# **Petrobarter**

# Oil, Inequality, and the Political Imagination in and after the Cold War

# by Douglas Rogers

Petrobarter—the exchange of oil for goods and services without reference to monetary currency—has been a widespread and underappreciated practice among corporations, states, and state agencies over the past half century. Analyzing this practice with reference to anthropological theories of barter adds to our understandings of two significant and intertwined concerns in contemporary social science: (1) the production and reproduction of inequality at various scales, from subnational regions to the international system as a whole, and (2) the generation and fate of mobilizing political imaginaries that challenge the abstracted, universalizing imaginaries so often associated with monetized exchange, especially in capitalist contexts. Barter exchanges featuring oil are, therefore, as analytically significant as the much more commonly studied transactions of oil and money. Ethnographic and historical case studies of petrobarter are drawn from the Perm region of the Russian Urals in the post-Soviet period and the global oil trade in the early Cold War. This view from the perspective of the socialist and postsocialist world, it is argued, provides an instructive counterpoint to the many existing studies of oil and money, both in and beyond anthropology, that are situated in the European-American colonial and postsocionial periphery.

"Oil is almost like money." ARCO oil executive Robert O. Anderson's oft-quoted words, as interviewed by Daniel Yergin for The Prize (1991:xv), anchor a durable set of political, scholarly, and popular discourses that link the intersection of oil and money to fame, fortune, and the fate of international orders. Massive new oil wealth notwithstanding, however, a somewhat different thread has run through my field and archival research on oil in Russia and the Soviet Union. I call this thread petrobarter: discourses and practices that feature the exchange of oil for all manner of goods and services without the direct intervention of money. Soviet and post-Soviet petrobarter, I argue, open some new perspectives not only on early twenty-first-century Russia but also on the workings of the global economy and political imaginaries at the largest scales—both in and after the Cold War. Making this claim involves decentering some existing theories of oil and money that derive primarily from the capitalist world especially along its colonial and postcolonial "mineral frontiers" (Vitalis 2007:18)—and building on anthropologists' rich tradition of attending to barter transactions.1

Oil, Money, and the Uses of Barter

The global common sense concerning oil's special relationship

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to money has a quite particular history, one that emerges almost entirely from—and reflects almost entirely upon—the capitalist oil industry. Within this massive literature, I take as my starting point a set of critical studies situated on the Euro-American colonial and postcolonial periphery. These studies are especially adept at theorizing the oil-money nexus in ways that are socially, culturally, and historically robust; they therefore clarify the stakes of the socialist and postsocialist petrobarter I explore here.<sup>2</sup>

Andrew Apter's analysis of oil boom and bust in Nigeria,

- 1. This article joins an array of recent research in anthropology that is beginning to shed light on oil transactions that have largely escaped scholarly notice, including oil theft or "bunkering" (Gelber [forthcoming]) and smuggling (Bozçalı 2011).
- 2. A discussion of the relationship between oil and money might equally begin with an appraisal of the scholarship (largely in political science and economics) on the "resource curse"—the much-debated correlation between flows of oil money in federal budgets and high levels of "corruption" and nondemocratic outcomes (see Ross [2012] for a recent and influential statement). As Timothy Mitchell (2011:1-2) is only the most recent to point out (see, e.g., Watts 2004), the resource curse literature does not so much theorize oil money as take it for granted, in the process neglecting to track actual flows of oil and their implications for social, cultural, political, and economic processes. But Mitchell's injunction to "follow the oil" comes with its own blind spot-at least as executed in his brilliant Carbon Democracy (2011)—in part because it, like many of the studies it challenges, tells the story of capitalist oil largely along a Euro-American imperial axis. I return to the resource curse and to some of Mitchell's insights in the final sections of this article, after more firmly establishing the utility of a view from the socialist and postsocialist world. For an anthropological discussion of the resource curse, see Reyna and Behrends (2011).

to begin with, rests on the claim that oil "standard[ized] the relative values in terms of which other commodities were bought and sold and thus approach[ed] the general equivalent of money itself" (2005:35). Writing about Venezuela, Fernando Coronil argues that "circulating through the body politic as money, oil ceased to be identified as a material substance and became a synonym for money. . . . Just as oil came to be seen abstractly as money, the state became a general representative of a political community of shared ownership of the nation's natural body" (1997:390). As Michael Watts (1994) puts it succinctly in a study of Nigeria informed by both Karl Marx's and Georg Simmel's accounts of money, the issues here are abstraction and generalization: money enables certain imaginations through its capacity to make unlike items exchangeable and, as part of this process, serves both to integrate and disintegrate social groups.

Although the abstracting and generalizing tendencies of money are quite widespread, Apter, Coronil, and Watts claim that they take on some special characteristics in postcolonial oil-exporting states within the global capitalist system. In these states, an elite class with privileged access to the subsoil realizes profits on the international market (in dollars) and then reinserts those dollars into local currencies at home through sectors that it controls. Money as oil rent and its rapid circulation have, in this view, crucial implications for the resulting incarnations of state power and its cultural entailments, whether they be statist, nationalist, pan-African, developmentalist, modernizing, or Occidentalist. Furthermore, these movements are quite distinct from those of industrial, factory-based capitalism, because they rely almost entirely on increased monetary circulation and attendant dreams of rapid progress rather than on transformed relations of production.

This is a persuasive line of argument about oil and money, with many intriguing historical and theoretical permutations. It is of no small import for thinking about post-Soviet Russia, particularly in its theorization of property relationships and the performative aspects of state power. My focus in this article, however, is on a major point of divergence: this family of arguments assumes monetized circulation in both the international system and within the oil-producing state in question, underlying conditions that do not obtain when oil's place in the international system is viewed from socialist and postsocialist perspectives. In the socialist and postsocialist world including its entanglements with the West and with Third World states during the Cold War—oil has been less an item of generalized or monetized exchange than of situational barter and centerpiece in all manner of intricate quasi-monetary circuits. Indeed, oil's place in these contexts and connections has often derived precisely from the fact that it is not always easily identified with or transformable into money.3

3. I am grateful to an anonymous reviewer for correctly pointing out that the scholarly and commonsense emphasis on the relationship between oil and money that I engage in this introductory section is of comparatively recent vintage. Forty years ago, most observers would have

One goal of this article, then, is to suggest that a shift from postcolonial contexts like Nigeria and Venezuela to a post-socialist context like Russia improves our understanding of the place of oil in human life over the past century. My aim, however, is not to reify or firmly typologize "postsocialist" and "postcolonial" oil. Rather, I suggest that an analysis that begins from the postsocialist context can be usefully brought into conversation with more well-established postcolonial analyses in order to better illuminate both contexts, their many intersections, and the still larger Cold War and post—Cold War systems of which each has been a part (Chari and Verdery 2009; Rogers 2010; Rogers and Verdery 2013). Barter, long of interest to anthropologists of socialisms and post-socialisms, is an ideal analytical vehicle for this larger project.

I understand barter to refer to a class of transactions in which goods are exchanged for goods without the direct intervention of monetary currency. Following Caroline Humphrey and Stephen Hugh-Jones (1992), I see barter as a polythetic category, one that encompasses a variety of patterns of exchange and that demands careful attention to the accounts of-and distinctions made by-those doing the transacting. Rather than anchoring a distinct kind of economic system that was a forerunner to monetized exchange, as economists often mistakenly assert (see also Graeber 2011), barter coexists with and stands in complex, interactive relationship to other modes of exchange, right up to and including those of global capitalism. Barter relationships can even be quite durable over time, as exchange partners continue to seek each other out and build a sense of trust rooted in ongoing social relations rather than—and even in shades of opposition to—an external repository of value such as a state's money. Charting the ways in which barter articulates with currency or gifts, then, can often illuminate the production, reproduction, and transformation of inequalities. I will show, for instance, that petrobarter can be a powerful strategy of capitalist accumulation, albeit one that is easily overlooked when we take for granted the centrality of oil-money transactions.

In addition to shedding light on the formation of inequalities, barter is useful for a second, and intimately related, reason: it points to the fashioning of historical and political imaginaries. If money's exchangeability is central to the kinds of postcolonial imaginaries that Apter, Coronil, and Watts account for so compellingly, then barter's tendency to skirt that same exchangeability can point to other political and historical imaginaries. On this analytical terrain, memories of barter, fears of barter, and disputes about barter are as significant as barter transactions themselves; indeed, they can proliferate even in cases where the actual practice of barter is rare. I find especially instructive Dipesh Chakrabarty's (2011:71) suggestion that historians approach any particular conjuncture as if it were a barter transaction. Seeing historical encounters in terms of barter, in

taken for granted that the oil industry massively distorted markets in its own favor—through barter and many other means—as famously explored in Anthony Sampson's exposé *The Seven Sisters* (1975).

which the terms of exchange take place without reference to some external, generalized standard, helps to uncover alternatives to the universalizing histories that capital tends to tell about itself. Such universalizing histories—and I would submit that the relationship of oil and money has become among the most firmly entrenched of them in recent decades—tend to efface histories that lie outside of capital's own "life course," casting all histories and polities as gradations of deviation from a European norm.

Chakrabarty's passing reference to barter as a tactic in his larger project of provincializing Europe was metaphorical. Indeed, in his reading of Marx, one of the prime places to look for alternatives to universalized histories is in varieties of money and commodities that, despite their form, might be discerned to lie at least partially outside capital's own life course. Nevertheless, I would submit that barter, like alternate currencies (e.g., Maurer 2005), is an especially useful arena in which to look for the generation of mobilizing imaginaries that do not fall wholly within capitalism's universalizing histories. I will suggest that socialist and postsocialist petrobarter has afforded a number of ways to inhabit alternate histories and political orders—alternate, that is, to the proliferating global narratives about oil that rest on the generalizations, abstractions, and universalizations that so often accompany the money form.

Classically, barter describes the one-time direct exchange of goods for goods without reference to a currency external to the exchange itself. There is, however, also a wide range of other transactions that both participants and external analysts frequently understand as falling under the rubric of barter. Among the most common of these in the oil industry have been countertrade and offset trade, in which corporations and states swap goods with little or no monetary calculation, and currency clearing, in which states transact goods for goods over an agreed period of time, only periodically reconciling their central bank accounts in monetary terms. As these examples indicate, another goal of this article is to enlarge the scales at which anthropologists think about barter. The fact that barter has often featured in the inequalities fostered by states and global corporations has largely escaped sociocultural anthropologists, who have tended to devote sustained attention to small-scale barter or, at most, to barter in "regional systems" (Humphrey 1985; Orlove 1986; Piot 1992). By linking the everyday barter of early postsocialist Russia to some of the global-scale barter transactions of states and corporations over the past half century, I aim to show that barter is a productive topic for anthropologists' ongoing engagements with issues of world-historical scope (Hann and Hart 2011; Wolf 1982), especially those that emerge from the growing anthropology of the corporation (see, e.g., Benson and Kirsch 2010; Welker, Partridge, and Hardin 2011).

Despite anthropologists' long-running insistence to the contrary, most observers follow mainstream economists' lead in assuming that the relationship between barter and money is a teleological one, characterized by historical progression away from the inefficiencies of barter and toward the allegedly

superior possibilities and exchangeabilities of money. In order to help counter this demonstrably false narrative, I organize my discussion as much according to scale as along a standard historical progression. The first section deals with petrobarter in 1990s Russia, focusing on the Perm region of the Urals. The second section enlarges the scale to a fully global perspective, but it moves backward in time to the early Cold War. The third section returns to Russia's place in the global order of the twenty-first century, showing how refractions of the earlier eras remain instructive, even—perhaps especially—in this age of ongoing financialization and monetization both in and beyond the postsocialist world.

# Postsocialist Barter I: Elite Formation and the Regional Imagination

In the late-Soviet period, the Perm region of the Russian Urals was a defense-industrial region with a modest and declining presence in the oil sector. By the turn of the twenty-first century, however, oil had become the region's marquee industry. The Perm region is now home to several divisions of Lukoil, Russia's largest private oil company, whose Moscowbased operations stretch across the former Soviet Union and around the world. Like most other major oil companies in the capitalist world, Lukoil is vertically integrated: it unites exploration, production, refining, and sales into a single corporate structure through an array of subsidiaries, holding companies, and holding companies within holding companies. In contrast to its fellow vertically integrated oil multinationals, however, Lukoil is young, having marked its twentieth anniversary only in 2011. Significantly, Lukoil was born at a time and place where there was no vertical integration in the oil sector whatsoever. In the Perm region, as in the Soviet Union as a whole, entirely separate federal-level ministries administered oil production, refining, and distribution. The movement of oil was subject, on the official level, to the dictates of central planning and, on the unofficial level, to all sorts of backdoor wheeling and dealing in the second economy. The story of the post-Soviet "verticalization" of the Perm region's oil industry spans the 1990s and early 2000s. It is, in no small part, a story of the ways in which barter facilitated the rise of a new oil elite and came to occupy a central place in the regional political and historical imagination.

Jackets, Toyotas, Sugar, Apples, and a New Oil Elite

Consider the account of Irina Ivanovna,<sup>4</sup> a former Lukoil-Perm employee, whom I asked in 2011 to recall the place of the oil industry in the Perm region in the immediate aftermath

4. With the exception of public figures speaking in public settings, I use pseudonyms to preserve the confidentiality of conversations with respondents.

of the Soviet Union.<sup>5</sup> She began by focusing on Permneftorgsintez (PNOS in common shorthand), a large refinery in Perm that was built in the 1950s and that, in 1991, employed around 15,000 people.

It was all done by barter<sup>6</sup>—there was no money. . . . So the Chusovoi metals factory traded its product for sugar or other things. And thanks to that some sugar appeared in the region. It wasn't only the Chusovoi metals factory, but also PNOS. Yes, they also worked on barter, I think with the Chinese. They imported down jackets, and wellmade ones. [PNOS employees got them] and just went down to the market and sold them for crazy [i.e., a lot of] money—there was nothing to wear, nothing in stores. . . . PNOS got those jackets for their workers, in exchange for oil products. It was outright barter, because there was no money.

