Cooperation and Conflict

Evidence on Self-Enforcing Arrangements and Heterogeneous Groups

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ABSTRACT. A conventional wisdom in the literature contends that without a system of formal enforcement, heterogeneous groups are unable to peacefully interact for mutual benefit and are prone to eruptions of violent conflict. This article maintains that the amount of such conflict has been dramatically overstated and the occurrence of peaceful interaction dramatically understated. The common view reverses the empirical reality of the world. Historical evidence indicates that where formal institutions are absent, heterogeneous individuals signal credibility to one another by engaging in shared customs and practices, enabling peaceful intergroup exchange. This evidence challenges prevailing beliefs and suggests that peaceful cooperation characterizes most heterogeneous group interaction.

I

Introduction

A PREVAILING WISDOM IN THE LITERATURE CONTENDS that social heterogeneity presents a problem for cooperation. Research by Greif (1989), Ellickson (1991), Bernstein (1992, 2001), Benson (1989, 1990), Zerbe and Anderson (2001), Landa (1994), and Clay (1997) all provides historical evidence of self-enforcing arrangements ensuring that contracts

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made are carried out smoothly. A common criticism of these examples, however, maintains that self-enforcing arrangements break down when extended outside the bounds of close-knit homogeneous communities (see, for example, Greif 1989, 1993; Landa 1994; Zerbe and Anderson 2001). A related literature on ethnic fractionalization emphasizes the obstacle heterogeneity creates in the provision of public goods (see, for example, Alesina, Baqir, and Easterly 1999; Easterly and Levine 1997; Cutler, Elmendorf, and Zeckhauser 1993; Goldin and Katz 1998) and in enabling trust (Alesina and La Ferrara 2002). It is widely believed that without a strong state, heterogeneous groups are not only unable to reap the gains from peaceful exchange but are also prone to inevitable eruptions of violent conflict (see, for instance, Horowitz 1985; Moynihan 1993; Kaplan 1993). But does the empirical record support this widely-held belief? On a daily basis we face interaction with complete strangers who over most dimensions are completely different from us. That the overwhelming majority of these interactions are peaceful *may* be due to the fact that they occur in the shadow of formal enforcement, but is this really a compelling explanation?

We often find ourselves in circumstances in which the mere existence of formal enforcement is effectively worthless. Contracts are incomplete or costly to enforce, the legal system fails, and the state's eye cannot be everywhere all the time. Indeed, in many of our encounters with "outsiders" we find ourselves in a position where we could surely get away with taking advantage of others; nonetheless, we overwhelmingly refrain from cheating. Our everyday experiences seem to cast doubt on the "shadow of the state" explanation mentioned above.

Additionally, history provides numerous examples of heterogeneous groups exchanging peacefully without the aid of a formal legal system. The post-Soviet republics and Africa in particular are often thought of as typical of the disasters that befall heterogeneous territories where formal authorities fail to play a prominent role. But according to the research of Fearon and Laitin: "In those many spaces where state authority is absent or weak—for example, in many of the post-Soviet republics—interethnic relations frequently remain cooperative" (1996: 715). In fact, between 1991 and 1995, among 30 of the non-Russian republics formerly under Soviet control, only three have experienced Russian/titular violence. The 14 former republics of the Soviet Union, excluding the Russian Federation, contain 45 different ethnic groups. Of these 45, only two have experienced violent conflict (Fearon and Laitin 1996: 716). In Africa the evidence is even more striking. Using data from Morrison, Mitchell, and Paden (1989), Fearon and Laitin find that between 1960 and 1979 the average number of violent events as a percentage of intergroup interaction is roughly *zero* (1996: 717).

While I certainly do not wish to say that there is never intergroup conflict, I contend that the amount of such conflict has been dramatically overstated and the occurrence of peaceful interaction dramatically understated. The common view, in short, reverses the empirical reality of the world. While most academic work suggests that violence is the rule, it is really the exception. For intergroup interactions in the real world, "peaceful and cooperative relations are by far the more typical outcome than is large-scale violence" (Fearon and Laitin 1996: 715).

