# An Agent-Based Model of the Acquisition of U.S. Client States

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### **Abstract**

United States foreign policy in the twentieth century has arguably been built around the creation and protection of client states. This tendency both antedates the cold war and continues after its end. We lay out the elements of a theory of U.S. client state acquisition (for the entire period from 1898 to the present) based on two motives, each with several associated mechanisms: helping "endangered" states from "enemies" in the region; and "getting one's ducks in a row" to prepare a war or set up alignments to ward off a new one. In both cases, client status is consensually arranged between the U.S. and the client; ceiling and diffusion effects may also enter into client acquisition. These mechanisms are then modelled using simulation; the model contains certain agent-based elements. Preliminary analysis of the model indicates that 1) the model generates fairly stable results; 2) it tracks the historical cycles in US client acquisition (periodic spikes) fairly well though it systematically under represents the number of clients that the US accumulates.

### Introduction<sup>1</sup>

In a series of papers, we have argued that one of the fundamental components of U.S. foreign policy for over a century has been the acquisition and protection of client states.<sup>2</sup> United States security and well-being is seen as revolving around the maintenance of particular regime types in various states; and from time to time, U.S. officials have felt it important to take on (but not, apparently, to discard) additional clients.<sup>3</sup> This policy, moreover, has been largely unchanged since the U.S. first began to expand overseas. Of course, the mechanisms of U.S. client maintenance are considerably more sophisticated now than they earlier were, and the U.S. reach is now global in a way that might have been seen as exaggerated in earlier, supposedly isolationist periods. By the same token, the U.S. has in the last century gone through at least three major eras, with the Cold War as demarcator. Nonetheless, we would argue that the continuities of U.S. policy, as regards the acquisition and protection of clients, far outweigh the historical differences.

In making this claim, we have for the most part been focusing more on the maintenance of client states than on their acquisition in the first place. Thus, the U.S. reacts toward its clients in remarkably similar ways, no matter whether we are talking about Santo Domingo in 1903 or Bosnia in 1995. For example, when a client is in trouble -- say from domestic opposition seen as likely to endanger the regime type -- the U.S. will predictably opt for an escalation ladder, involving increasingly "noisy" means (whether by itself or via proxies), each taken over from tasks the client is deemed as unable to accomplish. Such means of protecting clients, we have argued, stem to a considerable degree from micro-processes of how U.S. foreign policy recommendations are put together, chosen among, and called into question. Those micro-processes are discernible over decades, and we see no sign of changes in either them or the policies they generate.

However, the fact that client states are maintained in the same way now as in the past tells us little about why they became client states to begin with. If clients were never, to paraphrase the famous phrase about the British Empire, acquired in a fit of absent-mindedness, the circumstances of their acquisition vary considerably. Some were swept up in en bloc, as part of a general policy of alliance-construction; others, gradually and with considerable trepidation, as the least bad way of responding to particular, highly specific dangers. We have shown elsewhere how much the process of client acquisition depends on the client's being seen as having clearly demarcated place characteristics; but those characteristics, in turn, can be highly varied.<sup>5</sup>

The issue, then, is whether it is possible to come up with one or more mechanisms of client state acquisition capable of accounting for the apparently broad range of U.S. motives over the last century. This paper puts forward two such mechanisms which, we argue, are at the core of client acquisition in almost every instance of its occurrence (the two, which we shall discuss below, are Israel and Saudi Arabia). Those mechanisms, in turn, give rise to temporal and spatial patterns of acquisition which track quite well actual historical patterns; they also suggest likely future

<sup>&</sup>lt;sup>1</sup> We would like to thank, for helpful comments on a predecessor of this paper, James Bevan, Gavan Duffy, Patrick Jackson, and Philip Schrodt.

<sup>&</sup>lt;sup>2</sup> The two most recent are: "Was Luce Right? Simulating the Growth of U.S. Client States," ISA paper 2002; "The Continuity of Client States and Military Intervention in United States Foreign Policy," ISA paper 2001.

<sup>&</sup>lt;sup>3</sup> A preliminary definition: clients are regimes whose performance is overseen by patrons; the latter consider themselves responsible for the former.

<sup>&</sup>lt;sup>4</sup> For recent treatments of these two cases, see Max Boot, *The Savage Wars of Peace: Small Wars and the Rise of American Power* (New York: Basic Books, 2002), ch. 6; David Halberstam, *War in a Time of Peace: Bush, Clinton, and the Generals* (New York: Scribner, 2001), chs. 26-30; and Ivo Daalder, *Getting to Dayton: The Making of America's Bosnia Policy* (Washington, DC: Brookings Institution Press, 2000), ch. 3.

<sup>&</sup>lt;sup>5</sup> "Rhetorics of Place Characteristics in High Level U.S. Foreign Policy Making," in Frank Beer and Robert Hariman, eds., *Post-Realism: The Rhetorical Turn in International Relations* (East Lansing, MI: Michigan State University Press, 1996), 309-330.

scenarios and shed light on certain counterfactual situations.

This paper is divided into four parts. We begin with a conceptual discussion of what client status means and how it has worked for the United States historically. We then turn to a discussion of the two acquisition mechanisms, explaining each one and illustrating it with several examples. Next, we formalize these mechanisms as an agent-based computational model, "walking through" the model's code (it is written in Java, and implemented in the RePast simulation environment). Finally, we present the results of the model's simulation, both in terms of its "fit" with the historical patterns discussed above and in terms of particularly interesting trends and counterfactuals.

### Client States

At least as far back as ancient Rome, powerful political units have acted through a network of clients. To the patron, the advantages of having clients rather than, say, imperial provinces are twofold: the administrative and political costs of administering clients are considerably less than those occasioned by direct rule; and to have clients (referred to by the Romans as "friends") is significantly more flattering to one's self-image as a free political unit than to have subjects. Counterbalancing these benefits, of course, is an obvious disadvantage: clients, by virtue of their formal independence, are often obstreperous and able to manipulate the patron for their own ends. If two or more clients enter into conflict with each other, or if they are judged to be utterly incompetent, the patron will feel compelled to step in; this, historically, is how client networks were transformed into formal empires.

The reverse is also true. When imperial provinces revolt, especially when such revolts take place simultaneously or in rapid succession, the costs of putting down the rebellion are often too high for the empire as a whole to be maintained. The temptation is then great to grant formal independence to the remaining provinces. If regimes deemed to be compliant can be set up (often staffed by former provincial officials and by bureaucrats from the metropole), provinces can be transformed into clients. This, in sum, is what the French and to a lesser degree the British succeeded in doing during the era of decolonization; it is what the Russians have been attempting after the disintegration of the Soviet Union.

As these examples illustrate, client state networks also require considerable resources to maintain. Frequently, the patron needs to provide economic and military aid; and if the client in question is faced with an insurgency, the patron also needs to move troops and ships to help in stamping out the revolt. This can be an expensive proposition, particularly over long distances and in the face of well-armed rebel forces. Similarly, the costs of maintaining military bases are quite high. These various resource requirements help explain why the British engaged in successive retrenchments and why, quite apart from any concerns about democracy, the French have found it increasingly difficult to maintain their network of African clients.