PNOS employees, that is, received internationally bartered items like down jackets in lieu of cash salary, as bonuses, by dint of connections, or by other means. A significant portion of these items then made their way to street-corner markets and into the region more broadly (Sverkal'tseva 1998:65). This pattern of exchange had its roots in the Soviet period. In 1989, taking advantage of perestroika-era reforms that gave increased autonomy to firms, PNOS opened a new division that was permitted to execute its own international oil sales. The earliest deals took place with partners that included Japan, Korea, Finland, and Hungary. Only a small portion of these international exchanges were for cash, since PNOS could only keep up to 27% of profit from monetary sales abroad (the remainder being shunted into central Soviet coffers), while it was permitted to keep all of the goods for which it bartered. Late-Soviet PNOS used this opportunity to barter extensively for technology and construction materials that would help modernize and repair its aging facilities [Sverkal'tseva 1998:61]).

In 1991, in the multifaceted crisis that accompanied the end of the Soviet Union, shortages in the Perm region quickly become acute, with frequent delays in salary payments and rationing tickets necessary to acquire basic foodstuffs. PNOS was quite exceptional among the region's enterprises at this time, for it was one of only a handful of corporations in the Perm region whose products were marketable outside of Russia. (Soviet and post-Soviet industrial products were often considered of inferior quality on international markets.) As the region's industrial base steadily eroded, PNOS's international sales and barter deals began to include all manner of fashionable items, and this became ever more central to regional exchange. On one memorable occasion, for instance, an international barter deal between PNOS and Japan brought

nearly 100 brand-new Toyotas to the Perm region. Those with close connections to the refinery snapped up the new cars immediately—PNOS had "unexpectedly become a prestigious place to work" (Sverkal'tseva 1998:62). Already in the very early 1990s, that is, petrobarter was enabling a new regional elite to coalesce and spread outward from PNOS.

The situation was far bleaker on the production side of the oil industry in the Perm region, where oil deposits that had been aggressively exploited since the 1950s were in decline even before the economic crisis hit. In fact, PNOS was only able to keep its refining facilities up and running at all because it looked outside the region for new sources of oil to refine. In 1991, PNOS became the first of the Perm region's oil facilities to enter a newly formed private oil company, headed by Vagit Alekperov, deputy minister of oil and gas when the Soviet Union collapsed. Alekperov's Lukoil was, at the point of its founding, based in three West Siberian oil fields that contributed their first letters to the company's name: Langenpas, Urai, and Kogalym. For Alekperov, acquiring PNOS from its previous home in the Ministry of Oil Refining and Oil Chemistry was a crucial step in his goal of leaving behind Soviet-era fragmentation and assembling a vertically integrated Russian oil company that could compete with existing multinational oil companies on their own terms (Alekperov 1996). It would be another several years before the production side of the oil industry in the Perm region joined the Lukoil

The importance of petrobarter deepened in these years and moved from PNOS to the very center of economic and political life in the Perm region. At the center of this process was a massive holding company founded in 1993, the Perm Financial-Productive Group, or PFPG.7 As the name itself indicates, PFPG did not specialize in any one sector or product; it was, rather, horizontally integrated, with activities spread across multiple sectors. This brand of organization enabled the rapid, nonmarket movement of goods and services among constituent companies, often without monetary transactions, and it was especially useful for maintaining flexibility in the constantly shifting economic circumstances of the 1990s. Horizontal integration also concentrated enormous power and influence in the company's leadership. ("What didn't PFPG control back then?" reflected one of my interlocutors when I asked about the company.)

Petrobarter was absolutely central to PFPG's operations. Two of its largest and most significant constituent companies were Neftsintezmarket (loosely, Oil Products Marketing), which took over much of the regional and international sale

<sup>5.</sup> The varieties of barter relationships mentioned in the following paragraphs are more comprehensively treated in Seabright (2000); my focus here is on the critical role of oil and oil products across these many exchanges.

<sup>6.</sup> In direct quotations throughout this article, the English word *barter* translates the Russian *barter*.

<sup>7.</sup> The Permskaia Finansovaia-Proizvodestvennaia Gruppa was a regional variant of a "Financial-Industrial Group," the class of Moscowbased bank/natural resource conglomerates that emerged to quickly gain control over the privatization process in the early 1990s (see, esp., Johnson 2000). PFPG, along with its antecedent, the Perm Commodity Exchange, was the primary regional context in which new financial experts and old Soviet "red directors" collaborated and fought to form a post-Soviet regional elite.

of oil products that PNOS had earlier managed itself, and the Universal Trading House, which supplied stores and markets across the Perm region with foodstuffs and consumer goods. In one exchange recounted to me several times, for instance, Neftsintezmarket bartered oil products directly for an entire barge of Cuban sugar at a time when sugar had not been seen in the Perm region for nearly a year. It is some indication of the high value placed on PFPG's international petrobarter transactions at the time that, rather than hire laborers, the office staff of PFPG itself unloaded the barge under armed guard and supervised its transfer to the Universal Trading House. One of my interlocutors, a former employee of the PFPG, gave an example of the kinds of exchanges that, he said, characterized their work in the early years:

There were lots of long chains of exchange. So we provided fuel oil to the logging enterprises somewhere up north, and, roughly, got [uncut] timber from them. We processed it into packaging timber and sent it off to the Krasnodar region [some 1,500 miles away, in the Caucasus]. And there we took not money but apples. We brought the apples here, sold them, and got money for them. That's the kind of operation we did—to the fifth or sixth link.

As one Perm newspaper put it, describing PFPG's petrobarter operations as the ultimate insiders' network, "[Neftsintezmarket] worked out and carried out dizzying chains of mutual exchanges and credits, the result of which were schemes that it was impossible to understand. Unless you participated in them" (Mazanov 2006).

The size and significance of PFPG's petrobarter operations rapidly made them of interest to the regional state apparatus, which continued to cope with pervasive complaints and borderline unrest arising from the ongoing shortages of both food and fuel across the Perm region throughout the 1990s. In exchange for a favorable relationship with the regional state, PFPG, through Neftsintezmarket, soon took on the role of official state contractor for the acquisition, refining, and distribution of oil and oil products for state administration needs, most notably support for the agricultural sector, where the withdrawal of socialist-era state subsidies meant that tractors and combines often sat idle for lack of funds to purchase gasoline. As Gennadyi Igumenov, the Perm region's governor from 1996 to 2000, explained to me in intricate detail, PFPG's multiple units, in collaboration with state agencies, would facilitate the exchange of gasoline at the time of sowing for crops at harvest time and use those crops to form a "regional barter fund" that enabled exchange with other Russian regions. This was an early and crucial chapter of the intersection of oil, state, and emergent elite in the Perm region. In contrast to the assumptions of the standard literature on oil and money, it solidified long before the monetization of oil markets, the regular collection of taxes in money, or even the assembly of a vertically integrated company in the region. Instead, it took root in barter along and among the omnipresent tentacles of the horizontally integrated PFPG.

Money, though, clearly played some role—barter is not a closed system. One might ask, for instance, what came of the money that PFPG made on the sale of apples and sugar through the Universal Trading House. It is hard to say, even for those most well informed about those chaotic years. One place the money went was to another subsidiary of PFPG, the Securities League (Lig Tsennykh Bumag), which specialized in buying up shares in privatizing companies throughout the Perm region. A particular focus was shares in Permneft', the regional oil production company that had been privatized in the early 1990s, with shares distributed among its socialistera management and workers. This accumulation of shares turned out to be among the most consequential of PFPG's operations. So successful, in fact, was PFPG's Securities League in its share-buying efforts that, when Moscow-based Lukoil sought to acquire control over Permneft', an alliance between PFPG and the governor of the Perm region was able to demand extraordinary concessions from Lukoil (see Fedotova 2006:210). The 1995 sale of Permneft' to Lukoil, which completed the regional verticalization process that had begun with the entry of PNOS into Lukoil in 1991, brought a windfall profit to everyone associated with PFPG and oil-sector employees throughout the Perm region. It solidified their collective place as the region's new elite.

#### Reimagining the Perm Region

An important strand within the anthropology of barter shows that it is often a defensive, protectionist tactic, a way to avoid the state's money and carve out a separate domain characterized by greater degrees of familiarity and trust (e.g., Mayer 2002:143–171). My analysis thus far has shown that this tactic can apply to corporations and lower-level state agencies consolidating their status as segments of an emergent, regional, explicitly antifederal elite as much as to the individuals and households more commonly studied by anthropologists. Some additional implications of this arrangement become clear when we consider the story of PNOS and PFPG in the context of broader regional imaginations in the 1990s and in comparison to the more money-focused scholarship situated in Euro-American postcolonial contexts.

Several studies have linked the rapid proliferation of barter and alternate currencies in the immediate aftermath of socialism to the "parcelization of sovereignty." As regions, cities, and even companies issued their own currencies to their "own" people, everyday economic activity came to depend on small-scale political organization (see, esp., Humphrey 2002:5–20; Verdery 1996:204–228). Most of these studies have seen this parcelization of sovereignty as diagnostic of federal loss of control over nearly everything in the immediate post-Soviet period—from violence (Volkov 2002) to the money supply (Woodruff 1999) to deeper expectations about governance as a whole (Rogers 2006). This article adds a new facet to this literature by demonstrating the extent to which those processes in the Perm region relied crucially on inter-

national petrobarter and therefore linked the region's exchange networks to global barter circuits even as they bypassed the federal Russian state and its money. If oil dollars obtained on international markets have been central to the institutions and imaginations of postcolonial petrostates, then, in this postsocialist case, the barter of oil, including in international contexts, was central to the unimagining of the federal state in the 1990s and the contemporaneous rise of a specifically regional oil elite.

This new oil elite did not escape the withering criticism directed at "New Russians" throughout the 1990s. Indeed, simmering popular discontent with emergent social stratification led PNOS, PFPG, the regional state administration, and Lukoil-Perm to trumpet their interest in local circuits of barter at nearly every turn. Beginning with public appearances and newspaper articles and developing into "corporate social responsibility" programs by the mid-2000s, the new oil elite pointed again and again to the nonmonetized aspects of their operations, to their locality, concreteness, and distance from the money coursing through Moscow and international circuits. Oil bartered into sugar and apples, not to mention crops sown and harvested in the region, thanks to collaboration between PFPG and the regional state administration, were repeatedly deployed as evidence that oil in the Perm region was not simply being transformed into money.

In a lengthy newspaper article directed at their critics, for instance, the leadership of PFPG argued that local businesspeople like themselves were much preferable to Moscow structures and foreign ownership, for "local circles" of business owners would be most likely to concern themselves with the development of the regional economy (Kopylova 1995). Popular critiques of the emergent oil elite were particularly sharp when Lukoil finally gained control over Permneft' and regional oil production in 1995, for it seemed more certain than ever that Permian oil would be transformed into money in the pockets of Muscovites. It was no accident, then, that, as soon as it acquired Permneft', Lukoil began an intensive effort to draw attention away from the link between oil and money through a long series of corporate social responsibility projects dedicated to establishing a different link: that between the geological depths of oil and the historical and spiritual depths of local cultures in the Perm region (Rogers 2012).

Investigations of the oil-money nexus in postcolonial petrostates often focus on the magical properties of money gained from oil proceeds, such as its ability to grow with little apparent effort, and then trace the importance of this process for the formation of particular kinds of states and political and cultural imaginations. Money behaved in very odd—even magical—ways in the postsocialist world as well: pyramid schemes proliferated, bouts of demonetization and remonetization alternated with little warning, and devaluation and revaluation produced all manner of apparently surreal outcomes (e.g., Verdery 1996:168–203). The importance of oil in the Perm region, I have been arguing, emerged in good part in contrast to this kind of wild, magical, unfamiliar

money. To the extent that transforming oil products into jackets, Toyotas, apples, or timber entailed a certain degree of magic, that is, it was magic without the general equivalent of money described for postcolonial petrostates like Nigeria or Venezuela. Flowing along the lines of petrobarter, 1990s Permian oil and its derivatives were often framed as concrete, reliable, local, tangible, and nongeneralizable—precisely a contrast to the unpredictable and massively abstracted nature of rubles and money in the banking, salary, and street-corner exchange sectors. Postsocialist petrobarter indexed locality, regional imaginaries, and the ability to stand up against international and national centers of power by fleeing from the most exchangeable currency—money—into local regimes of value that had some tangible materiality, some connection to the Perm region. Petrobarter, in sum, was both a primary strategy of accumulation for a new regional elite-often at the expense of the federal center and its monetary currency and central to that elite's efforts to legitimate itself and stave off popular critique.8

#### Cold War Petrobarter

The petrobarter that I have focused on thus far could easily be dismissed as an isolated exception, born of the unique conditions that characterized Russia's exit from socialism and hardly of much relevance to other times, places, or scales of analysis. But petrobarter has generated inequalities and incubated political imaginaries far beyond the Perm region.

A large and diverse body of scholarship insists that the oilmoney nexus is just as central to global circuits of exchange as it is to individual petrostates. Scholars who attach enormous significance to the international flows of petrodollars, for instance, identify with schools of thought ranging from neoclassical economics, to realist and constructivist international relations theory (Spiro 1999), to various strands of Marxian political economy (e.g., Nitzan and Bichler 2002; Patnaik 2009). Most of this scholarship, like that on individual "petrostates," is situated along a First World-Third World axis, and it tracks the flows and exchanges of oil and money between postcolonial petrostates and Euro-American oil consumers. Yet, by the middle of the 1970s, the Soviet Union had surpassed the United States as the world's biggest oil producer and was the second largest oil-exporting state after Saudi Arabia. This Soviet oil often entered global circuits through barter transactions—arrangements that Western scholarly literature did not account for particularly well, at least from the perspective on barter that I adopt here. Western Sovietologists who took note of internationally bartered oil, for instance, often attempted to calculate "actual" monetary costs or to trace out barter's implications for "real" global oil prices. On some occasions, they simply bracketed barter trans-

8. For additional, largely complementary, perspectives on the emergence of a regional elite and its associated "political culture" and "urban regime" in Perm and the Perm region in the 1990s, see Borisova (2002), Fadeeva (2001), and Panov et al. (2002).

actions out of their calculations altogether. I will argue, by contrast, that petrobarter played an important role in shaping Cold War-era inequalities and political imaginations, with farreaching outcomes that are as significant as those related to relationships of oil and money.