This article aims to correct the false impression created by much of the literature that differing social groups cannot realize the benefits of exchange without a formal legal apparatus. The evidence suggests that heterogeneous individuals *signal* credibility to one another by engaging in each other's practices, customs, and traditions. Through these signals heterogeneous individuals are able to convey trustworthiness, enabling peaceful exchange despite the absence of a formal institutional structure. This practice is ancient. From tribal societies that engage in one another's religious ceremonies to international businessmen from across the globe who engage in shared methods of contract and arbitration, by associating with the customs of outsiders, heterogeneous individuals have established trust-enabling peaceful interaction throughout history. By briefly presenting some historical examples I hope to illuminate this fact and in doing so challenge the conventional wisdom, which holds that where a strong state presence is lacking, intergroup conflict is the rule.

II

Tribal Exchange

"[M]any historians, anthropologists and archeologists have found evidence of the existence of intersocietal exchange of fundamental goods among such stateless societies" (Chase-Dunn 1998: 45). In order to feel satisfied about the credibility of outsiders, individuals required marginal "cultural adjustments, often including complex manipulation of kinship and religious beliefs" from foreign potential trading partners to signal trustworthiness in exchange (Curtin 1984: 27–28).

Shared use of the "gift-exchange system"—a system of exchanging special ceremonial goods between heterogeneous groups—is employed among many stateless tribes as a means of signaling credibility to secure peaceful intergroup exchange. The Hiri of Central Papua (Seligman 1910), the Te of the Central Highlands (Bus 1951), the Kalinga of the Philippine Islands (Service 1975), the Kula Ring of the East Papuo-Melanesian tribal groups (Landa 1983), and the Moka of Mount Hagen (Strathern 1971) all employ the gift-exchange system toward this end. Here, we will analyze the Kula Ring gift exchange, the essential properties of which, for our purposes, adequately characterize this system of heterogeneous exchange for the other groups mentioned above.

While people who populate the East Papuo-Melanesian region where the Kula Ring operates share the same name—the Massims—the tribes that compose this population "are by no means a culturally homogeneous group" (Landa 1994: 144). Among their differences, the Massims have different languages and physical appearances. The tribes also have "different culture" and are "not bound by the same rules of overall behavior" (Belshaw 1965: 14). Consequently, Massims who do not belong to the same tribe view each other as outsiders (Malinowski [1922] 1961). Although Massim tribes have chiefs, they contain no institutions that resemble government and so are considered stateless societies by anthropologists (Dalton 1978).

"[T]he instrumental function of the Kula Ring" is "the creation of networks of alliances among stateless societies so as to facilitate commercial exchange" (Landa 1994: 142). The system achieves this end as follows. Within the Kula Ring, two ceremonial goods, necklaces and armshells, are circulated geographically between tribes in opposite directions. A Massim from one tribe that desires trade with an outsider offers him a nonceremonial gift. This outsider in turn offers the initiating Massim a ceremonial gift. In engaging in the gift exchange, the receiver's acceptance of the ceremonial gift signals his credibility. In order to remain in good standing with his trading partner, the initiating Massim in turn signals his trustworthiness by offering an equivalently valued ceremonial gift at a future date. Those who fail to do so lose reputation and with it the possibility for trade. Within the Kula Ring gift-exchange system, particular ceremonial objects that have been circulating for long periods of time develop special names and, owing to their related history, indicate that their offerer is particularly trustworthy. The holders of these objects are thus viewed differently (as less risky) than others in exchange. Traders with a poor reputation have trouble obtaining named objects because they are not as trusted in exchange.

As Landa puts it, the give and take of ceremonial goods in the gift-exchange system "serve as signaling devices of *mutual cooperative intent* on the part of both the giver and receiver" (1994: 162). Because he is engaged in a common practice with an outsider, a Massim tribe member's willingness to offer or receive one of these ceremonial objects signals his credibility to the outsider. By making shared use of the gift-exchange system, heterogeneous individuals from differing stateless tribal societies convey trustworthiness to one another, enabling trade. Signaling through this shared practice allows heterogeneous traders to overcome the problems of uncertainty and informational asymmetries posed by their social distance. Offer or receipt of a special named object enables additional/more valuable transactions through signaling stronger credibility. Additionally, by engaging in the shared practice of the gift-exchange system, individuals from heterogeneous tribes create a degree of commonality among one another, reducing social distance and enhancing their ability to cooperate for mutual gain.