For several decades, the United States has had the single largest network of client states. They fall into several, quite distinctive, categories. First come states with whom the U.S. has a formal military alliance. These include most of Latin America (via the Rio Pact); the original and some of the more recent NATO countries; Australia and New Zealand; Japan; and South Korea. A second group comprises states with whom the U.S. has intimate military ties, furnishing extensive military aid and maintaining close links with the indigenous armed forces. These include several

<sup>&</sup>lt;sup>6</sup> S.N. Eisenstadt, *The Political System of Empires* (New York: Free Press, 1963); idem and L. Roniger, "Patron-Client Relations as a Model of Structuring Social Exchange," *Comparative Studies in Society and History* 22,1 (1980): 42-77. An extensive bibliography on patron-client relations is available from the authors.

states in the Middle East, such as Israel, Jordan, Egypt, and Saudi Arabia; they also include states with whom the U.S. formerly was allied, such as the Philippines, Thailand, and Pakistan, or with whom there are long-standing political links, such as Indonesia and, for many decades, Ethiopia. Most states in this category also receive extensive U.S. economic aid. Third come pro-Western states with whom the U.S. has close economic and military ties. These include various states in the Caribbean and Pacific, as well as several African countries, such as Uganda and, formerly, Liberia fell into this category for many decades. Since the (first) Gulf War, several states in the Red Sea or Gulf area would also be included here. Fourth are formally neutral but pro-Western states with whom the U.S. maintains not only significant economic connections but, increasingly, military links as well: Sweden is the most prominent case in point. Fifth, although their status as U.S. clients is by no means firmly cemented, are several newly independent states in Eastern Europe and Central Asia, such as Bosnia, Tajikistan, and, most recently, Afghanistan. In our view, at least 60 states today are American clients.<sup>7</sup>

What these states all have in common is that the maintenance of their type of regime (though not by any means the individual leaders or political groupings comprising any given regime) is a) considered by the U.S. government as a legitimate matter of concern, which b) is worth considerable political and, if need be, economic and military efforts, should it be seen as endangered. In addition, the dominant political forces in each of these states also c) consider that characteristics a) and b) are themselves normal and legitimate. This, then, is a more complete definition of client states.

In order for regime maintenance to be an American goal and for that goal to be accepted as legitimate by the regime, the U.S. must receive explicit permission to engage in surveillance. This phenomenon is at the core of the concept of a client, and serves both as a measurement criterion for categorizing states and as a distinctive feature separating patron-client relations from related phenomena such as alliances. As a measurement criterion, looking for whether or not surveillance exists leads us to treaties and executive agreements permitting the U.S. to have military attachés and other sorts of overseers, but also, and more fundamentally, to the types of activities frequently reported routinely in daily cables and other messages from the embassy to Washington. This last point is important, since in the early years of the last century, U.S. bureaucratic mechanisms were not nearly as developed as they have subsequently become (e.g., military aid programs had not yet become regularized; there were no CIA stations; and so forth). By the same token, these mechanisms have now become common, so that any kind of U.S. bilateral relations with a given country are more likely than not to involve some sort of military-to-military contacts, even if surveillance is not terribly extensive.

Patron-client relations are conceptually distinct from alliance relations. The former, as we have said, involve oversight by the patron of the client's internal affairs, with the client giving its assent (even if reluctantly) to this oversight. Alliances, however, tend to be restricted more to external attack and, importantly, need not involve surveillance. Hence, the U.S. can be allied to a given state, in the sense of guaranteeing its security in case of external attack, but without protecting the regime in question against many potential domestic enemies. Conversely, the U.S. can oversee the client's performance without giving the kinds of guarantees (and weapons transfers) typically involved in alliance relations (in these cases, the client frequently nags the patron for more, and more sophisticated weapons, not to mention explicit military guarantees). Of course, most clients are also allies, and vice-versa, but the two concepts are sufficiently different that they not

<sup>&</sup>lt;sup>7</sup> The web of formal and informal relations that the United States has with its clients is extensive. The list of formal bilateral treaties and other international agreements on all kinds of topics is available as a Department of State document: *Treaties in Force: A List of Treaties and Other International Agreements of the United States in Force on January 1, 2002*, available at the department website <a href="http://www.state.gov/s/l/c3431.htm">http://www.state.gov/s/l/c3431.htm</a>. As discussed in the text, we pay particular attention to economic and military arrangements; for indirect information on the latter, see U.S. Department of Defense, *Base Structure Report, Fiscal Year 1999*. (It should, however, be noted that a number of U.S. military bases are not listed in this report, particularly those in the Middle East and Central Asia.)

only should be differentiated but should also be seen as not falling along a common dimension (e.g., security).

It is important to understand that client status need not involve lining up with the patron on many foreign policy matters, nor, indeed, that relations between the two are peaceful and harmonious. Clients may and often do take a stance on various items at odds with that of the patron, and this possibility may be strengthened by understandable feelings of resentment on the part of the client at its status. Since, for the patron, what counts is maintenance of regime type; this more overriding concern may even facilitate the client blackmailing the patron. However, when push comes to shove, it is understood by both sides that the patron's basic goal and its surveillance means are legitimate. Put in standard political science terms, we can say that the status of being a patron, while undoubtedly connected with the patron being powerful or influential, in the end is conceptually distinct. Rather, patron status is in effect a mode of governance, a kind of hegemony, and one all the effective precisely for its doubly voluntary character.

It should also be pointed out that multiple levels of patron-client relations are possible. Clients of the United States can themselves be patrons for other states. What we do exclude, for logical and practical reasons, is that a client of a client is also the client of its patron's patron, i.e., that a country like the U.S. can, as it were, reach down directly to a client while the latter also keeps its client status via, say, a former colonial power. We rule this out simply because, given the intrusiveness of surveillance and the notion of responsibility for regime-type maintenance, it simply is not possible for two patrons to be surveilling the same client for more than a limited time (in the end, the "middle" client either solves the problem or passes it to the U.S.). A second patron may extend security guarantees to the "lower" client, but it can only do so with the consent of the "middle" client, qua patron of the "lower" client.

Most U.S. clients are states with perfectly stable regime types. They do not require obtrusive surveillance or (except for economic and military aid) significant assistance. However, if the situation is deemed to warrant it, surveillance can easily become more intensive and assistance granted. Some regimes are seen as considerably more endangered. In such cases, U.S. officials engage in active policies aimed at buttressing the regime. These policies go well beyond transferring resources; they frequently involve daily advice to politicians, bureaucrats, the military, and various other political forces in the country. Of course, certain regimes are sufficiently thin in trained administrators that they rely routinely on the U.S. for advice even when there is no imminent danger in sight. At times, however, the client is faced with a problem for which its own resources, even buttressed by U.S. aid, are insufficient. In those cases, U.S. intervention may be resorted to.<sup>8</sup> We will return to this issue below, when we discuss motives for acquiring clients.

With these points in mind, we can now give a kind of stylized chronology of U.S. client acquisition. It should be kept in mind that this list is neither complete nor, as of yet, entirely verified. As we indicated, client status can only be ascertained when cable traffic is examined (and not only the cables deemed most worthy of being published by the State Department's own historians). What we did, as a second-best alternative, is to use treaties and military base agreements, along with reading through various of the volumes in the *Foreign Relations of the United States* series, supplementing both with particular secondary sources. It will be noted that we skip over most of the 1980s, due to paucity of any kinds of primary source materials; we also surely under represent a number of small Caribbean and Pacific island states.

<sup>&</sup>lt;sup>8</sup> For a detailed discussion of various forms of U.S. support for clients and various types of intervention see Sylvan and Majeski, Continuity. For a more detailed discussion of many of the interventions, see Stephen Majeski and David Sylvan, "From Easy Win to Basket Case: Extending a Theory of U.S. Overt Military Interventions to Cases of Covert Operations," presented at the 39th Annual Convention of the International Studies Association, Minneapolis, 1998; and Stephen Majeski and David Sylvan, "Client States and U.S. Intervention in the Cold War and Post-Cold War," presented at the 40th Annual Convention of the International Studies Association, Washington, D.C., 1999.

## A Partial List of U.S. Client States, with Approximate Dates of Acquisition<sup>9</sup>

1898 Cuba (ends 1959)

1900 Mexico, Guatemala, Honduras, El Salvador, Nicaragua, Haiti, Dominican Republic

1903 Panama

1939-40 Colombia, Venezuela, Bolivia, Ecuador, Peru, Chile, Paraguay, Uruguay, Brazil; Canada; also Liberia (ends mid-1980s)

1943 China (ends 1949)

1945 Italy, Saudi Arabia

1946 Argentina, Philippines

1947 Greece, Turkey

1948 France, UK, Belgium, Netherlands, Luxembourg, Denmark, Norway, Iceland, Portugal, Sweden, Austria; Korea; Israel

1949 West Germany

1950 Taiwan, Thailand

1951 Japan, Australia, New Zealand

1952 Ethiopia (ends 1974; resumes mid-1990s)

1953 Spain, Iran

1954 Pakistan

1955 South Vietnam (ends 1975)

1957 Lebanon (ends 1975)

1963 Jamaica, Trinidad and Tobago, Jordan

1964 Laos

1967 Indonesia

1974 Tunisia

1976 Egypt

1977 Malaysia

1981 Singapore

1982 Belize

1984 Brunei

. . .

