

The Paradox of Power Asymmetry and Voluntary Participation in Construction Dispute Mediation



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Introduction

Mediation has been promoted for use in the construction industry as a form of alternative dispute resolution (ADR hereafter) so that fewer disputes require costly arbitration and litigation [1]. In Hong Kong, since the mid-1800s, the Hong Kong government has made serious attempts to make mediation the mainstream ADR mechanism for all forms of dispute. In particular, the mediation movement received a strong push under the 2009 Hong Kong Civil Justice Reform (CJR hereafter). Practice Direction 31 (PD 31 hereafter), requiring an attempt at mediation before trial for all civil disputes except in the area of construction, was released for civil disputes except for those relating to construction. Practice direction 6.1 (PD 6.1 hereafter) is specifically prepared for cases reaching the High Court Arbitration and Construction List (HCCT hereafter). In general, HCCT cases involve cases involving construction. A Steering Committee on Mediation was established by the Hong Kong Judiciary with the aim of making recommendations on ways to promote a wider use of mediation in Hong Kong. In this regard, the Mediation Ordinance (Chap. 620 of the Laws of Hong Kong) was enacted in June 2012 and became effective on January 1, 2013. The Mediation Ordinance provides the regulatory framework over the use of mediation, especially for the confidentiality of the proceeding. Furthermore, the Hong Kong Apology Ordinance (Chap. 631 of the Laws of Hong Kong) was passed and came into effect on 1st December 2017. It is believed that by protecting an apology offer from legal responsibility, more progressive resolution attempts could be taken up by disputants such as those involving offering an apology. At the 2020

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December 2nd Guangdong-Hong Kong-Macao Greater Bay Area Legal Department Joint Meeting, the three governments agreed to establish a “Greater Bay Area Mediation Platform” with the aim of providing innovative and diversified legal services for enterprises in the Greater Bay Area. It can therefore be said that mediation has become the predominant ADR mechanism used in Hong Kong. One unique characteristic of mediation is voluntary participation. Moreover, with the contractual use of mediation and construction contracting parties not being on equal footing, genuine voluntary participation may not be possible. This study aims to examine the paradox of voluntariness and asymmetry in construction dispute mediation.

Use of Mediation to Resolve Construction Disputes

In view of the large number of disputes that occur, the Hong Kong Judiciary commissioned two pilot mediation schemes for property management and construction disputes in 2006 and 2008, respectively. Successful experiences were reported, and these pilot arrangements have now become standard practice. In addition, the Hong Kong Judiciary has established an Office of the Building Management Mediation Coordinator in the Lands Tribunal since January 2008 to encourage litigants to consider using mediation to resolve their building management disputes.

However, from the past ten years of experience, the adoption of mediation has not been particularly impressive. The number of cases and success rate of building management disputes have fluctuated in recent years (Fig. 7.1) [2]. From January 1st 2008 to December 31st 2012, a total of 589 cases were referred to mediators by the Building Management Mediation Co-ordinator’s Office (BMMCO). As a result, 556 cases have undergone mediation, leading to 226 mediated settlements. Accordingly, the success rate is approximately 40%. Averaged data for 2008–2013 and annual data for 2013–2019 for the building management cases are shown in Fig. 1.

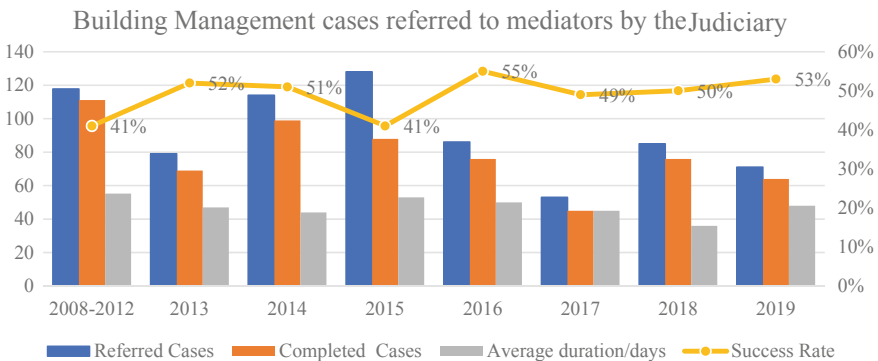


Fig. 1 Building management cases referred to mediators by the Hong Kong Judiciary

Another record also does not portray promising trend. According to the mediation reports filed with the Court of First Instance from 2011 to 2019, the settlement rate plateaued at approximately 50%, and the number of mediations conducted in 2019 underwent a sharp decline [3]. As shown in Table 1, the number of mediation certificates increased from 2011 to 2015. Since 2015, there has been no indication that mediation has gained popularity.

To examine the use of mediation in major construction disputes, the following summaries are collected. Table 2 presents the number of Construction and Arbitration Proceedings (HCCT)-related cases [4]. Tables 3 and 4 summarize the number of disputes handled by the Hong Kong International Arbitration Centre and the percentage of construction-related cases, respectively. Neither set of data indicates that there has been a broader use of mediation for construction disputes despite the aforementioned promotional efforts.

