Managing the relationships between the various parties involved in construction is becoming more crucial as the industry moves away from fragmented and adversarial ways of working. Under less-adversarial procurement routes and contractual arrangements such as partnering, it is essential that the parties develop mutually beneficial objectives and a high level of commitment, cooperation and trust. When disputes do occur, without good relationships between the parties they are likely to refer back to the clauses of the contract which, in turn, may start a return to adversarial ways of working. The concept of ‘relational contracting’ has been developed by Macneil (1974, 1980, 1981 and 1983). This considers a contract to represent a relationship between the parties and introduces a degree of flexibility into the contract on the basis of understanding the other party’s objectives. Based on a review of recent literature, this paper explores the dimensions of relational contracting that are applicable to the construction industry. Since the principles of relational contracting have received relatively little attention in the construction management literature, work from other disciplines have been explored in order to promote a fuller understanding of its implications to understanding the way in which people from different organizations work together. It is suggested that previous work has viewed the concept of relational contracting in isolation rather than as an integrated set of relational principles. It is argued that when viewed as a joined-up set of dimensions, relational contracting has the potential to facilitate a better understanding of inter-organizational relationships within the industry.

Keywords: relational contracting, long-term relationship, construction supply chain.

INTRODUCTION

Theories that emphasise the benefits of close, long-term relationships among different organisations are receiving increasing emphasis throughout the academic literature. Such relationships are relevant to many disciplines such as marketing (e.g. Achrol, 1991; Lusch and Brown, 1996; Anderson and Weitz, 1992), management (e.g. Blois, 2002) and economics (e.g. Baker et al, 2000). Many terms have been used to describe relationship phenomena such as relationship quality, co-operative relationships, relational contracting, strategic alliances and team-working.
In construction, the fragmented nature of the industry that has led to unsatisfactory performance in the past acted as a catalyst for researchers to begin to explore the potential of these approaches, one of the most promising of which is relational contracting (RC) (Rahman and Kumaraswamy, 2004a; Palaneeswaran et al, 2003). This is a socio-legal philosophy that requires all project participants to belong to a single (project) organisation (Rahman and Kumaraswamy, 2004a). RC represents a core element of mutual cooperation and team-working (Rahman and Kumaraswamy, 2004a), and has the potential to provide contractual flexibility, improve relationships, and build team-working (Macneil, 1974; 1980). This paper explores the dimensions of RC and its applicability to the construction industry and works from other disciplines have been explored in order to promote a fuller understanding of its implications and the way in which people from different organisations work together.

METHODOLOGY

A comprehensive review of construction research into RC undertaken over the past 15 years was conducted and several studies were identified and the approaches examined. This revealed that the discussions of relational contracting in construction management related journals were fairly limited, hence insights from other more established disciplines, such as marketing and general management, have been drawn upon. The key elements of relational contracts with relevance to construction have been extracted from this literature review and analysed within the paper (see Table 1). These will form the basis of a framework to be related to case study projects as part of on-going doctoral research into how improved relations can be established throughout the construction supply chain.

EXISTING APPROACHES TO RELATIONAL CONTRACTING

The concept of RC evolved from on Macaulay’s (1963) work. It posits a social contract theory of inter-firm relations that treats the governance of exchange in contractual relations between firms from both the economic and social perspectives (see Macneil 1980). Also known as relational contract theory, Macneil (1980, p.4) defined it as “the relations among parties to the process of projecting exchange into the future”. He emphasised that, a contract is present in all business to business exchanges. Indeed, this theory is well recognised as a general theory of social order (Whitford, 1985). Macneil (1983) suggested that contracts vary widely in the depth of relationship to which they applied. He identified ten common contract norms essential to all contractual arrangements, that are; role integrity, reciprocity, implementation of planning, effectuation of consent, flexibility, contractual solidarity, restraint of power, propriety of means, the linking norms (restitution, reliance & expectation interest) and harmonization with the social matrix (Macneil, 1980, 1983). These norms have, however, been viewed by some researchers as not providing clear dimensions for operationalising the relational norms (Ivens, 2004; Kaufmann and Dant, 1992; Noordeweir et al, 1990). While some researchers do not discuss their choices of the specific variables (e.g. Kim, 2000; Johnson, 1999; Gassenheimer et al, 1995), Ivens (2004) identified a set of ten norms that emerges from heterogeneous stream of literature that has been tested as being central to the study of relationships. Those norms are: (1) long-term orientation; (2) role integrity; (3) relational planning; (4) mutuality; (5) solidarity; (6) flexibility; (7) information exchange; (8) conflict resolution; (9) restraint in the use of power; and (10) monitoring behaviour.
The concept of relational contracting

Table 1: Organisation literature on relational contracting (RC)