#### The Promises and Threats of Global Socialist Oil

All Soviet leaders wrestled with the basic problem of how to build a system of production and allocation that was consistent with socialist principles and possibilities and, at the same time, existed in a larger international system stubbornly reliant on flows of capitalist money and commodities. In the 1970s and 1980s, for instance, one solution to this problem was to export oil to the West in exchange for hard currency that could be used to prop up an increasingly stagnant socialist system; the fall of global oil prices in the 1980s, according to some analysts, then had fatal consequences for the Soviet Union (e.g., Gaidar 2007; Kotkin 2001; compare Travin and Marganiya 2010). This version of events supports an analysis focused on oil and money in the international system, but a more complex picture emerges if we extend our view to include the 1950s and 1960s. In these early decades of the Cold War, the end of Stalin's autarkic "socialism in one country" policy coincided with dramatically increasing Soviet oil production in the new oil fields of the Volga-Urals basin. As Soviet representatives sought trade deals around the world with this new oil, they often offered it on barter terms.

In the 1950s and 1960s, both the Soviet Union and what were then known in the United States as the Less Developed Countries or the underdeveloped world (the term "Third World" was just coming into common usage; Pletsch 1981) lacked substantial reserves of hard currency. Underdeveloped countries without their own oil fields, in particular, found themselves paying large amounts of their meager currency reserves to Western-based multinational oil companies who would only accept payment in cash. Also wanting to guard its hard-currency reserves, the Soviet Union offered oil in exchange for local products that could not be otherwise obtained. Shortly after the Cuban Revolution of 1959, for instance, the Soviet Union offered Castro's new government crude oil in direct exchange for sugar. When the Western multinational companies that still operated Cuba's refineries refused to process the crude, Cuba nationalized the refineries and began a long series of oil-for-sugar deals with the Soviet Union—the antecedents to PFPG's oil-for-sugar deal in the 1990s Perm region. In India, where the Soviet Union offered to barter oil for a range of Indian goods in a deal that would have saved India many millions of dollars in hard currency reserves, the ultimate result was somewhat different. Although the possibility of nationalizing the oil companies' refineries in India was discussed, India ultimately elected to barter for refined oil products rather than crude and to contract with the Soviet Union for the construction of new refineries that would not be controlled by the oil majors (Tanzer 1969:178–193; for broader context, see also Sanchez-Sibony [2013]).

Soviet international petrobarter continued in various shapes and sizes throughout the remainder of the Cold War era. It was particularly dense between the Soviet Union and the COMECON states of Eastern Europe, as the Soviet Union provided for most of these countries' energy demands through oil and gas that was bartered for a range of other products on terms that were negotiated and renegotiated on a yearly basis—and became central to the sometimes fraught relationship between Eastern European socialist states and the Soviet Union (see, e.g., Jackson 1986; Park 1979). Eastern European countries themselves bartered directly for Middle Eastern oil after 1965, supplying tankers and manufactured items for oil (Berry 1972; Klinghoffer 1977:187). The Soviet Union's own deals ranged around the world and even began to creep into Western Europe. Much to the consternation of Western oil companies, for instance, the Soviet Union entered a substantial barter agreement with the Italian state-owned company ENI, which accepted Soviet oil in exchange for products that ranged from rubber to fertilizer in the late 1950s and 1960s (Frankel 1966:138-142).

In their provocative essay on "thinking between the posts" of postsocialism and postcolonialism, Sharad Chari and Katherine Verdery (2009) point out that the Soviet imperial order of the Cold War-which they see as extending outward from "Moscow Center" through Eastern Europe and into Soviet client states of the Third World-was organized differently than Western imperial orders. Soviet influence tended to produce replica party-states that each sought to increase control over the means to redistribute the surplus social product within its own territory (Verdery terms this "the drive to increase allocative power"), rather than integrating the entire imperial space into a single economic zone. If there was never, that is, a unified socialist Ministry of Planning with global jurisdiction, what, they ask, was the "glue" holding the Soviet imperial order together at the interstate level? (See Chari and Verdery 2009:16.) The catalog of deals described above provides one answer: bartered Soviet oil. Nonmonetized barter relationships were, that is, as key to the international socialist order as they were to domestic socialist economies of shortage.9

But barter also resonated differently in international contexts than it did in domestic contexts. In the international arena, it threatened the multinational capitalist corporations that had for decades carefully managed international oil production and pricing. The oil majors responded with a multilateral lobbying campaign that framed petrobarter as a major threat to the free world. Writing in a widely circulating economics magazine, for instance, one industry insider gave some clues to the strategies that were being pursued in Washington:

9. For a discussion of the failure of a 1970s attempt to supersede pervasive barter among COMECON countries by establishing an "international investment bank," see Stone (2008). I thank Yakov Feygin for this reference.

"The Soviets, in waging the cold war by economic means, can undercut prices and offer barter agreements. [Western] oil companies cannot be expected to meet this type of competition. In the end, it may prove necessary for the United States government—and perhaps, other Western governments also—to take an active part in the struggle" (McDivitt 1961: 22). Some of the most powerful and profitable corporations in the world, that is, were going to need state assistance. This framing of barter as a national security threat made it quickly to the highest reaches of the US government. In 1962, for instance, the US National Petroleum Council, in response to a request from the US Department of Interior, produced a lengthy report on the "Impact of Oil Exports from the Soviet Bloc."10 The report, issued over the signatures of a laundry list of oil company executives (among them Robert O. Anderson of "Oil is almost like money" fame), emphasized that nothing less than the future of the free world was at stake:

Barter deals involving surplus products are effective vehicles of Soviet influence since they make commodity-producing countries highly dependent on the Soviet Bloc for markets. . . . The Soviet Bloc has seized on petroleum as a highly merchantable commodity that they can barter for much needed Western equipment and technology as well as for political influence. (National Petroleum Council 1962:35–36)

Elsewhere in Washington, the Senate Internal Security Subcommittee of the Senate Judiciary Committee—the Senate counterpart to the House Un-American Activities Committee—commissioned reports on the ways in which Soviet international oil deals figured in broader strategies of "Communist subversion" (Committee on the Judiciary 1961:v). Senators used these reports to argue in favor of strong support for Western multinational oil companies, especially through the application of diplomatic pressure to discourage other countries from importing Soviet oil on barter terms.

The Barter Within: Oil for Oil Exchanges and "Shared Monopoly" in the International System

Strikingly, one of the outcomes of the oil majors' lobbying effort—and a significant victory for the industry—was the defense of a form of petrobarter that had lain in more or less open sight at the heart of the international capitalist oil industry for nearly 3 decades. Since an initially secret agreement in 1928—known as the Achnacarry Agreement after the estate in Scotland where it was negotiated—the major multinational oil companies had agreed to sell oil at a single price (set in Texas) and to fulfill all orders from the nearest available source among all of them. The oil company with the nearest facil-

10. The US National Petroleum Council began as a World War II–era forum for the collaboration of industry and government; it survived several attempts by the Department of Justice to curtail its influence in the postwar period, continuing to operate into the early 1970s (see Vietor 1984:37–42).

ities—rather than the company making the sale—would supply crude oil or refined products to purchasers, saving the entire industry on cross-hauling costs and reducing the need for duplicative refineries. Those who met to hammer out the Achnacarry agreement envisioned a massive system of intercompany oil swaps that would, while not itself always fully monetized, effectively counter a collective crisis of overproduction that was driving down prices. As with PFPG in 1990s Russia, we find nonmonetized or lightly monetized barter deals utilized to corner markets and enhance profits far from anthropologists' usual terrain of households and individuals on the periphery of a more monetized economy. We also find a type of barter that is likely prevalent only at the kind of very large scales I treat here: barter in which the objects transacted are basically identical (oil for oil), save for their spatial locations and transportability relative to the participants in the exchange.

The Achnacarry Agreement of 1928 came under immediate pressure from segments of the international oil industry that did not participate in the negotiations; it never functioned entirely as envisioned (see Yergin 1991:265). However, the US Department of Justice saw enough evidence of noncompetitive practices that, in 1952, it opened an antitrust case against seven multinational oil companies, alleging that one of several mechanisms of price-fixing was the systematic nonmonetized, anticompetitive exchange of oil among themselves. This suit, known as the "Oil Cartel Case," was massive in its scope; Department of Justice lawyers prosecuting it through the Truman and Eisenhower administrations saw it as the successor to the antitrust proceedings that broke up Rockefeller's Standard Oil in 1911 (see, e.g., Select Committee on Small Business 1952:204ff.).

The entrance of Soviet oil onto international markets in the 1950s gave the oil companies additional arguments with which to fight the Department of Justice. Many refused, for instance, to provide documents about their overseas activities, claiming that disclosure would undercut US national security. The State Department and the National Security Council, both of which relied on ties with the oil industry around the world, often agreed. Ultimately, and specifically citing national security, President Eisenhower's Department of Justice began winding down the decade-long antitrust suit. It petered out in a series of settlements and dismissals that stretched until 1968. Burton Kaufman summarizes this outcome nicely: "In the oil cartel case, the [United States'] commitment to antitrust in foreign as well as domestic commerce was made subordinate to a perceived Soviet threat in the third world and to the need to assure a cheap supply of energy in the presence of the expanding Cold War" (1978:101).11 That threat was, in substantial part, international petrobarter, ag-

11. The Federal Trade Commission opened a new "shared monopoly" case against eight oil companies in 1973, in which the issue of intercompany oil swaps again featured. This case was dismissed in 1981 (see Porter 1982).

gressively framed by capitalist oil interests as a challenge to the free world. 12

It remains somewhat unclear how the elements of the Soviet party-state imagined these barter transactions. Western scholars expended a great deal of effort trying to divine whether the Soviet Union really was using oil as a political weapon as the oil companies confidently alleged—or whether the implications of Soviet exports for international markets were incidental to some other plans—or no plan at all.13 Some suggested that the true purpose of Soviet international petrobarter deals was to acquire exotic consumption items, such as Cuban sugar, that could be redistributed to the Soviet populace to mollify domestic discontent and meet potentially disruptive consumption demands (Odell 1970:70). Others pointed to Soviet production facilities and patterns of domestic demand and offered predications about whether Soviet oil could really—despite oil majors' dire warnings—make much of a dent in global markets.

Scholars have not, to my knowledge, returned to these issues with the benefit of post-Soviet archival access, and so the precise calculations of the Soviet leadership in the 1950s and 1960s on these issues remain somewhat unclear. Nevertheless, we can certainly see a range of Soviet opinions on the implications of bartered oil for potential domestic and international futures. Some within the Soviet Union saw oil as the linchpin of the capitalist system; to undercut international oil markets was a promising route to ending capitalist imperialism once and for all. Those pushing the agenda of Western oil companies frequently cited the Soviet journal International Affairs on this matter: "It should be borne in mind that oil concessions represent, as it were, the foundation of the entire edifice of Western political influence in the [less developed] world, of all military bases and aggressive blocs. If this foundation cracks, the entire edifice may begin to totter and then come tumbling down" (Committee on the Judiciary 1961:2).

Other perspectives on the international system that featured barter also circulated within the Soviet Union. A range of socialist economists, for instance, took up issues of barter and international trade in the 1960s and 1970s, highlighting the mutual benefits of international barter in an era of "peaceful coexistence." Proposing bartered oil and gas deals directly with the United States, for instance, B. Vainshtein and R. Takhnenko argued that they should be a "form of production-collaboration" (1975:87) that would both avoid capitalist commodification and promote "the stabilization of the international situation and the strengthening of cultural rela-

tions with other countries" (89). Opposition to this imagination of international relations through the lens of barter came not only from hard-line socialists but from some of the regime's most vocal critics. International oil and gas barter deals, for instance, provided some key imagery in Alexander Solzhenitsyn's scathing "Letter to Soviet Leaders" in 1973, which advocated a return to Russian national traditions and the preservation of the nation's natural resources: "We, a great industrial superpower, behave like the most backward country, by inviting foreigners to dig into our earth and then offering them our priceless treasure: Siberian natural gas" (quoted in Goldman 1980:166).

#### Barter and the Cold War International System

Petrobarter, I have been arguing, is analytically useful in part because of the way it draws our attention to the imagination of historical trajectories and political orders that diverge from those so closely associated with the exchangeability of oil and money. The early Cold War was a time when such historical and political discourses rooted in petrobarter—as threat and promise, as national security, and as national tradition—had especially important implications for the organization of the international system. In a highly original argument, Mitchell (2011) has shown that the entire postwar Western understanding of "the economy" as a quantifiable body of monetary transactions that can expand without limit owes its shape to early postwar imaginations of oil as an infinite producer of wealth, particularly as those imaginations informed the drafting of the Bretton Woods system of international institutions. Attention to Cold War petrobarter points to a key way in which the monetized system Mitchell describes continued to be contested on both sides of the Cold War. From the perspective of Second and Third World states, this was an issue of barter versus monetary transactions and a struggle to retain reserves of hard currency; at times these struggles fed into the fears and promises of a different sort of international system. At another level, at stake in the 1950s and 1960s was the question of which form of petrobarter would continue to exist, for the nonmonetized exchange of oil as envisioned in the Achnacarry Agreement was just as crucial to the organization of the capitalist oil industry as petrobarter deals along a Second World-Third World axis were to the socialist world. As in the case of PNOS and PFPG described above, tracing the paths of barter leads us to the ways in which the creation and maintenance of vectors of inequality intersect with mobilizing political imaginations.

Although there are many other pieces to the story, the fact that the Soviet Union came to rely heavily on oil-for-money transactions with the West in the later 1970s and 1980s gives some indication of how those conflicts played out. This was, however, far from an inevitable outcome. For a time in the 1970s, in fact, it looked to many as though Soviet-style barter was the future of the entire international system. As the states and corporations of the capitalist world struggled to extract

<sup>12.</sup> Attending to international petrobarter as perceived threat thus adds an important dimension to Mitchell's instructive discussion of the ways in which oil featured in the construction of the Cold War (2011: 121–123).

<sup>13.</sup> A representative sampling includes Chadwick, Long, and Nissanke (1987), Goldman (1980), Gustafson (1982), and Stern (1987). In his recent archive-based study of Soviet international trade in this period, Oscar Sanchez-Sibony (2013) discerns no grand Soviet plan to destabilize the international system.

themselves from recession, debt, and oil shocks, they often turned to barter. "U.S. Firms Are Pressed to Offer Barter Terms by Overseas Customers; Americans Still Reluctant" read a representative headline in the Wall Street Journal (Martin 1977), "Back to Barter," proclaimed the Economist, reminding readers that the present turn to barter was hardly new on a global stage: barter had predominated in the 1920s in the aftermath of the First World War and was key to Germany's economic growth amid the Depression years of the 1930s (Economist 1974). From 1945 to 1958, others noted, most European currencies were inconvertible and relied, instead, on bilateral clearing agreements that swapped goods for goods and only periodically sought to reconcile central bank accounts in monetary terms. As many similar articles, reports, and papers informed Western readers in the 1970s and 1980s, fully 60% of trade within Eastern Europe at the time was based on barter, as was much of the exchange between the Soviet Union and the underdeveloped world. By 1984, international barter had become prevalent enough to feature in a special report in the Harvard Business Review (Yoffie 1984), which included a comprehensive guide and suggested business strategies for the most common types of international barter. It estimated that barter constituted 30% of all international trade at the time. As late as 1985, an author from another leading business school could claim that barter is "an increasingly important part of international trade" (Tschoegl 1985:33). Writing largely of this era, Grant Hammond cites a maxim among veteran international barterers: "There is countertrade in oil, and there is everything else" (1990:129-133).