1991-92 Kuwait, Bahrain, Oman, Djibouti

1994 Uganda, Bosnia

<sup>&</sup>lt;sup>9</sup> Some notes on particular cases: South American states had mostly economic ties with the U.S. until the late 1930s, when in preparation for a possible war, swarms of military attachés were sent south and surveillance began on a large scale. Italy was occupied by U.S. troops, but was a recognized state by 1945; Truman was ready to intervene overtly to prevent a domestic Communist takeover even before the CIA's efforts in the 1948 elections. In 1948, the Marshall Plan went into effect and its counterpart funds mechanism provided a powerful means of surveillance; interestingly, the Swiss, who participated in the Plan, were given an exemption from counterpart fund control; the Irish, who also participated, had most of their funds semi-controlled by the UK (and therefore remained a client of the UK for decades more); see Till Geiger, "Why Ireland Needed the Marshall Plan but did not Want It: Ireland, the Sterling Area and the European Recovery Program, 1947-1948," paper, Queen's University of Belfast. Sweden, in spite of being a neutral, participated eagerly in the Plan and also, although refusing NATO membership, established close military ties with the U.S. Dates for Japan and Australia and New Zealand are cautious, depending for the first on dates of the peace treaty and for the latter two on the economic mechanisms involved in the security arrangements negotiated that year. Iran was offered aid (and accepted some of it) earlier, but only after Mossadeq's overthrow were full surveillance mechanisms put in place. Jordan was offered client status in the Eisenhower Doctrine but its refusal led the U.S. to continue letting Britain remain as its patron for some years further, when Hussein's entreaties became too insistent to ignore. Indonesia could be entered a year earlier, during the immediate chaos of the countercoup, but not back in the 1950s, even when the U.S. gave up the idea of fomenting a military revolt against Sukarno. Tunisia could be as early as 1968, depending on the weight given to particular military accords. Bosnia is highly ambiguous: it was on a client trajectory (see Holbrooke's memoirs) by 1994, but surveillance now seems devolved on the European Union. The cases of Afghanistan, Qatar, and Tajikistan are too recent (and involve too many secret agreements) to be sure if they are full-fledged clients, or merely are military bases and the recipients of security guarantees.

It is evident that these clients were not acquired in a single, continuous process. There were major waves of acquisition, following or preceding wars; there were also frequent, near-yearly acquisitions in the late 1940s, the 1950s, and portions of the 1960s and 1970s. (These two patterns will be at the core of our discussion, below, of the two motives and mechanisms for client acquisition.) By the same token, some of these cases involved formal military alliances, others, bilateral, at times informal, arrangements (for example, Israel was mostly supplied with weapons by European states throughout the 1950s and well into the 1960s; the U.S. eschewed formal military arrangements in those years; yet on an annual basis, top Israeli ministers visited Washington and bargained over weapons and economic assistance).

Just as the temporal pattern and institutional modalities of U.S. client acquisition fall roughly into two categories, so too do the statuses of those clients prior to the moment of their acquisition. On the one hand, there are a number of states which were not only independent for a long time but indeed were not clients of any other state; this is the case for many Western European states and also the South American and, to a certain degree, the Central American ones (the establishment of the state of Panama is an egregious counter-example). On the other hand, there are many states, notably in Asia and the Middle East, which used to be colonies of a European state. The U.S. "took over" many of these clients because either they were no longer under the surveillance of a patron or their former colonial master, as patron, was deemed to be incompetent in protecting them from danger. In either case, the client was facing a problem which it was unable to solve on its own, or even with the help of its European patron. In the latter circumstance, we can see the U.S. as "inheriting" the client from the European patron; in the former circumstance, the U.S. "inherits" the problem from the client itself.

Note that in its pattern of involvement in Asia and the Middle East (and to some degree in the Western Hemisphere as well), the U.S. has opted over and over for a different mode of governance. European states, for the most part, established colonies; the U.S., with rare exceptions, did not. While it is true that the Europeans have themselves set up clients (the British did this extensively in the 19th century and the French in Africa after independence), this is far less prevalent among them than it is for the U.S. There may be deep historical or ideological roots to this European/American difference; but what is clear is that the U.S. pattern is precisely a consistent pattern, with vanishingly few exceptions.

Of course, not all U.S. clients remain in that status. At times, revolutions or other domestic upheavals result in major changes in regime type, leading to the "loss" of the client. Often, the U.S. is led to intervene overtly or covertly to contain or head off such upheavals, and there are no guarantees that intervention of this sort will succeed. (The issue of intervention has until recently been the principal focus of our research.) Nonetheless, we would observe that the U.S. has a fairly successful track record: most of its clients stay in that status for many decades, and rarely require intervention. It may be that this stability is due to a kind of selection bias, in which the U.S. only becomes a patron for clients it thinks can survive, but whatever the reason, some states have been U.S. clients for over a century now. This also suggests that states do not "graduate" from client status. Even if things look stable and there is no sense of urgency, the U.S. will routinely cast a gimlet eye on elections, investment laws, and other facets of the client's "internal" life. Hence it was that in the mid-1970s, when it appeared for a while that the PCI might win the Italian elections, Kissinger suddenly began speaking out on Italian politics. The same is true of Mitterrand's first term in office and, quite recently, of the various assurances sought from and given by Lula in Brazil.

Finally, and with rare exceptions, it is worth noting that the U.S. client acquisition seems to have little to do with either power or profit; instead, as we will argue below, U.S. acquisition of clients was and is undertaken to maintain or restore order and stability, which were or are at that

moment threatened (or potentially threatened). Of course, American policy makers are not averse to promoting economic interests, nor are they shy about projecting power. But, as various scholars have already emphasized, <sup>10</sup> U.S. policy is that of a hegemon, who sees itself as beset by problems which it (often reluctantly) has to solve, since its clients (who themselves may be patrons) are simply unable to do so themselves. We would note that this sense of being dragged into new commitments is not uncommon among hegemons; British policy in the nineteenth century was marked by a similar sense of self.

## Why and How Does the U.S. Acquire Clients? Motives and Mechanisms

From the prior discussion, it is clear that the U.S. has been in the business of acquiring and protecting clients for a long time. Why have generations of U.S. foreign policymakers chosen to acquire clients? Since 1898, and arguably before, the United States has had political, economic and security interests to foster and protect on an increasingly global scale. For sure, particular interests have emerged, evolved, and changed. Threats, created by the particular enemies of the day that threaten those interests (revolutionaries, communists, drug traffickers, authoritarian despots, narcoterriosts, religious fanatics, kidnappers, pirates, among others), have come and gone. In our view, what has been a constant, across time and space, are the overarching U.S. goals of law and order, and stability. U.S. foreign policymakers have consistently believed that their political, economic, and security interests of the day require order and stability. <sup>11</sup> From time to time, of course, those interests may indicate that certain regimes should be countered or even overthrown (or, for many decades, that U.S. clients should lose their colonial empires), but such actions are always seen as a restoration or, conversely, the initial establishment of a certain kind of just international order. <sup>12</sup>

In the American view, the way in which order is indicated is via the existence of states with regimes which know their place in this order and which uphold its current principles. Such regimes must be defended; otherwise order is by definition threatened. This defense is partly against external threats; but to U.S. policymakers, the principal threats to such regimes are internal. Accordingly, existing clients must be scanned and surveilled on a regular -- ideally, a daily -- basis; and such is precisely the role of the enormous U.S. foreign policy bureaucracy as it is implanted in each U.S. client.<sup>13</sup> (Of course, this bureaucracy took quite a while to be built up, but by the late 1940s it was well in place.) But since U.S. clients may themselves have clients, those clients too should be scanned regularly to check on their health, even if this scanning might not be as frequent or as intrusive as for U.S. clients and even if it is directed more at "sub-clients" with regimes reported already to be shaky.<sup>14</sup> So too should "free agents" -- i.e., clientless states --

<sup>&</sup>lt;sup>10</sup> Franz Schurmann, *The Logic of World Power* (New York: Pantheon, 1974); Bruce Cumings, *The Origins of the Korean War*, vol. 2 (Princeton: Princeton University Press, 1990).

