Scarce Differences: Toward a Material and Systemic Foundation for Offensive and Defensive Realism

ERIC J. HAMILTON AND BRIAN C. RATHBUN

A divide has opened up between offensive and defensive realism as to the relative scarcity of security in the international system, with powerful implications for the vision each approach offers about the nature of international politics. Yet we still do not understand why the two diverge given their common neorealist foundations. This article reviews implicit, explicit, and other potential explanations of that difference—the relationship between power and security, the offense-defense balance, the prevalence and efficiency of balancing vs. bandwagoning, and the role played by uncertainty in decision-making—and finds them lacking in their ability to provide an adequate account that is systemic and structural in nature, does not violate arguments the scholars have made in practice, and does not confuse cause with effect. Finding prior efforts lacking, this article proposes that the distinction could be logically rooted in material scarcity, a familiar theme in realism historically that has been ignored in more recent formulations. Drawing a distinction between a “dangerous world” in which uncertainty is the core problem and a “competitive world” in which scarcity bedevils state relations helps explain where offensive and defensive realism both diverge and converge.
Neorealism marked a revolution in the study of international politics. By developing arguments about how the nature of the international system might lead to security competition and conflict even among states that might otherwise prefer cooperation, neorealists created a powerful distinction between foreign policy analysis and international relations. The character of international relations might be forbidding and dangerous even when states are motivated primarily by security and survival. Merely knowing the interests of states is not enough; we must know something about the environment in which they operate. International relations scholars might debate the merits of the approach, but they cannot dispute neorealism’s effect on the field.

Although neorealists agree on the importance of anarchy and the conflict and competition that emerges as a result of the structure of the system, a division has opened up between “offensive” and “defensive” varieties of the approach. The two neorealisms share a common pessimism about the character of international relations, yet the picture painted by offensive realists is far grimmer than the one by defensive realists. Whereas the former see security as extremely scarce, the latter see it as relatively more abundant. The differences between the two branches are not as pronounced as those between neorealists as a whole and alternative approaches like constructivism, liberalism, and institutionalism, but they are still quite large. This means that neorealist theory is underspecified.

Despite various efforts to characterize the difference between the two, however, we still lack an explanation for the divide that withstands logical scrutiny. Why is the international system of defensive realism so much less conflict prone? How do we account for the relative paucity of security in offensive realism? These are important questions. The split between the two has grown into one of the more important debates in international relations theory, and the approaches are increasingly used to generate rival

---

hypotheses. Offensive and defensive realism’s respective father figures, John
Mearsheimer and Kenneth Waltz, are among the top four most influential
international relations scholars in the past quarter century, as ranked by
their peers. They have inspired a generation of realist scholars. How are
their visions different? Where do they come together, and where do they
diverge?

This article reviews four potential explanations for the differences con-
cerning the relative scarcity or abundance of security in offensive and defen-
sive realism. Some are explicitly made by scholars, whereas others are teased
out of established literatures. The first and most common is that in offensive
realism, states maximize power as a means to greater security, whereas in
defensive realism, power and security are not directly related, and too much
power can actually generate more insecurity. Second, the two neorealisms
might part ways on the prevalence of balancing as opposed to bandwagon-
ning in the international system. Third, some have explicitly argued that
the difference reduces to how states are thought to cope with uncertainty.
Fourth, offensive realists might characterize the nature of military technology
as one in which offense is generally more dominant than defense.

We set out a number of criteria in our search for a more stable foun-
dation for defensive and offensive realism. First, we believe that any differ-
ence between the two varieties of neorealism in theoretical terms should be
systemic and material in nature. Both offensive and defensive realism are
structural realisms; so too, in our view, should be the core of the distinction
between them. The aim is to depart as little as possible from these underly-
ing commitments, even if the extent to which neorealism is purely structural
is an open question. Second, the explanation must not confuse cause and
effect. For instance, we argue that states maximize power in offensive real-
ism because security is scarce, not the opposite. Third, we attempt to derive
an explanation that does not contradict the writings of major theorists to
date. For instance, we find that a difference over the relative dominance of
offense or defense is capable of serving as a foundation for an explanation
of the differences between offensive and defensive realism. However, we
also observe that offensive and defensive realists do not seem to actively
disagree on this score.

Finding existing explanations for the most part lacking, we make a
suggestion that has not yet been considered. To provide a stable foundation
of the difference between offensive and defensive realism, this article follows
Randall Schweller’s advice to bring the problem of material scarcity back into

---

2 Richard Jordan, Daniel Maliniak, Amy Oakes, Susan Peterson and Michael Tierney, One Discipline or Many? TRIP Survey of International Relations Faculty in Ten Countries (Williamsburg, va: College of William and Mary, February 2009), 43.

3 Jack Donnelly, Realism and International Relations (Cambridge: Cambridge University Press, 2000).
structural realism. Scarcity is scarce because resources are scarce. Scarcity features in older, classical realist texts. Yet it is notably absent in recent analyses, even in comprehensive reviews of realist thought. We believe it needs to be reintegrated. The paper conceptualizes the role of scarcity by drawing on a distinction made in the social psychological literature between a “dangerous world” and a “competitive world.” In a dangerous world, the main problem affecting social relations is uncertainty and the possibility of predation; in a competitive world, it is scarcity and the struggle for limited resources.

This danger/competitiveness distinction seems capable of capturing the generally implicit difference between defensive and offensive realism, respectively, and offers a materially grounded systemic distinction capable of generating the syndrome of behaviors expected by each approach. It can also explain where the two neorealisms converge and diverge. If states operate in an anarchic system marked by material scarcity, maximizing power becomes rational behavior, and there is no tradeoff between security and maximizing power—the more, the better. Uncertainty is a concern, but in a different way than is typical in the security dilemma. States know the intentions of others to be malevolent, even if motivated by survival, but they do not know when others might make their move. The result is that the nature of international relations is one of distributional conflict where aggression is the only path to security. If, on the other hand, the world is dangerous, but not overly competitive, states’ primary problem will be to distinguish benign from malign intentions. Given uncertainty, states will have difficulty cooperating, and they will have incentives to accumulate a sufficient amount of power in order to ensure survival. But the international system will be populated by mostly status-quo, security-seeking states, and security will be somewhat more abundant. Defensive realism tells us why states cannot reach more mutually beneficial outcomes; offensive realism doubts there are any such alternative realities.

The distinction between a dangerous and a competitive world also helps explain the similarities between the two approaches. Anarchy is a necessary condition for generating the types of behaviors foreseen by both offensive and defensive realism. In a stable domestic society, individuals can count on the state to allocate scarce resources so as to avoid the competitive free-for-all struggle that would otherwise ensue. The state also provides protection against those who might take from others, even in a situation of relative abundance. There is no equivalent in the international system. Relative gains seeking will occur in both realist environments.

---

There are therefore scarce differences between offensive and defensive realism in two senses. The degree of material scarcity provides a foundation that can account for the divergence between the two neorealisms and allows both to remain true to their material and structural nature. However, it also explains the commonalities; the difference between offensive and defensive realism is scarce when we compare the two to other approaches. To be clear, we are not arguing that both offensive and defensive realism already make use of this factor, but rather that if they did, it would help ground more firmly their respective insights. While cognizant that it is awkward to put words in other scholars’ mouths, we feel this is better than twisting them into the particular realism we prefer or complaining about logical incoherence. We are not pointing out mistakes, but rather omissions, laying a deeper material foundation that is both consistent with previous articulations and capable of generating the divergent behaviors that currently separate the two camps. Our goal is constructive rather than destructive. However, it must be the practitioners who judge whether they find this an attractive way of thinking about the issue.