Table 1 Number of mediation related documents filed in the court of first instance^a

	2011	2012	2013	2014	2015	2016	2017	2018	2019
Mediation certificate	2759	2977	2878	3271	3668	3623	3716	3590	2138
Mediation notice	1030	1146	1164	1223	1381	1380	1399	1248	958
Mediation response	949	1062	1031	1078	1258	1181	1249	1140	876
Mediation minutes	444	508	541	602	652	666	663	634	478
Settlement rate (%)	38	38	45	48	46	48	48	51	51

^aIt only includes cases commenced by the 5 CJR related case types in the Court of First Instance, i.e. Civil Action (HCA), Admiralty Action (HCAJ), Commercial Action (HCCL), Construction and Arbitration List (HCCT)

Table 2 Number of construction and arbitration proceedings (HCCT) related documents filed in the high court

	2011	2012	2013	2014	2015	2016	2017	2018	2019
HCCT	22	18	21	9	16	14	20	26	30

Table 3 Number of disputes involving HKIAC in recent 5 years

	2014	2015	2016	2017	2018	2019
Arbitration	252	271	262	297	265	308
Mediation	24	22	15	15	21	12
Adjudication	0	0	0	0	0	1

Table 4 Ratio of construction disputes involving HKIAC

	2014	2015	2016	2017	2018	2019
Construction dispute	–	22.2%	19.2%	19.2%	13.7%	14.8%

Voluntariness as the Necessary Condition for Successful Mediation

Mediation is a form of assisted negotiation [5]. Voluntariness is often considered its core feature. Disputing parties agree to engage in mediation when they prefer this process and have a genuine desire to resolve the problem at hand. The parties are also free to choose whether to use this method, when to use it and who will act as the mediator. The parties therefore have psychological ownership that is critical to ensuring that they will honour the settlement agreement reached. As a general rule, negotiating parties must have the will to negotiate; otherwise, there is a limited likelihood that the negotiation will be successful. In this regard, it has been quite notable that arrangements for mediation emphasize voluntary participation. Forced negotiation does not provide the necessary conducive platform for genuine attempts to settle. Moreover, there has been call for a mandatory use of mediation to accelerate its adoption. In Hong Kong, it is generally believed that any attempt to impose an involuntary process on a party may undermine the characterizing feature of mediation—voluntary participation. By analysing the current arrangements on construction mediation, an analysis of voluntary participation is illustrated.

Mediation Rules

The Hong Kong International Arbitration Centre (HKIAC) is the leading dispute resolution services provider in Hong Kong. Many dispute resolution activities have been organized by the HKIAC. In fact, the rules of the HKIAC are the most commonly used in Hong Kong. According to the HKIAC mediation rule, a failure by any party to reply within 14 days shall be treated as a refusal to mediate. Thus, mediation can only be conducted if all parties agree to mediate. The design of mediation is thus anchored in voluntary participation [6]. Many time delays could be avoided if disputants participated on their own accord. There would then be no issues related to compelling parties to mediate, and parties would be much more likely to make meaningful contributions, especially with good faith behaviours envisaged. In addition, in fully voluntary mediation, the parties are free to leave at any time.

Contractual Use of Mediation

It is now a standard dispute resolution process design to include mediation as an intermediate step between the contract administrator's decision and arbitration in construction contracts. In Hong Kong, most projects adopt standard forms of contracts with necessary modifications to suit their needs [5]. Normally, a three-tiered dispute resolution procedure is used. According to HKG General Conditions

of Contract for Building Works/Civil Engineering Works/Design and Build Contracts Clause 86 and General Conditions of Contract for Term Contract for Building Works Clause 92/Civil Engineering Works Clause 89, when a dispute arises, it shall be reported to and settled by the designated contract administrator. If either party is dissatisfied with the decision made, they can refer the matter to mediation within 28 days of the decision. If the matter cannot or does not need to be resolved by mediation, any reference to arbitration shall be made in accordance with the Arbitration Ordinance within 90 days. A similar design is also adopted in the private building projects force of contract. More recently, the New Engineering Contract (NEC) has gained popular use for public works projects in Hong Kong. The 2017 NEC4 Dispute Resolution Service Contract (DRSC) offers three dispute resolution options (W1, W2, and W3), and Z-clauses that provide bespoke additional contract conditions can be added, allowing unique requirements for local dispute resolution practices. W1 and W2 under NEC4 use adjudication as the primary means of dispute resolution, W3 uses dispute avoidance, while mediation can be added to the Z-clauses as a construction dispute resolution tool in the NEC, such as adjudication and arbitration. This contractual use of mediation is quite different from its mandatory use because voluntary participation is retained under the contractual arrangements. It is now established that the mediation clause shall be specific enough so that objective criteria can be deduced to determine compliance or otherwise. As such, a mediation clause should specify the model and rules to be used. In addition, a clear time frame for its implementation, the nominating authority and the minimum amount of participation are essential items to be incorporated to develop an enforceable mediation clause for construction contracts.

Court Encouraged Mediation

According to section F of Hong Kong High Court Practice Direction 6.1, construction cases reaching the Hong Kong High Court are encouraged to attempt mediation as a possible cost-effective means of resolving disputes and to promote the use of mediation.

Upon receiving the Mediation Notice, the Respondent should respond to the Applicant in writing within 14 days, although he has the right to refuse to mediate. The principal way to encourage mediation attempts involves the imposition of cost sanctions where a party unreasonably refuses to attempt. However, if a party (1) has engaged in mediation to the minimum level of expected participation agreed upon by the parties beforehand or as determined by the Court or (2) has a reasonable explanation for nonparticipation, he should not suffer any adverse costs order. Thus, as long as the aforementioned procedures are completed, it can still be claimed that the parties have certain autonomy in deciding to mediate or not. As reported in Sect. 7.2, even though PD 6.1 came into effect in 2009, the number of construction disputes referring to mediation did not significantly increase. This may well be explained by parties having a final say to undertake mediation. The voluntary nature of mediation has thus been retained.