<table>
<thead>
<tr>
<th>Author(s) &amp; year</th>
<th>Study Background</th>
<th>RC Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaufmann and Stern, 1988</td>
<td>Empirical - 32 cases out of 81 disputes in commercial exchange relationship in the USA</td>
<td>Solidarity; Role integrity; Mutuality</td>
</tr>
<tr>
<td>Heide and John, 1992</td>
<td>Empirical - Survey of 155 Original Equipment Manufacturer (OEM) and component supplier relationships in the USA</td>
<td>Solidarity; Flexibility; Information exchange</td>
</tr>
<tr>
<td>Boyle et al., 1992</td>
<td>Empirical – Two studies in the USA of the nature of influence within different relational structure: i) interaction in the automotive franchise system ii) automotive replacement tire system which evidences a variety of channel governance structure</td>
<td>Solidarity; Mutuality Flexibility</td>
</tr>
<tr>
<td>Ganesan, 1994</td>
<td>Empirical – Survey of 124 retail buyers and 52 vendors on long-term orientation in a buyer/seller relationship setting</td>
<td>Long-term orientation</td>
</tr>
<tr>
<td>Gundlach, et al., 1995</td>
<td>Empirical – Behavioural simulation depicting manufacturer and distributor exchange relationships in a channel setting patterned after an early stages of development of micro computer industry</td>
<td>Solidarity; Flexibility; Role integrity; Mutuality; Conflict resolution</td>
</tr>
<tr>
<td>Young, et al., 1996</td>
<td>Empirical – Survey of 509 Original Equipment Manufacturer (OEM) and their first-tier suppliers, selected from National Association of Purchasing Management members on their business relationship</td>
<td>Solidarity; Role integrity; Flexibility; Power; Expectation of continuation</td>
</tr>
<tr>
<td>Lush and Brown, 1996</td>
<td>Empirical - Survey of 454 wholesalers/distributors in the USA on their relationship with suppliers</td>
<td>Solidarity; Flexibility; Information exchange; Role integrity; Long-term orientation</td>
</tr>
<tr>
<td>Paulin et al., 1997</td>
<td>Empirical – Structured interviewed of 122 commercial banking in Canada on the relationship with the customer</td>
<td>Role integrity; Communication/(information); Flexibility; Solidarity</td>
</tr>
<tr>
<td>Cannon et al., 2000</td>
<td>Empirical- Survey of 424 buying organizations in the USA on their relationship with a particular supplier in industrial good sector</td>
<td>Solidarity; Mutuality; Flexibility; Conflict resolution; Power</td>
</tr>
<tr>
<td>Ivens, 2004</td>
<td>Empirical – Survey of 206 market research institute in Germany on their relationship with business organization customer</td>
<td>Role integrity; Mutuality; Solidarity; Relational planning; Flexibility; Information exchange; Long-term orientation; Conflict resolution; Restrain in the use of power; Monitoring behaviour</td>
</tr>
</tbody>
</table>

In construction, the applicability of RC has recently received attention by a few researchers in encouraging more collaborative teamwork (Parker and Hartley, 2003; Rahman and Kumaraswamy, 2004a; 2004b; 2002; Rahman et al, 2003; Palaneeswaran et al, 2003). Rahman and Kumaraswamy (2004a; 2004b; 2002) identified RC as an appropriate way forward to provide the necessary flexibility in smoothening contractual relationships and overcoming transactional barriers to teambuilding. They demonstrated how RC principles may be applied in building culturally appropriate project team for pro-active Joint Risk Management (JRM) during the entire project life cycle (Rahman and Kumaraswamy, 2004a) and verify the potential of RC implementation in construction (Rahman and Kumaraswamy, 2004b). Their studies
were based on the surveys and interviews on RC-based collaborative working arrangements on the perceptions of clients, contractors, consultants, sub-contractors and suppliers in Hong Kong.

Palaneeswaran et al (2003) and Parker and Hartley (2003) also developed conceptual models based on previous studies. They developed a relationally reinforced supply chain integration model as a way to strengthen the connective links between the clients and contractors in the construction supply chains. Parker and Hartley (2003) proposed a model that was applied to a case study of UK defence contracting in an attempt to assess whether the use of public private partnerships will necessarily lead to improved economic efficiency. While few if any of the studies in construction management apply Macneil’s relational contracting norms, it is possible that all ten norms suggested by Ivens (2004) in business-to-business service relationships are applicable to organisations within the construction supply chain, including main contractor-subcontractor relationships. Arguments for the applicability of all the ten norms are discussed below.

