Bought and Bound: Bridewealth and Gender Inequality in Africa

Abstract

In this paper we turn to the norm of reciprocity to explore gender inequality in Africa. We argue that the payment of bridewealth from a man's to a woman's family triggers reciprocal obligations on the part of the woman. Failure to meet those obligations results in social disapproval. Thus as bridewealth payment becomes more complete (that is, as the proportion that has been paid increases), norms restricting women become stronger and social constraints on men's violence against their female partners become weaker. We test and find support for our argument using a vignette experiment conducted with rural women in the Volta Region of Ghana.

Introduction

Gender inequality is pervasive in Africa. Inequality has been linked to domestic violence, sexually transmitted disease such as HIV/AIDS, population growth, and the general health and well-being of women and children. Why do women in Africa fare poorly? Why is gender inequality so persistent? Whereas much development work treats gender as an individual characteristic and seeks solutions by offering opportunities such as education or economic assistance to women, research highlights the importance of understanding gender dynamics as a cultural characteristic of societies (Dodoo and Frost 2008). Women are not just individual actors who can be empowered to improve their own situations. Women are also entrenched in social groups and are constrained by the norms enforced within those groups. Thus, scholars are increasingly arguing that traditional approaches to redressing gender inequality are unlikely to be effective unless they take into account the broader cultural context. On this view, explaining gender norms is essential for understanding gender inequality in Africa and for designing interventions that will improve the lives of women.

In this paper we turn to a key concept in classic sociology and anthropology – the norm of reciprocity. We argue that the norm of reciprocity, as enacted through the African marriage transaction, reduces the autonomy of married women and contributes to gender inequality. Consistent with anthropological and sociological work on the African family and lineage system, we suggest that the payment of bridewealth from the man's to the woman's family gives the man rights to the woman's reproductive and domestic labor. The payment of bridewealth thus obligates the woman. This obligation is socially enforced – people both disapprove of women who fail to meet their obligations and expect that others will disapprove. Accordingly bridewealth strengthens norms that constrain married women. We test our argument using a vignette experiment and find support.

LITERATURE AND HYPOTHESES

Reciprocity is foundational to society. Archeologist Richard Leakey, for example, went so far as to say that reciprocity makes us human – that human society would not exist without a system of reciprocity (Leakey and Lewin 1978; see also Ridley 1997; Tiger and Fox 1989). Early sociologists and anthropologists highlighted the importance of the concept (see, for example, Blau 1964; Homans 1961; Malinowski 1926; Mauss 1954; Simmel 1950).

Since this early emphasis, reciprocity has been neglected, however. Most exchange theorists have taken it for granted (Molm 2010) and have even claimed that it is of little theor etical

interest (Emerson 1972). Despite this criticism, some exchange researchers have developed systematic theoretically driven research programs on reciprocity – focusing in par ticu lar on the structure of reciprocity and its effects (see, for example, Molm 2007; 2010; Lawler and Yoon 1993). Still, contemporary sociologists have paid relatively little attention to the norm of reciprocity.

The norm of reciprocity is a rule that, "[y]ou should give benef its to those who give you benefits" (Gouldner 1960:170). That is, wh en ego provides a benefit to alter, alter is obligated to provide a benefit in return. After receiving a b enefit, the beneficiar y is in the "shadow of indebtedness" until the debt is repaid (Gouldner 1960:174). Individuals feel the uncomf ortable burden of this debt. In ad dition, f ailure to meet on e's reciprocal obligations is followed by social sanctions – people do not like those who accept good acts without returning them (Cialdini 2001; Whatley et al. 1999). Thus social pressure encourages compliance. The norm of reciprocity is thought to be universal, existing across time and place. And it is powerful. Individuals comply with the norm even when doing so leads them to behave in ways they otherwise would not (Cialdini 2001).

The norm of reciprocity contr ibutes to social o rder in a number of ways. One is that it facilitates social exchan ge. "A widely shared and strongly held feeling of future obligation made an enormous difference in human social evolution because it meant that on e person could give something (for example, food, energy, care) to another with confidence that the gif t was not being lost. . . . The result was the lowering of the natur al inh ibitions against transactions that must be begun by one person's providin g p ersonal resources to another" (Cialdini 2001:21). In addition to facilitating exchange in gen eral, the norm of reciprocity contrib utes more specifically to the ability to enter contracts (Fehr and Gächter 2000; Diekman 2004). Ouchi (1980:25) argues that, "If no such norm were widely shar ed, then a poten tial trader would have to consume so much energy in setting the contractual terms of exchange in advance and auditing the perfor mance of the other party afterwards that the poten tial transaction would cost too mu ch. Under such conditions, a division of labor is unthinkab le and social existen ce impossible." Thus the norm of reciprocity is essential for functioning markets. It is also though t to be a component of social cap ital and therefore important for economic development (see, eg. Putn am 2000; Diekman 2004). In general, the norm of reciprocity is valuable because it enables individuals to expect that overtures will be returned, and therefore facilitates exchange.