Court-Connected Mediation

There is an ongoing debate on whether courts should compel disputing parties to attempt mediation [5, 7–9]. Since the courts' association with mediation programs as in Canada, Australia, the United Kingdom and Singapore, a more balanced perspective on compulsory ADR has been developing. Court-annexed mediation is the most direct way to solicit attempts of mediation. However, an abuse of process can result. In fact, the Civil Justice Reform's (CJR's) Working Party has proposed court-annexed mediation; in its Interim in 2000, the proposal was finally rejected in the 2004 Final Report. Therefore, court-annexed mediation has not been implemented in Hong Kong [5, 7, 9]. Statutory use denotes that disputes will be automatically directed for mediation irrespective of the nature of the disputes. The negative effect is quite obvious, as parties may only take this condition perfunctorily [8]. Parties forced to mediate might not attend mediation in good faith, leading to extra costs and impeding mediation confidentiality when the case is finally heard in court [9]. Court-annexed mediation undermines the voluntary nature of mediation. The absence of voluntariness would worsen the relationship and make mediation less likely to succeed [5]. If parties are forced to mediate, settlement proposals may merely be formulated to satisfy mandatory requirements. Rules of law and justice may not even be on the agenda, which may address commercial issues in a way that lack clarity and certainty [7].

The Pillars of Successful Mediation

Despite an initial surge in the use of mediation when the Civil Justice Reform came into effect, the decline of this trend is quite disheartening. Examining dynamics of the willingness to mediate may unveil the underlying reasons for the slow uptake of construction mediation. Within this connection, the pillars of successful mediation are first considered. The removal of the pillars would likely hamper the chances of reaching settlement. More importantly, for this study, the role of voluntary participation in driving-mediated settlement is explored. Mediation is a voluntary, confidential and nonbinding dispute resolution process through which a neutral professional mediator helps parties reach amicable settlement. As mentioned in the previous section, voluntary participation is the first step in recognizing the applicability of the process and, most critically, the acceptance of the outcome. The freedom of exit at any time is definitely attractive to disputants who are not sure if the process is appropriate. Coercion runs against voluntariness and can have three facets: coercion to mediate, coercion to continue and coercion to settle. Cheung et al. [10] examined mediation from four aspects: nature, the neutral third party, settlement, and benefits. Those critical attributes shown in Fig. 2. The first aspect normally serves as the main reason for choosing mediation, and the second aspect is usually used to justify continuing mediation. The last two aspects are mostly related to the willingness to settle.

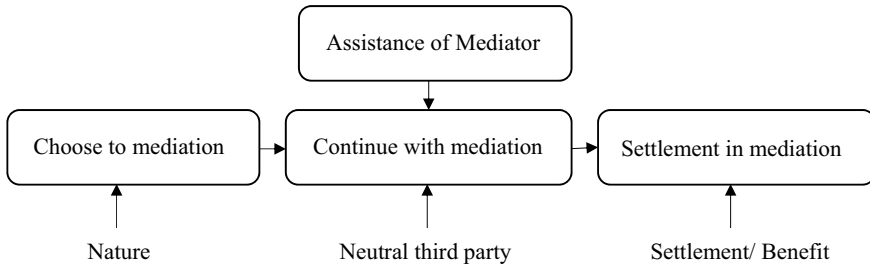


Fig. 2 Critical Attributes of the mediation process

Nature

Apart from voluntariness, confidentiality and enforceability are other major attractive attributes of the nature of mediation. The confidentiality ensured through mediation serves as an essential reason for disputing parties to use this method. Furthermore, discussions held during mediation are kept confidential. As a private proceeding, only the disputing parties know the happenings of a mediation. To many organizations, this is a very valuable characteristic. For this reason, parties feel much freer to express their views. The enforceability of mediation clauses can be a concern, as good faith provisions have been proven vulnerable in common law courts. Thus, far more detailed mediation arrangements are needed to ensure that parties will not find ways to avoid mediation. The associated downside is that parties will have fewer options. When the preferred choice of a party is not addressed, the level of voluntariness may be curtailed.

Neutral Third Party

One of the advantages of using mediation relates to the assistance of a professional experienced neutral mediator. If a dispute involves technical issues, the mediator should have at least some related technical knowledge. It is suggested that mediators of different backgrounds and with different specialties should be kept on the lists of mediators of nominating bodies. Mediators have a duty to act impartially and as such can be instrumental in assisting disputing parties in focusing on solving the problem at hand.

Settlement/Benefit

Parties' willingness to commit themselves to mediating should greatly improve the likelihood of reaching a settlement. Mediation is a non adversarial process through

which disputing parties come to understand each other's needs and interests. Identifying common interests is the pathway to settlement. Mediation also offers a wider range of remedies than formal proceedings. Creative terms of settlement can be crafted. For example, the provision of an apology as a means to address emotional issues has been found to be extremely useful in communicating disputes. Lateral thinking is vital in considering settlement options. Mediation can allow a greater range of settlements than litigation and arbitration.

The greatest benefit of using mediation relates to the time advantage it offers. The duration of a mediation process is measured in hours or days instead of weeks or months, which is the case for arbitration and litigation. Fast resolution is one of the most notable advantages of mediation. Less time taken results in lower costs and resources being needed. Costs involved in settling include venue, mediator, documentation, and settlement costs. Mediation helps reduce the overall cost by ensuring that parties are working towards a settlement instead of focusing on winning. The disputants show substantial involvement in the resolution process, which should be articulated. The central idea of mediation is to manage the adversarial relationship between two parties and encourage them to work cooperatively. Many cases have demonstrated that the relationship between parties of an arbitration is often beyond repair. Mediation seeks to avoid this undesirable outcome.