<sup>&</sup>lt;sup>11</sup> U.S. foreign policy makers often make remarks articulating this position. It is perhaps no more clearly stated than in the famous national security document NSC-68. "Our overall policy at the present time may be described as one designed to foster a world environment in which the American system can survive and flourish. ... This broad intention embraces two subsidiary policies. One is a policy which we would probably pursue even if there were not a Soviet threat. It is a policy of attempting to develop a healthy international community." (p. 252) "Even if there were no Soviet Union we would face the great problem of the free society, accentuated many fold in this industrial age, of reconciling order, security, the need for participation, with the requirement of freedom. We would face the fact that in a shrinking world the absence of order among nations is becoming less and less tolerable." (p. 262-3) (in *Foreign Relations of the United States, 1950,* Vol. 1. (Washington, DC: U.S. Government Printing Office.)

<sup>12</sup> Pace Kissinger, this is not at all a Metternichian goal but a Wilsonian, or, if you will, an Achesonian one.

<sup>&</sup>lt;sup>13</sup> For a discussion of the vast bureaucracies and the administrative apparatus constructed and deployed by the United States in the post-World War II era see David Sylvan and Stephen Majeski, "Overseeing a War: The 1961 Military Commitments," APSA paper, 1993. Our intention eventually is to construct a model of client state management (i.e., not only acquisition but also protection), and in this regard, we will want to include daily scanning and updating mechanisms. Agent-based models lend themselves nicely to this task.

<sup>&</sup>lt;sup>14</sup> We originally had thought that the U.S. would not be surveilling clients of its clients (e.g., Britain's clients) for the reasons presented above. However, a careful reading of one of the classic cases where the U.S. took over a client from its former patron (Greece in 1947) suggests that the U.S. was scanning the situation in the non-client for a year

be scanned (though not necessarily surveilled widely and deeply), since if they are threatened or plunge into chaos, this risks spreading and undermining international order. If such signs appear in either sub-clients or free agents, then, other means failing, it is a natural step for the U.S. at least to consider solving those problems itself; and this implies taking on the actor in question as a client.

As we have presented it, there is an intimate tie between client acquisition and client defense. This link becomes clearer when considering the way U.S. foreign policy has been (and appears to continue to be) made. We have argued elsewhere that high level U.S. foreign policy making regarding security has been the province of a small, largely autonomous, normatively cohesive, and secretive group of persons. 15 These groups of policymakers are constantly dealing with new and recurring problems and attempting to solve them. Such problems are typically brought to the attention of high level policy makers by the reports of the foreign policy bureaucracy. Thus, when serious problems arise, information about them is passed upward to the high level policy makers, who in turn are faced with the question of how to solve that problem. As one might expect cybernetically, the way a solution is constructed is by looking around at which actors (the client's military or bureaucracy; the client's patron's military or bureaucracy) are currently failing in the immediate task at hand. Solutions then present themselves quite simply: can the actor carrying out those tasks augment its efforts? If so, the U.S. should help it to do so. If not, then the issue on the table is whether the U.S. should take over responsibility for carrying out those tasks; and this obviously implies the possibility, if things go badly, of some kind of intervention. In this sense, the "inheritance" of tasks is the key micro-aspect of U.S. policy making, and it applies equally to existing U.S. clients (hence the notion of client defense) and to free agents and sub-clients (hence the notion of client acquisition).

A second link between client acquisition and client defense comes in what could be called (following Harold Garfinkel) the indexical character of policy making problems. High-level policy making involves a rhetoric of problem solving built up from situation descriptions regarding specific places. 16 For high-level U.S. foreign policy makers dealing with questions of war, diplomacy, client acquisition, and military intervention, problems and descriptions of them are about particular places, at particular times, characterized by particular situations. Should the United States intervene in a particular place and if so, how should it be done? In the world of high-level U.S. foreign policymakers, places usually are countries or regions; if the latter, then a set of countries or potential countries. Thus, policy making about problems in a given place means, typically, that policy makers have to consider the situation faced by the regime ostensibly governing that place; and here we return once more to the issue of clients and their acquisition. However, if places are really considered as inchoate, with complete lack of clarity regarding who is supposed to be in charge or even who is on the U.S. "side," then policy makers may well shy away from acquiring a client there (at least until such time as the place becomes clearer to them).<sup>17</sup> This, we think, goes some way toward explaining various officials were reluctant to intervene in Indochina during the siege of Dien Bien Phu; why the first Bush administration thought that, in the now famous words of James Baker, it had "no dog" in the Bosnian war; and

before the patron (Britain) gave up on its patron status (see Stephen Ambrose, *Rise To Globalism*, 2nd rev. edn., Penguin Books: New York, 1980), 125. Such anticipation is also found (and fictionalized, in Greene's famous novel) in the U.S. presence in Indochina during the final years of French rule. Note that scanning and surveilling of either a client of a client or of a colony of a client requires the "middle" patron's or metropolitan power's agreement.

15 We see this problem-solving culture as engaged in three central activities: constructing recommendations, choosing among recommendations, and reopening debate. On the first of these, see Stephen Majeski and David Sylvan, "How Foreign Policy Recommendations are Put Together: A Computational Model with Empirical Applications." *International Interactions* 25 (1999): 301-332, for a detailed discussion of how solutions to problems are generated as part of the routine process of recommendation construction.

<sup>&</sup>lt;sup>16</sup> Of course, certain problems, such as those concerning nuclear deterrence, may have a global quality, but even then, certain of the problems are place-specific. Recall, for example, the Reagan Administration's struggles over Pershing missile installations in Germany.

<sup>&</sup>lt;sup>17</sup> See Sylvan and Majeski, "Rhetorics of Place Characteristics."

why the Clinton administration was so reluctant to organize an intervention against the Cedras regime in Haiti.

Why the U.S. predilection for seeing the world in terms of clients? We have suggested elsewhere that part of the answer historically might have to do with the particular U.S. experience of empire, i.e., via settlement, the territory's white population enjoying citizenship rights and the eventual hope of statehood. In the late 19th century, this option was not open for Central America and the Caribbean, whereas there was a model -- the British and their clients in those regions -- which could be followed. At some point the patron-client relationship became part of the U.S. foreign policy repertoire and, once established provided an easy template for U.S. policy makers to employ. Part of the answer seems to be bureaucratic inertia. The foreign policy bureaucracy learned how to set up clients. Once it stumbled onto this policy, it did not need to innovate. It is also the case that the acquisition and maintenance of client states has proven in many instances to be a successful policy. The vast majority of clients has not presented insuperable problems for the U.S. and is content with their own status as clients. Indeed, the U.S. has experienced a high success rate by any standard, especially in comparison with that of other 20th century patrons.

Defense, as we have presented it, is of two sorts. One is a response to the presence of a danger arising from a specific enemy, one whose appearance offers the serious chance of a given state being undermined. This kind of danger, no matter how distant the links in the argument may be from each other, is a kind of reasoning based on place. The other kind of danger is based on time: not that there is a specific enemy somewhere in particular, but that the moment is particularly propitious for states in a certain type of situation to avoid future problems by acting then. Each sort of defense implies both a motive for the U.S. to acquire clients and mechanisms for acting on that motive.

Consider first the reasoning based on place. The motive here is to respond to a given enemy, one near enough to threaten countries not already shielded. Here, there are two considerations: "near enough" and "already shielded." To the U.S., "near enough" is not really a matter of number of miles distance, mostly because, as we pointed out above, the threat is less one of external attack than of internal subversion. American officials seem to reason about nearness by using a simple heuristic of region: an enemy in a given region is by definition a potential threat to every state in that region. As to "already shielded," this again is not determined, at least at the point of potential acquisition, by carefully weighing numbers of soldiers, tanks, and so forth (how could it, if the primary danger is of internal subversion). Rather, shielding is determined by another simple heuristic: does the country have a protector already on the job? Pre-eminent types of protectors are colonial masters and client patrons, so what lack of shielding means in practice is whether the country is a patron-less independent state. Of course, U.S. officials recognize that no shields are of equal value in the face of particularly dangerous enemies; and so if the latter had until recently been a U.S. client, it is deemed sufficiently dangerous to threaten even clients of patrons other than the U.S.