The norm of reciprocity also increases social stability.1 It is "a kind of plastic filler, capable of being poured into the shifting crevices of social structures, and serving as a kind of allpurpose moral cement" (Gouldner 1960:175). Part of the way that the norm of reciprocity contributes to stability is by providing reinforcement for other normative obligations. When status obligations breakdown, for example, the norm of reciprocity provides a reason for people to continue to meet those obligations. It is a "second order defense of stability; it provides a further source of motivation and an additional moral sanction" (Gouldner 1960:175). Most empirical work on the norm of reciprocity has focused on demonstrating its existence (see, for example, Berg, Dickhaut, and McCabe. 1995; Church 1993; Fehr et al. 1993; Greig and Bohnet 2008; Uehara 1995; Mitrut and Nordblom 2010; and Warriner et al. 1996). But scholars have also begun to produce empirical evidence showing the effects of the norm of reciprocity on social order (see, e.g., Fehr 1998; Fehr, Gächter, and Kirschsteiger 1997; Fehr and Schmidt 1999; see also Bewley 1995; 1999).2 There is still much that we do not know, however, about the relationship between the two.

We know even less about the norm of reciprocity and social inequality. Some suggest that the norm of reciprocity can inhibit exploitation by powerful actors, thus reducing negative effects of inequality (Gouldner 1960). Others identify ways in which it might increase inequality between individual exchange partners. Cialdini (2001), for example, argues that the norm of reciprocity can trigger unequal exchanges. "A small initial favor can produce a sense of obligation to agree to a substantially larger return favor" (P. 33). (One experimental study shows subjects reciprocating a gift 500% larger than they received (Regan 1971).) However, little empirical work substantiates the connection between the norm of reciprocity and systemic inequality.

In this paper we add to understanding of the norm of reciprocity by exploring its implications for gender inequality. We suggest that characteristics of African marriage trigger the norm of reciprocity, in turn obligating women in ways that reduce their autonomy relative to men's. The same characteristics of the norm of reciprocity that strengthen social order (facilitating exchange and increasing social stability) also contribute to the persistence of unequal gender relations in Africa.

Bridewealth

As described above, when the norm of reciprocity is operating, an individual who receives a benefit from another is obligated to repay. The payment of bridewealth is one such benefit that creates obligations on the part of women. Below we describe the practice of bridewealth, the reciprocal obligations that it triggers, and the consequences for norms constraining women.

Across much of sub-Saharan Africa, the payment of bridewealth lies at the heart of the marriage contract (Goody 1973). Bridewealth payment is a tradition that has not weakened over time. It continues to be practiced today in countries across Africa and across families of differing income and education levels in both urban and rural locations.

When a man and a woman are going to get married, their families negotiate a bridewealth payment that includes a variety of goods – for example, livestock, clothing, fabric, beads, household goods, imported products, drinks, and money (Aborampah 1999). The man and his family then pay the negotiated amount to the woman's family. Bridewealth payment is not necessarily completed in one payment. Because it can take years to fully pay the agreed upon amount, the completeness of payment varies. It is not unusual, however, given how long it can take men to accumulate the bridewealth (especially in poorer communities) that the bride's parents allow the principals to live together even when bridewealth has not been paid or when it has been only partially paid. When the negotiated amount has been completely paid, the rights associated with marriage transfer to men.

What are those rights? Anthropological research suggests that bridewealth payments compensate the bride's family for the loss of her labor – including her domestic labor and, at least in patrilineal communities, her reproductive labor. Marriage joins two kin communities (Bleek 1987; Caldwell and Caldwell 1987; Fortes 1978; Isiugo-Abanihe 1994b; Kayongo-Male and Onyango 1984) for the purpose of producing children (Philips 1953). When men pay bridewealth, their families gain rights to the children; the children produced in the marriage become part of the man's lineage. As a respondent in northern Ghana said, "You should know that in this place we marry our women with cows. When my father pays the bridewealth, he did that for you to deliver children for me" (Bawah et al.1999:60).

At an abstract level, bridewealth is a specific instance of a behavior that triggers the norm of reciprocity (Gouldner 1960). When the man and his family pay bridewealth, the woman becomes indebted. That is, the payment of bridewealth triggers reciprocal obligations (reproductive and domestic labor) on the part of the woman. Further, to the extent that a social norm is operating, those obligations are socially enforced – women who do not comply with the norm by meeting their obligations are subject to social disapproval. Thus bridewealth payment increases normative constraints on women's autonomy.

As described above, however, payment is not necessarily a one-time event. Payment may occur over time and therefore may be complete or not. We expect that as bridewealth payment becomes more complete, norms regulating women's autonomy will become more constraining. People will react more negatively to a woman who acts independently of her male partner. In addition, to the extent that the completeness of payment affects the strength of the norm constraining women, (rather than simply affect individual attitudes) bridewealth payments will also affect individuals' expectations of how *other community members* will react.

Hypothesis 1: As bridewealth payment becomes more complete, norms constraining women become increasingly restrictive.