Power Asymmetry Between Negotiating Parties

Another issue relating to using mediation concerns the potential diminishing focus on justice when unintended results are obtained due to a power imbalance. Equal footing is assumed in most negotiation theories, though this may not be the reality. For example, construction contracting parties show a substantial differential in power, limiting the applicability of renowned negotiation theories. In addition, voluntary participation in mediation will be affected by the existence of asymmetry between disputing parties. Is conflict further magnified when parties are 'forced' to enter mediation, as in the case of court-encouraged and court-annexed settings? The impact of asymmetry on commitment to mediation must therefore be investigated. Studies examining the effects of asymmetry of parties' perceptions of conflict on mediation outcome have been conducted [11, 12]. Some research has introduced specific styles of mediation that may be appropriate for disputing parties with uneven power [13]. Gewurz [13] also found that a skilful mediator could increase the probability of peaceful settlement by helping disputants overcome the problems associated with asymmetric information [14–16]. However, the above research focuses on nation to nation and neighbour to neighbour contexts. In construction, the function of incentivization in minimizing construction disputes by addressing asymmetry stems from disproportionate risk allocation, and power distribution between the contract and employer was reported by Zhu and Cheung [17]. Interdependence negates the aggregation of conflict. The more interdependent the parties are, the more likely compromising behaviour is to be practised to resolve the dispute [18].

Maintaining relationships is not confined to having disputes mediated. In fact, sustaining an enduring relationship among participants benefits the whole construction industry. Parties in dispute, however, must manage with conflicts arising from power asymmetry. This proposition is supported by research on organizational relationships ([19–22]) and can be operationalized as a power balance being a prerequisite for joint effort.

Asymmetry in conflict situations is generally identified by the power differentials between the disputing parties. Although there are many sources or forms of asymmetry, many of which can be translated as power between parties [23, 24], in this study, three forms of asymmetry are believed to have an effect on the level of voluntary participation in construction dispute mediation: resources, information and expectations.

Resource Asymmetry (RA)

Resources can be measured by disposable capital and assets. In this regard, developers are often more resourced than contracting organizations. Resource asymmetry may be one of the reasons why parties involved in a construction dispute are not willing to attempt mediation simply because of the disadvantages derived from unpreparedness. A less-resourced party may not be treated equally as far as negotiation dynamics are concerned. Since mediation is private and its process is flexible, no procedural safeguard exists, such as an observance of natural justice principles. Abusive use of flexibility by a powerful party can be an issue. Thus, concerns over being bullied during the process may become a barrier open-hearted participation. The classification of RA is drawn from the literature. As indicated in Table 5, coercive resource asymmetry (CRA), reward resource asymmetry (RA-RA), expert resource asymmetry (ERA), referent resource asymmetry (RE-RA), and legitimate resource asymmetry (LRA) are the most reported forms of resource asymmetry.

Table 6 lists the characterizing behaviours that manifest in the respective forms of resource asymmetry.

Table 5 Key references of the five forms of resource asymmetry

CRA	RA-RA	ERPA	RE-RA	LRA	References
*	*	*	*	*	[25]
*	*	*	*	*	[26]
*			*	*	[27]
*	*	*	*	*	[28]
*	*		*	*	[29]
*	*	*	*	*	[30]
*	*	*	*	*	[13]

Information Asymmetry (IA)

Successful construction dispute mediation is based on effective communication and could be hampered by information asymmetry. Information asymmetry occurs when one party has more or better information than the other. Studies in law and economics have shown that information asymmetry creates an imbalance of power in an exchange whereby adverse selection, moral hazard and hold-up problems could result [33–35]. Studies of information asymmetry in construction projects have mainly focused on risk and contract management. For example, asymmetric information in construction projects can lead to inequitable risk allocation [36]. Information asymmetry creates communication risks according to principal-agent theory [37]. Xiang et al. [38] suggested that risk prevention can be effected by reducing asymmetric information among project stakeholders. In sum, asymmetric information generates adverse selection, moral hazard and hold-up problems among construction project participants. On the other hand, the components of these causes could be used to measure information asymmetry. The imbalance of information between disputants could be examined from three different perspectives: adverse selection, moral hazard and hold-up problems.

Adverse selection refers to a situation where a party with less information is concerned about an unfair settlement. In such circumstances, parties who have more information use it for their benefit at the expense of their counterparts. The fear of

Table 6 Lists the resource asymmetry types and their characterizing behaviours

PRA types	Resource asymmetry-based behaviours	References
Coercive resource asymmetry	We are more capable of delaying the payoff to the other side	[19, 31, 32]
	We are more capable of reducing the profit of the other side	
	We are more capable of withdrawing certain needed services from the other side	
	We are more capable of making the process more difficult for the other side	
Reward resource asymmetry	We are more capable of affording future work opportunities to the other side	
	We are more capable of providing economic incentives to the other side	
Expert resource asymmetry	We have more knowledge and expertise in designing or constructing new projects	
	We usually are given advice from the other side	
	We are more likely to recommend appropriate actions to the other side	

(continued)

Table 6 (continued)