Massims from one tribe often require outside tribe members to participate in magical and ceremonial rites before establishing an exchange relationship. By requiring outside tribesmen's involvement in magical rites, tribes are able to further screen their potential trading partners. Conversely, quasi-religious participation by the outsider signals his trustworthiness in trade. Indeed, quasi-conversion to another group's religion has proved so powerful a signal in securing a stable trading relationship between heterogeneous groups that it has been used rather frequently among stateless tribes historically for this purpose.[1]

How well did the Kula Ring's gift-exchange system work? "As long as ceremonial exchanges continued to take place assuring that peace prevailed, the linked groups could continue to carry on other mutually advantageous activities, such as trade" (Dalton 1978: 160). The Kula Ring's use of shared religious practice proved extremely effective as well. By engaging/associating with the customs and practices of outsiders, individuals from the heterogeneous groups inside the Kula Ring signaled their credibility, securing peaceful exchange between one another without a formal institutional arrangement.

Heterogeneous individuals in stateless tribes also commonly used marriage to signal credibility as a means of enabling intergroup exchange. Heterogeneous agents that intermarry create a shared custom between each other. Intermarriage constitutes a sort of mutual engagement in the custom of an outsider by both parties and creates a significant bond between the members of heterogeneous groups that become linked through kinship. The coastal tribes of the Huon Gulf, which anthropologists characterize as "ethnically heterogeneous communities," provide a good example of this practice typical among many small stateless societies (Sahlins 1972: 286–288). A similar practice was employed in 18th-century Java, where Chinese merchants would marry local women to signal trust as means of forging the foundation for intergroup exchange relationships (Curtin 1984: 11).[2] By intermarrying, these merchants established their credibility in trading partnerships with outsiders. This practice by Huon Gulf tribes has proved highly effective in ensuring that the mutual gains from trade available through peaceful interaction are realized. Indeed, many of these "villages would not have been able to exist as constituted in the absence of [such] trade" (Sahlins 1972: 286–288).

The tribal evidence presented above primarily illustrates the effectiveness of the signaling mechanism in securing peaceful interaction among heterogeneous groups in primitive settings with small numbers. Past and present evidence from the international arena, however, demonstrates the widespread use and effectiveness of signaling through shared practice in securing exchange among heterogeneous groups on the order of an entirely different magnitude. As we will see below, the international arena provides considerable evidence of peaceful intergroup exchange in global settings with large numbers.

III

The Medieval Law Merchant

RESEARCH BY MILGROM, WEINGAST, AND NORTH (1990), Trakman (1983), Lopez (1976), Berman (1983), and others points out the historical operation of the *lex mercatoria*, or the "law merchant," in enabling trade among heterogeneous groups where formal enforcement was absent. The law merchant is a complex polycentric system of customary law that arose from the desire of heterogeneous traders in the late 11th century to engage in cross-cultural exchange. This custom-based system relies on private arbitration for resolving disputes. Between the early 12th and late 16th century, virtually *all European trade between heterogeneous groups* (i.e., international trade) *operated this way and with great success.*[3] This system enabled large groups of heterogeneous merchants to expand trade to the efficient level, realizing the gains from international exchange (Milgrom, North, and Weingast 1990).

Original documents from traders between the 13th and 15th centuries indicate that traders signaled credibility to one another by sharing customs and practices to initiate exchange, just as we have described.[4] Documents that go as far back as the 9th century indicate the ubiquity of this mechanism as a means of enabling trade. These documents indicate, for instance, that traders learned the languages of the outsiders they desired to trade with to signal their credibility and make possible exchange. A trader writing between 846 and 886, for example, states that "merchants speak Arabic, Persian, Roman, Frankish, Spanish, and Slavonic" (qtd. in de Goeje [1889] 1909:

114–116). By having knowledge of a diverse group of languages, merchants could signal their credibility to a multitude of outside potential trading partners.

