tween his framework and its predecessors leans more toward coincidence or congruence (i.e., that the explanations may work together or that one may be an extension of the other). Yet, when he moves on to discuss his research design, the trade expectations hypothesis is suddenly framed as occupying an exclusive position. This level of ambiguity about where trade expectations theory sits relative to realism and liberalism cascades through the analysis and has both theoretical and methodological implications. On the theoretical side, this framing leaves the reader wondering what it is we are going to get from the book: is it an extension to realism or liberalism? Is it a fusion of both? Is it a replacement? On the methodological side, readers are left wondering how, for example, to test a theory that is both "competing with" realism and "fundamentally realist."

Copeland concludes by positing that "trade expectations theory resolves the problems for established liberal and realist theories."[22] In reality, however, his analysis falls short of this goal. Despite providing an impressive wealth of evidence in favor of the trade expectations hypothesis, the theoretical and methodological ambiguities muddy the inferences we can draw and the implications for future research. The crucial addendum is that the trade expectations theory has the latent potential to achieve this resolution between the realist and liberal paradigms and to guide future applications of both. By recasting trade expectations as an extension of both theories, Copeland could demonstrate precisely the need to modify both main IR paradigms to more accurately deal with conflict under interdependence.

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[22] Copeland 2015, 428.

Theoretical and Methodological Reflections on Economic Interdependence and War

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What causes peace? Dale Copeland's detailed and ambitious book, *Economic Interdependence and War*, has an answer. At least under certain conditions, the ties that bind nations together in webs of commerce can lead them to prefer to avoid, or at least delay, active conflict. The basic claim of a commercial peace is hardly new. Scholars like Montesquieu and Smith detailed this connection at the dawn of the commercial age. Two features make the book distinctive and might be said to advance this timely and important research agenda. First, Copeland sets out to integrate ideas of a negative commercial peace that originated in liberal internationalist theory into a Realist neoclassical framework. Two lines of thinking about world affairs that were dialectical may perhaps have reached a synthesis. To achieve this synthesis, Copeland emphasizes prospective thinking about commerce by leaders in evaluating their nations' foreign security policy: It is the anticipation of trade, rather than its mere concurrence, that Copeland deems critical in achieving major power peace. Second, the book is broad and ambitious in its empirical scope as well as its theoretical domain, offering panoramic analyses of eras more akin to period narratives than to the narrowly focused vignettes that are common in the social sciences.

The world is complicated, made more complex seemingly every year by the march of trade and technology. This complexity suffuses both Copeland's subject matter and his attempt to explain the ties between commercial relations and conflict in international affairs. Copeland can only be praised for taking on such a challenging subject. At the same time, it is the responsibility of an author to clarify and simplify for his readers, and to prevail in its position through logical and empirical precision. I will try to keep things simple here, though regrettably this means I must gloss over or omit the rich nuance that is abundant in this 504-page text.

The Liberal-Realist Synthesis

Wealth from trade, to say nothing of the arms trade itself, can facilitate war, but as liberals emphasize, it also creates common ties that constrain actors, making war costlier. It is this interdependence, and its pocketbook effects, that are said in liberal theory to prevent war. There are numerous versions of the basic argument, so many in fact that one could fill several

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books with the varieties of liberal peace theory.[1] Whatever the details, however, the basic form is one of making war *relatively* expensive (or peace *relatively* cheap). Commercial loses associated with conflict pose costs for leaders and countries (economists call these opportunity costs) that, *if anticipated*, can lead them to prefer peace more often. It is important to note that in no form does this argument fail to put itself in the future. If these costs, or the opportunities to avoid them, are in the past then subsequent action can do no good (or cause no more harm). It is only when one's actions today shape outcomes tomorrow that opportunity costs matter for decision making. Similarly, a failure to anticipate opportunity costs makes them irrelevant.