#### Postsocialist Petrobarter II: Barter's Afterlives

Memories of Cold War petrobarter and its attendant imaginaries were promptly washed away in the flood of confidentand highly money-focused-teleologies that followed in the wake of the Soviet Union's end. Academic "transitology" led the way, with its armature of metrics, time frames, and comparative tables designed to pinpoint how and when Russia's reforms might have progressed to the point where they had arrived at democracy and capitalism. As it became clear that neither Russian democracy nor Russian capitalism were taking the shapes predicted in transitologists' models, "transition" was replaced, for many observers and participants, by a familiar set of teleologies linked to the nexus of oil and money. If transitological teleologies claimed to light a well-known and highly monetized path that would put Russia back on the course of universal history after decades of socialism, then many of the resource curse teleologies that replaced them charted a petrodollar-coated diversion into a similarly generalizable dead end.14 Confident imagined futures linking oil

14. Goldman (2008) is perhaps the most assertive in applying resource curse models to Russia; Gel'man and Marganiya (2010) offer a more nuanced view; Gustafson (2012) prefers the "curse of the Soviet past"; and Jones Luong and Weinthal (2010) offer a trenchant analysis that

to money proliferated in Russian politics and popular discourse as well, notably in Vladimir Putin's writings on natural resource policy, which gave a blueprint for steady, state-driven growth through the sale of natural resource wealth (Balzer 2006) and in the rosy predictions issued by Lukoil and natural resource companies themselves.

The anthropology of postsocialisms came of age in the 1990s and early 2000s in large part by critiquing the confident forecasts of transitology; my discussion of PNOS, PFPG, and Lukoil-Perm above added to a segment of this scholarship by incorporating an analysis of petrobarter. Rather than argue that a new era of money in the 2000s brought an end to that petrobarter, I suggest that the petrobarter transactions of the 1990s—and of the Cold War era before it—remain very significant for theorizing the historical and political imagination in the more recent, hypermonetized Perm region. Especially for members of the oil elite that emerged at the interstices of PNOS, PFPG, Lukoil-Perm, and the regional state apparatus in the 1990s, petrobarter continued to be fertile ground for imagining political and historical orders alternate to those found in the welter of transition and posttransition teleologies that featured oil and money.

### Cyclical Histories

To be sure, street-corner and interfirm barter in the Perm region have declined from their mid-1990s heights. I have encountered few interlocutors in Russia over the past several years—whether they be taxi drivers, state officials, rural pensioners, unemployed factory workers, or university students—who are not ready and willing to quote the current global price of oil (in US dollars) and offer an opinion as to its implications for their personal circumstances and the future of the Russian economy writ large. Irina Ivanovna, whose recollections of PNOS's oil-for-down-jackets barter deals informed my analysis of the consolidation of postsocialist inequalities in the Perm region, was quite typical in speaking very differently about the 2000s, by which time she had begun a 5-year stretch as a mid-level office manager in Lukoil-Perm:

[In 1999], I started to get rich—right before my own eyes. Our salaries were crazy. In 2000 I bought an apartment for 200,000 rubles. It's hard to believe now. 200,000 rubles. In 6 months it was worth 800,000. There was this crazy increase in everything that had to do with money. . . . I refurbished the apartment and started to vacation in Turkey every year.

Like all of my conversations about oil in the Perm region in 2009–2012, this one took place in the context of ongoing global financial crisis and, especially in 2011–2012, deep political uncertainty. Although 2008–2009 did not, for most Rus-

shares my own skepticism for the universality of models developed for postcolonial petrostates. For anthropological analysis of the movement of "resource curse" models around the world, see Weszkalnys (2011) and Yessenova (forthcoming).

sians, approach the early 1990s or 1998 in terms of severity, the jolt of declining oil prices was enough to stir memories of the 1990s-memories that featured barter. As we talked, it became clear that Irina Ivanovna did not take for granted any sort of historical teleology. Rather, she preferred to see a more cyclical history that featured alternating periods of monetization and demonetization, oil money and oil barter. In recalling the past 20 years, she drew parallels among the crisis years of 1991, 1998, and 2008-2009 as times when barter displaced, or threatened to displace, money. After her story of PNOS-era oil-for-down-jackets deals, discussed above, she paused to reflect: "1991 and 1998—they run together. And now [2011]—the same thing... the same thing with money it's all flown away again." She returned to this theme later in our conversation, when we got to 1998: "And we all became poor again" and "So we were again raked under, like in 1991." When we spoke in 2011, the small business she had started with her savings from 5 years at Lukoil-Perm was having trouble finding clients: "And look, everything is being destroyed again. This is already the second year I'm sitting around . . . well, maybe the recovery is already starting."

Tatiana Romanovna, a mid-1990s employee of the PFPG, framed the crisis years of 2008-2012 in a similar way. Over the past few years, she said, and despite the rapid monetization of everything in the early 2000s, the Perm region had become an "economy of favors rather than money." For example, she said: "One person recommends another for a [government] post, and gets in return permission to build on a certain piece of land, and then he offers another favor to someone else. There might be a monetary equivalent, but that monetary equivalent is not itself as important as the favor." Comparing it specifically to the oil-for-apples deals that characterized her time at PFPG in the 1990s, she went on to explain the exchange of favors was itself "a type of barter," one that was undoing much of the progress of the intervening years because it undercut the emergence of trained specialists and expertsincluding herself—who had spent years (and large sums) on new education and training, yet found opportunities for advancement largely closed off to insider networks circulating favors among themselves.

Tatiana Romanovna's frustrations with the Perm regional economy resonates with a great deal of scholarship about Russia's "economy of favors" (Ledeneva 1998) and critiques of "corruption" that continue to proliferate in Russia and around the world. For my purposes here, it is significant that it does so in a quite particular way: by recalling the petrobarter deals of the 1990s and deploying them as a lens through which to view the more recent economic downturn. She, Irina Ivanovna, and others assured me that things were not nearly as bad as they had been in 1991. Still, the possibility of a return to demonetized barter was real, and its evident cyclicity disrupted the teleologies that undergirded so many other circulating discourses that linked past and present, oil and money: discourses of transition, of resource curse, and of steadily increasing wealth from the sale of natural resources.

The cyclical historical accountings of petrobarter and money offered by Irina Ivanovna and Tatiana Romanovna, routed through their own recollections of their 1990s work at Lukoil-Perm and PFPG and in light of the Cold War history discussed above, are a useful reminder that oil has been fully, reliably, and primarily exchangeable for money in Russia for little more than a decade out of the past century. Indeed, I would argue that, in Irina Ivanovna's account especially, we see some ways in which Russia's postsocialist entry into the boom and bust of commodity-driven capitalism is being subsumed into a much older model of historical consciousness in Russia that marks time as a long series of crises or transformations (see, e.g., Grant 1995; Ssorin-Chaikov 2003). At least in some places in Russia, a historical consciousness that periodized the past as alternating between times of monetized and demonetized exchange stretches well back into prerevolutionary times (Rogers 2009). In the postsocialist period more narrowly, Irina Ivanovna's periodization appears to offer another iteration of the common discursive patterning, identified by Shevchenko (2008:15-34), in which Soviet-era talk about the "crisis of socialism" morphed quickly into pervasive talk about postsocialist crises.15

The fact that postsocialist petrobarter, in both the 1990s and in its more recent recollections, unfolds in a Russian context where monetization has rarely been taken for granted for long and crises succeed crises provides some pointed challenges to the assumptions about historical progress that run through so many accounts rooted in the exchangeability of oil and money. In fact, the cyclicity described by Irina Ivanovna and Tatiana Romanovna bears far more resemblance to the layered, convoluted history of oil money and oil barter that I have traced over the past 60 years than it does to the confident teleologies pedaled by transitologists, resource curse theorists, petrostates, and oil companies.

#### Oil for Democracy?

Petrobarter also anchored political and historical imaginations of an even larger scale. As part of its efforts to attract investment from Western Europe, the Perm regional government staged a "Forum of Regions" in the fall of 2009. For 2 days, some of the best and brightest of Perm hosted an array of business leaders and politicians representing subnational regions in the European Union. The forum was, at least in its ceremonial and plenary parts, typically platitudinous—full of mutual admiration, promises of collaboration, and evocative imagery linking Western Europe to the Perm region ("the first place in Europe to see the sunrise").

However, a note of public disagreement crept into the closing plenary panel, when Gert Weisskirchen, a deputy in the German Bundestag, used his allotted time to issue some im-

15. A more detailed analysis of the relationship between crisis, barter, and political formations in Russian and Soviet history would also need to engage with the insights of Hessler (2004) and Holquist (2002).

passioned and none-too-subtle critiques of Putin-era Russia. "We are all," he declared, "living in laboratories of modernity"—laboratories where "new kinds of humanity" are constantly being created. But, he went on, people must be free to unleash their own creativity in both the economic and the political spheres. People must be given a chance "to participate in their own future." He concluded by noting that he had been present at the Helsinki Accords in 1975, when the Soviet Union agreed to respect universal human rights. That promise, he implied, had not yet been realized in Russia. It was a classic transitological critique, with resource curse overtones: Russia, despite the end of socialism and its enormous resource wealth, had still not managed to follow a path that was fully capitalist, democratic, and respectful of universal human rights.

One of the Perm region's principle hosts of the conference was Andrei Klimov, at the time an elected representative in the Russian Duma and a member of its foreign relations committee. Klimov had entered Perm regional politics in the early 1990s, and his service as chair of the legislative assembly's regional policy committee made him intimately familiar with the petrobarter deals that defined the era. He gently and diplomatically took the microphone and proceeded to reject the assumptions of his German guest: "Friends, this is a strange deal. You [Western Europeans] want our oil and gas in exchange for your democracy. So, really, it's a kind of barter. But I'm not sure that [Russia's] young people are going to agree to [those terms]." He went on to say that he had recently been at a roundtable of youth talking about what Europe would be like in 15 years, and in his opinion, the Russians were far more flexible and imaginative than their Western European counterparts. "Be assured," he continued, "we have possibilities that we will develop in our own time, with our own customs and traditions, step by step. In 10-15 years, we will be in a better position than we are now." Klimov's response drew approval from the audience, and several acquaintances commented on it to me later. One rephrased it slightly, but kept its defiant tone: "You want to buy our oil and gas, but give [dat'] us your democracy." The point of Klimov's remarks, in other words, was that German money paid for Russian oil and gas completes an exchange, with nothing more required; adding democracy to the mix, as Weisskirchen's comments seemed to, makes the proposed transaction start look like complex barter, the terms of which demanded contestation. "What kind of exchange is that?" concluded my acquaintance.

What kind of exchange, indeed? What did casting international relations—here subsuming both the energy trade and political systems—in terms of barter and monetized exchange accomplish?<sup>16</sup> And how were these exchanges linked to senses

16. See Bruce Grant's (2009) discussion of the traffic in bodies, gifts, and representations between Russia and the Caucasus for an especially instructive account of the ways in which the precise discursive framings of international exchange relationships in the post-Soviet world have long

of the past and future, from the Helsinki Accords to Russia's youth and the country's "own traditions and customs"? For this is what was at stake that evening in Perm, when Klimov deployed the imagery of refused international barter to outline a different path, and a different temporality, for oil-rich Russia. At a much larger scale than Irina Ivanovna and Tatiana Romanovna, but drawing no less on his experience of the 1990s, Klimov used the conceptual language of petrobarter to frame an alternate political and historical imaginary. In doing so, he joined a venerable tradition of politicians on both sides of the Cold War.

#### The Futures of Petrobarter

Petrobarter has not simply retreated to the domain of the political imagination in oil boom Russia. Stacy Closson (2011) argues that, after 1991, Russia effectively reconstituted the bartered Eastern European energy zone of the 1970s and that for much of the post-Soviet period the enormous volume of international barter deals makes it "truly difficult to determine the true nature" of energy prices (2011:350). Even as this very high percentage of international barter transactions declined somewhat in the 2000s, Closson goes on to report, they still accounted for more than half of Russia's energy exchanges with Belarus and Ukraine. Many of the international deals in the former Soviet Union so comprehensively treated by Balmaceda (1998, 2008; see also Bruce 2007) would also fit comfortably under the rubric of petrobarter as I have used it here. My goal in this article has not, however, been limited to theorizing the postsocialist world. Precisely because petrobarter has been especially pronounced in exchanges that involved the second of the Cold War's three worlds and its post-Cold War aftermath, it affords a useful perspective from which to reflect back on and reformulate some broader assumptions.

After all, petrobarter persists elsewhere around the globe as well. It features, for instance, in many of the deals that Petrocaribe offered, and sometimes closed on, as part of Hugo Chávez's efforts to challenge the organization of the global oil industry and to set up alternate possibilities in Latin America and the Caribbean (see also Gledhill 2008). Iran has proposed a number of oil barter deals, notably with China, India, and Uruguay, in order to duck international economic sanctions that work by restricting monetized exchange on oil markets (Bozorgmehr, Fifield, and Hook 2011). China's burgeoning investments in Africa are often cast as oil-for-infrastructure exchanges, nonmonetized terms that recall others occupying the popular and political imag-

histories and powerful effects. In another variation on this theme, Borenstein (2008:88) notes frequent comparisons between the export of oil and gas and the trafficking of Russian women abroad in the post-Soviet period.

ination in recent years—not least of them the "blood for oil" formulations of the United States-led war in Iraq.<sup>17</sup>

Michael Ross concludes The Oil Curse: How Petroleum Wealth Shapes the Development of Nations (2012) by suggesting some ways in which oil-producing states might avoid what he sees as the common policy choices that lead, in nearly all cases if not inevitably, to high levels of inequality and undemocratic outcomes. Citing China's recent oil-for-infrastructure deals in Africa, Ross proposes barter transactions as one alternate possibility to the "curse" of oil wealth. Because they do not generate massive flows of money that can deform political systems, he suggests, barter transactions might be a surer route to "normal" development in oil-producing states. This is not certain, however, because, "the barter contract is a new phenomenon in the petroleum world" (237). I have argued that a perspective from the socialist and postsocialist world shows that the barter of oil has, in fact, a history as long as-and intimately related to-the monetized exchange of oil, although this history is harder to see if one focuses on First World-Third World relationships and takes for granted, as Ross and so many others do, the tight embrace of oil and money.

