulnerable populations.

Now, in response to the early implementation of AGRA's numerous programs, affected smallholders and various members of civil society acting on their behalf have mobilized to advocate alternative solutions to Africa's hunger crisis that address both the productive capabilities of farmers and the liberalized political context in which they exist. This shift towards sustainable farming methods is gaining momentum: transcontinental movements like La Vía Campesina ("the Peasants' Way") are spreading, articulating "social, environmental, economic, and cultural" concerns and articulating for land reform.²⁸⁶ These movements are self-organized farmer federations that signify "both a break with conventional federations run by large producers and with humanitarian NGOs typically concerned with peasant agricultural production."²⁸⁷ These movements aim to open the issues of sustainable agriculture and equitable land distribution to public debate, from which the neo-liberal discourse to which AGRA is the newest contributor has largely shielded them.

It is beyond the scope of this paper to outline a detailed proposal for an alternative to AGRA. What I will explain, however, are the conditions that this new means of development need to meet. The most commonly discussed alternatives fall under the broad rubric of food sovereignty. The notion of food sovereignty is still young, but for now can be understood as a "people's right to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems."²⁸⁸ Abiding by this framework entails the

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democratization of the food system: people become in charge of not only what they eat, but how it is produced, marketed, and sold as well.

Much of this ideology draws upon the principles of agroecology, or the application of ecological principles to the production of food.²⁸⁹ Proponents of agroecology do not deny that productivity levels are too low to feed Africa's growing population, but they reject the agricultural modernization model based on industrialization and a bolstering of export commodities (and in the case of Africa, biofuels).²⁹⁰ In order for agriculture to be successful, they say, practices cannot be imposed from above but rather must "bring to bear local knowledge and skills on the research process."²⁹¹ This approach is based not on privatization and exclusivity but on shared knowledge, cooperative institutions (such as community seed banks), and alternative systems of production.

The concepts of food sovereignty and agroecology are grounded in more than just idealistic rhetoric. In 2008, the International Assessment of Agricultural Knowledge, Science and Technology for Development released a report based on four-years of research and consultations with 400 scientists that "warns against relying on genetic engineering 'fixes' for food production and emphasizes the importance of locally based, agroecological approaches to farming," writes Holt-Giménez.²⁹² Indeed, a survey of 45 "sustainable agriculture projects" in 730,000 households in 17 African countries found that 95 percent of these initiatives improved yields by 50 to 100 percent.²⁹³

In denouncing the technocratic solutions of the original and new Green Revolutions, I do not mean to imply that research is an unwelcome component of the food sovereignty movement. However, the development community has to abandon its reductionist philosophy towards technological development. It can no longer pretend technological

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innovation can be measured on a material basis alone. We have to recognize the capacity of mechanization to create, but also to displace, rural employment. Opportunities for research regarding resource conservation and agricultural procedures are many, but this research cannot take place in research centers halfway across the globe. Rather, it must incorporate years' worth of agricultural and experience that already exists today on the ground.²⁹⁴

Finally, it is naïve to assume that attempts to bolster sustainable agriculture on behalf of Sub-Saharan smallholders can work if unmatched by specific changes in policies within the food commodities market. Of course, these policies will differ by country, and should not be thought of as a homogenous unit. Nevertheless, it is crucial to tighten regulation of U.S. agribusiness to prevent the “dumping” of cheap grain onto African markets. Governments need to support farmers by implementing living wages and floor prices, and need to incentivize local distribution of food for the sake of income equality, nutrition, and the environment. Without the necessary public sector support, even the most productive agroecological farmers will struggle to garner a profit in the increasingly competitive and agribusiness-dominated world food market.

What About Foundations?

Missing from these proposed alternatives is any substantial discussion about the role major philanthropic actors like the Gates Foundation should play, which naturally leads one to wonder *if* they should play any kind of role at all. The norms espoused by food sovereignty advocates and those currently perpetuated by liberal foundations are indeed all but mutually exclusive, and opportunities for their reconciliation are slim.