In the pages that follow, we review the differences in the pictures painted by offensive and defensive realism over the abundance of security. We then turn to the four explanations that might be capable of explaining the different descriptions. After finding all but one wanting, we return to an old but neglected realist notion: the importance of scarcity. To provide firmer conceptual foundations for how scarcity and uncertainty might generate a different character to the international system, we draw out a distinction, pulled from social psychology, between a dangerous and a competitive world and note the parallels between those notions and defensive and offensive realism, respectively. The final section makes the case for a unified neorealist theory based on variation in scarcity as a general property of the international system and as an attribute of particular state-to-state relationships. We think more systematically about how we might measure scarcity and argue that future security challenges might well be driven by such concerns, suggesting that offensive realism will be of increasing relevance in the coming decades.

**SCARCE OR ABUNDANT SECURITY?**

Before we begin, we must deal with the somewhat thorny problem of classification. By all accounts, John Mearsheimer is the primary advocate of offensive realism and openly carries this banner. We consider Waltz to be the father of not only structural realism, but also of defensive realism. As most of his work precedes the offensive-defensive realism split, Waltz neither writes as a defensive realist nor does he specifically address the disagreements between the two. Where he does mention the debate in later work, he attempts to distance himself from it by suggesting “realist theory, properly viewed, is
neither offensive nor defensive.” Nonetheless, Mearsheimer explicitly sets up offensive realism in opposition to Waltz’s work, which he considers the structural umbrella of defensive realism as a whole. Moreover, Waltz is widely classified as a defensive realist, and those writing explicitly as defensive realists claim his lineage. Recognizing that others might disagree, however, we are sure to show that our argument applies either way—as a means of distinguishing not only Mearsheimer from Waltz, but also other self-described defensive realists.

Both offensive and defensive realism put anarchy at the center of their explanations; they assume that states at a minimum want to survive and are uncertain about the intentions of others in a system where there is no overarching power to prevent conflict. Moreover, they tend to characterize the world in similar terms as dominated by danger, security competition, and often violent conflict. For Waltz, “Competition and conflict among states stem directly from the twin facts of life under conditions of anarchy: States in an anarchic order must provide for their own security, and threats or seeming threats to their security abound. Preoccupation with identifying dangers and countering them become a way of life. Relations remain tense; the actors are usually suspicious and often hostile even though by nature they may not be given to suspicion and hostility.” He writes that “the condition of insecurity—at least, the uncertainty of each about the other’s future intentions and actions—works against their cooperation.”

Mearsheimer agrees that under anarchy, “great powers fear each other. They regard each other with suspicion, and they worry that war might be in the offing. They anticipate danger. There is little room for trust among states.” The result is a “world of constant security competition, where states are willing to lie, cheat, and use brute force if it helps them gain advantage over their rivals.”

Both theories start with similar assumptions about the anarchic structure of the international system, yet they end up painting very different pictures of international politics. Sean Lynn-Jones argues that although realism has always had a pessimistic image of “international politics as an unending cycle of conflict, hostility and war,” this view “now applies only to offensive realists.” For offensive realists, “security is scarce, making international competition and war likely,” whereas for defensive realists, “the international system does not necessarily generate intense conflict and war.”

11 Ibid., 35.
Frankel frames the differences along similar lines. “Offensive realists posit that security in the international system is scarce, and that the fierce competition to attain security forces states to adopt offensive strategies, which often result in conflict and war.” Conversely, “defensive realists are more optimistic about the likelihood of avoiding war. They argue that security is readily available.”

Both neorealisms are notably more pessimistic about the prospects for peaceful relations among nation-states than alternative approaches such as liberalism, institutionalism, or constructivism, yet there are still significant disputes between them about the implications of anarchy. Why should this be the case? As Brian Schmidt asks, “How is it that Waltz can posit such a fundamentally different image than Mearsheimer when they are nonetheless both firmly rooted in the same tragedy school and share so many of the same basic assumptions?” Each side does not understand how the other can derive its particular vision of world politics from the same theoretical foundation. Offensive realists criticize defensive realists for having an overly benign view of world politics. Mearsheimer argues he “cannot find any place in Waltz’s work where he explicitly argues that states should seek to gain power at the expense of other states.” He seems, almost ruefully, to admit that “Waltz has a rather benign theory of international politics” in which there are “few incentives for states to act offensively.” Defensive realists likewise cannot understand where offensive realists are coming from. Glenn Snyder argues “aggressiveness does not follow necessarily from Mearsheimer’s explicit assumptions.”

NOT CAUSE BUT EFFECT: THE RELATIONSHIP BETWEEN POWER AND SECURITY

Scholars generally attribute the disagreement over the relative scarcity of security to the relationship between security and power. Both defensive and
offensive realism agree the primary goal of states is survival, but they differ about how states can best survive in anarchy.\textsuperscript{19} Jeffrey Taliaferro explains, “Offensive realism predicts frequent internationally driven expansion and holds that all states strive to maximize relative power. . . . Defensive realism presents a slightly more optimistic view of international politics. States strive to maximize relative security, not relative power.”\textsuperscript{20}

For Waltz (and other defensive realists), power is conceived of as “a possibly useful means” to security as an end, but the pursuit of power can be a risky business. States can be insecure from having both too little and too much, as the former tempts conquest and the latter invites balancing. The goal for statesmen therefore is to have an “appropriate amount” of power as a means to maximizing security.\textsuperscript{21} Security and power are not positively and linearly related, so most states are security-seeking, “defensive positionalists” primarily concerned with maintaining the status quo.\textsuperscript{22}

Mearsheimer claims that “offensive realism parts company with defensive realism over the question of how much power states want.”\textsuperscript{23} He argues:

States in the international system aim to maximize their relative power positions over other states. The reason is simple: the greater the military advantage one state has over other states, the more secure it is. Every state would like to be the most formidable military power in the system because this is the best way to guarantee survival in a world that can be very dangerous. This logic creates strong incentives for states to take advantage of one another, including going to war if the circumstances are right and victory seems likely. The aim is to acquire more military power at the expense of potential rivals. The ideal outcome would be to end up as the hegemon in the system. Survival would then be almost guaranteed.\textsuperscript{24}

This argument identifies a direct and positive relationship between security and power—the result being that all states will incline toward revisionism and act aggressively to accumulate as much power as possible.\textsuperscript{25}

\textsuperscript{21} Waltz, \textit{Theory of International Politics}, 126.
\textsuperscript{25} Mearsheimer, \textit{The Tragedy of Great Power Politics}, 21, 29, 34–55, 37.
If states, or at least great powers, do seek to maximize their relative power, the world is certainly less benign than Waltz and defensive realists imagine. However, from his quote, Mearsheimer is clear that in offensive realism states maximize power because security is scarce, not the reverse. Maximizing power is the effect of the more perilous nature of international politics he sees, not the cause. Indeed, if it were the other way around, the difference between offensive and defensive realism would rest on the goals and intentions of states. This would not be consistent with the structural and systemic focus of both neorealisms. The perceived relationship between power and security cannot explain the controversy over the degree of security in the international system. Rather, the resolution of the power vs. security debate depends foremost on whether security is scarce or plentiful.