It is important to note that bridewealth works through different mechanisms than are typically assumed in research on exchange and marriage. Much literature on marriage in the West relies on an exchange perspective and uses principles of exchange to explain inequality between men and women (see, for example, Edwards 1969; Scanzoni 1982). According to this perspective men have power in a marriage relationship because they tend to have more resources than women and because women are dependent on them for access to valued resources.

Women's situations can be improved if they can obtain more resources or alternative sources of valued goods. Thus if women have more education, better jobs, and higher salaries, then they have relatively more power in a relationship. The norm of reciprocity works through a different mechanism. It "evokes obligations toward others on the basis of their past behavior" (Gouldner 1960:489). In other words, bridewealth has an effect not because it increases a woman's dependence on her male partner, but because it obligates her. The implication is that bridewealth payment creates constraints over married women, regardless of the relative income and education levels of the man and woman. Increasing a woman's income may reduce her dependence, but does nothing to reduce her obligations resulting from bridewealth.

While women may feel a sense of obligation when bridewealth has been paid, in order for a social norm to be operating, that obligation must be socially enforced (Coleman 1990; Horne

2009). This raises the further question of why people enforce norms. Research shows that they are more likely to do so if they expect that others will approve of their behavior (Horne 2001; 2009). That is, norm enforcement is regulated by metanorms – a specific type of norm that regulates whether a behavior should be sanctioned, how severe the punishment should be, and the type of punishment that is appropriate (Axelrod 1986, Ellickson 1991). In order to understand norms, therefore, it is useful to also understand how people react to those who punish.

In a couple, the person best positioned to punish the woman is the man. The man may punish the woman verbally or physically. Such punishment typically takes the form of domestic violence – unfortunately relatively common in Africa (Amoakohene 2004). We conceptualize domestic violence as a strategy through which men control women, and more specifically, as a means through which men enforce social norms. If bridewealth payments affect women's normative obligations, and if male violence is a means through which men enforce those obligations, then we ought to observe some effect of bridewealth on approval of male violence. That is, when bridewealth has been fully paid we would expect people to react less negatively to violence by the male partner than if bridewealth has not been paid. This is because a man who uses violence is more likely to be seen as appropriately enforcing the woman's normative obligations if he has paid bridewealth.

Hypothesis 2: Metanorms allowing the man to use violence to punish the woman will become more permissive as bridewealth payment becomes more complete.

Domain of Women's Behavior

We explore the effects of bridewealth on women's autonomy in two domains of behavior that have implications for women's well-being – reproduction and business. Women's lack of reproductive autonomy increases their vulnerability to HIV/AIDS and other sexually transmitted infections. It also has implications for their fertility. Poor health and high fertility are both associated with female poverty. Female reproductive autonomy also has broader implications for population growth. Fertility reduction in Africa has long been a central focus of demographic research and policy. Despite considerable investment however, population remains a significant issue. The fertility transition appears to have stalled (Dodoo and Frost 2008:433-436; Haub 2011). Indeed, Africa has the fastest growing population in the world (Zuberi et al. 2003). It may be that the preconditions necessary for fertility decline – including the need for fertility to be perceived as under the individual's control (Coale 1973) – do not exist in Africa. To the extent that norms constrain female reproductive autonomy, a woman's fertility is not under her control.

Norms regulating women's business activity are also important for the welfare of women and their families. Historically African women made important contributions to their family's livelihood. Their financial contributions remain important today. Women's income continues to contribute to the maintenance of the household and the well-being of children.

Traditionally, women have arguably had more autonomy in business-related activities than in reproduction. Research shows, for example, that among patrilineal groups in Accra, women engaged in dressmaking, trading, and so forth are free to earn their own money and, for the most part, use it as they please (Kalu 1981; Pellow 1978). They have this economic freedom even as they are expected to be virgins at marriage and monogamous during marriage, and to produce and care for young children. Based on this existing research, we expect that individuals will be more disapproving of a woman who makes independent decisions related to her fertility than they will be of a woman who makes decisions related to her business.

Similarly, metanorms regulating male violence will be more permissive in the domain of reproduction than in the domain of business.

Hypothesis 3: Norms regulating women will be more restrictive for behavior related to reproduction than for behavior related to business.

Hypothesis 4: Metanorms allowing the man to use violence to punish the woman will be more permissive in the domain of reproduction than in the domain of business.

THE EXPERIMENT

We used a vignette experiment to investigate the effects of bridewealth payment and the domain of female behavior on norms constraining women's autonomy. For our purposes, a vignette experiment provides three significant advantages. First, standard surveys include few if any items regarding either bridewealth or norms constraining women. Perhaps for these reasons, there is to our knowledge no strong quantitative evidence testing the relation between bridewealth and gender norms. Second, people are reluctant to talk about the issues we are interested in. It is easier for them to honestly respond to questions about characters in a vignette than to describe their own lives. Third, experiments have known strengths in testing causal relations. Our purpose here is not to measure demographic patterns in Ghana (and because we are not studying a random sample of men and women in Ghana, we cannot do so). Rather, our purpose is to assess a theoretical prediction regarding the causal link between bridewealth and norms constraining women. Experimental methods are ideal for this task.