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After all, as explained more thoroughly in Chapter 1, for such prominent actors in our democratic society, philanthropic foundations as a group demonstrate insufficient procedural legitimacy. Even staunch advocates of foundations like Fleishman recognize the need for more policing of the non-profit sector to foster foundation legitimacy. As he is adamant to point out, direct regulation by either public or private institutions would compromise the autonomy that foundations can and have used for public good. He does, however, believe that self-regulation and greater government oversight are necessary to increase foundation transparency and reduce foundation misconduct.²⁹⁵

Fleishman's concerns, however, are not quite the same as those that fellow critics of the Green Revolution and I share. Whereas he is worried about explicit corruption within foundations, I am more concerned about the characteristics of their governance structures that allow and even encourage trustees to undertake top-down projects that intentionally or not promote cultural imperialism. White men have historically comprised foundation leadership, a far cry from the demographic of most of the populations they seek to serve. Moreover, foundations suffer a lack of accountability, both internally, as foundation trustees are unelected and responsible to only each other, and externally, as watchdog organizations have a limited (albeit growing) say in their legal privileges. However, until foundations make marked steps to adopt more racially, economically, and ideologically diverse boards, and until the public demands institutions to monitor these concentrations of power, it is unrealistic to expect much improvement in this regard.

How They Could Help

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At the same time, foundations like the Rockefeller and Gates Foundations do certainly have a number of tools at their disposal that could be used to support these equitable farming practices and advocacy for land reform. It is worth revisiting these. Turning once again to Fleishman, he succinctly sums up how foundations' unique position in the strata of American society gives rise to these attributes:

Unlike for-profit businesses, [foundations] have only one mandate – to assist and improve the workings of the civic sector for the good of society. Unlike operating charities, they are not trammled by the day-to-day demands of their many constituents groups. And unlike wealthy individuals, they can have staffs that can research social issues, institutional memories that can inform strategies for effecting social change, and they staying power necessary for dealing with persistent problems.²⁹⁶

All of these advantages are those that civil society actors working on behalf of sub-Saharan smallholders do not enjoy. In particular, foundations could utilize the following three characteristics to disrupt existing structures and lend legitimacy to the work being done on behalf of food sovereignty:

Assets

Most obviously, foundations have an unimaginable reserve of resources: the Gates Foundation alone has a greater net worth than the GDP of twelve African nations combined.²⁹⁷ On the most basic level, if foundations are truly interested in the reduction of widespread hunger, they should allocate capital towards staple rather than export food crops, or towards the development of agrofuels as the Gates Foundation is doing with AGRA.²⁹⁸ Moving beyond the farm itself, peasant movements – even the largest like *Vía Campesina* or Brazil's Landless Peasant Movement – have only been able to affect limited change. These movements are crucial to establish the political will to address the

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conditions that would make the widespread adoption of agroecological practices a reality.²⁹⁹ Still, they have struggled to effectively address issues of policymaking and advocacy. These networks also fail to connect to a significant portion of their potential base due a sheer lack of communication channels. Foundation support for these popular movements could simultaneously ease the burden of activist leaders and lend international legitimacy to causes that might otherwise go overlooked.

Extra-Political Identities

Foundations, as established in Chapter 1, at least in theory operate wholly apart from the state. As Prewitt says, the non-profit sector “provides public goods but retains its right to push back if the state encroaches too far into the sphere of personal freedom – that is, its right to be an independent power center.”³⁰⁰ In the minds of the receiving parties, foundation activity is not necessarily steeped in both the historic biases and the strategic interests that government action may be. As demonstrated by the rapid expansion of social movements like Campesino a Campesino, African smallholders across the continent are increasingly distrusting the state and as a result shifting their faith towards NGOs.³⁰¹ Foundations thus find themselves commanding a political space and trust that the United States government might not enjoy. With this influence, foundations have the ability to, among other things, act swiftly and decisively to establish forums for civil society participation,³⁰² and educate their audiences on how to transform the face of Sub-Saharan Africa to one of sustainable technology, cooperative agriculture, and political mobilization.

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Expertise

In recent years, says Frumkin, foundations have begun to professionalize their staffs, a move that has given them “standards for conduct, training programs aimed at developing-grant-making skills, and a body of expert knowledge to guide practice.”³⁰³ This trend is undoubtedly increasing project effectiveness. Much research is still needed to determine how more of Africa’s peasant farmers can intensively but feasibly and sustainably manage the resources available to them.³⁰⁴ Foundations, either with their sizeable staffs or ability to recruit experts, can play a crucial role not just in incubating social movements, but also in coming to better understand the technical ideas around which these movements are organized.