To signal credibility, merchants had to engage in many different outsiders' customs if they desired exchange. As a merchant from Naples in 1458 put it, one must "'adapt oneself to the circumstance'" if he is to be successful in exchange (Cotrugli 1573: fol. 25v.–29r.). Frequently this involved adopting the manners and disposition of the outsiders one desired to trade with. According to our Napoli merchant, in order to "enjoy as much reputation or credit" as needed to facilitate exchange, "merchants must not have the fierce manners of husky men-at-arms, nor must they have the soft manners of jesters and comedians, but they must be serious in speaking, walking, and in all actions" (Cotrugli 1573: fol. 64v.–66v.). Sharing these "manners" created a "reputation" for trustworthiness that enabled intergroup exchange. Appearance was also important in signaling credibility to outsiders. A merchant writing from Florence sometime in the early 14th century advises traders to "[w]ear modest colors, be humble, [and] be dull in appearance . . ." (qtd. in Sapori 1947: 642). His advice suggests that traders looked to customs and practices like dress and manners as signals of trustworthiness when deciding whether to exchange with outsiders.

While shared customs and practices signaled credibility and enabled intergroup trade, *failure* to engage in common customs and practice signaled a *lack* of credibility and could destroy the possibility of exchange. A merchant writing from Florence in 1393 writes: "Have nothing to do with one who . . . gambles, lives in luxury, overdresses, feasts . . ." (Morelli 1718: 260–261). The words of a trader writing from Genoa at the end of the 13th century echo this fact. To aspiring merchants, he advises: "Be courteous to everyone, but consider well in what way; while making nice manners and cheerful and pleasant appearance part of yourself" (qtd. in Parodi 1886–1888: 114–115). "Nice manners" and "cheerful appearance" signal credibility, but overly courteous behavior runs the risk of signaling untrustworthiness to outsiders who may moderate their cheer.

Innumerable shareable customs and practices served as bases for signaling credibility among medieval international merchants. Writing in Florence at the beginning of the 14^{th} century, Dino Compagni's poetry points to the critical importance of commonality over three particular dimensions of custom and practice in enabling trade. The successful merchant, he writes, will be "[g]enial in greeting without complaints, He will be worthier if he goes to church . . . Further, he must write Accounts well-kept" (qtd. in Del Lungo 1879–1887: 389). Shared manners, religious practice, and accounting methods all signaled credibility to outsiders and made exchange possible.

Trader documents provide numerous examples of the importance that heterogeneous traders placed on shared customs and practices in relaying information about outsiders' credibility. Writing about Milan in 1288, one merchant observes that "its natives . . . have the peculiarity of being rather tall, jovial in appearance, and quite friendly, not deceitful, still less malicious in dealing with people from outside their town, and because of this they also are more highly considered abroad than others. . . . They live decently, orderly, and magnificently; they use clothing that does them honor . . . good-humored in customs and way of life . . ." (qtd. in Novati 1898: 67–114). This merchant is quite clear that the customs, appearance, and behavior of the people of Milan are decisive in outsiders' evaluation of their credibility and suitability in exchange.

A merchant practice guide written in Florence between 1310 and 1340 is even clearer about the importance of the signaling mechanism in enabling intergroup exchange. In a telling passage, the guide imparts advice to Western traders who desire to trade with the Chinese: "First, it is advisable for [the trader] to let his beard grow long and not shave. And at Tana he should furnish himself with dragomans[5] . . . And besides dragomans he ought to take along at least two good manservants who know the Cumanic tongue well. And if the merchant wishes to take along from Tana any woman with him . . . he will be regarded as a man of higher condition than if he does not take one" (qtd. in Evans 1936: 21–23). The necessity of engaging in the customs and practices of outsiders to signal credibility and enable intergroup exchange was thus widely known and accepted by traders.