To explore the long history of petrobarter is to glimpse some of the cracks, challenges, and alternatives in the workings of the global political economy over the past 60 years. In cases where states and corporations employ petrobarter in the future, we might expect not the flattening of inequalities within the existing international system, as Ross suggests, but the emergence of new and reformulated inequalities and a related range of more fundamental alternatives and challenges to that system. In contemplating the spread of inequalities and political imaginaries at the current global moment, when both the "petro" and the "dollar" elements of the international system are under enormous pressure, it seems especially useful to keep in mind that oil is not—at least not always—almost like money.

### Acknowledgments

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17. Although I am sympathetic to the instinct to unravel this framing (esp. RETORT 2005), we might also ask what leaving the money out accomplishes.

versity of Pennsylvania and Rice University's Center for the Humanities, as well as David Engerman, Bruce Grant, Erik Harms, Karen Hébert, Ben Nathans, and *Current Anthropology*'s astute reviewers. Nataliya Langburd and David Willey provided terrific research assistance throughout.

## Comments

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Rogers has done us a valuable service by presenting this ethnography of petrobarter. This piece broadens our ethnographic knowledge of the petroleum industry. It also advances theorization of the oil industry by reminding us that oilmoney transactions are merely one historically contingent mode of exchange. I admire Rogers's ability to find the term *barter* wherever it pops up in the literature and to make this concept more relevant to contemporary anthropology than it has been in the past. Part of Rogers's project, as I see it, is to decompose taken-for-granted social totalities back into their component networks, and, more generally, to situate and demystify "global" phenomena, as Tsing (2000), Knorr-Cetina and Preda (2005), and Ho (2009), among others, have done—to see, in other words, the jackets and the sugar beneath the "global flows."

That said, as someone who works in Melanesia, where exchange and reciprocity are a major feature of social life, I feel that the gift might be peeking out from behind barter more than Rogers lets on—at least in this article. This now-common strategy of scrutinizing the networks that shape global flows is particularly appropriate here because of the way it reveals, or promises to reveal, personal networks of exchange. I think it would be interesting, therefore, to see Rogers drill down to close analysis of the relationships between elites that potentiate petrobarter. This is what I have tried to do in my own work on mining elites (Golub and Rhee 2013).

Looking at global markets from the point of view of elites who make them is useful because it gainsays claims about the fungibility of oil. Over a century of journalism, memoirs, and autobiographies, starting from Ida Tarbell's *A History of the Standard Oil Company* (Tarbell 1969 [1904]) and extending to Steve Coll's *Private Empire* (Coll 2012), demonstrate, as Rogers does, that oil is a commodity for which there has never been a rational market and where exchange is critically shaped by a "heroic" mode of history (Sahlins 1980) and the personal relations between elites—as Rogers's brief discussion of Achnacarry shows. Just to take the Russian example, BP's joint venture with TNK hinged critically on Moscow's chief rabbi contacting the mother of BP's chairman (Bower 2010, 125). And of course there is the whole issue of refining crude,

which any petroleum engineer can tell you is not all the same. These are facts that everyone close to the industry recognizes. The appeal of Rogers's work is his ability to bring us close to this lifeworld.

That said, at times I was not as clear about Rogers's theoretical contribution as I would have liked to be. Because his coverage of the previous literature is relatively brief, it is at times difficult to understand how he differed from it. In particular, I think Rogers might benefit from a deeper engagement with Fernando Coronil's work. Coronil was a complex thinker, and there may be points of engagement with his work that Rogers could pursue.

Overall, however, Rogers's work on petrobarter is useful because of the way it walks the line between two bodies of literature. The first is the anthropology of oil, which is ethnographically rich but which often involves research respondents far from centers of power and calculation and which is not, frankly, deeply immersed in the business side of the industry it examines. The second is the political science and policy literature, which takes as its unit of analysis institutional actors such as "companies" or "countries" and thus at a stroke prevents it from scrutinizing the very topic that would allow it to actually make progress answering its core research questions. By walking this line Rogers demonstrates once again the relevance of anthropology to the central issues of our time. He provides us with another valuable contribution to the anthropology of oil.

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Rogers's article does several services to anthropology: it introduces a new facet of the anthropology of the state, namely, international agreements; it extends the anthropology of socialism and postsocialist regimes by taking Verdery's work on barter into new arenas; it extends the anthropology of barter, which has tended to be defensive against the old economics equation between barter and "primitive" exchange, rather than probing ethnographically on the basis of its own assumptions and substantive subject matters; and it opens up the petroleum regime to a new topic, anthropological study. The article is provocative on all counts, especially since the case history is so well documented. I have two suggestions for extensions, although not necessarily within the present article. First, we need a deeper excavation of the history and deployment of transactions defined as "barter." Second, study of the quantification and temporal regimes of modern international barter around extractive industries needs to undertake detailed examination of the actual terms and the legal frameworks that hold them in place over what are typically the very long periods of time for which mining agreements hold. An associated domain would then be the relative transparency of the agreements as they enter politics and political succession.

On the first point: From the history of the slave trade, as a basic institution of Western capitalist development, we know that currencies for the trade were being invented by British merchants at exactly the same time as John Locke and Isaac Newton were working together to purify and protect the unified, bullion-based system for Britain itself that eventually undergirded British imperial power for the next almost 300 vears. Cowries imported from the Maldive Islands in the Indian Ocean were transported to West Africa via London as ballast, which then exempted them from even being defined as commodities for customs and excise purposes. Manillas were manufactured in many places around the major ports in Britain. These would be defined as commodities, not "money," since their convertibility was kept very limited. The gold of West Africa was also treated as a commodity and not as money, since it was not issued by the monetary authorities and not checked for purity by such institutions as the Trial of the Pyx. Inevitably, then, while "money" was (and still is) a commodity on markets that produce prices (exchange rates), certain other goods are counted and measured for transactions but not explicitly against money. Against what, then? A frontier of research opens up, based on the suspicion that barter itself is an invention of the great monetary centers, protecting and directing the flows of varied units of value.

The etymology seems to support this direction of thinking. Apparently, *barter* is only mid-fifteenth-century in English, "from Old French *barater* 'to barter, cheat, deceive, haggle'; 'of uncertain origin, perhaps from a Celtic language' (cf. Irish *brath* 'treachery'). Connection between 'trading' and 'cheating' exists in several languages. . . . The noun is first recorded 1590s, from the verb" (*On-line Etymology Dictionary*, July 8, 2013, http://www.etymonline.com).

We can note the connection of the concept of barter to the dangers of patronage and other controls for which Adam Smith would see the free market as a corrective and also the coincidence of its English usage with the rise of the slave trade. Any version of mercantilism would depict foreigners as barterers if it could, justifying that "our own" bullion currency would be not disbursed into foreign hands. The modern history of international barter appears to be long, deeply inflected with power relations (as the article points out), and associated ideologically with the resulting asymmetries.

One can wonder, then, about the current terms and foundations for barter contracts. Oil rights require long-term planning, on the success of which whole economies depend for decades at a time. We need to know how the hedging of agreements works, for both money and barter transactions. Rogers does not address either the quantification involved or the temporal horizons, probably because they are proprietary and thereby inaccessible. Contracts can include the time frame of concessions for exploration and exploitation, the exact terms of royalties and returns to partners in the investment,

the conditions of operation of the oil field, and so on. Partnerships can be varied, according to the specific operation: initial investment in the capital fund and responsibility for, for example, ecological and social conditions of operation. It is hard to imagine these not being quantified in very detailed terms. Indeed, rights to royalties on natural resources for the producing populations, as a percentage of market value, can be written into the national constitution. We do not know yet how all this works, but it is very important to open all these topics up for ethnographic attention and anthropological theorizing. These very long-term commitments are intricate and enormously powerful in a present world that is more likely to be economically turbulent than predictable, and they are more likely to involve political successions of varying dynamics than to hold steady under stable policies and legal frameworks.

## Black-Gold Rescues US Dollar Hegemony

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Although gold and silver are not by nature money, money is by nature gold and silver.
(Marx 1965, 89)

#### Oil Is Money

Does Russia bartering oil for other goods present an alternative to money as a universal means of exchange? In today's petroleum-fueled economies, oil is not just another good but one that possesses the qualities and functions of money. Indeed, oil today functions not like fiat money but as robust specie—gold and silver. Oil's qualities of homogeneity, portability, divisibility, and universal demand enable it to serve as general equivalent, as currency that can measure, transact, distribute, and store value. Because of arbitrary supply constraints—sovereign location, physical extraction—oil is money in the vein of gold rather than sovereign issue.

## Seigniorage

While gold is a dependable form of money—"money is by nature gold and silver"—its supply cannot easily expand to underwrite multiplying transactions in an expanding economy. Fiat money can do so, and for their trouble, sovereigns profit from the difference between the goods fiat money can buy and the low cost of producing that money. That profit is aptly called *seigniorage*. To temper the temptation to generate excessive seigniorage profits—an inflation tax—by printing money, sovereigns have backed fiat money with gold

or silver. Keeping that promise, as the Venetian gold ducat and the English pound sterling did for centuries, a currency can be accepted beyond its sovereign borders, creating an empire of trade. International reserve currency status enables its sovereign issuer to garner seigniorage profits from the rest of the world. Seigniorage is a form of invisible tribute from willing dependents, who become unwilling when that tribute becomes too large, and embarrassingly visible.

Up until 1971, the US dollar served as international reserve currency backed by gold, enjoying such seigniorage. As the costs of the Vietnam War escalated, however, the United States succumbed to the temptation of printing US dollars far beyond the gold it owned in Fort Knox. The UK ambassador showed up with a bag of dollars, demanding an ounce of gold for every 35 of them. The gold standard was no longer viable.

# From Gold Standard to Black-Gold Standard: Oil Rescues the Dollar

By irresponsibly printing US dollars to finance the Vietnam War, then formalizing that irresponsibility by discarding the gold standard in 1971, the United States abused and jeopardized the US dollar's reserve currency status and seigniorage privilege. Just 2 years later, however, the historic oil price hike of 1973 provided a chance for the US dollar to retain its reserve status. Oil became the new, black-gold standard that backed the US dollar, thereby enabling it to retain its reserve currency status. What could oil do that gold could not? The key lies in requiring that oil be sold in US dollars. While oil thus appeared to derive its (nominal) value from the US dollar, the reverse was true: oil became the new black-gold that backed the US dollar's survival as reserve currency. Oil's new high price and escalating demand meant that many new dollars would be needed to transact oil worldwide. Such dollars would be held by foreigners, and they would therefore not spark domestic US inflation. Such dollars abroad also allow the United States to run persistent trade deficits, consuming more goods than it produces, by giving foreigners nominal paper in exchange for real goods. Such almost-free goods amount to about half of all US dollars in circulation, being the portion held abroad (estimates range from 40% to 60%).

Oil priced in US dollars disguises the de facto function of oil as money. A rising oil price is considered a change in terms of trade between one good (oil) and everything else, rather as inflation (rising prices/falling money value in relation to all goods). Rising oil prices allow the United States to correspondingly increase the US dollar supply without sparking inflation. And even when inflation does result, the blame falls on oil—and Middle Easterners—rather than on the US dollars and its American purveyors.

This unequal blame game must be especially galling to Saudi Arabia, for as a unique swing oil producer that can modulate prices up or down, Saudi Arabia helps the US dollar maintain a balance between seigniorage profits and inflation.

Oil's advantage over gold lies in its more elastic supply, elastic to not only price signals but political ones as well.

#### Conclusion: Barter, Dollar, or Euro?

So when the Russians or the Iranians barter oil, they are not proposing an alternative to the US dollar or to money as such. They are merely pursuing a strategy of "live and let live" on the margins of the US-dollar-reserve-currency-backed-by-oil floating exchange rate regime. This is by no means an "alternative imaginary" but rather an acknowledgment of US international macroeconomic monetary monopoly. This is not an act of challenge or submission but one of getting by on its margins, without paying tribute. The true challenge is to sell oil in euros or some other potential reserve currency, and we know what happened to Saddam when he tried that.

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Douglas Rogers's article is a welcome reminder of what anthropology can contribute to the effort to understand economies by underscoring how they are always plural or internally multiple. In line with others who have urged social scientists away from the "capitalocentrism" (Gibson-Graham 2006:35) of some critical approaches, Rogers illuminates how petrobarter presents a different take on oil economies. In anthropology and allied fields, it is as if the analysts themselves have been dazzled by the magic of money, in its role as the general equivalent, as much as their interlocutors who see in oil not only its fungibility but also its ability to abstract, deracinate, and destroy.

Now, I am all for a good dazzle. But the point of being dazzled, Marilyn Strathern says, is to allow oneself the suspension that allows us to hover "on the threshold of understanding" (Strathern 1999:11). Certain critical approaches, with their certainties about abstraction and equilibration, too rapidly complete the equation assumed in exchange rather than allowing the kind of suspense Rogers's article affords, or that the irresolution barter itself provides.

For barter is different from mere exchange. Barter depends on the specificities of things, persons, and relations. Again, Strathern: it is not an exchange of sago for pigs, but *this* sago for *that* pig. Barter always entails its own spatiotemporal referents in its enactment (see Maurer 2006:22; Strathern 1992). Thus, the space of Perm becomes important in Rogers's story: it cannot be any oil. It has to be *that* oil. Where other analysts have come to oil and money with a language of equivalence and exchange, then, Rogers seems to point toward a language of substitution and payment (Maurer 2012b). This makes petrobarter a pragmatic operation.

The mistake, of course (not committed by Rogers, but I

can imagine a possible misreading), is to assume that with barter we have the situated and embodied whereas with monetary exchange, we have the hyperreal, abstract, and eviscerated. But even monetary exchange is shot through with particularity. While in one moment or phase, we see reference to the "external, generalized standard," in another moment or phase, someone is feeling the crispness of the banknote, flipping the coin for luck, waving the mobile phone in the air to catch the vibrations and the money running through them. The materiality, in short, matters. Rogers quotes a newspaper article: petrobarter schemes were "impossible to understand. Unless you participated in them." Precisely.