In Copeland's conception, as in other opportunity cost arguments, nations still want to fight. However, the text argues for a key theoretical innovation in focusing on *future* economic gains or losses. But the distinction between future and past trade that Copeland emphasizes is not salient. Specifically, whether states are currently not trading, but will if they remain at peace, or whether states are currently trading and will continue to do so if they do not fight, is said to prove pivotal in *Economic Interdependence and War*. But there is nothing in the opportunity cost framework, or in Copeland's particular version of the theory, that would make distinguishing among different pasts germane. Both are functionally equivalent. In each case, it is anticipation of the future that drives choices.

In basic analytical terms, the effect of trade in the opportunity cost framework is like that of altering the payoffs in the famous Prisoners' dilemma game to transform it into the almost equally famous chicken game. If the cost of war goes up enough, both sides prefer conceding to mutual destruction. Of course, each side still prefers an outcome where it is the adversary that swerves or backs away. [2] A similar challenge exists between trade partners. One need to look no further than the current headlines to see two states, the United States and China, trying to cow one another over the imposition of risky actions made possible not in spite of, but because of, trade.

This does not preclude Copeland's conception of the mechanism underlying trade's effect on peace from operating effectively. However, at least three problems with this logic remain. First, how much is enough? Big wars are very expensive. It is a rare case where two nations' bilateral trade is on a scale that would make eliminating all trade (let alone some of it) sufficiently costly to fundamentally alter the accounting price of a war, or even of a significant militarized dispute, once states have reached the point where they consider military escalation of a dispute a rational choice. In my own research, I have found that in the post-World War II era, less than four percent of all dyads look this way.[3]

Second, there is the vexing question of endogeneity, here in the sense of reverse causation. Endogeneity implies that the states that are most likely to fight are least likely to trade together. For example, the United States worked hard to prevent U.S. and other western merchants from trading with the Soviet Union. Copeland dismisses these and other endogeneity problems rather blithely. It is not clear why, since they are of considerable concern in the literature.[4]

Third and most vexing, I do not think Copeland's theory succeeds at reconciling contrasting predictions of conflict causation used by different paradigms. The admittedly implicit theory of war underlying liberalism emphasizes a cost-benefit calculus. Realist theories rely on some form of power relations. Realism does not intensively consider war costs (though these appear in the nuclear domain). So, how does one reconcile the predicted effects borne of opportunity costs with relative power, in an environment where prosperity itself may prove to be a problem? Copeland's solution is ingenious but confused, and confusing. The simplest description is that, in prospect, opportunity costs somehow manage to intersect with and remedy concerns about relative power. If a state expects future trade to make it more powerful, it will not fight today. If instead states perceive that they will be prevented from prospering, they can prefer war. "Such a state will tend to believe that without access to […] markets needed for its economic health, its economy will start to fall relative to other less vulnerable actors."[5]

This sounds very plausible, especially if one's mind is still focused on the liberal logic of war, as well as peace. But there are at least two problems in attempting to fuse liberal (costs) and Realist (power) conceptions in this way. First, let us assume for a moment that everyone can see the future equally, so that the future is subject to common conjecture (everyone can see and evaluate everyone else's problem). If I know that by continuing to trade instead of fight I will be stronger in the future *relative to you*, then of course this is terrific for me. But Realist you is not going to like this future. If instead you will grow more from trading than I, then Realist me hates interdependence and you are the happy one. Looking into the future, if we agree on what we see, we cannot escape the Realist relative gains problem.

The second problem with using the future to segue from a focus on costs to power has to do with perceptions. My initial supposition about what leaders know about the future must be relaxed. Whether it is world affairs or labor relations, the origins of disputes seem most often to lie in what actors do *not* know, rather than what they do. In fact, the text is clear that leaders *do not know the future*. One of the key features of being forward-looking is that one can get things wrong—leaders may not have the same beliefs about their future economic prospects. If there is no common conjecture, then war in Copeland's world depends on whether Realist leaders anticipate compatible or incompatible effects of interdependence. If both you and I think that we will be relatively advantaged by trade, then we can remain at peace, at least for a while. If instead either of us is pessimistic about the magnitude of future

[1] For examples of such books, see Doyle's *Ways of War and Peace* and Russett's *Grasping the Democratic Peace*.