The vignette manipulated the completeness of bridewealth paid and the domain of female behavior. It had a 3 x 2 between subjects design that crossed the completeness of bridewealth paid (none versus partial versus full) by woman's behavior (reproduction versus business). Thus there were six experimental conditions: no bridewealth/reproduction, no bridewealth/business, partial bridewealth/reproduction, partial bridewealth/business, full bridewealth/reproduction, and full bridewealth/business. There were 46 subjects per condition for a total n of 276. Each subject was randomly assigned to one of the six experimental conditions.

Subjects and Procedures

Participants in the experiment were women ages 21 and over living in small, rural, communities in the Volta (patrilineal) region of Ghana. Within each community, participants were randomly selected and offered a small gift worth about six Ghana cedis (approximately four U.S. dollars) for their participation. Participants were randomly assigned to an experimental condition.

Each participant was interviewed by a field worker who spoke Ewe, the local language. Field workers had paper copies (in English) of the vignette and the questions to be asked. During training, the field workers and the authors reviewed the vignettes and the accompanying questions. Because Ewe is primarily spoken rather than written we did not translate the English materials into written materials in Ewe. Instead, field workers, graduate student research assistants, and the authors worked collectively until consensus was reached regarding the most accurate translation. Field workers then practiced describing the vignettes and asking questions in Ewe. Before conducting the experiment, we pre-tested the vignette and measures. Then we went into the field to run the experiment. Field workers conducted interviews in Ewe and recorded participant responses on the questionnaires.

Experimental Manipulations

The *completeness of the bridewealth payment* was manipulated by describing a couple in which the man had not paid, had partially paid, or had fully paid the bridewealth due. The *domain of the woman's behavior* was manipulated by describing a woman who had either used contraception or had given away money from her shop to an old friend, in both cases without her husband's concurrence.

For three years the man and the woman have been [LIVING TOGETHER. THE MAN HAS PAID NO BRIDEWEALTH/TOGETHER. THE MAN HAS PAID SOME OF THE BRIDEWEALTH BUT NOT ALL/ MARRIED WITH FULL BRIDEWEALTH PAID].

They have no children.

The man works in a Governmental institution.

The woman has a big store selling cloth in the market that she started with her own money. One day the man found out that the woman had [BEEN USING CONTRACEPTION/GIVING MOST OF HER EARNINGS FROM HER SHOP TO AN OLD FEMALE FRIEND FROM HIGH SCHOOL IN THE NEXT VILLAGE] without telling him.

At this point in the vignette, the field worker asked the participant a series of questions about perceptions of the woman's behavior. Then she went on to tell the participant that the man had beaten the woman.

When the man found out that [THE WOMAN HAD BEEN USING CONTRACEPTION/GIVING MOST OF HER EARNINGS FROM HER SHOP TO AN OLD FEMALE FRIEND FROM HIGH SCHOOL IN THE NEXT VILLAGE] he was very angry. When he came home he beat her.

The field worker then asked questions about perceptions of the man's beating the woman.

Dependent Measures

In order to measure norms regulating female behavior, we asked participants a series of questions evaluating the rightness/wrongness of the woman's behavior and of the man's beating of the woman. Subjects responded by looking at a picture of a ladder with 10 rungs and placing the woman or the man from the vignette on the ladder. The top of the ladder (10) represented "very right" and the bottom of the ladder (1) represented "very wrong."

Field workers asked participants how "right" or "wrong" various people would see the woman's behavior. Specifically, they asked subjects about how the man's family, other men in the community, the woman's family, and other women in the community would evaluate the behavior of the woman in the vignette. Answers to these questions provide indicators of subjects' perceptions of other's evaluations, and thus tap into the *norms* in the community. We also asked subjects how right or wrong they themselves saw the woman's behavior. This question provides data regarding individual participant attitudes.

Participants were also asked about how right or wrong the man was for beating the woman. Again interviewers asked them about their own attitudes regarding how right or wrong they thought the man was. And they asked participants how they thought the man's family, other men in the community, the woman's family, and other women in the community would evaluate the man in the vignette. These questions provide indicators of women's expectations regarding community reactions and thus provide an indicator of community *metanorms* that regulate male use of violence to punish their female partners.

RESULTS

Below we examine the effects of the experimental conditions (bridewealth payment and the domain of the woman's behavior) on participants' evaluations of the woman in the vignette. Then we look at the effects of the experimental conditions on participants' reactions to the man in the vignette beating the woman.

Disapproval of the Woman

Table 1 presents mean evaluations of the woman's behavior across the experimental conditions. These figures represent the subject's own evaluations as well as her perceptions of the likely reactions of others – the family of the man in the vignette, other men in the community, the family of the woman in the vignette, and other women in the community.