Perhaps most significantly, traders' common voluntary submission to the business and arbitration practices embodied in the *lex* *mercatoria* signaled credibility to one another as well. Traders who ex ante agreed to the business and arbitration practices of the *lex mercatoria* created commonality over these customs, signaling their credibility, which in turn fostered peaceful exchange. Some practices shared for this purpose included the use of certain media of exchange (Uzzano 1442); notaries (Lopez 1976: 108); standardized weights and measures (Unknown after 1345: 49–50); standardized units of account; witnesses to contract (North 1990: 121, 129); and membership in transnational trading associations and guilds (Berman 1983: 342). When one particular trader did not share sufficient commonality with another to signal credibility at the level required for his desired volume of exchange, he would pool together with a number of other individuals to form quasi-partnerships and corporations called *compagnia* and *societas*. When taken together, the number of individuals comprising such pools shared considerably more customs and practices with the outsider, making a higher volume of trade possible (Lopez 1976: 73–79).[6] Because partners to such ventures often came from outside small homogeneous family groups, signals of credibility based on shared custom and practice also were important in choosing partners. Thus, in a *societas terrae* contract circa 1282, the terms of the signing trader read: "I promise you that as long as I remain our factor . . . I shall not gamble in any game of dice . . . nor shall I have carnal relations with any married woman, virgin, or religious" (qtd. in Sapori 1947: 502–503). By adopting the moral behaviors required by his extra-familial partner, the signing trader signaled credibility, making his partnership with the outsider possible.

A brief digression is in order. Up until now our treatment of the signaling mechanism employed by heterogeneous individuals to enable intergroup exchange has neglected a potentially important question regarding the use of disingenuous signals. We might wonder how the self-enforcing arrangements described thus far were able to function effectively, given that there appears to be nothing preventing agents from signaling credibility only so that they can cheat their partners in actual exchange. Why don't individuals send disingenuous signals?

Individuals are unlikely to cheat after signaling credibility for two reasons. First, given that no individual can signal credibility costlessly, once investment in a credible signal has been undertaken, the expected payoff from cheating must rise in order to keep cheating worthwhile. Stated alternatively, given that investment in signaling credibility constitutes an additional cost to cheating, the profitability of cheating falls. Where the cost of signaling credibility is C and the expected payoff from cheating is z, in order for cheating to be profitable, $z \geq C$. If individuals are overly concerned about the possibility of disingenuous signaling, all they need to do is set $C > z$. When this is done, the only individuals who bother to send signals are those who intend to cooperate in interaction. Second, the relative price effect of engaging in shared customs or practices for the purpose of signaling makes cooperating cheaper and cheating more expensive. Once an individual has invested in signaling credibility, whether he or she intends to cheat or not, the relative price of now cooperating has fallen and the relative price of now cheating has risen. In equilibrium then, we should predominantly observe cooperative groups interacting—chiefly what we do observe.

IV

The Modern Law Merchant

THE STORY OF MODERN-DAY INTERNATIONAL TRADE is very similar to that of the medieval law merchant (Lew 1978: 585). Modern international trade still makes wide use of customary practice and private arbitration. Indeed, in the early 1990s, at least 90 percent of all international trade contracts had arbitration clauses (Benson 1995). By sharing business and arbitration practices, heterogeneous traders of the modern *lex mercatoria* are able to signal credibility, securing peaceful exchange between each other as well as they did in medieval Europe. Private international commerce organizations, most notably the International Chamber of Commerce (ICC), often oversee such trade relations between members and arbitrate disputes when they arise (Böckstiegal 1984). By sharing membership in such organizations, heterogeneous individuals signal their credibility to one another as well.[7]

This system has functioned exceedingly well in enabling trade between heterogeneous agents.[8] According to the World Bank, in 1999 international trade accounted for nearly 25 percent of world GDP. This figure provides a good sense of the immense scale of heterogeneous exchange occurring without external enforcement in modern international commerce (World Bank 2002). Furthermore, "arbitral awards are most generally promptly and willingly executed by business people" (David 1985: 357). Indeed, virtually "[e]very research into the practice of international arbitration shows that by far the great majority of arbitration awards is fulfilled without the need for enforcement" (Böckstiegal 1984: 49). In a study published in 1981, a survey of international oil traders indicated that over 88 percent of all contracts entered were carried out without dispute. Of the remaining 12 percent, respondents indicated that 76 percent of disputes were arbitrated successfully by private adjudication (Trakman 1983: 53). This particular outcome supports our claim regarding the use of disingenuous signals. Regardless of their ex ante intentions, once international traders have invested in signaling credibility by engaging in the business practices established by the *lex mercatoria*, they find it in their interest to follow through on the agreed-upon terms of exchange.[9]