A larger question the article raises is, what is the nature of the "alternative?" Rogers's gestures toward temporality and my invocation of the concept of phase provides a possible answer. Where anthropology once may have contented itself with delineating the articulations of modes of production or developing typologies of reciprocity and redistribution, in this case—and many others—what comes forward is the oscillating back and forth between two or more states (see Maurer 2012a). This has implications for how we imagine our plural world(s) and invites reflection on the relationship between Rogers's effort and recent work on ontology. This is something I leave for others, except to say that I think Rogers does not give himself due credit in his conclusion. It is not so much that his analysis shows a "glimpse [of] some of the cracks" in global political economy. It opens up the question: One world, or many? Or one, with many within? I am content to defer, for now, to William James, writing in 1909: "The word or names a genuine reality" (James 1909:324). Rogers shows how it can become anthropology's task to illustrate that reality.

Finally, a relatively unrelated coda: I cannot help but hear in the ARCO executive's statement, "Oil is almost like money," a prefiguring of European Consumer Commissioner Meglena Kuneva's (2009) statement that "personal data is the new oil." Insofar as the exchangeability, barter, gifting, or expropriation of data is becoming a pressing political and academic concern, postsocialist experiences with petrobarter may provide other analogies to the stories we are likely to hear about expropriation, enclosure, and commodification—will this data be treated as almost like money? In some quarters, it already is. But that does not mean we give in to its magic.

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Rogers concludes his important discussion of "petrobarter" noting that its analysis reveals "some of the cracks, challenges, and alternatives in the workings of the global political economy." Having situated his argument in the context of petroleum

resources in the Perm region of Russia, Rogers's analysis can be extended to illuminate the role of barter in other contexts. Rogers's two central points—that anthropological analysis of petrobarter adds to our understandings of (first) the production and reproduction of inequality at various scales and (second) the possibility of creating alternative political-economic "imaginaries" that are not premised on capitalism—are instructive in considering the role of barter in contemporary relations between China and African nations. The notion of barter is helpful in analyzing China-Africa engagement at multiple scales and in multiple contexts, why these engagements have accelerated rapidly over the first decade of the twenty-first century, and why such engagements create alternative political-economic "imaginaries" or contexts for power beyond postcolonial, capitalist relations with Euro-American partners.

Chinese trade with African nations complements, competes with, and even supersedes trade with Euro-American partners; such shifts in the parameters and substance of exchange certainly "produce and reproduce inequality" at various levels of society in African nations. However, relations of barter also foster the production and reproduction of new relations of equality between African and Chinese partners, in particular at the bilateral level. Relations of barter are premised on the expectation—indeed the requirement—of equality and mutual benefit created through the transaction itself. Barter serves as a broad metaphor for contemporary engagement between African nations and China: each partner seeks to balance its own benefit in expectation of the other's notion of benefit, in a context in which values are not necessarily comparable even though the exchange is seen as equal and fair by both sides, and where goods and services can be exchanged without reference to monetary value. As analyzed in anthropological theories of barter, the exchange of dissimilar objects or services that both partners agree are equivalent makes the partners equal in the context of that exchange (Humphrey 1985; Humphrey and Hugh-Jones 1992). With the persistence of barter exchange, partners build a foundation of equality that can provide a stable basis for continued economic partnership and broader geopolitical engagement. Barter thus creates equality between partners who are not necessarily equals in larger economic or political contexts.

The 2008 resources-for-infrastructure deal between China and the Democratic Republic of Congo (DRC) is a case in point. Relying on future returns from a joint venture in copper and cobalt mining, the China Eximbank agreed to finance more than \$6 billion in infrastructure development in the DRC to build hydropower installations, railroads, hospitals, and schools (among other projects). As summarized by a Canadian business executive familiar with the negotiations: "Congo doesn't have to wait for its infrastructure until it has the money. Building starts immediately with the natural resources as guarantee. . . . The Chinese approach side-steps all of the conditionality and gets right to the point. You want infrastructure built? You have resources to guarantee a loan? We have a deal" (Brautigam 2009:146).

What China values and what African nations value does not have to be, and often is not, equal in kind or in monetary value; the balance arises when each partner provides the other with the goods or services that it values and that both partners accept as equivalent. The exchange of raw energy resources (oil) for infrastructure (Angola and Nigeria) or cocoa revenues for a hydropower plant (Ghana) creates conditions of equality between China and African nations because each partner gets what it wants from the other. The persistence and acceleration of such resource-for-infrastructure arrangements requires that both partners perceive balance and fairness in the transaction, regardless of value attributed by external observers or markets. Furthermore, many Chinese enterprises, especially if they are state-owned, can afford to engage in this kind of nonmonetized exchange because their success is not determined solely by economic profitability but is also assessed in relation to China's larger geopolitical goals.

Chinese investments in African nations are both pragmatic and symbolic. Symbolic investments include "prestige projects," such as sports stadia, which recognize and promote African national communities through their dedication to sports teams, and government buildings, such as parliament and national congress buildings and the headquarters of the Organization for African Unity, which signal China's recognition of and respect for African political institutions, leaders, and processes. Such projects symbolize political equality and affirm Chinese recognition of African national dignity, recognition that many Africans feel is sorely lacking in their relations with Western nations. The expectations of economic balance of interests and political equality—resulting from relations of barter between China and African nations-do indeed raise the possibility of "new political imaginaries" for African leaders and citizens alike.

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In this insightful article, Rogers brings into relief the practice and politics of what he terms *petrobarter*, the process of exchanging petroleum for goods and services without the medium of money. His work in the Perm region of the Russian Urals in the post-Soviet period and the oil trade in the early Cold War provides an important counterpoint to existing literature on oil that focuses primarily on the oil-money nexus in regions dominated by Europe and the United States. Rogers analyzes the practice of petrobarter in the Soviet Union and postsocialist Russia in the same analytical frame, upending the remarkably resilient evolutionary narrative that barter sets the stage for monetary exchange. Moreover, Rogers's research offers a much needed challenge to widespread portrayals of

socialist and capitalist economies as wholly dissimilar and mutually exclusive.

Rogers argues that unlike the abstractions of monetary exchange, barter avoids exchangeability and generalization; the service or goods being exchanged for oil cannot move unmarked in the same way as money. Barter, thus, provides a possible alternative to the depersonalized, abstract, and at times mysterious characteristics of money. Rogers reveals how these characteristics make barter a crucial mechanism for producing political narratives, especially those that pose a challenge to capitalist hegemony. Yet, as he reveals in several fascinating case studies, barter does not necessarily escape the problems associated with monetary accumulation.

Rogers's case studies illustrate the complexity and unanticipated outcomes of barter. Workers in the oil industry, he finds, often quickly exchange bartered goods for generalizable abstract cash. As one of Rogers's informants notes, refinery workers in Perm sold the jackets they had received as a petrobarter deal for large sums of cash in local markets. At more elite levels, barter has served as a mechanism for capitalist accumulation and antifederalist politics. Barter allowed those who controlled refineries to avoid a monetary profit winding up in Soviet coffers. Later it was a way for an emergent postsocialist elite to be able to secure control of a privatizing oil industry. A rising capitalist class framed their bartered transactions as tangible and local, unlike the "magical" and mercurial fluidity of money with its devaluations, revaluations, and possible growth, seemingly unconnected to human action. Barter provided a convenient alibi for this new elite to deflect criticism from popular sectors while at the same time securing profit.

Despite petrobarter's close entanglements with capitalism, Rogers asserts that it nevertheless allows us to imagine political practice in ways that are less constrained by the institutions and conceptual framework of capitalism. I would like to hear more from Rogers on this claim.

Rogers's article raises intriguing questions about Venezuela, a context that I am most familiar with, where in 2003 the Chávez government enthusiastically turned to petrobarter. Fernando Coronil's thesis about the importance of oil for Venezuelan state formation has lasting implications, but much has changed in this oil-rich country, as Rogers mentions late in the article. While Rogers frames his work as a shift from a focus on the postcolonial dynamic of Venezuela and Nigeria to the postsocialist context, his argument may gain even more traction if he considers Venezuela's neosocialist turn toward petrobarter. Much like the Soviet economists that Rogers cites, the Venezuelan government frames petrobarter as a step toward challenging global capitalist hegemony and making social justice a motivating factor in trade relations. Whereas the Soviet Union exchanged oil for Cuban sugar, Venezuela now barters 100 thousand barrels of oil a day for Cuban doctors, among other goods and services.

Rogers's article raises fascinating questions for the Venezuelan context. What is the difference between, on the one hand, "sowing the oil"—an old Venezuelan phrase—for dollars and, on the other hand, sowing Venezuelan oil for Cuban doctors? Rogers notes, drawing on Coronil, that oil for money exchanges in Venezuela made it possible for those holding the purse strings to endow the state and themselves with magical power. Petrobarter also enabled the late Hugo Chávez to cultivate a magical aura. The Chávez government placed Cuban doctors into poor neighborhoods where few people had reliable access to primary health care. Despite the concreteness of the petrobarter for doctor exchange, the community organizing that it takes to make the Cuban doctors' engagement in poor neighborhoods successful was often overlooked when people in the barrios of Caracas praised Chávez (and God) for conjuring desperately needed doctors.

Instead of capital accumulation, the Venezuelan government has reaped better health indices, support from poor communities, solidarity with Cubans, and kudos from leftists worldwide. Capitalism may be undercut in the Venezuelan context not because the global price of oil is shaken by petrobarter but because Cuban doctors make evident that another system is possible. Here, Rogers's suggestion that there is an important difference between barter and monetary exchange at the level of political imaginary provides an important tool to assess overlooked aspects of this exchange.

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Tony Woods, an authority on Chechnya and an associate editor at the New Left Review, has reviewed a new book by Thane Gustafson entitled Wheel of Fortune: The Battle for Oil and Power in Russia in the London Review of Books ("Who Owns It?" June 6, 2013, 30-32). Woods rehearses the frontier history of Soviet oil-from Baku to the Volga region to Siberia—the spectacular collapse in production after 1989, the extraordinary smash-and-grab of the Yeltin years that produced three private vertically integrated oil and gas companies (Woods relates the fantastic story of Vladimir Bogdanov, head of Surgutneftegas, selling the entire state-owned company to himself by shutting the local airport for a day so that no other bidders could participate in the auction), the massive confrontation between the new private oil companies and the Russian state during the 2000s, and Putin's reigning in of the "oilygarchs" (most famously the recently released Mikhail Khodorkovsky who spent 10 years in jail following a tax and fraud conviction). By 2008, Putin announced that oil and gas resources had produced a half trillion dollars in reserves and two sovereign wealth funds worth another \$180 billion. Woods proffers the view that the oil sector is in no sense simply "state owned" and neither are private companies like LUKukoil really private for that matter. These entities are

hybrid, which is, says Woods, the hallmark of contemporary Russian capitalism. The word *barter*, incidentally, never appears.

Near the end of his article, Rogers cites Closson's claim that Russia's international oil deals continued to include an extraordinarily high percentage of barter transactions even after the 1990s-more than 50% in the cases of Ukraine and Belarus. This seems astonishing, perhaps even implausible. I would not deny the significance of barter in the oil sector during the 1990s; demonetization was central to the theorizing of Russian capitalism at this time by the likes of Burawoy, Verdery, and Woodruff. How important it is now in light of the petro-dollar surpluses and of the operations of the massive hybrid enterprises dominating oil and gas remains an open question for me. There are a number of ways of thinking about this petrobarter. One is that, like the genesis of the protection industry ("roofs") in the same period, petrobarter was conjunctural, contingent upon the temporary implosion of the post-Soviet state coupled with the shock therapy of market reforms. Another is that the pervasiveness of the blat economy and the ongoing presence of barter across many industrial domains (doubtless of very different sorts and scales) points to a structural or at least enduring aspect of capitalist dynamics in Russia, in which reciprocal trade throws a wrench not only into the "money as oil" equation but also into certain definitions of "mature capitalism" (commodities producing commodities through the universal medium of money), in the same way that Michael Denning's (2010) brilliant account of capitalism and the wageless life provides a rather different optic through which one can view the capital-labor relationship. A third is that not just oil but many aspects of modern capitalism can only be grasped by a rather catholic view of what passes as economic transactions. After all, barter is everywhere (see the fascinating website and newsletter Barter News: http:// www.barternews.com/barter\_happenings\_around\_the\_globe .htm). China has set up the Yangpu Oil Barter Exchange, reportedly the world's first barter exchange for oil and gas. But the picture far exceeds China and oil. Barter organizations engage in trades with over 400,000 companies worldwide. The complexity of the transactional field is very clear if one examines, for example, a case like Angola, which interestingly collapses the distinction Rogers makes between postcolonial and postsocialist settings. The record of China-Angola oil swaps is well documented, but the national oil company SON-ANGOL extends across multiple sectors as a global enterprise resembling in many respects the South Korean chaebol, but with interesting inflections. Domestic and international barter is one part of the story but so too are state-directed nonmonetized transactions, something close to what we would identify as transfer pricing and, of course, transactions that are "black," that is to say, illegal (here oil theft is key) and apparently deeply imbricated in the shadow world of very shady Hong-Kong groups (the so-called Queensway syndicate; see http://www.economist.com/node/21525847). As central as barter is to the oil sector is organized oil theft and a

global "oil mafia" (currently in Nigeria 15% of output is stolen; oil theft is widespread in Mexico, the Caucasus, and Colombia). In this sense, petrobarter opens up the wider oil complex, as I have called it (Watts 2012), an assemblage not just of IOCs (international oil companies) and NOCs (national oil companies) but oil service companies, construction and engineering firms, criminal organizations, "takeholders" like the NGO (nongovernmental organizations) and audit cultures of EITI (Extractive Industries Transparency Initiative), the shadow economy of drugs and money laundering (both follow oil quite closely), and, of course, the security forces (also sometimes bartered relations). This is a complex field of interfirm and interstate economic transactions that stands uneasily with respect to the analytics of Adam Smith, Karl Marx, or Karl Polanyi.