None of this reasoning, of course, implies that countries deemed particularly endangered will automatically become U.S. clients. At the minimum, since clients are formally sovereign, there has to be a willingness on the part of the state concerned to accept client status, with all that that implies as to surveillance and intrusiveness. We can think, therefore, of the "dangerous place" motive as implying a two-step mechanism: first, the United States identifies states as enemies and offers client status to patron-less independents in the same region as the enemy, with the offer being extended to clients of other patrons as well if the enemy was a former U.S. client. Second, the recipient of the client offer can accept or reject the offer, depending on whether its internal political situation permits U.S. surveillance (and, of course, with whether the state agrees that the

designated enemy is in fact an enemy). 18

Keep in mind that this mechanism only pertains to the U.S. acquisition of clients. For now, we bypass the way in which the U.S. and potential clients identify states as enemies; more immediately relevant, we also ignore other ways in which the U.S. deals with enemies. In fact, we have argued elsewhere that the U.S. reacts to particular threats in its existing clients in a variety of ways, each aimed at eliminating the threat. At times, such reactions may involve also attempts at subverting or overtly attacking an enemy deemed to be the source of an internal threat, as when, for example, the U.S. dealt with threats to South Vietnam by attacking North Vietnam in addition to bolstering the counterinsurgency war in the south and taking on Laos as a client, or when, in the early 1960s, the U.S. reacted to Cuba as a supposed source of subversion by launching invasion and assassination attempts in Cuba proper, while also sending aid to Central American regimes and taking on Jamaica and Trinidad and Tobago as clients. A follow-up to this paper will attempt to knit together these different strands of client acquisition and client maintenance.

It will be noted that there is no feedback mechanism specified. We see this as fundamental, since the point of a state's becoming a client is the maintenance of a particular regime type; hence, even if the enemy vanishes, the client will remain a client, ceteris paribus. "Maturation," in this sense, is beside the point. However, client status still remains consensual in an important sense: not only does a state become a client only if the U.S. offers and it accepts, but if the client subsequently changes its mind, it remains free to withdraw. Our sense is that a small number of states in fact do this (at a higher level of abstraction, this is what an internal revolution amounts to), and that the reverse possibility also exists: in which a formerly unwilling state then can, by changing its mind, invite (or re-invite) a U.S. client offer.

Various refinements to this mechanism are possible. It may be, for example, that there are limits to the number of clients that the U.S. can acquire; it may also be that there is a kind of diffusion process in which either alignment willingness or unwillingness are "imitated" across states in the same region.

A final point. It will be observed that in this "enemy" mechanism, nothing is said about the ideological color of the enemy. We do not exclude the possibility that enemies seen as all of the same sort (e.g., "communists") might have been judged as requiring greater shielding actions by the U.S. than ideologically diverse enemies. The historical evidence for this proposition, though, is sparse; and we would see it as more likely that anticommunism enters the picture at the level of enemy recognition heuristics than at the level of client maintenance or acquisition.

Let us now turn to the second motive that based on time. Our argument here is that certain historical moments are seen as particularly threatening, or, conversely, as particularly propitious to eliminating present or future threats. These moments seem to revolve around the imminence or immediate aftermath of interstate wars. Thus, if a major war is considered significant, great powers will attempt to prepare for war by establishing alignments with states whom they consider as in their own security domain. At the other end of the time line, there is a convention -- going back hundreds of years in the Westphalian system -- that winners of wars set up new alignments in an attempt to ward off a future war of that sort. These two generalizations, when applied to the case of client acquisition, suggest mechanisms combining space and time. If the U.S. considers a major war as impending, it will offer client status to states in its own backyard, i.e., in the Western Hemisphere. And if the U.S. was the leading state in a successful interstate war, it will offer client status to patron-less states in the region or regions in which it led the winning war.

<sup>&</sup>lt;sup>18</sup> In principle, this possible divergence in appreciation of a given state as an enemy offers interesting ground to explore. In practice, we have found that most of the time, the U.S. only offers client status to deal with states it thinks themselves agree on who is an enemy and who is not.

As before, these offers can be accepted or rejected by states, depending on their willingness to be aligned. There is one exception to this purely voluntary relation: states who were enemies and were subsequently occupied by the U.S. The idea here is that the occupation will serve to remake these former enemies into model international citizens, with the result that, when readmitted to the community of states, alignment will be voluntary.

We are well aware that the above description may seem naïve. Obviously, the U.S. puts pressures on states to join economic and security arrangements. But just as obviously, states do resist from time to time, calculating that as long as they do not take up arms against the United States, they may not suffer serious consequences, particularly with the U.S. having its plate full in other respects and, in any case, having considered the maintenance of the type of regime for them as in any case a higher priority. Beyond this, we are struck by how much, during various diplomatic negotiations about such "getting the ducks in a row" alignments, the various parties saw eye to eye. The particular genius of U.S. policy in the Truman Administration was to find ways to lead other states to a genuine consensus.

Once again, we would observe that the mechanisms pertaining to this second motive go beyond ideology. Certainly, U.S. efforts in the post-World War II years were premised on a struggle against communism; but they were also aimed at avoiding a relapse into closed economic trading blocs and other features identified as breeders of war by Cordell Hull and many of his associates. In addition, U.S. efforts at the end of the Spanish-American War and the end of the (first) Gulf War can hardly be qualified as anti-communist in ideology. Nor did the other mechanism, that pertaining to impending war, have anything to do with anti-communism (the concern was fascism, and this concern persisted until the waning days of World War II, when the U.S. tried to keep Argentina out of the new security pacts it was putting together for the Western Hemisphere on the grounds that its regime was an Axis sympathizer).

From the above discussion, we can see that the motives and mechanisms of client acquisition we have put forward are in principle applicable to any period in which the U.S. had the will and the power to acquire clients beyond its immediate borders. At any point, the appearance of enemies will spark the U.S. to acquire clients, whether or not there is a particular enemy seen as most dangerous of all. And at any moment, an impending or successfully led war can result in additional client acquisition, no matter what the particular justification may be at that instant.

For the most part, the mechanisms associated with these two motives seem fairly easy to distinguish. "Ducks in a row" mechanisms yield "wholesale" client acquisitions; "enemy" mechanisms yield "retail" acquisitions. But any given year may be marked by both types of acquisitions, and in certain cases, the mechanisms may be hard to distinguish (e.g., is the immediate aftermath of the Gulf War a matter of regional realignment or instead of shielding states against an enemy?). To explore these matters further, as well as to probe future possibilities and historical counterfactuals, we now turn to a computational model of these mechanisms in the agent-based tradition.

### An Agent-Based Modelling Approach

The approach we take to modelling the U.S. client acquisition process is based upon the agent-based modelling approach pioneered by Epstein and Axtell.<sup>19</sup> The general logic of this approach is to stipulate agents (micro-level phenomena) and their rules of interaction and then observe what macro-level social patterns or structures emerge in a simulated environment (computer

<sup>&</sup>lt;sup>19</sup> J. M. Epstein and R. Axtell. *Growing Artificial Societies: Social Science from the Bottom Up* (Washington, D.C.: The Brookings Institution, 1996).

simulation). Agent-based models typically have three constitutive components; agents, an environment or world those agents inhabit, and rules that stipulate how agents interact with other agents and their environment.<sup>20</sup>

Agents can represent all kinds of phenomena depending upon the artificial world being constructed. In abstract terms, agents are bundles of rules that define various internal states of the agent, and dictate how the agent will respond to various stimuli from other agents and the environment.<sup>21</sup> Examples of internal features or states of agents include sex, metabolic rate, and, as discussed in the model to follow, the agent's patron's identity and region tag. Examples of behavioral rules (often represented as if-then stimulus-response production rules) include such things as mating processes, and trading relations. The environment or world is "a medium separate from the agents, on which the agents operate and with which they interact."<sup>22</sup> Environments can be quite abstract or concrete. Finally, there typically are rules that stipulate agent and environment interaction such as resource consumption.