V

Conclusion

WHILE CONVENTIONAL WISDOM SUGGESTS the ubiquity of intergroup conflict where formal institutions are lacking, in actuality intergroup cooperation is the rule. The shadow of the state cannot explain the preponderance of peaceful intergroup interaction that we observe. If for no other reason than the unavoidable imperfections of any method of enforcement, in many cases government cannot be relied upon to ensure cooperation between heterogeneous individuals. On a daily basis we confront outsiders in situations that fall beyond the shadow that government casts. Indeed, in "most places where ethnic groups intermingle, a well-functioning state and legal system do not exit" (Fearon and Laitin 1996: 718). Nonetheless, the overwhelming majority of our encounters proceed without problems.

The literature implies that outside the bounds of the state's shadow intergroup cooperation is virtually nonexistent (see, for example, Greif 1989, 1993; Zerbe and Anderson 2001; Horowitz 1985; Moynihan 1993).[10] But "[t]his widely-accepted view seems to be based on a biased selection of cases" (Fearon and Laitin 1996: 716). We considered evidence demonstrating that heterogeneous individuals cooperate for mutual gain by engaging in shared customs and practices to signal credibility to outsiders where formal institutions are absent. The cases explored present a more accurate picture of heterogeneous individual interaction. They illustrate the dominant occurrence of intergroup cooperation over conflict and indicate the solution to uncertainty and informational asymmetries employed by heterogeneous agents to reap the benefits of peaceful exchange.

Notes

1. For example, the African Aro trade system of the 19th century relied heavily on this practice, as did the Sanusiyya, who used it to found a new trade route across the Sahara (Curtin 1984: 48).

2. Similarly, Curtin points out that many 16th- and 17th-century European traders married locals as well (1984: 58).

3. As Benson notes: "In fact, the commercial revolution of the eleventh through fifteenth centuries that ultimately led to the Renaissance and industrial revolution could not have occurred without . . . this system" (1990: 31).

4. All quotes below come from Lopez and Raymond (1990).

5. The term *dragomans* was used to refer to country guides, usually in Eastern regions.

6. The emphasis here is on the business practices shared by traders to signal credibility and enable exchange within the *lex mercatoria*. However, shared customs outside of business practices were used as well. For instance, intermarriage, citizenship in multiple countries (Lopez 1976: 67, 63), and religious affiliation (Berman 1983: 346) all served a similar function.

7. Outside of business practice and membership of association, sharedness of other customs facilitates modern international trade as well. For instance, Rose and Engel find that even after controlling for other relevant factors (such as geographic proximity, relationship as former colonies, etc.), sharing a common language causes international trade to increase by a factor of four. In other words, homogeneity over the sole (although significant) dimension of language leads to a 300 percent increase in international trade. They find a similar substantial effect for groups sharing the same medium of exchange (Rose and Engel 2002). Intersocietal use of a common medium of exchange was also employed by stateless tribal societies in order to signal

trustworthiness, which in turn facilitated intersocietal exchange (Launay 1978).

8. It would be a mistake to attribute this success to the existence of intergovernmental organized regional trade zones such as those created by NAFTA or the EU. Recent work by Rose and Engel (2002) finds no systematic effect of membership in such regional trade agreements on the pattern or volume of international trade. O'Loughlin and Anselin (1996) more strongly reject the idea that preferential trade regions have simply led to more trade among closely geographically situated countries. Indeed, they provide evidence that the trend in international trade is, if anything, moving in the direction of greater *extraregional* exchange.

9. It is worth mentioning that modern international commerce without external enforcement is considerably less painstaking than international trade that occurred historically in such an environment. The advent of the Internet, innumerable consumer and producer reporting organizations, and modern transportation alone make long-distance trade between heterogeneous people immeasurably easier and less costly today.

10. The Hobbesian approach of thinkers such as Buchanan (1975 [2000]) and Tullock (1972) suggests that without formal enforcement, even *intra*-group cooperation is impossible. In addition to demonstrating the prevalence of intergroup cooperation without formal enforcement, our analysis applies to the prevalence of *intra*-group cooperation without formal enforcement as well.

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