	Reproduction	Business
	Mean (S.D.)	Mean (S.D.)
Man's Family	1.48 (1.05)	2.02 (1.73)
Men	1.89 (1.10)	2.63 (2.06)
Woman's Family	2.74 (2.10)	3.98 (3.27)
Women	2.52 (1.53)	4.59 (3.08)
Subject	2.02 (1.63)	3.67 (3.23)
Man's Family	1.91 (1.36)	3.07 (2.77)
Men	2.33 (1.91)	2.61 (1.79)
Woman's Family	3.07 (2.53)	4.28 (3.11)
Women	3.17 (2.26)	4.30 (2.97)
Subject	2.20 (2.32)	4.28 (3.46)
Man's Family	2.50 (2.58)	2.26 (2.16)
Men	2.78 (2.32)	2.80 (2.15)
Woman's Family	5.24 (3.74)	6.15 (2.53)
Women	3.93 (3.16)	5.74 (3.17)
Subject	4.39 (3.79)	5.33 (3.62)
	Men Woman's Family Women Subject Man's Family Men Woman's Family Women Subject Man's Family Men Woman's Family Men	Mean (S.D.)Man's Family1.48 (1.05)Men1.89 (1.10)Woman's Family2.74 (2.10)Women2.52 (1.53)Subject2.02 (1.63)Man's Family1.91 (1.36)Men2.33 (1.91)Woman's Family3.07 (2.53)Women3.17 (2.26)Subject2.20 (2.32)Man's Family2.50 (2.58)Men2.78 (2.32)Woman's Family5.24 (3.74)Women3.93 (3.16)

Table 1. Mean	Evaluations	of the	Woman	in the	Vignette
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N=46 per condition.

Table 2 describes the results of analyses of variance that looks at the effects of the experimental conditions on the subject's evaluations of the woman in the vignette and on subjects' perceptions of how others in the community would react.3 There was no interaction effect of bridewealth and domain of behavior, so we present the results without including an interaction term.

Table 2. ANOVA Showing the Effect of Bridewealth and the Woman's Behavior on Evaluations

of the Woman.

		Man's	Men in the	Woman's	Women in the	Subject
		Family	Community	Family	Community	F
	d.f.	F	F	F	F	
Bridewealth	2, 272	3.48*	1.79	15.5***	5.81**	10.7***
Woman's	2, 272	3.86*	2.25	9.12*	25.19***	17.2***
Behavior						
R-Square		.04	.02	.13	.12	.12

N=276. * p<.05 ; ** p<.01; *** p<.0001 (two-tailed test). Bridewealth: none=1; some=2; full=3.

Domain of Woman's Behavior: business=1; reproduction=2.

Consistent with our predictions regarding the domain of the woman's behavior, participants were more approving of the woman in the vignette when she gave away most of her earnings than when she used contraception. In addition, they expected that the family of the man in the vignette, the family of the woman, as well as other women in the community would evaluate the woman similarly. The domain of behavior did not have an effect on subjects' perceptions of evaluations by other men in the community. These results are generally consistent with our hypothesis that normative constraints are stronger in the domain of reproduction than business. This was the case even though the business decision was arguably an important decision with financial implications for the family – the woman giving away her income to an old friend. Even this extreme behavior was subject to less disapproval than using birth control.

Consistent with our predictions regarding the effect of bridewealth, there is a statistically significant effect of bridewealth on reactions to the woman. Subjects were more disapproving of women when the bridewealth payment was more complete. In addition, bridewealth affected subjects' expectations of the reactions of the man's family, the woman's family, and other women in the community. Bridewealth did not affect expectations regarding how other men in the community would react. These results show that bridewealth strengthens normative constraints – across two behavior domains, married women have less autonomy than single women.

We conducted post-hoc analyses to determine the level of payment at which bridewealth had its effect. In other words, we wanted to see where the effect on social disapproval occurred – at the shift from no to partial bridewealth paid, or from partial to full bridewealth paid, or both.

Tukey's comparisons show that for our female subjects the shift from no to some bridewealth was key (see Table 3). Participants rated the behavior of the woman in the vignette more negatively when a man had paid some bridewealth rather than none. And they expected that the woman's family and women in the community would see the woman in the vignette more negatively if some rather than no bridewealth had been paid. These results suggest that even if a man has not fully paid the bridewealth, as long as he has paid something, the woman's marital obligations are activated – at least from the perspective of our female subjects and their expectations of their peers. This means that our female subjects believe that a man's payment of at least some of the bridewealth triggers creates normative constraints for the woman. But, they also expected that the reactions of the man's family would shift when full rather than some bridewealth had been paid. Bridewealth had no effect on subjects' expectations of how other men in the community would react.