PRA types	Resource asymmetry-based behaviours	References
Referent resource asymmetry	We adopt better exemplary project cost management methods	
	We adopt better exemplary project time management methods	
	We adopt better exemplary project quality management methods	
	We adopt better exemplary project safety management methods	
	We have better exemplary values	
Legitimate resource asymmetry	We more frequently use sections of contract agreements as a “tool”	
	We believe other side has a stronger right to request and expect that things be done according to its requirements, even when they are not referenced in the contract	
	We are more obliged to accept the other side’s suggestions	

unfair settlement can prompt the concerned party to refuse mediation. Moral hazard occurs when parties act opportunistically and is characterized by maximizing self-interest seeking [39]. Moral hazard usually arises when a dispute situation is vague or when contracts are incomplete. The occurrence of moral hazard would prompt parties to withdraw from mediation. A hold-up problem arises when two parties are able to mediate most efficiently through joint effort but refrain from doing so due to concerns that they may have to concede too much to the more powerful party. Hold-up problems lengthen mediation time. Hesitation may cause parties to miss the opportunity to reach a settlement. Table 7 presents those three information asymmetry types and their characterizing behaviours.

Expectation Asymmetry (EA)

Expectation asymmetry could be interpreted as the difference between expectations and perceived performance. Conflict research often assumes that parties in dispute have the same view of the nature of the conflict at hand. Moreover, the parties may have different perceptions and expectations of the conflict. Some researchers reveal expectation asymmetry in the construction industry and inconsistencies in construction project practitioners’ expectations and realities. Liu [41] noted the importance of disputing parties bridging the expectation-reality gap for proper risk assessment.

Table 7 Presents those information asymmetry types and their characterizing behaviours

PIA types	Information asymmetry-based behaviours	References
Adverse selection	We know more about the attributes of construction products, such as the number of construction projects, visual effects, etc.	[38, 40]
	We have a better understanding of the expected and actual progress of construction projects	
	We are more aware of construction costs, including labour costs, material costs, mechanical equipment costs, etc.	
	We are more capable of making things more difficult for the other side	
Moral hazard and hold-up problem	The contractor, in the construction of the project after signing the contract, exhibits cautiousness over the design of construction drawings, the quality of personnel involved in the construction process, the quality of building materials, construction methods and technologies, etc.	
	The owner supervises and regularly assesses the contractor’s construction behaviour, which mainly involves establishing a problem responsibility system, a reward and punishment system, and an acceptance system to inspect the construction status and effort of the contractor	
	The owner’s financial ability, including progress payments for construction projects being issued on time	

In terms of cooperation, a gap between reality and one’s expectations about the likelihood of another’s future actions decreases trust in the partnership eventually leads to inefficiency in construction management [42].

Mediation is less likely to have a successful outcome when disputing parties have asymmetric perceptions of the outcome [11, 43]. The above research covers only cases of effective mediation, and this may be an important limitation because conflict asymmetry may be directly related to the likelihood of both parties voluntarily participating. The parties involved in construction disputes are named “complainants” or “respondents”. It has been found that complainants are more demanding and difficult to satisfy. In contrast, respondents are more yielding and less sure of themselves. The result implies that respondents usually end up with less than what they expected [44]. At the same time, it is less likely that both parties will accept the sharing of

responsibility if their expectations differ. Additionally, if accepting one's responsibility is a necessary condition for parties to cooperate in a mediation session, it will also be an important condition for a party's willingness to participate in a mediation session in the first place. Moreover, asymmetry may inhibit the possibility of practising integrative conflict resolution, thus impairing the likelihood of successful mediation. Aversion attitudes demotivate participation in mediation. Most decisions have a status quo alternative—that is, doing nothing or maintaining one's current or previous decision. Status quo effects restrain decision-making in many settings [45]. During a negotiation, once an assessment of the dispute is made, changing one's position to accept a counterpart's proposal is often taken as a loss [46]. In an experimental setting found that asymmetrical conflicts are less likely to run a constructive course and are more likely to escalate into impasse or win-lose outcomes, showing that third parties should be aware of the structure of the conflict when they engage in mediation [47]. Overall, making both parties aware of the gap between the expectations and realities of a conflict and of taking responsibility is important not only for parties' cooperation in a mediation session but also to bring both parties to the mediation table [48].

Expectation asymmetry occurs at both the pre- and post contract stages. The inherent expectation asymmetry involved in risk aversion imposes an original restriction on the observed construction bid data, while experience influences the degree of risk aversion. Regarding the contractual form of procurement contracts under cost uncertainty, research provides that the contractor is more averse to ambiguity than the owner—the more ambiguity of belief there is, the lesser the power of the optimal incentive scheme becomes. A fixed-price contract is optimal if there is no ambiguity. If levels of ambiguity are high, a cost-plus contract is optimal. A cost-share scheme is sensible for conditions in between [49]. A previous study on international construction projects [50, 51] showed that (1) decision-makers are more risk-averse in opportunity situations than in threat situations, (2) decision-makers are extremely risk-averse when the chance of loss is too high, and (3) decision-makers are more risk-taking when decisions involve losses than when decisions involve gains. The effect of loss aversion is also explored, anchoring in commercial real estate prices; a study shows this effect to vary by type of market participant and cycle [52]. As for problem fixing, Kahneman and Tversky [50] discuss how the psychophysics of value induce risk aversion in the domain of gains and risk-seeking in the domain of losses and point out that the distinction between decision and experience values is rarely explicit in decision theory because it is tacitly assumed that they coincide. This assumption suggests that disputants' voluntariness to participate can be improved by framing negative outcomes as having negative value [51]. Two experiments were conducted to verify that negatively framed bargainers generally show more voluntariness than their positively framed counterparts in most situations. A pair of positively framed bargainers reach more integrative settlements than a pair of negatively framed bargainers [53]. Neale and Bazerman [54] also found that a positive frame leads to more concessionary behaviours and successful performance than a negative frame. Risk aversion and empathy gaps belong to expectation asymmetry. Table 8 presents behaviours manifesting the effects of expectation asymmetry.