I am convinced that petrobarter was a twin strategy for regional class formation and accumulation and a strategy for state legitimation. I am much less convinced of Rogers's argument about political imaginaries and the barter world. I am not convinced that comrades Chakrabarty and Klimov can be deployed to suggest that what is on offer is a different temporality or different path. Nostalgia for the past? Maybe. Cyclical barter? Possibly. But maybe the high watermark of petrobarter is over. Rogers will keep us informed.

# Reply

It is a pleasure and an honor to engage with such an incisive set of comments from such a distinguished group of scholars. Golub, Rupp, and Schiller offer thoughts primarily based on petrobarter arrangements they are familiar with in other parts of the world, while Ho, Maurer, Guyer, and Watts speak mainly to analytic and theoretical issues, although not without reference to specific examples.

Golub's experience in Melanesia leads him to suspect that "the gift might be peeking out from behind barter more than Rogers lets on" and to suggest further attention to personal networks of elites. He is absolutely correct that a narrower focus on any subset of networks in the Perm region—elite as well as nonelite—would make visible a whole range of networks and webs of reciprocity that include gifts, barter, and monetary exchange and that would extend beyond oil. The present article does not follow this route simply because my primary goal was to move outward into other domains and modalities of petrobarter rather than inward to a more comprehensive treatment of regional exchange.

Still, I offer one rejoinder to Golub's framing of this important issue, which three times in as many sentences speaks of elites shaping or making possible patterns of petrobarter. In the Perm region, at any rate, it was at least as much the petrobarter that made the new elites as the other way around. Although the post-Soviet circumstances in which so many old

elites and institutions were so thoroughly discredited threw this dynamic into particularly sharp relief, I suspect that a less dramatic version has often played out elsewhere in the world following the discovery of oil. The centrality of oil to global exchange networks and to so many visions of modern life means that petrobarter is an especially potent elite-maker. (In this sense it is, in fact, like oil money.) By attending to petrobarter, then, we have an additional way of asking how the global oil industry has been so effective at hooking into and transforming existing local configurations and thereby empowering new elites and certain factions of old elites. Torrents of oil money should not, in other words, be assumed to provide sufficient explanation for the rise of a new network of elites. We must at least consider the role of larger fields and other modalities of exchange. If my analysis of petrobarter is useful to Golub and others thinking about the extractive industries in Melanesia, then I hope they will accept it as a return gift, for Melanesia-based studies of exchange, reciprocity, and personhood were foundational inspirations for the anthropology of socialisms and postsocialisms (see, e.g., Dunn 2004; Verdery 1996) and helped sensitize me to the significance of Russian petrobarter in the first place.

A central axis of large-scale international barter now runs between China and African states, including, as Rupp notes in her commentary, Angola, Nigeria, Ghana, and the Democratic Republic of Congo. Because these vectors of global natural resource flow-including but not limited to petrobarter—have grown so rapidly in recent times, they offer an especially useful context in which to think beyond Cold Warera divisions of the world. Rupp discerns an intriguing commonality in many of these China-Africa barter deals: it is precisely their barter terms that ground a rhetoric of equality and mutual respect between the exchange partners. This rhetoric of equality through barter, Rupp goes on to note, is often directly contrasted to the highly monetized natural resource transactions that have taken place among Euro-American states, transnational corporations, and African states for decades—decades that have been characterized by nothing if not by inequality. It would seem, then, that some of the rhetoric of friendship among nations through petrobarter deals that once characterized the Soviet Union's exchanges with COMECON and Third World states in the Cold War has taken on a new life in China-Africa rhetoric. It would be a fascinating project to trace this strand of discourse more comprehensively through the global socialist and postsocialist diaspora (see also Rogers 2010). It seems just as likely, for instance, to have incubated in African capitals, with their extensive Cold War-era ties to the Soviet Union and long practice of looking for alternatives to relationships with Euro-American postcolonial powers, as to have moved from the Soviet Union to China.

In the few words permitted here, Rupp is only able to note in passing that China-Africa trades also "produce and reproduce inequality at various levels of society in African nations" (and presumably on a global scale as well?). In a more comprehensive analysis of China-Africa petrobarter deals, I think it would be essential to extend this line of analysis, lest we be deceived by the discourse of barter-as-equality. It is to guard against this possibility that I paired my discussion of barter imaginaries in the Perm region with an account of how petrobarter was central to the formation of a new regional elite, and for the same reason that I explored American and Soviet Cold War political imaginaries in conjunction with the accumulation strategies of international oil companies at the time. Focusing on the point of exchange—and on political imaginaries, metaphors, and symbols extending outward from it—can only take us part of the way, and it is crucial to remember that discourses and rhetorics of equality are among the most common vehicles for inequality.

Schiller takes up another aspect of my discussion of petrobarter in neosocialist Venezuela, with particular attention to the late president Hugo Chávez's high-profile exchanges of oil for Cuban doctors. Interestingly, the nonmonetized nature of these exchanges does not seem to have interfered with the long-running dramaturgy of Venezeulan statecraft so comprehensively traced in Coronil's Magical State (1997). Even though they appear courtesy of very concrete relations of petrobarter and community organizing, Schiller reports, the doctors were still considered by many to have been conjured by the state in the person of Hugo Chávez. Is this in part because, oil-for-doctors deals notwithstanding, so much of the rest of the Venezuelan oil economy remained monetized, in contrast to the thoroughgoing demonetization in which petrobarter proliferated and became associated with the un-imagining of the federal state in the early post-Soviet Perm region? This arrangement looks, that is, more like the Perm region in the late 2000s, where memories and glimpses and political imaginaries of petrobarter emerged around the edges of an otherwise very highly monetized field of exchanges and in the context of a highly performative federal state. In any case, Schiller is doubtless correct that neosocialist contexts like Venezuela are another prime location to look for both practices and imaginaries that feature barter—petro and otherwise (on neosocialisms, see Boyer 2010).

The remaining four commenters take more theoretical and analytical routes into the issue of petrobarter. They speak to issues of oil and money, temporality and phase, and the place of barter in global circuits of exchange.

Ho provides a valuable contribution to this discussion by giving a capsule summary of the US dollar as international reserve currency, its tight link to the global oil trade since the 1970s, and the seigniorage benefits that continue to accrue to the United States from this arrangement. I readily acknowledge that, by building my analysis around some of the differences between oil exchanges in colonial/postcolonial and socialist/postsocialist contexts, I deemphasized their common location in a global reserve currency cum international seigniorage regime (at least since the 1970s). Let me also emphasize, however, that I did grant from start to finish that oil is sometimes—even often—closely related to money in one way or

another. The "Black-Gold . . . US Dollar Hegemony" relationship Ho outlines is a welcome addition to that list, but in this article I was interested in theorizing some underappreciated cases in which oil is not so closely related to money and in using those cases to reflect back on the workings of the entire system.

Ho goes on to suggest that, once we acknowledge the existence of a global reserve currency/seigniorage system operating in close connection with the international oil trade, then we must also recognize that petrobarter is "by no means" capable of generating political imaginaries, alternatives, or challenges. For Ho, the only thing that qualifies as a "true challenge" is an overt, frontal assault on the status of the US dollar as global reserve currency as such (e.g., Iraq's flirtation with pricing oil in euros in 2000). This framing seems to me too blunt by several orders of magnitude; indeed, it leaves no room for most of the ways in which anthropologists have theorized power in recent decades. How can it be that the only kind of challenge, the only kind of political imaginary, the only kind of alternative that warrants anthropological attention, must come at the level of global reserve currency and be identifiable chiefly by the fact that it was answered by an American military invasion? Surely our ethnographic and theoretical antennae can be-must be-more finely tuned than this.

I am deeply grateful for Ho's reminders about oil's special relationship to the US dollar in recent decades and about the long history of state-sponsored violence in the overall political economy of oil. I would not wish to downplay either one. However, the hasty, broad-brush way in which Ho deploys them here tramples over much of what I think can be distinctive about anthropology among the disciplines usually concerned with international oil: the ability to discern and theorize processes that cross scales; to take seriously a variety of exchange dynamics uncovered through historically grounded ethnography; and, thereby, to expose seams and cracks and alternatives that have been rendered invisible by ideology, decontextualized theory, selective examples, accumulated common sense, or, in the case of oil, money, and war—a powerful combination of all of the above.

Maurer and Guyer both note that barter seems to invite certain temporalities, beyond the narrow case of cyclical monetization and demonetization that I described in the Russian case. I agree. Without room for a good deal more ethnography and analysis, I hesitate to wade into the ontological waters that Maurer suggests, at least in this context. It does seem to me, however, that the movement of objects and values in and out of different "phases," as Maurer writes, is indeed an especially promising arena in which anthropologists might get some analytical purchase on the knotty issue of how many possible futures become—or fail to become—lived realities. The question of "One world, or many?" that Maurer poses, that is, comes in all tenses.

With her queries about the time horizons involved in petrobarter exchanges, Guyer focuses our attention on the fu-

ture. I suspect that we will find a wide range of petrobarter temporalities, even in the examples cited in this discussion. Much of the early postsocialist barter I describe in Russia was extremely short-term, situational, improvised, and, from the perspective of those involved, not at all pegged to long-term issues like the management or development of oil fields. At the other end of the spectrum, we would presumably find the much more highly formalized, very long-term oil-for-infrastructure deals between China and Africa of the sort that Rupp describes.

That all sorts of early postsocialist petrobarter unfolded as a response to conditions of massive monetary instability and uncertainty is clear enough; Guyer's framing of this issue in terms of temporality suggests to me yet another way to move analytically from postsocialist petrobarter outward. Mazen Labban (2010) argues that the global oil trade has become increasingly financialized in recent years, to such an extent that oil prices now reflect short-term speculative trading in derivatives markets more than actual global supply and demand for oil. Is it the case, then, that the resulting turbulence and unpredictability is driving some states and oil companies out of the financial markets and into other kinds of exchanges—barter deals among them—that can give them the kinds of hedging and risk management tools (perhaps especially the longer time horizons that Guyer mentions) required for the exploitation of the world's increasingly difficult to access oil deposits? Petrobarter in these cases would be much longer term than the early postsocialist examples, but it would take place with the broadly similar aim of finding material moorings and accumulation strategies in the context of monetary turbulence.

Watts draws on his encyclopedic knowledge of the global oil complex to add significantly to the catalog of petrobarter transactions included in this discussion. He is persuaded by my account of petrobarter in the early post-Soviet period and also thinks that the personal networks (to use Golub's phrasing) characteristic of Russian capitalism seem to lend themselves to barter-type transactions across domains of exchange and time periods. He is skeptical, though, of my effort to export the concept of petrobarter, suggesting that petrobarter "may have peaked." That is certainly one possibility. But I think the long list of additional cases introduced by other commenters and by Watts himself, along with my own Cold War-era example (which Watts does not weigh in on), suggests that we may not want to jettison the concept just yet. The decline or irrelevance of barter has been proclaimed and predicted ceaselessly. Perhaps it is time to shift strategies and look for ways in which barter has been, instead, integral to a long succession of international systems, with the global flow of petroleum being only the most recent incarnation. In this regard, there is no better place to conclude than with Guyer's eye-popping suspicion, based on a sketch of global exchange at the time of the slave trade and early capitalist development, that "barter itself is an invention of the great monetary centers." If this is so, then petrobarter has an even longer and more varied genealogy than I suspected at first. Anthropologists, as the commenters collectively demonstrate so well, have a sizable number of powerful tools with which to trace and theorize that genealogy.

-Douglas Rogers

## References Cited

- Alekperov, V. Y. 1996. Vertically integrated oil companies of Russia: formation, methodology, and realization. Moscow: Lukoil.
- Apter, Andrew. 2005. The Pan-African nation: oil and the spectacle of culture in Nigeria. Chicago: University of Chicago Press.
- Balmaceda, Margarita. 1998. Gas, oil and the linkages between domestic and foreign policies: the case of Ukraine. *Europe-Asia Studies* 50(2):257–286.
- 2008. Corruption, intermediary companies, and energy security: Lithuania's lessons for Central and Eastern Europe. *Problems of Post-Commu*nism 55(4):16–28.
- Balzer, Harley. 2006. Vladimir Putin's academic writings and Russian natural resource policy. Problems of Post-Communism 53(1):48–54.
- Benson, Peter, and Stuart Kirsch. 2010. Capitalism and the politics of resignation. Current Anthropology 51(4):459–486.
- Berry, John A. 1972. Oil and Soviet policy in the Middle East. *Middle East Journal* 26(2):149–160.
- Borenstein, Eliot. 2008. Overkill: sex and death in contemporary Russian popular culture. Ithaca, NY: Cornell University Press.
- Borisova, Nadezhda. 2002. Perm': Kvasiavtonomiia. In Avtonomiia ili kontrol': reforma mestnoi vlasti v gorodakh rossii, 1991–2001. V. Gel'man, S. Ryzhenkov, E. Belokurova, and N. Borisova, eds. Pp. 189–227. St. Petersburg: Letnii
- Bower, Tom. 2010. Oil: money, politics, and power in the 21st century. New York: Grand Central. [AG]
- Boyer, Dominic. 2010. Why not neosocialism? Unpublished manuscript, Rice University.
- Bozçalı, Fırat. 2011. The illegal oil trade along Turkey's borders. Middle East Report 261:24–29.
- Bozorgmehr, Najmeh, Anna Fifield, and Leslie Hook. 2011. China eyes barter plan to bypass US sanctions on Iran payments. *Financial Times*, July 25, 1.
- Brautigam, Deborah. 2009. The dragon's gift: the real story of China in Africa. Oxford: Oxford University Press. [SR]
- Bruce, Chloë. 2007. Power resources: the political agenda in Russo-Moldovan gas relations. *Problems of Post-Communism* 54(3):29–47.
- Chadwick, Margaret, David Long, and Machiko Nissanke. 1987. Soviet oil exports: trade adjustments, refining constraints, and market behavior. Oxford: Oxford University Press.
- Chakrabarty, Dipesh. 2011. Provincializing Europe: postcolonial thought and historical difference. Durham, NC: Duke University Press.
- Chari, Sharad, and Katherine Verdery. 2009. Thinking between the posts: postcolonialism, postsocialism, and ethnography after the Cold War. Comparative Studies in Society and History 51:6–34.
- Closson, Stacey. 2011. A comparative analysis on energy subsidies in Soviet and Russian policy. Communist and Post-Communist Studies 44:343–356.
- Coll, Steve. 2012. Private empire: ExxonMobil and American power. New York: Penguin. [AG]
- Committee on the Judiciary. 1961. Soviet oil in the Cold War. Washington, DC: US Government Printing Office.
- Coronil, Fernando. 1997. The magical state: nature, money, and modernity in Venezuela. Chicago: University of Chicago Press.
- Denning, Michael. 2010. Wageless life. New Left Review 66:79-97. [MW]
- Dunn, Elizabeth. 2004. Privatizing Poland: baby food, big business, and the remaking of labor. Ithaca, NY: Cornell University Press.
- Economist. 1974. Business brief: back to barter. Economist, December 14, 1974, 52–53.
- Fadeeva, L. A. 2001. Politicheskie traditsii i regional'naia politicheskaia kul'tura prikam'ia. Politicheskii al'manakh Prikam'ia 1:46–69.
- Fedotova, S. L. 2006. Vol'nyi putevoditel'. Perm': Kompan'ion.
- Frankel, Paul. 1966. Mattei: oil and power politics. New York: Praeger.
- Gaidar, Yegor. 2007. Collapse of an empire: lessons for modern Russia. Washington, DC: Brookings Institution Press.
- Gelber, Elizabeth. Forthcoming. Black oil business: rogue pipelines, hydro-