Thus, an agent-based model begins with an explicit set of assumptions about the three constitutive features of the artificial world (agents, the environment, and rules of interaction) and uses them to generate simulated data of that world.<sup>23</sup> Axelrod refers to agent-based modelling as a way to do thought experiments and suggests that it is a third way of doing science in contrast to the traditional inductive and deductive methods.<sup>24</sup> For related arguments about agent-based modelling see Epstein and Axtell's (1996) discussion about using computer simulations to "grow" artificial societies and generate social structures. Most scholars employing this approach search for patterns in the simulated data, particularly the large-scale effects from the interactions of locally interacting agents.

Underlying this logic is the notion that the ability to "grow" such structural or system-wide properties implies that the micro-level properties of agents and the rules stipulating their interactions are "sufficient conditions" to generate those structural properties. One can also ask a different question. Are there essential features of agents, those that define various internal states of the agent and those that define how they interact, that are necessary for the structural or system-wide property of interest to occur? If we systematically vary features of the agents or the way the agents interact and discover that the event (system-wide cooperation) or social structure (institution) occurs only when agents have certain features or interact in certain ways, then we can say that the existence of agents with those features or interactions of a certain type are necessary or essential for the system level result. Or put another way, given the features of agents and the rules specifying their interactions, what kinds of system level (social) outcomes are possible?

<sup>&</sup>lt;sup>20</sup> Agent-based modeling in political science (Schelling, T.C., 1978. Micromotives and Macrobehavior. New York: Norton. Axelrod, R. 1984. The Evolution of Cooperation. New York: Basic Books.; Axelrod, R. 1997. The Complexity of Cooperation: Agent-based Models of Competition and Collaboration. Princeton: Princeton University Press.; Epstein and Axtel, 1996; Cederman, L. 1997. Emergent Actors in World Politics. Princeton, N.J.: Princeton University Press.; Majeski, S.J., G. Linden, C. Linden, and A Spitzer. 1999. "Agent Mobility and the Evolution of Cooperative Communities Complexity, Vol 5:1, 16-24; Lustick, I. 2000. "Agent-based Modelling of Collective Identity: Testing Constructivist Theory," Journal of Artificial Societies and Social Simulation," Vol 3, No.1.

<sup>&</sup>lt;http://www.soc.surrey.ac.uk/JASSS/3/1/1.html>) has a complex lineage and set of connections to a number of other approaches; cellular automata (von Neuman, J. 1966. Theory of Self-Reproducing Automata. Edited by A.W. Burks, Champaign, IL: University of Illinois Press; Wolfram, S. 1994. Cellular Automata and Complexity. Reading, MA: Addison-Wesley.), cybernetics (Ashby, W.R., 1956. An Introduction to Cybernetics. New York: Wiley.; Steinbruner, J. 1975. The Cybernetic Theory of Decision. New Dimensions of Political Analysis. Princeton: Princeton University Press.); complex adaptive systems (Holland, 1995), Artificial Life (Langton, C.G., ed. 1989. Artificial Life. Redwood City, CA: Addison-Wesley.); and evolutionary game theory (Smith, J.M. 1982. Evolution and the Theory of Games. Cambridge: Cambridge University Press.).

<sup>&</sup>lt;sup>21</sup> Holland, J.H. 1995. *Hidden Order: How Adaptation Builds Complexity*. Reading, MA.: Addison-Wesley.

<sup>&</sup>lt;sup>22</sup> See Epstein and Axtel, 1996, 5...

<sup>&</sup>lt;sup>23</sup> See Axelrod, R. 1997. *The Complexity of Cooperation: Agent-based Models of Competition and Collaboration.* Princeton: Princeton University Press.

<sup>&</sup>lt;sup>24</sup> Axelrod, 1997, 3-4.

Social scientists are often interested in what kinds of institutions are generated by the practices of agents, who have various desires, preferences, strategies, and material capabilities, and the interactions among those agents. They are also interested in the effects that various practices of agents and the interactions among them have on the social structures that are generated. Agent-based modeling is an effective way of analyzing such relations and, while most modeling efforts tend to analyze simplified and more abstract versions of the social process of interest, the technology available now allows for quite complex and more "realistic" representations of the social processes than earlier simulation modeling in international relations.

Modelling via computer simulation provides the researcher with several advantages compared to more typical formal approaches. While the power of analytical solutions of such formal approaches as game theory and differential equations is undeniable, computer simulation are far more flexible and allow for the modelling of more complex phenomena. More complex models containing more elements, variables, parameters, interactions among variables, a variety of probabilistic components, and various kinds of relations among variables can be constructed and assessed. In addition to doing standard sensitivity analysis by varying initial conditions and parameters, simulation is an excellent medium to perform counterfactuals. Do various phenomena emerge if different agents' features are incorporated or different interaction rules posed? Not only can one do "experiments" by varying one feature or some combination of features and observe the effects on the dynamics and outcomes, but also we can stop the simulation in mid-course and query information about the behavior and features of agents or change the internal features of agents and rules of interaction in midstream and observe the results. The agent-based modelling approach, because it allows for heterogeneous agents (not just classes of agents such as in predator-prey models), a physical space that agents interact with but are distinct from, and local interaction among agents, provides some advantages over more traditional simulation approaches applied in the social sciences.

In the model of U.S. client acquisition we develop below, in typical agent-based modeling fashion, we establish a set of agents in an environment, provide them with particular features and rules, establish a set of initial conditions, and then run the simulation to see what behavior is generated or "emerges." However, our approach differs in several important ways from most agent-based models. First, our model has only a limited sense of space (i.e., geography or spatial neighborhoods). While agents are endowed with a regional "tag" and displayed on a grid within their appropriate region, their location within that region is not theoretically relevant to our modelled theory of U.S. client acquisition: agents are not closer or farther away to other agents within the same region and do not act on any such sense of distance. Second, the U.S. is not represented as an agent in the typical fashion of agent-based modeling (though this will change when we begin to model U.S. client state maintenance). The model consists of agents whose client status is what is being modeled; the agent "response" to the U.S. is glossed here as a variable. (In future work, we plan to set up a message-passing system between the US and other agents.) Third, unlike most agent-based models, there is very little interaction among the agents. Indeed, the interaction among the agents is only indirect and is based upon locality in a sense of regional similarity rather than a local neighborhood; we do, however, add as a possibility some limited degree of diffusion across agents in the same region.

But in a deeper sense, our modelling enterprise captures the spirit of agent-based models. The fundamental point of such models is to represent events not as single, atomic phenomena but as concatenated sets of interactions. By definition, such interactions take place between actors, and even if the actors in question are rather "stupid" (i.e., without much memory or reasoning abilities), their interactions can be made as concatenated and multidimensional as one might wish. For the moment, our model treats the U.S. as an absent, though looming actor (the quasi-theological language here is deliberate); but our intention, when expanding the model to take into account U.S.-client interactions, is to make it visible and to model client state status as precisely a

concatenated set of interactions.

A technical note. The model is written using the University of Chicago's RePast software framework for creating agent-based simulations.<sup>25</sup> This provides us with a library of procedures for creating and running Swarm-like simulations, though it is much easier to use than Swarm. The code for the model is itself written in Java and is available from the authors upon request.

The simulation is initially seeded with 220 agents. For display purposes, agents are randomly located within contiguous regions on a two-dimensional grid. For now, the agents have five defining features (eventually, we will add a number of other ones, such as resources, insurgency levels, and so forth): they have a client status (they can be non-U.S. colonies, U.S. colonies, non-U.S. clients, U.S. clients, and patron-less states); an enemy status (non-enemy, "regular" enemy, and enemy which was a former US client); a neutral status (pertaining to their willingness to align with the U.S. if asked: they may be unwilling, willing, or willing when earlier unwilling, this last being of considerable political significance); a "closeness" status (is the agent in question in the U.S. "backyard," so to speak); and a "regional" tag (there are 8 regions: Central America and the Caribbean, including Canada; South America, including Liberia; Western Europe, Nordic and Mediterranean countries; the Middle East and North Africa; Central and Eastern Europe, including the Caucasus; Asia; and Oceania, including Australia and New Zealand). In addition, agents also share two temporal traits: whether there is an impending multi-region war; and by whether the region in question was the site of a recently successful interstate war led by the US (with differentiation depending on the intensity of combat in the region).