[2] Snyder 1961.

[3] Gartzke Typescript.

[4] See, for example, Morrow's "How Could Trade Affect Conflict?"

[5] Copeland 2015, 2.

economic gains, then we may prefer war. This of course means that the theory really hinges on the question of beliefs and their origins, since what leaders happen to anticipate determines how they will behave, determining whether trade begets peace or war.

There is an enormous literature on decision making and human cognition. It is unreasonable to expect an author to capture all or even most of what other authors are writing. But given the centrality of perception to assessing the accuracy of predictions from Copeland's framework, some additional detail on how leaders form beliefs would be especially helpful. Here, the book says too little.

Material variables condition who gets what in this story, while the information actors have about material variables condition how they go about getting there. Copeland ends up with this conclusion without consciously embracing it, discussing the process of discovery about relative power and benefits in a manner not unlike Bayes Rule, but without explicitly addressing key insights that follow from tying uncertainty to decision-making and conflict in this manner.

The result is no longer a story about opportunity costs. It is instead a story about beliefs about opportunity costs, or indeed beliefs in general. If states have incompatible conceptions of the effects of trade, whether real or imagined, this can lead them to fight *even when the actual mutual benefits of trade should have prevented conflict*. Copeland notes this effect without tying it to the appropriate causal mechanism of conflict. If what leaders believe about trade is at the core of whether they fight, then it is beliefs that drive conflict, not material conditions.

In sum, Copeland's book seeks to meld liberal commercial peace theory with a Realist account of the origins of great power war. These two theories have fundamentally different explanations for the origins of conflict and thus are difficult to reconcile. Copeland's solution is to look to the future, focusing attention on what leaders anticipate about events and circumstances. However, this does not actually resolve logical tensions between the two paradigms. Nor does it respond effectively to fundamental criticisms of each perspective's theory of war. It also leads to important questions about the origins of perceptions that are not resolved in the text. These structural problems are obscured under an enormous amount of description and argument.

The Methodological Approach of Economic Interdependence and War

I thus turn, briefly, to addressing the extremely detailed empirical research in the text. There is much in Copeland's extensive case studies that informs and provokes, making it impossible to do it justice in a short essay. So I will just address a few key issues.

A basic problem, which Copeland disputes, involves endogeneity. The text concentrates on great powers. Separating states into big and small appears to be a hold-over from the billiard ball days, and from an age when anything more than a dichotomy overloaded the human imagination. But focusing on great powers is likely to greatly worsen the endogeneity problem discussed above: One of the factors determining major power status is economic size, and economic size is increasingly driven by integration into the global economy. Thus, Copeland's sampling procedure incorporates his key independent variable.

A related concern about Copeland's case selection, as comprehensive as the empirical analysis might *appear* to be, is that it inhibits our ability to assess alternative explanations. One way in which war can be averted, possibly helped by trade, is if actors lack the basis for competition or conflict in the first place. This is positive (rather than negative) peace. This is how the West was tamed, not by guns but by civilization. In settings as diverse as marriage, the workplace, and the European Union, constituent actors have found sufficient common cause to interact cooperatively. Institutions and norms bridge gaps not to compel, but to facilitate cooperation. Workers in knowledge industries cannot be effectively forced to be creative. Instead, they are given incentives to further the interest of their employers by sharing a stake in the firm's future. Conquest in such an environment is counterproductive, since there is no practical way to ensure continued productivity and profit except by allowing workers to remain unfettered by coercion, which undermines conquest.[6] In the second half of the 20th Century, the United States as hegemon has not conquered to rule, possess and extract. Instead, it has led a coalition of nations, made more powerful and willing based on prosperity and collective security. Common interests have made war in the Western world all but unthinkable for over seven decades. Copeland recognizes this important peace-producing dynamic, but he instead focuses on explaining the tensions between West and East.