Table 3. Evaluations of Woman in the Vignette: Tukey's Post-Hoc Comparisons of Differences in Means across Bridewealth
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Conditions

	Man's Family	Men in the	Woman's Family	Women in the	Subject
		Community		Community	
	Difference in Means				
	[95% Confidence				
	Intervals]	Intervals]	Intervals]	Intervals]	Intervals]
None	-1.09	.326	2.02*	1.10*	1.62*
Some	[822, .604]	[343, .995]	[.948, 3.10]	[.139, 2.06]	[.535, 2.70]
Some	.739*	.207	.315	.185	.391
Full	[.026, 1.45]	[463, .876]	[758, 1.39]	[774, 1.14]	[693, 1.48]
None	.630	.533	2.34*	1.28*	2.01*
Full	[083, 1.34]	[.137, 1.20]	[1.26, 3.41]	[.324, 2.24]	[.927, 3.10]

* Difference in means is statistically significant at the .05 level or better.

Our findings suggest that participants had different perceptions of the norms adhered to by women and men. They generally expected men to be more disapproving (compared to women) of the woman in the vignette. Further, participants' expectations regarding men did not consistently reflect changes in the experimental conditions. We conducted additional analyses to investigate this potential difference in subjects' perceptions of the norms adhered to by men and women. We used a repeated measures analysis of variance to look at whether being asked about the man's family, men in the community, the woman's family, women in the community, or her own opinion affected a subject's responses. This analysis shows that the effect of who the woman was asked about was statistically significant (F=34.9(4,269) p<.0001). Further, there was an interaction between who the woman was asked about and bridewealth (F=5.02(4, 269) p< .001), as well as who the woman was asked about and the

woman's behavior (F=5.02(4, 269) p<.001). These analyses show that participants had different expectations regarding the disapproval of men and women and that these expectations further differed depending on the level of bridewealth paid.

Tukey post-hoc comparisons indicate that the differences between the man's and the woman's family, between the man's family and women in the community, between the man's family and the subject, between men in the community and the woman's family, between men and women in the community, and between men in the community and the subject were all statistically significant at the .05 level or better (see Table 4). These results provide evidence that participants see men and women as differing in their adherence to gender norms.

Table 4. Evaluations of the Woman in the Vignette: Tukey's Post-Hoc Comparisons of

Comparison	Difference in Means	95% Confidence Intervals
Man's Family	-2.04*	-2.50, -1.57
Woman's Family		
Man's Family	-1.84*	-2.30, -1.37
Women in the Community		
Man's Family	-1.44*	-1.91,979
Subject		
Men	-1.74*	-2.20, -1.27
Woman's Family		
Men in the Community	-1.54*	-2.00, -1.07
Women in the Community		
Men in the Community	-1.14*	-1.60,678
Subject		

Differences across Category of Person

* Difference in means is significant at the .05 level or better. Only statistically significant results

are reported.

In sum, both bridewealth and the domain of behavior affected norms constraining women's autonomy. Norms among women became more constraining as bridewealth payments shifted

from none to some. In addition, the effects of the experimental conditions varied depending on whether subjects were asked about how men or women would react. In general, our female participants expected more disapproval from men. Expectations regarding disapproval from women varied more consistently with the experimental conditions than expectations regarding reactions of men. In other words, bridewealth payments affect the subjects' own reactions as well as their perceptions of how women will react. But female subjects seem to feel that men and the family's of men will react very negatively to women whatever the situation. Interestingly, this finding is inconsistent with ethnographic work suggesting that males actually do pay attention to bridewealth and see it as significant for their authority over their female partner (Frost and Dodoo 2010). It may be that women have inaccurate perceptions of the norms to which men adhere.

Disapproval of the Man in the Vignette

Now we turn to participants' responses regarding how right or wrong the man was to beat the woman (see Table 5). These figures describe the subject's own opinions and her perceptions of the opinions of others.

	Contraception	Business
	Mean (S.D.)	Mean (S.D.)
Man's Family	4.41 (3.07)	4.26 (3.28)
Men	5.39 (3.35)	4.93 (3.26)
Woman's Family	3.52 (2.66)	2.70 (2.55)
Women	4.02 (3.14)	3.07 (2.48)
Subject	3.78 (3.31)	3.33 (3.06)
Man's Family	3.76 (3.08)	3.09 (2.44)
Men	4.50 (3.27)	4.34 (2.77)
Woman's Family	2.11 (1.42)	2.24 (2.07)
Women	2.65 (2.05)	2.57 (1.89)
Subject	2.72 (2.60)	2.72 (2.42)
Man's Family	3.74 (3.03)	3.52 (2.98)
Men	4.24 (3.11)	3.74 (3.06)
Woman's Family	2.54 (2.27)	1.70 (1.63)
Women	2.78 (2.25)	2.33 (2.06)
Subject	2.52 (2.25)	2.04 (1.95)
	Men Woman's Family Women Subject Man's Family Men Woman's Family Women Subject Man's Family Men Woman's Family Men Woman's Family	Man's Family 4.41 (3.07) Men 5.39 (3.35) Woman's Family 3.52 (2.66) Women 4.02 (3.14) Subject 3.78 (3.31) Man's Family 3.76 (3.08) Men 4.50 (3.27) Woman's Family 2.11 (1.42) Women 2.65 (2.05) Subject 2.72 (2.60) Man's Family 3.74 (3.03) Men 4.24 (3.11) Woman's Family 2.54 (2.27) Women 2.78 (2.25)

Table 5. Mean Evaluations of the Man Beating the Woman

N=46 per condition.