**Long-term orientation**

Although the success in partnering among the parties involved has been discussed extensively in relation to long-term commitment, mutual objectives, trust, etc., many authors have assumed it does not represent a true picture of the relationships that exist (Bresnen and Marshall, 1999 and Briscoe et al., 2004) especially in the downstream supply chain relationships. Dainty et al (2001) highlighted that the development of long-term relationship does not occur in practice because parties within the supply chain are still sceptical towards such integration practice with their partners. However the move to the long-term relationship among project participants had taken in place. This is based on Xiao and Proverbs (2003) where they found the mean of longest partnership among UK construction organisations was 12 years. Based on the inter-organisational studies of other industries, which view the ability of long-term relationship in creating sustainable competitive advantage (Ganesan, 1994), this dimension should be applicable to the parties involved in the construction supply chain. It is generally agreed that long-term orientation comprises continuity of expectation element reflecting recognition that the relationship will continue in the future (e.g. Heide and John, 1990). Several authors emphasise the importance that relational elements such as long-term orientation in relation to enhancing the performance outcomes in buyer-seller relationships (Noordewier, et al., 1990; Anderson and Weitz, 1992). Thus, it is argued that long-term relationship orientation should be the way forward for the construction organisation to success in the future.

**Solidarity**

This is the extent to which unity or fellowship that arises from common responsibilities and interest dominates an exchange relationship (Kaufman and Dant, 1992; Gundlach et al, 1995). In simple terms, it is the preservation of the relationship, particularly when one partner is in a predicament (Ivens, 2004). It is expressed through behaviours, which contribute directly to relationship maintenance (Heide and John, 1992; Macneil, 1980). It assures the preservation of the unique and continuing relationship in which the commercial transactions take place (Kaufman and Stern, 1988). The extent to which an actor’s behaviours express solidarity with the exchange partner functions as an indicator of the stability of the long-term business relationship (Ivens, 2004). In industrial marketing relationships, solidarity is defined operationally (Lusch and Brown, 1996; Heide and John, 1992) as a willingness to help in
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occurrence of any problems, sharing of problems and committed to improvements for mutual benefits. Medlin and Quester (2001) claimed that solidarity is associated with commitment - an essential element in contributing success to construction partnering. Solidarity in construction supply chain relationships may form a key indicator of the likelihood of a long-term relationship within the construction industry.

Mutuality
This relates to the acceptance by both partners that individual success is achieved through both partners’ common success (Ivens, 2004). Kaufmann and Stern (1988) defined it as the degree to which focus on the benefits of the relationship as a whole over long-term, rather than monitoring individual transactions for fairness. It is apparent that many authors associate mutuality with trust (e.g. Medlin and Quester, 2001). However, ‘over the long-term’ in the definition of mutuality reflects certain time scale element that distinguish mutuality from trust when trust has been defined as the confidence in an exchange partner’s reliability and integrity (Morgan and Hunt, 1994). In construction, trust has been identified as one of the key factor that influences the construction supply chain success. In several surveys in the UK and Hong Kong (Chan et al, 2004; Akintoye et al, 2000; Black et al, 2000), trust was found to be the main priority among the respondents and the key to effective construction supply chain relationships. However, several other authors found that the failure of relationships collaboration is often due to lack of trust among the potential partners (e.g. Briscoe et al, 2001). What is clear is that partners who work to mutual advantage and seek to ensure the relationship produces benefits for all parties involved (Wood et al., 2001). This requires parties to not only fulfil their duty, but go beyond mere contractual obligations to meet the expectations of their partners, respond to each other without being asked (Wood et al., 2001). Mutuality should, therefore, form a cornerstone of the realisation of relational contracting in construction.

Flexibility
This refers to the willingness of parties to adjust practices and policies in response to unforeseen or changing conditions (Boyle et al., 1992). Due to uncertain business environment, planning and adjustment are required to continue business in the future. Several researchers suggest flexibility allows for ongoing planning and continuous adjustment of obligations between the exchange partners, whereas a more rigid approach leads to fixed terms of working (Boyle et al., 1992; Young et al., 1996). Swan et al (2002) revealed that construction personnel may only be flexible when trustworthiness is high. It would seem, therefore, that flexibility might flow from some of the other conditions explored within this paper.

Role integrity
This occurs when both partners fulfil their respective responsibilities. It is associated with the complexity of the exchange relationship that extends beyond individual transactions (Kaufman and Dant, 1992). Greater complexity to exchange relationship portrays higher levels of role integrity. Contrary to discrete transactions, relational exchanges comprise a variety of expectations and issues whereas discrete transactions are simplistic buy-sell interactions. Thus, relational exchanges can be characterised as exhibiting higher levels of role integrity (Young et al, 1996). In relational exchange theory, parties engaged in the exchange processes have to fulfil certain roles (Ivens, 2004) in which they reflect mutual promises made during the development of their relationship. The promises lead each member to develop expectations concerning each other’s behaviour (Kaufmann and Stern, 1988). In business-to-business relationship,
Ivens (2004) found that the role integrity of the suppliers positively influence customer satisfaction and trust. In construction partnering relationships, some authors suggest integrity is one of the most important elements (e.g. Matthews et al., 1996; Spekman et al., 1998) that may lead to a nourishing relationship.