The Paradox of Asymmetry and Voluntary Participation in Construction Dispute Mediation

Voluntariness is considered to be a prerequisite to reaching settlement through mediation [61]. Mediation was introduced to Hong Kong as a voluntary resolution process. Even under Practice Direction 6.1, though the Court may apply adverse cost orders against parties who unreasonably refuse to mediate, the use of mediation may be deemed ‘not quite voluntary’. Moreover, the take-up rate and settlement rate of mediation not be particularly impressive. Furthermore, the mediation programs operated in Australia, Canada and the UK hold that as long as the mediation outcome is self-determined, a positive effect can be detected regarding whether its use is mandatory. As such, the settlement rates of mandatory and voluntary mediation show no major differences [62, 63]. Nonetheless, some practitioners have suggested that forced mediation also has potential to erode access to justice, especially if the power to order compulsory mediation is exercised frequently [6, 64]. The HKSAR government appears to take a more moderate stance in encouraging the use of mediation while retaining its voluntary nature under PD 6.1.

The presence of power asymmetry in mediation has been identified by Gazal-Ayal and Perry [65] and Gewurz [13]. The more powerful party is likely to impose its will on the weaker party with a “take-it-or-leave-it” or “take-it-or-suffer” strategy. Moreover, the weaker party expects to mediate on equal footing [66]. The paradox between power asymmetry and voluntariness is thus formulated. There is no easy answer to this inherent dilemma between voluntariness and asymmetry. Some authors, however, argue that power symmetry is a favourable condition for effective negotiation [29, 67, 68]. This suggestion makes practical sense when the weaker party is desperate

Table 8 Presents expectation asymmetry types and their characterizing behaviours

PEA types	Expectation asymmetry-based behaviours	References
Benefit gap asymmetry	Perceived cost savings from participating in mediation are lower than expected	Aibinu and Al-Lawati [55], Karambayya et al. [56]
	Perceived time savings from participating in mediation are lower than expected	
	Perceived productivity improvements from participating in mediation are less significant than expected	
	Perceived business opportunity improvements from participating in mediation are less significant than expected	

(continued)

Table 8 (continued)

PEA types	Expectation asymmetry-based behaviours	References
Cost gap asymmetry	Perceived higher share proportion of the initial cost of mediation (e.g., the on-time charges of the mediator, the cost of renting a conference room, etc.) than expected	
	Perceived higher share proportion of the additional cost of mediation (e.g., relevant service charges to hire a lawyer or other professionals to provide professional advice during the mediation process, etc.) than expected	
Security gap asymmetry	More perceived possibilities of submission data or document leakage than expected	
	Perceived confidentiality of mediation process lower than expected	
	More perceived possibilities of minimum expectation resolution leakage than expected	
Fairness gap asymmetry	The procedure rules are more inclined to the other side than expected (e.g., the favourable sequence for asking questions and offering rebuttals, keeping track of new information changes and options, etc.)	
	The substantive outcomes are more inclined to the other side than expected	
	The third-party favours the other side over us more than expected (e.g., mediator considers another side's feelings and opinions more, etc.)	
Framing gap asymmetry	Our options are presented with more positive connotations than expected	Pinkley [57, 58], Kahneman and Tversky [59], Segal [60]
	Our options are presented with more negative connotations than expected	

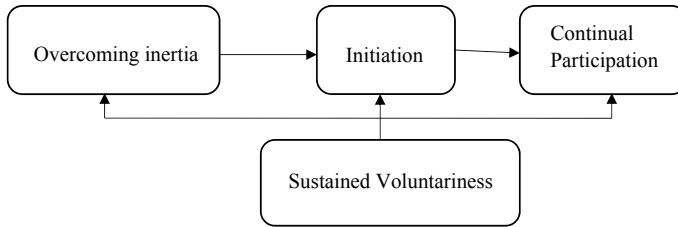


Fig. 3 The role of voluntariness in construction dispute mediation

for an early settlement whereby the more powerful party is likely to be in the upper hand and drive for a settlement in his favour even at the expense of the weaker party. Thus, a faster settlement may be result. Power asymmetry is taken as a reality check for the weaker party despite the unintended result of conflict being suppressed [28, 69, 70]. Inspired by these differing perspectives, this study calls to examine the effect of power asymmetry on the level of voluntary participation in construction dispute mediation (CDM hereafter). Figure 3 illustrates the role of voluntariness in underpinning successful mediation.

Notably, conceptualizing power asymmetry and voluntariness in CDM would help detect power asymmetry from different aspects and voluntary/involuntary behaviours present during the dispute mediation process. Balancing the power asymmetry relationship is an effective way to improve voluntary participation and the possibility of achieving successful dispute settlement. Mediation is a form of assisted negotiation; it is therefore vitally important to include the role of the mediator in the relationship framework between asymmetry and voluntary participation. In fact, previous research has illustrated the function of mediators in facilitating dispute settlement through the appropriate use of tactics to address bottlenecks such as dispute sources and disputants' attitudes [71–73]. This study also aims to explore mediators' interventions to address the power asymmetry relationship and thus make voluntary participation sustainable throughout mediation. Against this background, the following questions are addressed in this study: (i) Does power asymmetry affect construction disputing parties' voluntary participation in mediation? (ii) What underlying constructs of involuntary behaviours hinder amicable dispute mediation? (iii) In what ways can mediators help mediation address the paradox between asymmetry and voluntary participation?