Agents are created one region at a time (30 Central America, 15 South America, 45 Africa, 25 Middle East, 25 Western Europe, 25 Eastern Europe, 35 Asia, and 20 Oceania). They are randomly assigned client status using as probabilities the relative frequency of such statuses, by region, in 1898 (at this point, there are no US colonies or US clients). We also randomly assign willingness to align with the United States if asked, with most agents being assigned as willing, but with the percentage varying by region (Middle East, Africa, and Asia having lower percentages of willingness). "Close" status is granted to all agents in Central America and South America. All agents are initially assigned to be non-enemies and not to inhabit regions then characterized by impending war or by US-led successful war. In the display, we have shown non-US colonies as grey, US colonies as light blue, non-US clients as yellow, US clients as dark blue, patron-less independent states as green, and enemies as red (if an agent is both an enemy and some other status, it is always red).

The purpose of the model is to update, for every iteration of the model (these iterations, called ticks, are set at four per year; we always run the model at least up to the early 21st century and often beyond), each of the five client statuses. To do this, we first have to update the other agent attributes, and this is done via a series of functions as follows.

- 1. Impending war is hard-wired in to turn it on only for the year and a half preceding World War II. We however have as a user-adjustable parameter the possibility of adding a second impending war some time after 1960, with the user specifying the date.
- 2. U.S.-led successful wars are hard-wired for the Spanish-American War (Central America as intense combat, Asia and Oceania as non-intense combat); World War II (Western Europe, Asia, and Oceania), and the (first) Gulf War (for the Middle East). We have as a user-adjustable parameter the possibility of adding another US-led successful war after 1995, with the user specifying the date, the region, and the intensity of combat.
- 3. Enemy status. Colonies and non-US clients are not permitted to become US enemies (based

<sup>&</sup>lt;sup>25</sup> Available at http://repast.sourceforge.net for downloading.

on historical observation). We randomly let a certain percentage of patron-less states become enemies, with the percentage varying by period (pre-cold war, cold war, post-cold war; these are all user-adjustable parameters, with defaults drawn from historical frequencies); U.S. clients also randomly can become enemies, with the probability being less than for patron-less states (how much less is again a user-adjustable parameter). Once a state is an enemy, it stays in that condition for a certain period of time, again varying by the three periods above (the duration for each period is user-adjustable), but this time with former U.S. clients staying as enemies for the same length of time as patron-less states who are enemies.

4. Neutral status. Most of the time, agents do not change their willingness or unwillingness to align with the U.S. However, there is a randomly drawn percentage of states in one category switching to the other category (we have specified the percentage here from historical frequencies), and this percentage may be affected by the possibility of diffusion: if there is more than one neutral in the region, this may raise the probability of U.S.-aligned states becoming neutral, just as it may lower the probability of neutral states becoming U.S.-aligned. This amount of raising or lowering is a user-adjustable parameter; the default is that there is no diffusion.

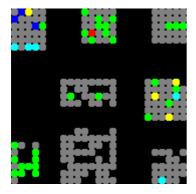
Having updated the other agent attributes, we are in a position to update the agent's client status. We do this as follows.

- 1. Non-U.S. colonies have a certain probability of becoming either independent and patron-less, or independent and non-U.S. clients; this probability is derived from historical frequencies, and varies between before and after the end of World War II (the latter being higher). If the U.S. took the lead in a successful war, the U.S. takes over some colonies as spoils of war, but otherwise the probabilities of becoming independent are not much changed.
- 2. U.S. colonies have a small chance of becoming U.S. clients (not patron-less), this chance varying depending on whether they are in a region close to the US or not (the latter probability is higher).
- 3. Non-U.S. clients. Here there are two cases. If the region has an enemy which used to be a U.S. client, then non-U.S. clients in that region will, if willing to align, become U.S. clients (this stems from the enemy mechanism discussed above). There may be a ceiling effect which limits the number of such U.S. client takeover to a certain number during the year (this is a user-adjustable parameter, with the default value that it not apply). But if the region does not have an enemy which used to be a U.S. client, then the non-U.S. client will most likely remain a non-U.S. client for a long time; we therefore assign a small (historically derived) probability of becoming a U.S. client (the figure is a compromise among different patrons).
- 4. U.S. clients. If the client has in the last iteration become an enemy or a neutral, it is automatically reassigned patron-less status. Otherwise, there is a small (historically derived) probability of becoming patron-less, with the post-World War II probability being greater than for before 1945.
- 5. Patron-less states. This is the core of the model. We start by hard-wiring the Soviet Union's transformation of Eastern European patron-less states into clients at the end of World War II; we then add in the U.S. occupation of Axis states in Western Europe and Asia at the end of World War II; this is done on the basis of one of the "ducks in a row" mechanisms specified above: the U.S. being the leader in a successful war in that region and there being enemies in the region just before the war ends. We then add in the major "ducks in a row" mechanism: patronless states in a region in which the U.S. has led a successful war are offered client status and accept it if they are willing to be aligned (we treat the acceptance of the offer as simultaneous with its issuance). Then comes a final "ducks in a row" function: in preparation for a multi-

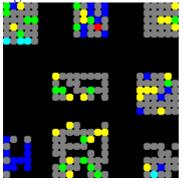
regional war, the U.S. offers client status to a set of patron-less states in "close" regions. Then comes a second and major "enemy" mechanism: if there is a recent enemy in the region (over the last five years), the U.S. offers client status to patron-less states. Willing states accept (again simultaneously). The U.S. offer, as with the case of non-U.S. client updating, has an optional user-adjustable ceiling parameter, in which the U.S. will not take on more than a certain number of such clients in a given year. Finally, we add in a variant of the enemy mechanism: if a state which was neutral becomes willing to be aligned with the U.S. then (assuming it had an offer made previously), the offer is reactivated and the state becomes a client. Analysis

The model has a significant number of parameters and probability functions so the first task is to see how whether or not the model is relatively stable. That is does the model generate relatively similar patterns across a number of simulation runs. We ran the simulation twenty times for the set of initial parameters noted earlier. Not surprisingly there is some variation across the simulation runs but in most respects the model generates relatively stable patterns for the variables of relevance. First, in all twenty runs, there are "two ducks in a row" acquisition spikes in the 1940s that coincide with the two spikes in actual client acquisitions at the start of World War II and following World War II. There is another smaller spike that consistently occurs across the runs that coincides with the Gulf War in 1991. Second, the bulk of U.S. client acquisitions across the twenty simulation runs occur in regions that we expect -- Central America and the Caribbean, South America, and Western Europe whereas client acquisitions are quite limited in the Africa, Central and Eastern Europe and Asia. This trend can be observed by examining a set of snap shots of the simulated world at various time points. Note black spaces denotes no agent, grey are colonies of countries other than the US, light blue are US colonies, yellow are clients of other countries, dark blue are US clients, green are patron-less independent states, and red are enemies. Also the upper left region denotes Central America and the Caribbean, bottom left South America, top middle Western Europe, middle column middle row Middle East and North Africa, middle column bottom row Africa, top right Central and Eastern Europe, middle right Asia, and bottom right Oceania.