**Information exchange**

This refers to bilateral expectation that parties will proactively provide information useful to the partner (Heide and John, 1992). It is expected that both parties should communicate a broad range of information, which is considered important for the future of the business relationship. It also facilitates the realisation of mutual benefits, thus reducing misunderstanding and uncertainty (Frazier et al., 1988; Mohr and Nevin, 1990). According to Bleeke and Ernst (1993), information exchange is the most critical element to successful inter-firm relationship and has been regarded by several researchers as a relational norm (Noordewier et al., 1990; Heide and John, 1992; Pilling et al., 1994). In construction, the importance of information exchange among the construction organisations has been explored by many authors and has been found to be crucial to successful relationships (e.g. Matthews et al., 1996; Briscoe et al., 2001).

**Conflict resolution**

This refers to the application of flexible, informal and personal mechanism to resolve conflict (Ivens, 2004). The skill of managing conflict is important as it can cause breakdowns to the interaction processes and thus damage relationships. Any termination of business relationship should be avoided as this will lead to considerable additional costs to all of those concerned (Vaaland, 2004). Leung et al., (2005) in a survey on construction professionals in Hong Kong found positive relationship between conflict resolution involving an integration style and the project participant satisfaction.

**Limitation of power**

This refers to the degree of restraint with regards to contractual power over one or other of the parties (Kaufmann and Dant, 1992). The more relational values are put to an exchange, the less likely the parties will exercise their legitimate or coercive power (Macneil, 1981; Young et al., 1996). Limiting the power of one party over another is perhaps the best way to maintain a business relationship. For example, in construction industry, if a supplier faces some problems and is not able to supply the materials within the time required, the customer may exercise their power to penalise the supplier. Relationships could be adversely affected with the use of such power. However, a business relationship could be improved by limiting such power and a good relationship would be maintained if both parties can provide some forms of cooperation and taking steps in resolving such problems.

**Monitoring behaviour**

This is about control or supervisory actions in business relationship (Ivens, 2004). At one end, little control is exercised over the activities of the business partner, while on the other end (the relational end), a greater degree of an active supervision is used by the partner to ensure specified performance during the execution of the exchange agreement (Noordewier et al., 1990). Thus, both control and enforcement function, which are normally performed separately, are performed together with vertically integrated hierarchies. Considering the advantage and the practicality of this approach
towards a flourishing relationship, this function is crucial to the development and maintenance of good relationships among firms along the construction supply chain.

**Relational Planning**
Heide (1994) suggests that relational planning is important to maintaining relationships. Relational planning refers to a system by which future contingencies, rights and responsibilities of both parties are determined early on in the relationship (Barney and Ouchi, 1986). It effectively develops a frame of reference for the parties rather than strict specifications of duties. Several empirical studies have investigated the antecedents of different aspects of the process such as the environmental heterogeneity (Dwyer and Welsh, 1985), power dependence considerations and the degree of munificence (Dwyer and Oh, 1987). Noordewier et al (1990) demonstrate that the design of bilateral decision-making processes under uncertain conditions actually enhance certain aspects of performance in industrial purchasing relationships. In a client-contractor relationship, for example, if relational planning is implemented, the contractor may adjust their activities to suit the needs of the client, thereby supporting the development of the relationship.

**DISCUSSION**
Previous research surrounding construction supply chain relationships has tended to view the components of RC in isolation rather than as an integrated set of relational principles. However, when viewed as a joined-up set of dimensions, RC has potential to facilitate a better understanding of inter-organizational relationships within the industry and why some succeed and other fail. This is because, even though these norms are work-related, they are founded on social norms and are applicable in any social relationship between two or more parties.

RC norms can be viewed as potential solutions for overcoming barriers for integration and the problems inherent in the disappearance of the temporary organisation after the project is completed. If RC norms are applied in the working relationship with the partners along the supply chain then long-term relations will be ensured. RC norms (such as, solidarity, mutuality, integrity, flexibility, etc.) should tie the parties into a positive relationship if they are able to maintain them, since self-seeking attitudes will be diminished when all participants believe that the success of the entire supply chain would bring higher returns.

Arguably, all of the relational norms discussed within this paper are applicable to the construction industry, even if they are rarely exhibited as being used in combination.

**CONCLUSION**
This paper is based on an ongoing doctoral research project. The ten relational norms discussed in this paper will form the basis of a framework for exploring the factors which underpin the success of supply chain relations within a number of successful construction projects. The focus is on main contractor-subcontractor relationships rather than on the client-main contractor relationships which have dominated the research into relational norms to date. From this, case studies will be conducted, which will investigate the existence and role of these ten norms in the main contractor-subcontractor relationships. The planned study will contribute to the construction management knowledge by applying the ten norms in the construction supply chain.
REFERENCES