This then begs several questions: What is it about the material environment that varies so much in offensive and defensive realism so as to induce such different behaviors? What makes survival-minded states maximize power in one anarchy but not another? How states resolve the tradeoff between security and power, or whether they will see such a tradeoff at all, must be an effect of some material difference between offensive and defensive realism; it cannot be the cause of the division. Consequently, it becomes part of the explanandum, not the explanans, the dependent rather than the independent variable, so to speak. Any account of where and why offensive and defensive realism diverge cannot depend on but rather must explain these alternative notions of how security and power are related.

THE “B” WORDS: BALANCING AND BANDWAGONING

One way to explain the alternative views concerning the relative scarcity of security would be if offensive realists maintained that bandwagoning is more prevalent than balancing and defensive realists the opposite. If bandwagoning is more prevalent than balancing, then power consistently recruits allies, and maximizing power brings more security. Simply maintaining the status quo might in fact put the state’s survival in jeopardy. Conversely, if maximizing power generally leads others to coalesce against a state, then the correct strategy is to accumulate enough power to provide security but not enough to provoke encirclement. Expansion in this view is foolish as those who appear to be aggressors are very likely to face a balancing coalition that would decrease rather than increase the chances for survival.26 As a result,

26 For Waltz and other defensive realists, “the lessons of history would seem to be clear: In international politics, success leads to failure. The excessive accumulation of power by one state or coalition of states elicits the opposition of others.” Kenneth N. Waltz, “The Origins of War in Neorealist Theory,” *The Journal of Interdisciplinary History* 18, no. 4 (Spring 1988): 625.
states acting strategically will tend to be status quo oriented and find security by possessing an “appropriate amount” of power.\(^\text{27}\)

Defensive realists do place much stress on the role played by balancing, as states wishing to survive will ultimately choke off the rise of those that might accumulate a preponderance of power.\(^\text{28}\) Moreover, offensive and defensive realists do seem to disagree somewhat about the efficiency of balancing, a related but somewhat different question than balancing’s prevalence.\(^\text{29}\) However, making the prevalence or the efficiency of balancing vs. bandwagoning the crux of the debate between defensive and offensive realists lacks a systemic and structural foundation. There is nothing about the material environment or the nature of the system states face that explains why they would prefer balancing as opposed to bandwagoning to ensure security. Such a distinction would have to rely on different assumptions about how leaders make decisions, a decidedly reductionist move. For this reason, most accounts of why states alternatively choose to bandwagon or balance generally rest not on structure but agency. For instance, Schweller explains these choices with reference to the unit-level variable of whether states are satisfied and status quo oriented or dissatisfied and revisionist.\(^\text{30}\) Focusing on these types of divergent unit-level motivations has spurred an important line of research in neoclassical realism but cannot account for the split in neorealism.

THE PSYCHOLOGICAL DIFFERENCE: UNCERTAINTY AND FEAR

Another way scholars have distinguished between offensive and defensive realism is by reference to how the two approaches treat the question of uncertainty about intentions. A number of works claim offensive realists, in contrast to their defensive cousins, believe that states assume the worst about others’ intentions. States approach the international environment more fearfully. As a consequence, working under the assumption that others might have greedy motives, states are more apt to take aggressive, power-maximizing and offensive military action. Evan Braden Montgomery writes, “Offensive structural realism assumes that uncertainty is complete and invariant, as well as a determinative constraint on state behavior. Because

\(^{27}\) Waltz, Theory of International Politics, 126. See also Schweller, “Neorealism’s Status Quo Bias.”


\(^{29}\) Mearsheimer, The Tragedy of Great Power Politics, 39.

great powers are unable to know either the present or future intentions of other actors, they are conditioned to remain fearful and maximize their relative power whenever possible."31 Stephen Brooks contends that offensive realism maintains that states plan and act according to possibility, whereas defensive realism expects states to plan and act according to probability.32 Andrew Kydd argues that whereas defensive realism allows the possibility of trust and the signaling of benign intentions, this is not true of offensive realism.33 Charles Glaser writes that the “case for power maximization flows largely from offensive realism’s handling of information about motives. To reach this conclusion, Mearsheimer holds that states must make worst-case assumptions about others’ intentions. If this were true, states should try to maximize their power under a wide range of conditions.”34

Mearsheimer does indeed write, “States can never be certain about the intentions of other states. Specifically no state can be certain another state will not use its offensive military capability against the first.”35 He goes on to claim, “Although the level of fear varies across time and space, it can never be reduced to a trivial level. The basis of this fear is that in a world where states have the capability to offend against each other, and might have the motive to do so, any state bent on survival must at least be suspicious of other states and reluctant to trust them.”36 Nevertheless there are a number of reasons why the way theorists treat uncertainty does not and cannot adequately explain the difference between offensive and defensive realists.

First, it is not at all clear that offensive realists actually see states as assuming the worst in a way that is not true of defensive realists. Drawing pessimistic conclusions about intentions is a central force motivating state behavior in almost all defensive realist texts. Waltz writes that “the condition of insecurity—at least, the uncertainty of each about the other’s future intentions and actions—works against their cooperation.”37 About offensive realism Montgomery writes, “Because the international system compels all actors to provide for their own security, decision makers cannot rely on the internal characteristics of other states as adequate sources of information. Instead, they are forced to infer what potential adversaries may do by observing their aggregate power and assessing their capacity to inflict harm.”38 Yet, this is identical to the defensive realist Joseph Grieco’s conclusions:

---

36 Ibid., 11.
37 Waltz, Theory of International Politics, 105.
“States are uncertain about one another’s future intentions; thus, they pay close attention to how cooperation might affect relative capabilities in the future.”

39 States are always hedging their bets in a “possibilistic” way.

According to Glaser, defensive realism, not just offensive realism, suffers from a “competition bias” that cannot be explained merely by reference to anarchy.40 The security dilemma is driven largely by a lack of complete information about other states’ current and future intentions. Glaser writes, “Uncertainty about other states’ motives must lie at the core of structural realism—which emphasizes the ability of the international environment to generate competition between security seekers; without it, security seekers would always cooperate.”

41 In later work, he opts for a “rational theory” of international politics distinct from defensive realism precisely because defensive, not just offensive, realists make such fearful and possibilistic assumptions about threats under conditions of uncertainty.

In contrast, fear, uncertainty, and worst-case logic should not play a larger role in offensive realism than in defensive realism if we stick to the former’s inner logic. If all states seek to maximize their power, then no state has benign motives, even security-seeking states. Consequently, there is much less uncertainty about intentions. States are not making worst-case assumptions because the worst case is true. This means, as Glaser correctly notes, that the security dilemma is not really a dilemma in offensive realism because there is no downside, no inadvertent conflict. As Shiping Tang argues, offensive realism eliminates the problem of intentions. In his wonderfully pithy formulation, in “offensive realism, when a state believes that it can do harm to you, it will—not just may.”

42 States do not have to assume because they know (or at least should know) about the intentions of others. If all states indeed maximize power, assuming the worst is a very safe assumption. And a state cannot signal benign intentions if it does not have them.