The literature on voluntary negotiation is growing, but there has yet to be a definition of voluntariness that encapsulates the central idea of participation at one's own will in construction dispute mediation. A voluntary participation framework has been used extensively in construction dispute mediation. Voluntary participation embraces intentional action, the absence of controlling influences and no-role restriction. Voluntariness is a multidimensional concept that cuts across several domains. Based on the literature review conducted for this study, a summary of voluntary manifestations is presented in Table 9.

Table 9 Based on the literature review conducted for this study, classifications of voluntariness used in previous studies is summarised

Dimensions of voluntariness	Manifestations	References
Intentional action	The party in the performance of actions uses intentional action	[74]
The absence of persuasion	No side persuading another side believes something through the merit of reasons proposed	
The absence of coercion	No side intentionally forces another side or uses a credible and severe threats of harm to control another side	

(continued)

This study contributes to the study of construction dispute mediation in Hong Kong. The assumption of voluntary participation is seldom questioned. However, there is obvious and notable power asymmetry between disputing parties. Acknowledging this inherent paradox and devising appropriate intervention by the mediator would bring construction dispute mediation to higher adoption level.

Intervention of Mediator in Bridging Power Asymmetry

There are different schools of thought on whether asymmetry hampers voluntary participation. Marquardt and Wiedman [78] found that managerial participation in stock market offerings is negatively associated with information asymmetry. Wu and Babcock [79] found that under the green payment program, farmers may use information asymmetry to obtain favourable combinations of production and subsidies. The concepts of principal-agent theory were applied to design the green payment program. Considering the possible information asymmetries between the government and farmers, the voluntary and self-selecting participation rates of the program were projected. Marquardt and Wiedman [78] suggested that firms change their disclosure activity before offerings to reduce information asymmetry to hype the stock. Similarly, in analysing an international sample of 575, Martínez-Ferrero et al. [80] proposed a bidirectional relationship between voluntary disclosure and asymmetric information. It was found that more asymmetric information leads to more voluntary information disclosure practices, which can boost investor participation confidence. Similar to the ability to retain users, this issue is an important concern for social network sites. Shi et al. [81] found that expectation asymmetry negatively influences users’ motivation to use Facebook. Analogously, customers normally enter into a service with certain expectations regarding the level of service they are likely to receive. Customers’ expectations can thus be attributed to the causes of service failure [82]. In terms of partnerships, information and decision-making power imbalances between nurses and patients may inhibit partnerships in care and create more

Table 9 (continued)

Dimensions of voluntariness	Manifestations	References
The absence of information manipulation	There is no use of nonpersuasive means to alter a side's understanding of a situation	[75]
The absence of reward manipulation	No side motivates another side to do what the agent of influence intends	
Inducement	No offers to provide incentives are made	
Persuasion	No application of interpersonal pressure or by an exhortation to self-interest or community norms is applied	
Force	No enforcement by nonconsensual intervention or the issuance of threats is used	
Understanding of the proposed program	Potential participants have an adequate understanding of specific aspects of the proposed program or even of the program in general	[76]
Social norms	No side considers decision making by the other side as the social norm	[77]
Social relations	Cross-cutting interpersonal and contextual domains does not make it difficult to say no	
Value	There is a willingness to mediate the dispute for shared value	
Diminished capacity	Supply or funding chains are disrupted	
Goals	There is a willingness to mediate the dispute to achieve a mutual goal	
Manipulation	The choice of an action is free from constraints imposed by other persons or social institutions	[77]
Inducements	The voluntariness of the disputants is undermined by "inducements" or "offers" designed to encourage the parties to enter mediation	

imbalance with less subsequent patient input, harming cooperation in patients' health care.

On the other hand, asymmetry in resources can develop trust between team members and solicit voluntary participation [83]. Building on social comparison theory, Wang et al. [84] found that a moderate level of reward resource asymmetry is likely to involve a higher percentage of participatory employees than firms with either very low or very high levels of inequity. The statistical analysis results of Benk and Budak [85] reveal that Turkish taxpayers support the effects of referent and legitimate power asymmetry and promote trust and that voluntary tax compliance thus results.

From the contingent perspective, Cowan et al. [86] proposed a power–benefit matrix for interfirm relationships and illustrated that resource asymmetry affects cooperation willingness from the relationship benefits perspective. If the earned benefit is below expected, higher power will lead to opportunism, if the benefit is at or exceeds expectations, the weaker party is likely to tolerate it. Fuchs and Lippi [87] report descriptive and econometric evidence that national divergence matters for policy decisions to voluntarily participate. It was found that an optimal policy responds to a country’s incentive to remain in or leave the monetary union. A study of African small exporters also found [88] that relational resource asymmetry positively impacts the innovative participation of small suppliers. Aiello et al. [89] considered both intergroup and interpersonal approaches to power and examined how social dominance orientation influences coordination between supervisors and subordinates. The authors’ results show that the stronger participants were in social dominance orientation (SDO), the greater their willingness to participate under harsh levels of resource asymmetry than under lower levels of resource asymmetry became.