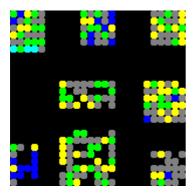
Agent simulation 120 ticks -- 1930



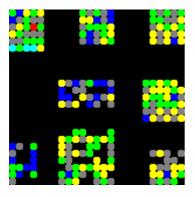
Agent simulation at 225 ticks -- 1955



Agent simulation at 320 ticks -- 1980

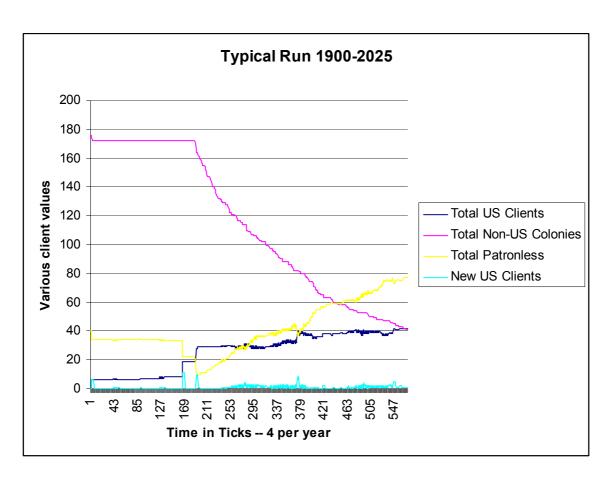


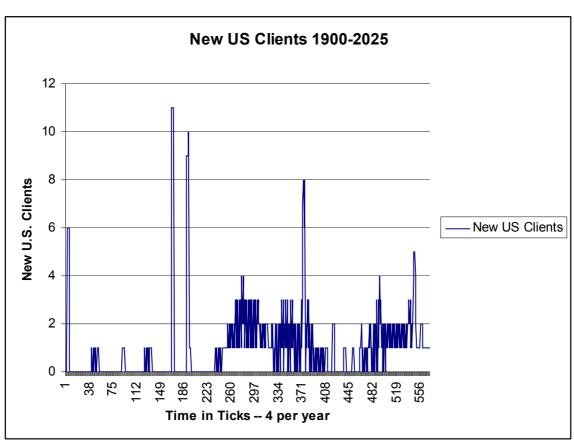
Agent simulation at 420 ticks - 2005

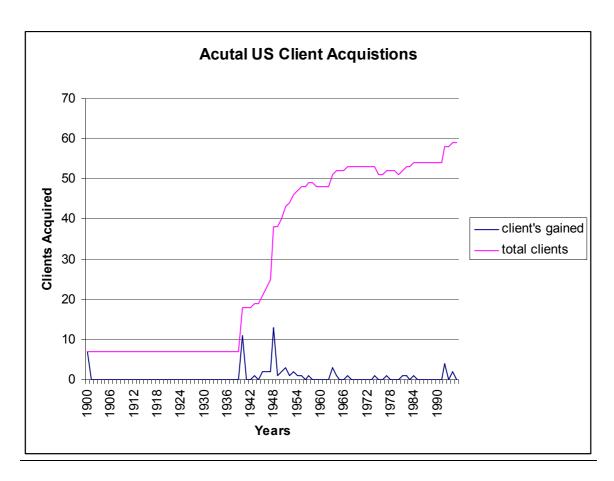


Several expected patterns are demonstrated in this set of span shots from one a typical simulation run. First, note the presence of very few U.S. clients and the limited number of patron-less independent states located mostly in Western Europe and South America in 1930. Second, as anticipated groups of US clients appear in both Western Europe and South America by 1950 and clients of other patrons emerge in Africa, Asia as decolonization picks up speed and with the domination of Eastern Europe by the Soviet Union. Third, the snap shots in 1980 and 2005 reveal the continued clustering of US clients in Central America and the Caribbean and Western Europe with the addition of a number of clients in the Middle East and North Africa. Note as well that these two snapshots also reveal higher than expected "losses" of U.S. clients in various regions.

Simulated results on client acquisition and other variables of a typical run are presented in the following two charts. Two additional consistent patterns also emerge across the twenty simulations runs. First, the total number of US clients acquired varies between 25 and about 40. Second, the U.S. tends to lose on average about 25 clients per simulation run. When we compare these results with actual US client acquisition (see chart below), it is clear that the model consistently under generates the number of US client acquisitions This may be a function of the fact that the model appears to generate an insufficient number of enemies so that retail acquisition of clients due to danger not sufficiently represented. However, an examination of the simulation runs suggests that too many clients appear to be "lost" by the US and become



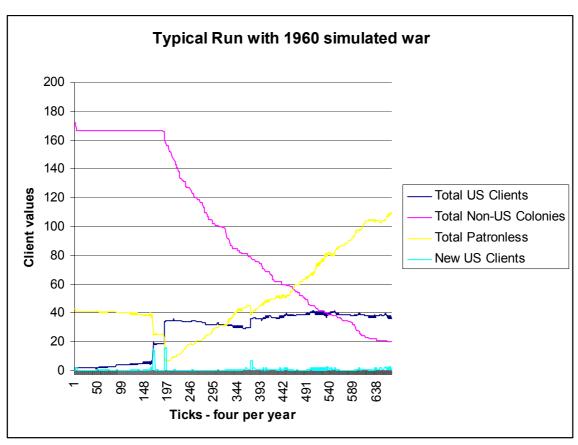




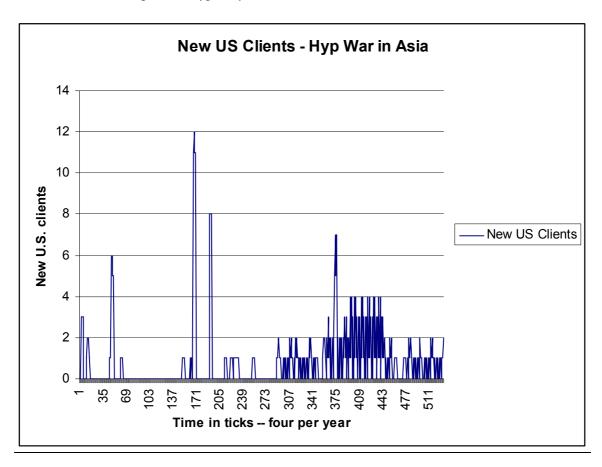
patron-less independent states; on average about 25 versus only 5 historically. Thus, the under generation of clients acquired is more likely due to the fact, as noted earlier, that this is an incomplete and underspecified model. Specifically, what is not modelled here is how the US maintains clients.

Next, we used the simulation to examine three types of counterfactuals; a hypothetical war involving the US circa 1960, large hypothetical wars involving the US in the 1990s and early 2000s in various regions, and increasing the number of enemies generated in the post-cold war era. The simulation was run a number of times with the simple addition of a hypothetical war involving the US in 1960. We would anticipate that a war of this nature would lead to the acquisition of a large number of clients via the "ducks in a row" mechanism. In addition, the timing coincides with the presence of a large number of new patron-less independent states as a result of decolonization. The analysis indicates (see results of a typical run below) that the introduction of such a hypothetical war in 1960 has little effect on US client acquisition.

Various large hypothetical wars were introduced into various regions (Middle East, Central Europe and Asia) in the 1990s and early 2000s. The simulation results suggest that hypothetical wars introduced into Central and Eastern Europe in the mid 1990s and in the Middle East in 2003 have no effect on US client acquisition. Interestingly a large hypothetical war introduced in the Asian region in 2003 generates some interesting effects. Client acquisitions spike up at the



time of the hypothetical war (see chart of typical run below – around 420 ticks or the year 2003) and overall client acquisition typically rises to over 50.



One final counterfactual manipulation was introduced by increasing the probability that patronless states become enemies in the Post-cold war era. A number of simulations were run with varying increases in the probabilities of generating enemies. With relatively moderate increases in the probabilities of generating enemies, the simulation results show essentially no effect on U.S. client acquisition.<sup>26</sup>

### Conclusion.

We have argued that United States foreign policy in the twentieth century has been built around the creation and protection of client states. We laid out the elements of a theory of client state acquisition based on a U.S. concern with stability and order. The US acquires clients via two mechanisms; an "enemies" mechanism and a "ducks in a row" mechanism. The theory was then modelled using simulation; the model contains certain agent-based elements. The preliminary analysis of the model indicates that 1) the model generates fairly stable results; 2) it tracks the historical cycles in US client acquisition (periodic spikes) fairly well though it systematically under represents the number of clients that the US accumulates. Clearly there is much more to do in both assessing the model and in adding the client maintenance component. In addition, the simulation was used to assess various counterfactuals; a hypothetical war involving the US circa 1960, and large hypothetical wars involving the US in the 1990s and early 2000s in various regions and these results suggest that more counterfactual analysis and sensitivity analysis of the model is warranted.

<sup>&</sup>lt;sup>26</sup> When the probabilities are increased substantially, US client acquisition increases in the Post Cold War period. However, the US also loses clients more frequently suggesting that the probability of patron-less clients becoming enemies cannot be pushed too high.