- carbon dealers, and the "economics" of oil theft. In Subterranean estates: the material and political worlds of the global petroleum and gas industry. Hannah Appel, Arthur Mason, and Michael Watts, eds. Ithaca, NY: Cornell University Press.
- Gel'man, Vladimir, and Otar Marganiya, eds. 2010. The resource curse and post-Soviet Eurasia: oil, gas, and modernization. Lanham, MD: Lexington Books.
- Gibson-Graham, J. K. 2006. The end of capitalism (as we knew it): a feminist critique of political economy. 2nd edition. Minneapolis: University of Minnesota Press. [BM]
- Gledhill, John. 2008. "The people's oil": nationalism, globalization, and the possibility of another country in Brazil, Mexico, and Venezuela. *Focaal* 52: 57–74
- Goldman, Marshall. 1980. The enigma of Soviet petroleum: half-full or half-empty? London: Allen & Unwin.
- . 2008. Petrostate: Putin, power, and the new Russia. Oxford: Oxford University Press.
- Golub, Alex, and Mooweon Rhee. 2013. Traction: the role of executives in localising global mining and petroleum industries in Papua New Guinea. *Paideuma* 59:215–236. [AG]
- Graeber, David. 2011. Debt: the first five thousand years. Brooklyn, NY: Melville
- Grant, Bruce. 1995. In the Soviet house of culture: a century of Perestroikas. Princeton, NJ: Princeton University Press.
- ——. 2009. The captive and the gift: cultural histories of sovereignty in Russia and the Caucasus. Ithaca, NY: Cornell University Press.
- Gustafson, Thane. 1982. Energy and the Soviet bloc. *International Security* 6(3):65–89.
- -----. 2012. Wheel of fortune: the battle for oil and power in Russia. Cambridge, MA: Harvard University Press.
- Hammond, Grant. 1990. Countertrade, offsets, and barter in international political economy. London: Pinter.
- Hann, C. M., and Keith Hart. 2011. Economic anthropology. New York: Polity.
   Hessler, Julie. 2004. A social history of Soviet trade: trade policy, retail practices, and consumption, 1917–1953. Princeton, NJ: Princeton University Press.
- Ho, Karen. 2009. Disciplining investment bankers, disciplining the economy: Wall Street's institutional culture of crisis and the downsizing of "corporate America." American Anthropologist 111(2):177–189. [AG]
- Holquist, Peter. 2002. Making war, forging revolution: Russia's continuum of crisis, 1914–1921. Cambridge, MA: Harvard University Press.
- Humphrey, Caroline. 1985. Barter and economic disintegration. *Man* 20(1): 48–72.
- Humphrey, Caroline, and Stephen Hugh-Jones, eds. 1992. *Barter, exchange, and value: an anthropological approach.* Cambridge: Cambridge University
- Jackson, Marvin. 1986. When is a price a price? The level and patterns of prices in the CMEA. Soviet and Eastern European Foreign Trade 22(1):100–112
- James, William. 1909. A pluralistic universe. London: Longmans, Green. [BM] Johnson, Juliet. 2000. A fistful of rubles: the rise and fall of the Russian banking system. Ithaca, NY: Cornell University Press.
- Jones Luong, Pauline, and Erika Weinthal. 2010. Oil is not a curse: ownership structure and institutions in Soviet successor states. Cambridge: Cambridge University Press.
- Kaufman, Burton. 1978. The oil cartel case: a documentary study of antitrust activity in the Cold War era. Westport, CT: Greenwood.
- Klinghoffer, Arthur. 1977. *The Soviet Union and international oil politics*. New York: Columbia University Press.
- Knorr-Cetina, Karen, and Alex Preda. 2005. *The sociology of financial markets*. Oxford: Oxford University Press. [AG]
- Kopylova, Natal'ia. 1995. Svoia rubashka blizhe k telu. Zvezda, March 24. Kotkin, Stephen. 2001. Armageddon averted: the Soviet collapse, 1970–2000.
- Oxford: Oxford University Press.

  Kuneva, Meglena. 2009. Keynote speech, Roundtable on Online Data Collection, Targeting, and Profiling. Brussels, March 31, 2009. http://europa.eu

/rapid/press-release\_SPEECH-09-156\_en.htm. [BM]

- Labban, Mazen. 2010. Oil in parallax: scarcity, markets, and the financialization of accumulation. GeoForum 41:541–552.
- Ledeneva, Alena. 1998. Russia's economy of favours: blat, networking, and informal exchanges. Cambridge: Cambridge University Press.
- Martin, Everett G. 1977. U.S. firms are pressed to offer barter terms by overseas customers. *Wall Street Journal*, May 18, 1, 31.

- Marx, Karl. 1965. Capital, vol. 1. Moscow: Progress. [EH]
- Maurer, Bill. 2005. Mutual life, limited: Islamic banking, alternative currencies, lateral reason. Princeton, NJ: Princeton University Press.
- ——. 2006. The anthropology of money. *Annual Review of Anthropology* 35:15–36. [BM]
- ———. 2012a. The disunity of finance: alternative practices to Western finance. In *Handbook of the sociology of finance*. Karin Knorr and Alex Preda, eds., 413–430. Oxford: Oxford University Press. [BM]
- 2012b. Payment: forms and functions of value transfer in contemporary society. Cambridge Anthropology 30(2):15–35. [BM]
- Mayer, Enrique. 2002. The articulated peasant: household economies in the Andes. Ithaca, NY: Cornell University Press.
- Mazanov, Valerii. 2006. PFP-Gruppa: tak soshlis' zvezdy. *Novyi Kompan'ion*, Perm, February 14.
- McDivitt, James. 1961. The threat of Soviet oil. Challenge 9(8):20-22.
- Mitchell, Timothy. 2011. Carbon democracy: political power in the age of oil. London: Verso.
- National Petroleum Council. 1962. The impact of oil exports from the Soviet bloc, vol. 1. Washington, DC: National Petroleum Council.
- Nitzan, Jonathan, and Shimson Bichler. 2002. The global political economy of Israel. London: Pluto.
- Odell, Peter. 1970. Oil and world power. New York: Penguin.
- Orlove, Benjamin. 1986. Barter and cash sale on Lake Titicaca: a test of competing approaches. Current Anthropology 27(2):85–106.
- Panov, P. V., O. B. Podvintsev, and K. A. Punina. 2002. Vozdeistvie izmenenii v kharaktere vnutrielitnykh otnoshenii na funktsionirovanie regional'nykh politicheskikh institutov Permskoi oblasti. *Politicheskaii almanakh Prikam'ia* 3:94–113.
- Park, J. Daniel. 1979. Oil and gas in COMECON countries. London: Kogan Page.
- Patnaik, Pabhat. 2009. The value of money. New York: Columbia University Press.
- Piot, Charles. 1992. Wealth production, ritual consumption, and center/periphery relations in a West African regional system. American Ethnologist 19(1):34–52.
- Pletsch, Carl. 1981. The three worlds, or the division of social scientific labor, circa 1950–1975. Comparative Studies in Society and History 24(4):565–590.
- Porter, Richard. 1982. The Federal Trade Commission versus the oil industry: an autopsy on the commission's shared monopoly case against the nation's eight largest oil companies. *Antitrust Bulletin* 27(1982):53–820.
- RETORT. 2005. Afflicted powers: capital and spectacle in a new age of war. London: Verso.
- Reyna, Stephen P., and Andrea Behrends. 2011. The crazy curse and crude domination: towards an anthropology of oil. In *Crude domination*, Andrea Behrends, Stephen P. Reyna, and Günther Schlee, eds. Pp. 3–29. New York: Berghahn.
- Rogers, Douglas. 2006. How to be a *khoziain* in a transforming state: state formation and the ethics of governance in post-Soviet Russia. *Comparative Studies in Society and History* 48(4):915–945.
- 2009. The old faith and the Russian land: a historical ethnography of ethics in the Urals. Ithaca, NY: Cornell University Press.
- ———. 2010. Postsocialisms unbound: connections, critiques, comparisons. Slavic Review 69(1):1–15.
- ———. 2012. The materiality of the corporation: oil, gas, and corporate social technologies in the remaking of a Russian region. *American Ethnologist* 39(2):284–296.
- Rogers, Douglas, and Katherine Verdery. 2013. Postsocialist societies: Eastern Europe and the former Soviet Union. In *The handbook of sociocultural anthropology*, James G. Carrier and Deborah B. Gewertz, eds. Pp. 439–455. London: Bloomsbury.
- Ross, Michael. 2012. The oil curse: how petroleum wealth shapes the development of nations. Princeton, NJ: Princeton University Press.
- Sahlins, Marshall. 1980. Other times, other customs: the anthropology of history. American Anthropologist 85(3):517–544. [AG]
- Sampson, Anthony. 1975. The seven sisters: the great oil companies and the world they made. New York: Viking.
- Sanchez-Sibony, Oscar. 2013. Red globalization: Stalin, Khrushchev, and the political economy of the Soviet Cold War. Cambridge: Cambridge University Press.
- Seabright, Paul, ed. 2000. The vanishing rouble: barter networks and non-

- monetary transactions in post-Soviet societies. Cambridge: Cambridge University Press.
- Select Committee on Small Business. 1952. The international petroleum cartel. Washington, DC: US Government Printing House.
- Shevchenko, Olga. 2008. Crisis and the everyday in postsocialist Moscow. Bloomington: Indiana University Press.
- Spiro, David. 1999. The hidden hand of American hegemony: petrodollar recycling and international markets. Ithaca, NY: Cornell University Press.
- Ssorin-Chaikov, Nikolai. 2003. The social life of the state in subarctic Siberia. Stanford, CA: Stanford University Press.
- Stern, Jonathan. 1987. Soviet oil and gas exports to the West: commercial transaction or security threat? Hants, England: Gower.
- Stone, David R. 2008. "CMEA's International Investment Bank and the crisis of developed socialism." *Journal of Cold War Studies* 10:48–77.
- Strathern, Marilyn. 1992. Qualified value: the perspective of gift exchange. In *Barter, exchange and value: an anthropological approach.* C. Humphrey and S. Hugh-Jones, eds. Pp. 169–191. Cambridge: Cambridge University Press [BM]
- ——. 1999. Property, substance, and effect: anthropological essays on persons and things. London: Athlone Press. [BM]
- Sverkal'tseva, Ol'ga. 1998. Eto nasha s toboi biografiia: khronika, sobytiia, liudi. Perm':OZON.
- Tanzer, Michael. 1969. The political economy of international oil and the underdeveloped countries. Boston: Beacon.
- Tarbell, Ida. 1969 (1904). The history of the Standard Oil Company. New York: Norton. [AG]
- Travin, Dmitry, and Otar Marganiya. 2010. Resource curse: rethinking the Soviet experience. In *Resource curse and post-Soviet Eurasia: oil, gas, and modernization.* Vladimir Gel'man and Otar Marganiya, eds. Pp. 23–47. Lanham, MD: Lexington Books.
- Tschoegl, Adrian E. 1985. Modern barter. Lloyd's Bank Review 158:32–40.
- Tsing, Anna. 2000. The global situation. *Cultural Anthropology* 15(3):327–360. [AG]
- Vainshtein, B., and R. Takhnenko. 1975. Barter agreements and the problems of effectiveness. Soviet and Eastern European Foreign Trade 11(1): 76-90.
- Verdery, Katherine. 1996. What was socialism and what comes next? Durham, NC: Duke University Press.
- Vietor, Richard. 1984. Energy policy in America since 1945: a study of business government relations. Cambridge: Cambridge University Press.
- Vitalis, Daniel. 2007. America's kingdom: mythmaking on the Saudi oil frontier. Stanford, CA: Stanford University Press.
- Volkov, Vadim. 2002. Violent entrepreneurship: the use of force in the making of Russian capitalism. Ithaca, NY: Cornell University Press.
- Watts, Michael. 1994. Oil as money: the devil's excrement and the spectacle of black gold. In *Money, power, and space*. Stuart Corbridge, ed. Pp. 406– 445. Oxford: Blackwell.
- 2004. Resource curse? Governmentality, oil, and power in the Niger Delta, Nigeria. In *The geopolitics of resource wars*. P. L. Billon, ed. Pp. 50–80. London: Routledge.
- 2012. A tale of two gulfs: life, death and dispossession along two oil frontiers. American Quarterly 64(3):437–467. [MW]
- Welker, Marina, Damani J. Partridge, and Rebecca Hardin. 2011. Corporate lives: new perspectives on the social life of the corporate form. Current Anthropology 52(S3):S3-S16.
- Weszkalnys, Gisa. 2011. Cursed resources, or articulations of economic theory in the Gulf of Guinea. *Economy and Society* 40(3):345–372.
- Wolf, Eric. 1982. Europe and the peoples without history. Berkeley: University of California Press.
- Woodruff, David. 1999. Money unmade: barter and the fate of Russian capitalism. Ithaca, NY: Cornell University Press.
- Yergin, Daniel. 1991. The prize: the epic quest for oil, money, and power. New York: Touchstone.
- Yessenova, Saulesh. Forthcoming. Oil talk, resource curse talk. In Subterranean estates: the material and political worlds of the global petroleum and gas industry. Hannah Appel, Arthur Mason, and Michael Watts, eds. Ithaca, NY: Cornell University Press.
- Yoffie, David B. 1984. Profiting from countertrade. *Harvard Business Review* 86(3):8–16.