States, therefore, are indeed fearful in offensive realism but more because of certainty rather than uncertainty. They are fearful because of what they know rather than what they do not know. This is not to say that there is no uncertainty in offensive realism but that the uncertainty concerns when, not whether, the blow will come. This is the fear of anticipation and dread rather than anxiety. To borrow Donald Rumsfeld’s awkward phrase, this is the “unknown known.” When someone is breaking into your house, you are very afraid, but you are no longer uncertain about the person’s intentions to


41 Glaser, Rational Theory, 47.

commit a crime. The only solution to this type of fear is the power to deter. By contrast, in defensive realism states are more uncertain than fearful, and fear takes on a different meaning. In this approach, states are fearful because of what they do not know—the intentions of the other. This fear rests on a “known unknown”; states understand that they can never know others’ motives with 100 percent certainty. States can deceive one another and intentions can change. Concern for this possibility generates the security dilemma. This causes fear more akin to anxiety and worry, the lesser fear that accompanies living in a dangerous neighborhood.

Defensive realists are indeed more optimistic about the ability to signal benign intentions and to resolve the problem of uncertainty that bedevils state interaction. And the security dilemma varies by situation as a function of “structural modifiers” such as geography, whereas in offensive realism it is relatively invariant. This more contingent and remediable view is therefore likely a function of the less hostile environment defensive realists see in the first place. In other words, offensive realists see fear as a more intractable problem because security is scarce, rather than the reverse. It is indeed logical for offensive realists to claim that states will assume the worst if security is scarce as opposed to plentiful. However, this again begs the question: Why is security scarce?

Second, even if offensive realism does rely, however illogically, more heavily on uncertainty, this distinction rests on an assumption about how statesmen approach decision making. That is a psychological difference. If we are to retain the structural and material nature of both defensive and offensive realism, the distinction cannot operate at the individual level; nor can it be based on subjective perceptions of material reality. Claiming that offensive and defensive realism approach the question of uncertainty differently is to claim that the difference between the two is essentially cognitive. Tang and Brooks reach this conclusion, but most neorealists would likely object. To the extent that offensive realists do indeed argue that states assume the worst and defensive realists do not, this must be the result of some different characterization of the material environment. It must be derivative rather than primary. But this again begs the question: What does that mean?

TRUE TO THEIR NAMES? THE OFFENSE-DEFENSE BALANCE

A more promising candidate for explaining the difference between offensive and defensive realism might be contrasting views about the dominance of offense or defense. After all, offensive realists do stress the offensive nature

---

of international politics, whereas defensive realists stress the defensive character. The balance between offense and defense is materially grounded and therefore structural and systemic in nature. Annette Freyberg-Inan contends that the introduction of offense-defense theory led to the split in the realist camp. Stephen Van Evera likewise finds this to be a core difference between the two neorealisms, arguing, “We can distinguish offensive Realists, who think conquest is easy and security is scarce, from defensive Realists, who think conquest is difficult and security is abundant.”

Offense-defense theory holds that factors like military technology and geography strongly influence whether offensive or defensive military strategies will be dominant at a given time. If defense is dominant, states will find it easier to protect what they have. The security dilemma is ameliorated because increases in one country’s power only slightly decrease the security of others, as what protects cannot easily be used to take. The situation is eased even further if offensive and defensive technologies are distinguishable, as it ameliorates the problem of uncertain intentions. If, on the other hand, the offense generally has the advantage, states will find themselves compelled to undertake aggressive and expansionist military action—even if they only seek security—to establish, for instance, physical buffers between themselves and potential adversaries or to preempt any possible attack. Security will be scarcer. The nature of military technology is essentially a systemic variable in that once weapons are created, they cannot be uncreated. They produce a different security environment than existed before, one that states have no choice but to come to terms with even if the distribution of military technology, like the distribution of power, varies significantly.

There is certainly something to this difference. Van Evera offers the clearest statement on this issue, suggesting that offense-dominance is actually “quite rare, and widely overstated.” Conversely, Mearsheimer maintains there is little historical evidence that offense rarely succeeds, let alone that defense invariably has an advantage over offense. He cites the fact that 60 percent of initiators of conflicts between 1815 and 1980 won, suggesting that conquest often does pay.

---

45 Freyberg-Inan, What Moves Man, 76.
46 Van Evera, Causes of War, 10n21.
50 Van Evera, Causes of War, 191. See also Snyder, Myths of Empire, 23.
Although the offense-defense balance is capable of offering a logical material and systemic basis to offensive and defensive realism, some stretching and contortions of previous realist scholarship might be required. To begin with, the question for defensive realists is not whether defense always has the advantage, but when. Variations in the offense-defense balance in turn are said to help explain variations in the frequency of conflict and whether or not conquest pays.\footnote{Karen Ruth Adams, “Attack and Conquer? International Anarchy and the Offense-Defense-Deterrence Balance,” *International Security* 28, no. 3 (Winter 2003/4): 45–83.} As a result, defensive realists have developed nuanced theories about the “structural modifiers” that help determine whether, in any particular security environment, offense or defense has the advantage.\footnote{Jervis, “Cooperation Under the Security Dilemma”; Van Evera, *Causes of War*; Charles L. Glaser and Chaim Kaufmann, “What is the Offense-Defense Balance and Can We Measure It?” *International Security* 22, no. 4 (Spring 1998): 44–82.} Even then, they acknowledge the critique that it may be difficult to determine the actual offense-defense balance at any given time.\footnote{For critiques of offense-defense theory, see Jack S. Levy, “The Offensive/Defensive Balance of Military Technology: A Theoretical and Historical Analysis,” *International Studies Quarterly* 28, no. 4 (June 1984): 219–38; Keir A. Lieber, *War and the Engineers: The Primacy of Politics over Technology* (Ithaca, NY: Cornell University Press, 2005); Keir A. Lieber, “The New History of World War I and What It Means for International Relations Theory,” *International Security* 32, no. 2 (Fall 2007): 155–91, 190; Keir Lieber, “Correspondence: Defensive Realism and the ‘New’ History of World War I,” *International Security* 33, no. 1 (Summer 2008): 185–94.} Offensive and defensive weapons are difficult to distinguish, and decision makers are often biased in their assessments for a variety of domestic political and cognitive reasons.\footnote{Jervis, “Cooperation Under the Security Dilemma”; Van Evera, *Causes of War*, esp. 191–92; Snyder, *Myths of Empire*.} Even then, they acknowledge the critique that it may be difficult to determine the actual offense-defense balance at any given time.\footnote{Mearsheimer, *The Tragedy of Great Power Politics*, 114–19, 129.} Offensive and defensive weapons are difficult to distinguish, and decision makers are often biased in their assessments for a variety of domestic political and cognitive reasons.\footnote{John J. Mearsheimer, *Liddell Hart and the Weight of History* (Ithaca, NY: Cornell University Press, 1988), 36n61. See also John J. Mearsheimer, *Conventional Deterrence* (Ithaca, NY: Cornell University Press, 1983), 25–27; Mearsheimer, *The Tragedy of Great Power Politics*, 30n28.} Even then, they acknowledge the critique that it may be difficult to determine the actual offense-defense balance at any given time.\footnote{Glaser, *Rational Theory*, 155.} Offensive and defensive weapons are difficult to distinguish, and decision makers are often biased in their assessments for a variety of domestic political and cognitive reasons.\footnote{Mearsheimer, *The Tragedy of Great Power Politics*, 114–19, 129.}
BRINGING SCARCITY BACK IN