Contrary to Hypothesis 4, analyses of variance show that, for the most part, the woman's behavior does not affect evaluations of the man's beating (see Table 6). The one exception here is that the domain of behavior has an effect when subjects are thinking about how the woman's family would evaluate the man's violence (Model 3).

Table 6. ANOVA Showing the Effect of Bridewealth and the Woman's Behavior on Evaluations

of	the	Man
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		Man's	Men in the	Woman's	Women in the	Subject
		Family	Community	Family	Community	
	d.f.	F	F	F	F	F
Bridewealth	2, 272	2.37	3.31*	6.14**	5.17**	5.49**
Woman's	1, 271	.94	.96	3.94*	3.14	.96
Behavior						
		R-sq=.02	R-sq=.03	R-sq=.07	R-sq=.05	R-sq=.04

N=276. * p<.05; ** p<.01. Bridewealth: none=1; some=2; full=3. Domain of Woman's

Behavior: business=1; reproduction=2.

The analyses also show that across all categories (with the exception of the man's family), bridewealth has a statistically significant effect on approval of the man's beating the woman (see Table 6). That is domestic violence was more acceptable when more bridewealth had been paid, and participants expected others to similarly view violence as more acceptable as bridewealth payment became more complete.

Again we conduct post-hoc Tukey analyses to see how much payment was necessary in order to change approval levels. That is, we examine whether the effect on approval occurs with the shift from no to partial bridewealth, from partial to full bridewealth, or both (see Table 7). The results show that expectations of approval among the woman's family and women in the community for a man beating his partner increases when the man has paid full as compared to some bridewealth. For our female subjects, the man had to increase payment from none to full before their perceptions of violence shifted.

	Man's Family	Men in the	Woman's Family	Women in the	Subject
		Community		Community	
	Difference in Means				
	[95% Confidence				
	Intervals]	Intervals]	Intervals]	Intervals]	Intervals]
None to Some	.207 [.830, 1.24]	434 [-1.52, .653]	.054 [802, .693]	054 [869, .761]	432 [-1.35, .486]
Some to Full	913 [-1.95, .124]	739 [-1.83, .348]	935* [187, -1.68]	935* [120, -1.75]	837 [-1.75, .079]
None to Full	707 [-1.74, .330]	-1.17* [086, -2.26]	989* [-1.74,241]	989* [174, -1.80]	-1.27* [-2.19, .351]

Table 7. Evaluations of Man in the Vignette: Tukey's Post-Hoc Comparisons of Differences in Means across Bridewealth Conditions

* Difference in means is significant at the .05 level or better.

Thus the thresholds for women's obligations and men's rights are different. Our female subjects perceived women as responding to the shift from no to some bridewealth paid (though they themselves required a shift from none to full payment in order for their evaluations to change). The man's right to beat his wife, however, increased only when he had paid full bridewealth. These findings suggest that the threshold triggering the norm regulating women may be lower than the threshold that triggers the metanorm regulating men's punishment of their female partners.

Further, expectations differed depending on whether subjects were considering the likely reactions of men or of women. We looked to see whether experiment participants had different perceptions of the likely reactions of the man's family, men in the community, the woman's family, and women in the community and whether those perceptions differed from her own reactions. To do this we conducted a repeated measures analysis of variance. The results showed that the person about whom the subject was being asked affected her responses (F=30.7 (4, 268) p<.0001). However there is not a statistically significant interaction effect between the person about whom the woman is asked and the experimental conditions (for bridewealth F=.69 (8, 536) p=ns; for woman's behavior F=.22 (4, 268) p=ns). That is, the effects of the experimental conditions appear to be consistent whether subjects were considering men or women.

We did a further post-hoc Tukey comparison to see where the differences lay (see Table 8). The results show that women responded differently when they were asked about the man's family compared to men in the community, the man's family as compared to the woman's family, the man's family as compared to women in the community, the man's family as compared to the subject, men in the community compared with the woman's family, men in the community compared with women in the community, and men in the community compared with the subject. These differences were significant at the .05 level or better. In general, participants saw women as more critical of domestic violence than men.

Table 8. Evaluations of Man in the Vignette: Tukey's Post-Hoc Comparisons of Differences

Comparison	Difference in Means	95% Confidence Intervals
Man's Family	728*	-1.18,276
Men in the Community		
Man's Family	1.33*	.877, 1.78
Woman's Family		
Man's Family	.895*	.443, 1.35
Women in the Community		
Man's Family	.943*	.490, 1.40
Subject		
Men	2.06*	1.61, 2.51
Woman's Family		
Men in the Community	1.62*	1.17, 2.08
Women in the Community		
Men in the Community	1.67*	1.22, 2.12
Subject		

* Difference in means is significant at the .05 level or better. Only statistically significant results

are reported.