Another issue has to do with inference in an inherently probabilistic setting. The assertion in modern analysis is not that states that do not trade always fight or that those that trade never do. Copeland is mindful of this and too sophisticated to suggest that interdependence is more than one among many factors influencing international affairs. Still, this poses two challenges for his chosen mode of analysis. First, the marginal impact of a variable or process depends on how often it makes a difference in terms of given outcomes in a population of actors or circumstances. How do we know whether the cases Copeland has chosen to study are representative of tendencies in world affairs? How can we tell how much trade matters if the examples he shows us are not representative? One indication of a clear problem in case selection is his focus on rivals; one cannot expect to learn a great deal about peace by looking disproportionately at those that fail to achieve it. Trade may operate at an earlier stage, preventing states from becoming rivals. Second, case studies, even a considerable number of them, cannot clearly delineate tendencies.

There are also a number of admittedly technical and specialized errors that will mar the text in the eyes of experts, thought

[6] Examples of this type of argument abound. See, Brooks's *Producing Security*; Rosecrance's *The Rise of the Trading State*; and Angell's *The Great Illusion*.

they are unlikely to be noted by general readers. Copeland claims to have replicated statistical studies by other authors. But in doing so, he makes glaring omissions. For example, he incorrectly interprets interaction terms from tabular results and uses models to make out-of-sample predictions.

Another concern about the analytical methods is that the text notes the importance of both exogenous and endogenous factors in a leader's choice of interdependence. This implies a two-stage process and creates challenges for inference (even under the best of conditions). For example, it is not clear how the text is able to resolve whether causes are endogenous or exogenous since this depends in part on a prior stage of causation. If domestic politics is treated as an exogenous factor, for example, but the choice of regime type is influenced by trade and other variables, then regime type is endogenous. Copeland identifies at least six exogenous factors as confounding variables in the analysis. The variables should be factored systematically into case selection, as well as explication within cases. Yet, this is difficult, given limited degrees of freedom (in other words, there are more variables than cases).

Finally, Copeland's defense of his methodological approach is that he is analyzing rare events. The discussion of the strengths and weaknesses of quantitative versus qualitative methods for assessing rare events in a multi-causal environment highlights basic challenges to inference facing all methods involving observational data. Over-sampling on failure (in this case war) does not necessarily tell us more about the causes of peace, especially if one believes that causation is multiple and jointly contingent. And there is lots of peace in the world, for a multitude of reasons, so to the extent that Copeland in fact has an explanation for peace, he is, fortunately, not studying a rare event at all.

Ignoring what one wants to explain because the other thing is rare gets the whole enterprise backward. Tests of theories of commercial peace involve contrasting interdependence with many factors that interfere with conflict, such as distance, interests, capabilities, alliances, etc. By looking mostly just at failures, one cannot distinguish the causes of the overwhelming proportion of successes. Again, because the discussion is so detailed, the words sound right, and many readers have no basis on which to doubt the veracity of the author's claims, highly uncertain inferences may be believed as assertions of fact.

Conclusion

Interdependence as a setting for research is challenging (some might say daunting), precisely because the processes involved are multifaceted and complex. Copeland's book is ambitious, and in the best sense of that word it moves research forward by encapsulating both insights and areas deserving additional attention. I have focused disproportionately on areas where I think it falls short, but this is only because the goal of promoting peace and international stability through a better understanding of commerce and conflict is clearly one of the most important in the modern world. I applaud the aspiration of the author to make the world better, more peaceful. At the same time, I fear Copeland's particular approach, seeking to synthesize two traditions that each have problems addressing the fundamental process of interest, and conflict itself, is not likely to prove productive, at least partly due to the methodological choices he makes. I hope that future iterations of this scholarly objective are even more careful in their causal logic and in the methods they use for the empirical assessment of that logic in our fractious world.

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