Rather than taking a forceful line on the offense-defense balance that might mischaracterize previous realist scholarship, we argue that bringing material scarcity back into structural realism provides a way to ground the differences between the theory’s offensive and defensive variants while remaining true to its material and systemic foundation. Scarcity is a material feature of an environment and one that can even be used to characterize the entire international system at times. Identifying scarcity as the motivating force behind the behaviors expected by offensive realism should not come as a radical surprise or departure to most IR scholars. The importance of scarcity has always been central to both scholars and practitioners in the realist pantheon. Yet, with few exceptions, it has largely been overlooked by neorealists.60

Scarcity is the underlying cause of two of the three forces that Thomas Hobbes identifies as the primary sources of conflict—competition and diffidence (mistrust). According to Hobbes:

If any two men desire the same thing which nevertheless they cannot both enjoy, they become enemies; and, in the way to their end, which is principally their own conservation and sometimes their delection only, endeavour to destroy or subdue one another. And from hence it comes to pass that, where an invader hath no more to fear than another man’s single power, if one plant, sow, build, or possess, a convenient seat others may probably be expected to come prepared with forces united to dispossess and deprive him not only of the fruit of his labor but also of his life or liberty. And the invader again is in the like danger of another. And from this diffidence of one another there is no way for any man to secure himself so reasonable as anticipation, that is, by force or wiles to master the persons of all men he can so long till he see no other power great enough to endanger him; and this is no more than his own conservation requireth and is generally allowed.61

For Hobbes, therefore, competition is endemic to human interaction because all individuals require the same basic material resources to survive. Under conditions of scarcity, and with “no power able to overawe them all,” self-preservation leads naturally to competition. Because resources are limited and others likewise need them to survive, individuals must also rationally fear that others are out to take from them. The second cause of conflict,


mistrust, is an extension of the first cause, competition. If all must take from
others in order to survive, then none can be trusted. These two causes, with
scarcity at their root, are at the center of Hobbes’ war of all against all.

Hans Morgenthau places stress on *animus dominandi*, the desire for
power hardwired into human nature. It is often forgotten that while his em-
phasis on man’s inherent lust for power and dominance led neorealists to
characterize him as a first-image realist, Morgenthau argues “there are two
reasons the egotism of one must come into conflict with the egotism of the
other,” the first of which is scarcity. Similar to Hobbes, Morgenthau suggests
the problem is that “what one finds for himself, the other already possesses
or wants, too.” From this fact, “struggle and competition ensue.”62 As Waltz
writes, “Morgenthau recognizes that given competition for scarce goods with
no one to serve as arbiter a struggle for power will ensue among competitors,
and that consequently the struggle for power can be explained without refer-
ce to the evil born in men.”63 Even without any assumptions about human
nature, Morgenthau still suggests that a sufficient explanation for conflict can
be found in a world of scarcity where there is no overarching authority. He places geography, natural resources, and technology at the center of his
conception of national power and argues that national power is increasingly
more dependent on “the control of raw materials in peace and war.”64

The importance of scarcity for realism can also be traced through its con-
nection to the study and practice of geopolitics.65 Geopolitics developed as a
branch of political geography in the nineteenth and early twentieth centuries
and sought to explain power politics in terms of the physical features of the
natural environment.66 Classical geopolitics held that land, strategic sea and
river passages, and resources were essential for national survival and pros-
perity. States that controlled or had access to them were better able to pro-
mote strong domestic economic growth and could build powerful militaries;
those that did not were less likely to be dominated by the former. As a result,
geopoliticians argued that states do (and should) pursue expansionist poli-
cies designed to control territory. Most IR scholars distanced themselves from
geopolitics after World War II because of its perceived connection to Nazi

---

192.

63 Kenneth N. Waltz, *Man, the State and War: A Theoretical Analysis* (New York: Columbia University
Press, 1959), 34.

64 Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace* (New York:

65 On the relationship between realism and geopolitics, see Jonathan Haslam, *No Virtue Like Necessity:
Realist Thought in International Relations Since Machiavelli* (New Haven, CT: Yale University Press, 2002),
162–82; John M. Hobson, *The Eurocentric Conception of World Politics: Western International Theory,

Resolution* 4, no. 1 (March 1960): 15–51; Geoffrey Parker, *Western Geopolitical Thought in the Twentieth
imperial policies. But even though realist theorists dropped the racist overtones of geopolitics, they incorporated its deep appreciation of the struggle for scarce space and resources into postwar realism.

More recently, other scholars, like Bradley Thayer and Azar Gat, have integrated scarcity by drawing on recent developments in evolutionary psychology, biology, and anthropology. Thayer argues that the material scarcity that characterized the world during human evolution forced humans to adapt aggressive behavioral traits that enabled them to survive. These traits persist today, even in a more plentiful world. He nicely corrects Morgenthau’s original conflation of the two causes of conflict by showing how the environment shapes human nature. The environment was prior. Thayer’s is not, however, a systemic theory either. He maintains instead that biological traits, which once emerged from a scarce environment, provide a first image motivation to drive offensive realist-style behaviors today. These traits serve as a kind of historical anachronism.

Schweller, on the other hand, argues that scarcity is an essential feature of realism as a whole. He asserts that “realists see a world of constant positional competition among groups under conditions of scarcity.” Our argument is related, but different. We claim that defensive realism relies more on uncertainty than on scarcity and that the latter is a useful variable for providing a microfoundation that explains differences between realists rather than the commonality among them. Schweller comes to many of the same conclusions as we have, only he applies them to realism in general rather than parceling them out to different subgroups. That being said, our arguments are not necessarily in conflict. The emphasis on scarcity might differentiate realists from non-realists and offensive realists from defensive realists as well. It is a question of degree.

A DANGEROUS WORLD OR A COMPETITIVE WORLD? SEPARATING TWO CONFLATED CONCEPTS

Although scarcity has often factored into realist thinking in the past, the realist canon lacks strong conceptual foundations and succinctly articulated causal mechanisms about how a lack of material resources translates into particular dynamics in the international system and how these might be distinguished from others. To better conceptualize the role that scarcity might

---


69 Ibid., 29.
play in distinguishing offensive from defensive realism, we turn to the literature in social and political psychology. Psychologists have identified scarcity and uncertainty as linked to distinct worldviews that define specific and unique orientations toward politics that may be helpful in understanding the real, although largely implicit, terms of the debate. Of particular use is the comparison drawn by John Duckitt and coauthors between competitive and dangerous worldviews.\textsuperscript{70} These might at first glance seem like synonyms, and indeed they generate some similar behaviors. They are, however, conceptually and empirically distinguishable. Drawing on this work provides a way both to flesh out the role of scarcity and separate the logics and consequent prevalence of conflict in offensive and defensive realism.