DISCUSSION

The results are consistent with our argument that bridewealth triggers reciprocal obligations, in turn constraining women's autonomy. It appears that even incomplete payment is sufficient to trigger those obligations. Further, full payment of bridewealth weakens social disapproval of men beating their wives. These findings suggest that the practice of bridewealth is damaging to women because it strengthens the norms that constrain their autonomy. When bridewealth has been paid, women's control over their reproductive and business activities declines. The implication is that the practice of bridewealth institutionalizes patterns of obligations that require women to defer to men. It is not just that the norm of reciprocity leads to inequality in a particular relationship, but that, because of the centrality of bridewealth to marriage, it reduces the autonomy of married women in general.

Our results suggest a partial explanation for persistent gender inequality in Africa. Inequality is buttressed not only by status expectations for men and women (that might change as a result of development and education), but also by norms of reciprocity that obligate married women. Efforts to reduce inequality through increasing women's education and income levels may change existing status expectation for men and women. But these efforts do not address the normative obligations created by bridewealth payment. The power of the norm of reciprocity may mean that bridewealth payments continue to constrain women's autonomy even if there is some change in expectations regarding male and female roles. That is, to the extent that a norm of reciprocity is operating, efforts to increase women's education and income will have little if any effect on women's obligations and the normative constraints they experience. Education is a standard policy prescription for improving the lives of women. But unless it addresses the obligations created by bridewealth, its affects are likely to be limited. Future research should explore whether education of individual woman and the education levels of communities counteract the effect of bridewealth to weaken norms constraining married women.

Our results also highlight a frequently neglected element of exchange. Research on exchange often focuses on what individuals do in order to evoke desired behaviors in others. It identifies strategies used by dependent and powerful parties in a relationship. Those who are in a dependent position (because they have fewer resources and few alternative sources of valued goods) are disadvantaged in exchange relations because they are less able to evoke the behaviors they would like. On this view, one way to reduce inequality is to increase the resources and options of the dependent party. This approach would suggest that increase women's education and income ought to increase their power in the marriage relationship. But our results highlight the importance of a different mechanism – obligation. When the man pays bridewealth, the woman is obligated. Even if she gains more education and a higher income, she is still obligated. Thus, again, the implication is that focusing on improving the welfare of individual women will not fully address inequality because it does not address underlying normative obligations.

Given women's normative obligations, what might reduce inequality? One possibility is to change expectations regarding what is an appropriate return on the part of women. The norm of reciprocity says that bridewealth creates obligations. But it does not specify the scope of those obligations. Is it possible to identify conditions under which the scope of the woman's obligations varies – even if bridewealth has been paid? Future research should investigate this possibility. Future work should also explore the intersection of dependence and obligation in contributing to gender inequality. Bridewealth creates obligations. But men and women also engage in exchanges under conditions in which the relative dependence of the partners varies. Interventions to reduce inequality must consider both female dependence and obligations.

Our research was conducted with female subjects in patrilineal, rural communities in the Volta Region of Ghana. We expect that the theory we present will be predictive in any patrilineal African community in which bridewealth is practiced. It would be useful, however, to test the theory in other settings. For example, our results show that subjects perceived men and women as adhering to somewhat different norms. In general, they expected men to be more disapproving (compared to women) of the woman in the vignette. Further, participant expectations of women changed with the experimental conditions. However, their expectations of men were less consistently responsive to the experimental conditions. Future research ought to include male participants. Are women correct in their

perceptions of male reactions? Are men indeed more disapproving than women? Do men simply disapprove of independent female behavior, or do they also see bridewealth payment as triggering normative obligations on the part of the woman? It would be useful to understand how both men and women perceive gender norms, as well as whether their perceptions of the norms adhered to by the other sex are correct. Scholars have argued that we cannot understand reproduction dynamics in Africa if we only talk to women (see, for example, Bankole 1995). Our results similarly suggest that we will not get a full picture by simply studying women.

It would also be useful to examine whether bridewealth has the same effects across communities. Our study was conducted in patrilineal villages. There is reason to think that bridewealth may have weaker effects in matrilineal societies because in those cultures, children remain in the woman' lineage. But, the norm of reciprocity suggests that payment of bridewealth may still create obligations. Future research should explore the effects of bridewealth on female autonomy in matrilineal communities to see if women are subject to reciprocal obligations even when there is not a cultural expectation that rights to the children transfer to the man.

CONCLUSION

Building on classic work that highlights the importance of reciprocity for social life, scholars are developing systematic theories of how reciprocity works and what its effects are. This paper focuses on the norm of reciprocity and its consequences. Theoretically, our findings contribute to understanding of the norm of reciprocity – providing evidence of its power to contribute to systemic inequality. Substantively our research provides empirical support for the view that the practice of bridewealth in Africa undermines the autonomy of women. We find that bridewealth payment triggers normative obligations; failure to meet these obligations produces social disapproval. Our results suggest that efforts to improve the lives of African women must take into account existing marriage practices and related gender norms. Policies that fail to take into account the normative obligations created by bridewealth payment will have limited effects.

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