In general, there is more research supporting the idea that information and expectation asymmetry create obstacles to rather than encouraging full participation in mediation. Furthermore, the effect of resource asymmetry between disputants on mediation willingness is more complex; both pros and cons opinion have been reported; and further investigation of resource asymmetry under more detailed classifications, such as coercive, reward and resource asymmetry, on voluntary participation, is needed. In contrast, power asymmetry stems from expertise, reference, and legitimacy and may encourage participation in mediation. Referring to the moderating factor, mediator tactics and techniques should help deal with different power asymmetries in construction mediation. A conceptual framework summarizing the paradox of asymmetry and voluntary participation in construction dispute mediation is shown in Fig. 4.

When a power imbalance exists between parties, this will inevitably influence their willingness to participate in mediation. In this case, the mediation outcome may not be ideal. In what ways could a mediator help alleviate such concerns? Ippolito and Pruitt [44] attempted to address this connection and found that mediator efforts to balance power discrepancies are not effective. In addition, it is controversial when a

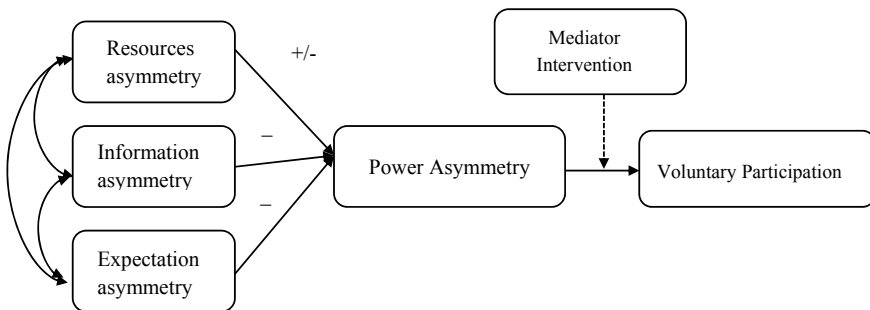


Fig. 4 Paradox and mediator intervention

mediator tries to rectify power asymmetry because this suggests that the mediator is departing from a neutral stance. Therefore, it is recommended that the focus should be on how mediation tactics can be used contingent on the circumstances of power relations and on the willingness to mediate. Table 10 lists mediator strategies for power asymmetry and voluntary participation.

To sustain voluntary participation, the mediator may intervene in an effort to balance the power asymmetry throughout mediation to ensure good mediation outcomes, and the weaker party will thus not be pushed into unfair agreement. Six categories of disputants' power asymmetry-related tactics and 13 categories of disputants' voluntary participation-related tactics used in 5 main stages of mediation were identified through content analysis. The subsequent discussion will provide insight into the relationship between mediator intervention and the measurement of disputants' voluntary characterizing behaviours.

Summary

The presence of asymmetry between parties of construction contracting is real. Complete absence of asymmetric power can't be expected due to the nature of the transaction. The relationship between owners and contractors is typified as one of principal-agent. When dispute between them arises, the asymmetry between them may affect their voluntariness in undergoing mediation. From the perspective of organizational economics, asymmetry in construction contracting would give rise to the use of one-side contracts. As such, ex post practice of opportunism seems likely. Empirical research has shown that it is important to have voluntary participation so that the mediated settlement will be honoured. This study offers the conceptual lens to analyse the paradox between asymmetry and voluntary participation. Contractual use of mediation is the prevalent approach with voluntary participation being the central design consideration. Power asymmetry may be a problem as a unwilling party would be pushed to attempt mediation. Likewise, court encouraged or court-annexed approach may have the same effect-undermining voluntary participation. This study raises the need to revisit the assumption of voluntary participation in construction dispute mediation.

Table 10 Lists the mediator potential Intervention on power asymmetry and voluntary participation

Mediation stages	Attributes	Mediator tactics
Introduction	Related to disputant’s power asymmetry	Ensure that all documents deemed conducive to mediation have been disclosed to the mediator
Venue and arrival		Ensure the attendance of representatives of all parties in advance
Opening phase		Explore the genuine concerns of the parties Encourage parties to show respect, cooperate and create a productive atmosphere for later interactions
Individual session		Guide the parties to review their interests and concerns Challenge each party to identify a solution that will satisfy all of the parties
Introduction	Related to disputant’s voluntary participation	Ensure that the case is appropriate for mediation and is appropriate to mediate at the given point in time
Venue and arrival		Properly manage the booking of required rooms and visual facilities and individual mediation session wait times
Opening phase		Introduce all attendees to create a more personalised atmosphere and to highlight the differences between mediation and litigation Allows parties to express their views and feelings in a controlled confrontation for negotiation and later compromise Establish authority and control from at the start of mediation by demonstrating confidence, judgement and familiarity with the process
Individual session		Show an understanding of the issues and empathy for the situation faced by the parties Prioritise issues and address less contentious issues first to create a sense of cooperation and progress

(continued)

Table 10 (continued)

Mediation stages	Attributes	Mediator tactics
		Help the parties develop a realistic understanding of different alternatives they have in resolving the disputes <hr/> Remind the parties of the cost and time consequences of continued litigation or arbitration <hr/> Shift from deadlock on a substantive issue to discuss procedural ways of moving forward <hr/> Advise the parties to carry out an early neutral evaluation (ENE) that effectively resolves technical issue deadlock <hr/> Advise the parties to take legal advice from a jointly appointed lawyer about the legal issues <hr/> Recall what can be agreed on between the parties within the existing authority and resources
Dealing with deadlock		

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