Duckitt defines “dangerous world beliefs” (DWB) as a set of attitudes held together by the core understanding that the “social world is a dangerous and threatening place in which good, decent people’s values and way of life are threatened by bad people.”\textsuperscript{71} DWB is measured through agreement or disagreement with survey statements such as “there are many dangerous people in our society who will attack someone out of pure meanness, for no reason at all.” Danger creates fear, but also uncertainty. For those who hold these beliefs, the world is not only dangerous, but also “unpredictable” in the terms of another survey statement.\textsuperscript{71}

Dangerous world beliefs create the obvious motivational goals of establishing and maintaining societal security, order, cohesion, and stability. Holders of DWB rank security as one of the highest values when asked to choose among Salom Schwarz’s exhaustive typology of human values. Their responses directly predict support for strong law and order policies, for instance. These policies can create dilemmas in democratic countries, as such policies might infringe on the civil liberties of law-abiding citizens because the state cannot be certain of who has malicious intent. This limitation on individual rights is justified by appeal to the greater good and the belief that one cannot take a chance on security. Bad things must sometimes be done to protect good people.\textsuperscript{72}

Competitive world beliefs (CWB), in contrast, are held together by the “belief that the social world is a competitive jungle characterized by a ruthless and amoral Darwinian struggle for survival,” according to Duckitt.\textsuperscript{73} The problem is not one of uncertainty, but rather of scarcity. In this mindset, the social world is marked by the “amoral struggle for resources and power


\textsuperscript{73} Duckitt, “A Dual-Process Cognitive-Motivational Theory,” 51.
in which might is right, and winning everything.” Unlike DWB, CWB does not distinguish between good and bad or recognize moral tradeoffs that one makes on behalf of the greater good. It is every man for himself. CWB, as Duckitt and Sibley describe it, is the “ruthless pursuit of power.” It is measured through agreement with survey statements like “life is governed by survival of the fittest; we should not let compassion and moral laws be our guide”; “it’s a dog-eat-dog world where you have to be ruthless at times”; “you know that most people are out to ‘screw’ you, so you have to get them first when you get the chance”; and “if one has power in a situation, one should use it however one has to in order to get one’s way.”

Clearly, competitive and dangerous worldviews overlap to some degree. If the world is competitive, others will be looking to take from you; everyone becomes dangerous. And, to a lesser degree, if the world is dangerous, it is sensible to stockpile resources, perhaps engendering a competitive search for power. Indeed DWB and CWB are correlated at the individual level. Nevertheless, research also indicates that these are conceptually distinct belief systems. DWB and CWB lead to separate clusters of policy attitudes that sometimes overlap and sometimes do not.

OFFENSIVE COMPETITION OR DEFENSE AGAINST DANGER? SCARCITY AND UNCERTAINTY AS PROBLEMS UNDER ANARCHY

Although the research on CWB and DWB is psychological in nature, centering on variation in beliefs, we believe that the conceptual distinction between these two different types of worlds is of great use for realist theory. These different types of environments might be objectively distinguishable and lead all decision makers, regardless of ideological biases, toward the same conclusions. We can think of competitiveness and danger as systemic characteristics of the international environment that are not in the eye of the beholder. The distinction between a competitive world where behavior is driven by scarcity and a dangerous world where behavior is caused by uncertainty offers a way of capturing the difference between offensive and defensive realism while remaining true to the material and structural nature of both approaches. It logically incorporates and links the various ways in which others have tried to describe the differences, such as security being scarce and states assuming the worst.

74 Ibid.
Scarcity seems capable of driving those elements that are unique to offensive realism. If the world is marked by a dearth of resources that are necessary for survival, then survival becomes much more of an open question. All states become revisionist states, not out of greed, but out of necessity. Offensive realism can therefore predict consistently competitive behaviors even while assuming security-seeking states. It explains why states might act offensively even when defense is dominant. To the question of why security is scarce in offensive realism, the answer could be scarcity itself.

A scarce world inevitably invites aggression as cooperation cannot resolve the dilemma of a pie that is too small. The proper strategy in such an environment is the maximization of power to take the maximum amount of resources. States will seek dominance and hierarchy, since power and security are one and the same. There is never enough to accumulate so as to become a status quo state unless you accumulate just about everything. Status quo states will starve. This is the characterization of realism offered by Jeffrey Legro and Andrew Moravcsik in which state interests are “uniformly conflictual.” However, it primarily applies to offensive realism. Offensive realism is offensive because one must take from others to survive. Offensive behavior will dominate even if the offense is not dominant.

Glaser’s critique of offensive realism, that assuming the worst is irrational, is not true in a scarce world. In such an environment, states are right to assume the worst because the worst is true. All states will know each other’s intentions. Uncertainty will be problematic but not the primary concern. There is no tradeoff between power and security, no dilemma between cooperation and competition. States cannot be misunderstood because there is nothing to misunderstand. Indeed, scarcity creates a need to be highly strategic; this would be consistent with Mearsheimer’s greater stress on the rationality of decision makers, as compared to defensive realists. Rather than asserting that Mearsheimer’s argument relies on irrational, worst-case logics, we believe it is more productive to ground his argument in a material situation that would render such a decision-making process entirely rational. If there is less scarcity, security is less scarce, and the demands on statesmen decline. States can afford to be wrong every once in a while without significantly deleterious consequences.

The parallels between the conception of the world as dangerous and defensive realism are also clear. The main problem in a dangerous world is deciphering who is threatening and who is not—that is, uncertainty. Defensive realism often comes in for undue criticism because it assumes conflictual behavior on the part of largely status quo states. Critics ask why states would

---

79 Mearsheimer, *The Tragedy of Great Power Politics*, 31; Mearsheimer, “Reckless States and Realism.”
accumulate power and engage in arms races if most other states are peaceful.\(^\text{80}\) This is akin to asking why an individual might keep a shotgun in the closet even if his neighborhood is relatively safe, which of course many do, or why even peaceful communities have police forces. All that is necessary to create a dangerous world is the possibility of bad behavior and uncertainty about when and where such behavior will occur. In this way we disagree with Schweller’s argument that scarcity is necessary to generate conflict and competition in defensive realism.\(^\text{81}\) There can be danger without scarcity provided there is the possibility of predation and the consequences are severe enough. However, the uncertainty problem does not generally require offense. Rather, states create security forces to defend against those who might do them harm.

Defensive realists typically explain aggression, as opposed to increases in friction or distrust, not by reference to the system, but rather to domestic pathologies.\(^\text{82}\) Waltz cites miscalculation or overreaction stemming from the unit level as the source of aggression.\(^\text{83}\) Other defensive realists developed this line of inquiry, looking for the roots of revisionism in domestic pathologies like misperceptions, false beliefs, or misguided ideologies.\(^\text{84}\) This is consistent with the dangerous world model in which violence, crime, and other bad social outcomes are a function of the attributes of a few social deviants. The dichotomy between status quo and “greedy” revisionist states echoes the distinction between the good and bad apples in a dangerous world. Conversely, in offensive realism there is no need to make reference to unit-level variables to explain war. All aggression originates in the system where the structural dictates of anarchy and scarcity are sufficient to explain expansionist state strategies.

Not only can the distinction between a dangerous and a competitive world help us resolve the source of disagreement between the two realisms, the logic of the two sets of beliefs can account for the similarities between realists as well. Both varieties of realism are centrally concerned with anarchy as there is no higher authority to allocate scarce resources or to defend states from those that are dangerous. States are on their own to provide for their material needs. Power is necessary for both, whether it be for taking precious resources from others or defending against those who are greedy. Competition and danger necessitate a definition of the national interest in primarily materialist terms. In both a competitive and a dangerous world, states do not let moral considerations interfere with the dirty business of international

---

\(^{80}\) Schweller, “Neorealism’s Status Quo Bias.”

\(^{81}\) Schweller, “Realism and the Present Great Power System.”

\(^{82}\) Snyder, “Tensions Within Realism,” 68, 71–72.


affairs. They are often forced to do things they might not necessarily want
to do.