Finding Normative Legitimacy

What I am really asking, then, is: is it possible for foundations akin to the Rockefeller, Ford, and Gates Foundations to obtain normative legitimacy despite, or perhaps even as a result of their well established lack of procedural legitimacy? Can they donate funds and launch initiatives in developing countries without breeding dependence? After all, as Roelofs says, “When an organization such as Ford, with assets of approximately \$15 billion, decides to throw its weight behind one cause rather than another, it is no small distortion of democracy.”³⁰⁵

Ostrander, Silva, and McCarthy label this question the “funding dilemma,” which holds that social movement organizations seeking funding either accept money from external actors (like foundations) and risk co-optation of their cause, or refuse the influence of outsiders and fundraise internally at the risk of raising insufficient funds.³⁰⁶

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The authors reject that dichotomy as oversimplified. “Under certain conditions,” they write, “mobilizing money strategically is possible and movement groups can be active agents in their relationships with funders.”³⁰⁷ In engaging grantees in dialogue throughout the funding process, foundations can avoid the trap of hegemony.

Others, however, believe these instances are rare, and are far more skeptical of social movements accepting external sources of money, particularly when such power asymmetries are bound to exist. Scholars such as McAdams and Haines point to two related trends when it comes to the funding of social movements: social control and channeling. By the former, they mean that foundations enjoy total autonomy when selecting recipients, and will thus fund only moderate actors; by the latter they mean foundations indirectly moderate the “goals and actions” of the parties they do fund so as to assure a positive return on any given investment.³⁰⁸ Such co-optation and suppression of dissent, they say, is all but inevitable.

This discussion might even lead one to ask if, from a purely utilitarian standpoint, this co-optation is entirely problematic. If foundations have the capability of increasing agricultural outputs – which AGRA certainly might – does it matter on whose terms this increase occurs? The problem with this line of thinking, though, is that the normative reasons for advocating food sovereignty are derived from the pragmatic. Though the food sovereignty and farmers’ rights movements are not identical, they share key similarities, including the underlying tenet of farmer autonomy. To quote Borowiak, this claim “does not reside in a nostalgic appeal to a traditional agronomy, to a reified indigeneity, or more generically to the conservation of what has gone before.”³⁰⁹ As demonstrated in the previous chapters, an increase in agricultural productivity does not necessarily translate to

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increased income or reduced hunger for entire subsets of the population. In supplanting traditional agricultural norms with those that reward commodification and capital accumulation, the Rockefeller and Gates Foundations have appeared to select an agenda that undermines not just the individual autonomy but also the fundamental, physical well-being of millions of Africans.

Of course, it is not impossible for a liberal foundation to tackle widespread hunger and poverty – or any social injustice – justly. Oddly enough, the Ford Foundation is a prime example of a liberal foundation that has evolved from its very conservative origins to support a number of causes championed by more explicitly progressive organizations. Granted, in some respects it does continue to operate according to the same capitalist biases we saw in the Green Revolution in India. The foundation is a major supporter of community development corporations³¹⁰ and more recently of the Grameen Bank's efforts to institutionalize microcredit in developing countries, two institutions Roelofs would consider "safe" channels for capitalism. Nevertheless, since the 1960s, the foundation has contributed to participatory democracy via a number of initiatives that range from Civil Rights funding³¹¹ to ACLU partnerships.³¹² These projects would, in the most general sense, would appear to challenge the foundation's institutional interests.

Indeed, in the case of the new Green Revolution, adopting the aforementioned suggestions requires an ideological leap that in all likelihood is too great for the Rockefeller or Gates Foundations to accept in the foreseeable future. It requires a rejection of the principles of stringent intellectual property rights, privatization, and technocratic approaches upon which both philanthropists made their fortune and

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established their respective foundations. More than that, this shift necessitates a degree of humility that foundation leadership has yet to demonstrate.

Democratizing Philanthropy

As it is, we cannot count on liberal foundations – the largest and most influential of the heterogeneous group – to effect positive social change. What ultimately we need is a transformation of the entire philanthropic landscape. As illustrated above, foundations do have certain attributes that allow them to act more efficiently than their peer institutions. Given the sums of otherwise-taxed wealth they command, though, their structure must be amended in a way that facilitates more socially responsible behavior and grant-making. Because normative legitimacy is conditional upon the interests and biases of foundation leadership, it is crucial to infuse philanthropic foundations with a degree of procedural legitimacy as well. At the very least, this procedural legitimacy will require foundations to diversify their leadership, as well as official mechanisms of internal *and* external accountability. This change will not happen organically, and will require a tremendous deal of collaboration on the part of private, public, and third sector actors. But if foundations are to occupy a legitimate space in our pluralist democracy, it is time they operate according to principles that serve not their own interests, but rather those on whose behalf they claim to act.

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