Nevertheless, offensive and defensive realism often reach the same con-
clusions from different starting points. There is a parallel with research on
DWB and CWB, both of which have been used to articulate “dual process”
outcomes in which the same policy attitudes are predicted by two different
mechanisms. This is the case with relative gains. Both schools of realism
would argue that states are sensitive to their relative power vis-à-vis others.
However, in a scarce world there is no distinction to be made between rel-
ative and absolute gains. International politics is marked by a distributive
conflict over a largely fixed pie. Maximizing absolute share is the same as
ensuring a relative gain vis-à-vis others.

In contrast, relative gains concerns in defensive realism are motivated by
avoiding a situation in which a potential rival gains more from a cooperative
outcome, advantages that might (but might not) be used against a state.
This uncertainty poses a dilemma for states that does not exist in offensive
realism, even if the motivation to gain more than the other is the same. In
the terms used above, a dangerous world induces the need to compete; but
this competition is over a potentially larger pie. States in defensive realism
face what Stein calls “dilemmas of common interests” in a way that is not
true of offensive realism.85

It should not be surprising to find elements of both danger and com-
petition in offensive and defensive realism. A dangerous world forces states
to put more of a premium on resources that might induce scarcity. It is
therefore not unexpected to find Waltzian realists writing of competition.86
A scarce world is also a dangerous world. Mearsheimer writes that “political
competition among states is a much more dangerous business than eco-
nomic intercourse.” Thus it is not that danger and competition do not exist
in both realist worlds—they do—but rather that starting theoretically from
one versus the other tells a different, if still related, story about international
politics. Grounding offensive realism in scarcity does not require that offen-
sive realists rely less on the security dilemma or uncertainty to support their
arguments. Scarcity makes the security dilemma more acute but also less of
a dilemma.

We should stress that we are not arguing that defensive and offensive
realists hold DWB or CWB; rather, we are using the dangerous/competitive
world distinction solely as a means to specify the premises of offensive
and defensive realism more fully. Again, we do not want to put words
into scholars’ mouths, but the parallels suggest that offensive realism would
be better specified by explicitly relying on the scarcity premise that drives

85 Arthur Stein, “Coordination and Collaboration: Regimes in an Anarchic World,” International
86 Waltz, Theory of International Politics.
a competitive world, and defensive realism would be better specified by explicitly relying on the uncertainty premise that drives a dangerous world. We maintain that making this distinction helps bring the scarcity of Hobbes and Morgenthau back into the realist equation, provides a clear distinction between the two neorealist variants that is material and structural in nature, and explains the considerable points of agreement and disagreement.

Also, we are not arguing that states and those who lead them are, in the particular picture painted by offensive and defensive realism, driven by perceptions. Rather, objective reality as specified by the theorist drives states and leaders. If competitiveness and danger are to provide the core difference between the two realisms, they have to be objectively there, not subjectively perceived. Psychological research indicates that when the objective situation becomes more dangerous or competitive, individuals tend to adopt the attitudes, either DWB or CWB, that accurately reflect their environment. On the basis of experiments, for example, some psychologists have articulated what is known as Realistic Group Conflict Theory (RGCT) in which an objectively real competition for scarce zero-sum resources between groups leads to conflict. Scarcity leads to scarce security.

**BACK TO THE FUTURE: THE RETURN OF SCARCITY AND SUGGESTIONS FOR FUTURE RESEARCH**

This argument has important theoretical and policy implications. In terms of the former, the distinction between a dangerous world based on uncertainty and a competitive world based on scarcity points the way toward a unified theory of structural realism based on material factors. Unlike anarchy, which is relatively constant in international politics (at least according to realists), scarcity is something that varies historically over time and across space. Moreover, it is negatively correlated with uncertainty: when scarcity is acute, uncertainty is diminished as states can be more certain of the (malign) intentions of others and vice versa. This suggests that offensive and defensive realism essentially act in tandem, with the former providing a more accurate account of world politics than the latter in particular environments, those distinguished by a dearth of material resources. Those settings include particular time periods marked by systemic scarcity but also particular regions for research.

---


and countries where scarcity is more of an issue. There is any number of indications that scarcity is becoming a crucial and systemic issue for international politics in a way that it has not been for some time.

The first step is to conceptualize scarcity more fully. To begin with, there are two related but slightly different types of scarcity. Absolutely scarce goods are those that cannot be obtained in an amount capable of satisfying desired demand, are non-substitutable, and are required to fulfill life’s basic needs. Relatively scarce goods, on the other hand, are those that likewise cannot be obtained in an amount capable of satisfying desired demand, but are substitutable, and may or may not be required to fulfill the basic needs of life. Relative scarcity is the more widespread conception that is rooted in economics where a good is defined as scarce if it is “capable of satisfying a want” but does not “exist in such quantities that each of us can find at hand enough, completely to satisfy his desires.”89 The severity of relative scarcity is driven by availability, substitution costs, and how highly the good is valued even if it is superfluous to basic human needs.

Scarcity in international politics combines both conceptions. Governments must at a minimum be able to provide conditions that can meet their citizens’ basic needs, including access to water, food, shelter, heating, and essential healthcare. Though fairly rare, some of these goods, such as water and food, can be absolutely scarce in cases where water tables are depleted, there is a severe draught, and supplies cannot be replenished. For the most part, however, relative scarcity is the more widespread phenomenon as governments not only seek the minimal welfare of their population, but also national prosperity. These concerns mean states must also value energy resources like coal, oil, and gas; other mineral and material resources like iron, copper, and gold; and more recently rare earth minerals used in a variety of modern defense, health, and consumer technologies. These resources are scarce because they are limited in their availability, are often very costly to substitute, and are highly valued by states as they provide the means necessary to fuel national development. They may not be essential to basic human survival, but they are the foundations of material power, which for realists is closely linked to national survival.

There are two problems in particular that restrict the availability of resources. First, resources may exist in such a small amount as to make them naturally scarce; this can include resources that once existed in a larger amount but have been significantly depleted over time. Second, they may exist in a large enough quantity to satisfy demand but are monopolized by a single country or small group of countries that limit their availability. The first problem can be minimized by controlling access to as large a portion

of the remaining supply as possible (a short-term solution) or by finding an alternative resource as a substitute (a long-term solution). The second problem can be solved either by controlling the resource or access to it or through open markets that make it readily available. In times when resources are naturally restricted (because they exist in small quantities or have been considerably depleted) and/or are not evenly spread across the earth and cannot be accessed through the international marketplace, scarcity is severe and might contribute to intense competition between states. When resources are widely available and the international marketplace makes them readily accessible, scarcity is less of a problem.

It is necessary for a theory of international relations to elaborate the material resources valued by states as sources of national power that, when scarce, create the possibility of conflict. These include energy resources, such as oil, natural gas, coal, and uranium, that states depend on to fuel production; metals and minerals that are valued for their industrial use, like iron, aluminum, and rare earths, or their preciousness, like gold and diamonds; land that can be used for living space and contains arable soil, pastures, and forests; freshwater for drinking, irrigation, and to sustain fisheries; oceans and seas that contain strategic shipping lanes and chokepoints, as well as saltwater fisheries; and finally a population to provide labor.

The supply of these resources available to states ranges from relative scarcity to relative abundance based on the resources' sum total present in the world and their distribution across the globe. Systemic scarcity occurs when there is a limited global supply of a given resource and states face similar incentives to exploit it. This could be measured by comparing worldwide production figures with worldwide demand patterns or by looking at market-determined prices, which provide a decent indicator of relative availability. A contemporary example is the case of fossil fuel-based energy resources that are fixed in supply and are universally essential for powering national economies and militaries. Though fossil fuels are already systemically scarce by definition, a supply crunch accompanied by a permanent spike in oil prices above US$500 a barrel would likely indicate a situation of severe systemic scarcity.

Scarcity can also occur at a lower non-systemic level as a result of resources being unevenly distributed and market access to them being overly costly or non-existent. This could be measured by defining a particular geographic area (a state, region, etc.) and comparing the relative local supply, in addition to market availability, with demand. Again, locale-specific prices could be used as a proxy, as well as figures for imports and exports, that might show, for example, domestic scarcity or abundance of metals, minerals, or timber. Thus country-level scarcity of food may be severe in cases where the national population is large, there is little arable land and irrigation water, and market access to imports is restricted. Regional scarcity of water
may be acute in arid regions where water tables have been depleted. Systemic scarcity varies over time; non-systemic scarcity varies both over time and across space.

In looking for a better articulation of the mechanisms by which scarcity might lead to conflict, scholars would do well to turn to the work of non-realists. Nazli Choucri and Robert North were the first to study the impact of crucial variables like population, resources, and technology on state security systematically. They argue:

A combination of growing population and developing technology places rapidly increasing demands upon resources, often resulting in internally generated pressures. The greater this pressure, the higher will be the likelihood of extending national activities outside territorial boundaries. To the extent that two or more countries with high capability and high pressure tendencies extend their interests and psycho-political borders outward, there is a strong probability that eventually the two opposing spheres of interest will intersect. The more intense the intersections, the greater will be the likelihood that competition will assume military dimensions. When this happens, we may expect competition to become transformed into conflict, and perhaps an arms race or cold war.90

Based on the operationalization of scarcity we provide, it is possible to identify historical periods of scarcity vs. abundance and test whether they were more or less conflict prone. Future research ought to look in this direction. It has long been contended that the basis of economic and political power has also shifted over time away from agriculture and land, a scarce and finite resource.91 The past two centuries are sometimes regarded as an age of plenty among the great powers. Bradford DeLong argues the nineteenth century was “the first time technological capability outran population growth and natural resource scarcity” and that this shift eventually culminated in the greatest explosion of wealth in world history in the second half of the twentieth century.92 Several trends helped drive this incredible recent growth, including the discovery of rich energy and mineral deposits across the world, the green revolution in agriculture, and the information revolution, all of which made resources more plentiful. The result of these changes is that the


nature of wealth and prosperity has arguably changed in such a way as to make scarcity and the control of resource stocks less of a concern in the modern world than previously. As these changes took place, we would expect conflicts to have been driven increasingly by uncertainty rather than scarcity, particularly of the absolute kind. Certainly the superpower era was the golden age of theorizing about uncertainty-driven conflicts.

The pendulum, however, might be shifting back. Considerable research has already been devoted to exploring how population pressure and environmental change, combined with access to limited resources like clean water, productive agricultural land, forests, and fisheries, can lead to intergroup competition and sometimes violence in poorer countries. Given the current demographic and environmental trends in many parts of the developing world, these scarcity-induced conflicts are likely to remain problematic, if not worsen. There are, however, a number of reasons to think that scarcity will be of increasing concern not only within developing countries, but also between relatively powerful and industrialized nation-states. This paper does not endorse a neo-Malthusian perspective, but it does suggest that trends in several key resources could have severe implications for international security. This might make scarcity, and therefore offensive realism, of increasing policy relevance.

Mounting resource stress stems from two principle sources: a growing world population and rising new powers with their consumer classes in the developing world. The world population has doubled since 1970, as last year the world welcomed its seven billionth resident. The demographic growth rate is slowing, yet even conservative estimates project the world’s population increasing to nine billion by 2050 and over ten billion by 2100. Almost all this growth will occur in Asia and Africa, each of which is expected to grow by one billion people through 2050.

---


95 Orme, “The Utility of Force in a World of Scarcity.”

Increasing pressure on resources, however, will come not only from a growing world population, but from the convergence in consumption patterns between developed and developing countries. Although current consumption levels are already high and flattening in the United States, Western Europe, and Japan, forecasts for consumption growth rates in the developing world are substantially higher. The dominant trend in international politics today is the rise of potential great powers like Brazil, Russia, India, and China and regional powers like Indonesia, South Africa, and Turkey. As these countries continue to grow, their level of consumption will rise steadily, and they are likely to challenge and in many ways change the current dynamics of the US-dominated international system. Past work has been inconclusive as to whether heavy industry can be exploited as a spoil of war. However, it does seem clear that industry does require an adequate source of energy and that this might be the source of increasing friction of the relative security variety.

Energy, food, and water are important examples of resources that might become increasingly scarce. Many analysts suggest world oil production has already peaked and is plateauing; more optimistic estimates extend current production levels to 2025 at the latest. As production peaks and demand continues to rise, the supply-demand gap will make access scarcer and cause prices to increase. Food supplies may well face similar constraints as declining yields, shrinking arable land, and falling water tables take their toll. The last sixty years saw substantial production increases as the green revolution helped extend crop areas and at the same time boost yields. Yet these increases have been steadily diminishing since the 1970s. Moreover, the earth’s fresh water supply is fairly abundant, albeit relatively fixed and unevenly distributed. Saudi Arabia, Syria, Iraq, Yemen, India, and China all have (or soon will have) falling water tables that will not be replenished any time soon. Pollution has also effectively lowered the available supply of water in many parts of the world. By 2025, estimates are that 85 percent of Sub-Saharan Africa’s populations will live in countries that face water stress;


101 UNDP, Beyond Scarcity, 39.
Scarce Differences

large, densely populated swaths of China and India will be water scarce; and 90 percent of the Middle East’s population will live in water-scarce countries. As these trends play out, the competition over new fossil-fuel deposits in the Arctic and the South China Sea, cropland in Africa, or water in the Middle East and Southeast Asia is likely to become more severe with increasing incentives for state aggression to secure the resources necessary for national survival.

In the coming years, scarcity will also be central to perhaps the most debated and crucial relationship between two great powers: the United States and China. China poses a unique set of challenges for the United States because of its potential as a peer competitor, a threat the United States has not faced since the demise of the Soviet Union. There is good reason to believe, and some preliminary evidence to suggest, that the struggle for scarce resources will be at the center of any explanation of US-Chinese competition. Resources have been and remain essential to America’s material military and economic power, and the United States has enjoyed a corner on the world market since World War II. Resources have likewise been central to China’s rise over the last three decades. China thus far has largely achieved its sustained rise through export-led domestic economic growth, relying on large coal and mineral reserves, smaller oil and natural gas deposits, and abundant labor. Domestic demand, however, has already begun to outstrip resource supplies, and China will increasingly require and seek a larger share of the world’s resources as it continues to grow. Even if the United States seeks only to maintain its dominant position with respect to world resources and China attempts to increase its position to keep up with domestic economic growth, the two could eventually find themselves competing over a series of resource flashpoints to the point that conflict becomes a very possible outcome.

Bringing scarcity back in is relevant not only because it is a potentially more stable foundation for a critical theoretical debate in IR, but also because it has substantial implications for explaining contemporary world politics. It seems we can scarcely ignore the potential ramifications for international security.

102 Ibid., 136.