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THE EFFECTIVENESS OF ACCEPTANCES COMMUNICATED BY ELECTRONIC MEANS, OR – DOES THE POSTAL ACCEPTANCE RULE APPLY TO EMAIL?

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INTRODUCTION

The initial fascination with “everything Internet” and the persistent trend to equip otherwise unexciting legal terms with the prefixes “cyber-” or “e-” seem to have abated. Despite nearly 15 years of electronic commerce and endless articles revolving around the legal changes and challenges allegedly brought about by the Internet, many important questions remain open. One of those questions relates to the seemingly basic problem lying at the centre of contract formation: when does an acceptance communicated by electronic means become effective? To date, legal literature has not been able to provide a definitive answer. Existing analyses appear simplistic and based on a general lack of understanding of the underlying technologies. It is surprising that electronic commerce managed to thrive despite the lack of certainty and predictability in such an important issue.

This paper analyses the problem of determining the time of formation on the basis of the “offer and acceptance” model. The latter comprises interpretative rules to determine when the minds of the parties have met.¹ Although harnessing a sequence of electronic acts into “offers” and “acceptances” may appear artificial,² only the offer-acceptance analysis permits the establishment of the precise moment of formation. While acknowledging the fact that contracts can come into being without a discernible “offer and acceptance” being present,³ this paper focuses on the difficulties of applying the offer and acceptance model to novel communication scenarios. The aim is not to provide a definitive solution regarding the moment of effectiveness of acceptances communicated by electronic means. The aim is to explore the inconsistencies in popular arguments, the blind alleys they lead to and the problems created by an

¹ Carter, J W, *Carter on Contract*, vol 1, Butterworths Lexis Nexis, Sydney 2002, hereinafter referred to as *Carter on Contract*; at [02-050]; *Hyatt Australia Ltd v LTCB Australia Ltd* [1996] 1 Qd R 260 at 264 per McPherson JA; *The Law of Contract* para 2.2

² *Carter on Contract* [03-290] referring to Lord Denning’s suggestion in *Butler Machine Tool Co Ltd v Ex-cell-O Corp (England) Ltd* [1979] 1 WLR 401 at 405

³ Carter, J W, Peden, E, Tolhurst, G, *Contract Law in Australia*, Butterworths Lexis Nexis, Sydney 2007, hereinafter referred to as *Carter, Peden, Tolhurst*; at [201]

undisciplined use of terminology. In particular, the persistent focus on the “instantaneousness” of electronic communications is criticized. “Instantaneousness” is a distracting factor and should be abandoned from the discussion altogether. A more simplified and technology independent approach is proposed.

The effectiveness of an acceptance on receipt is regarded as the principle, while effectiveness on dispatch, called the “postal acceptance rule” (the “PAR”), is regarded as the exception. This paper asks the question: should acceptances communicated by electronic means be governed by the principle or by the exception?

BACKGROUND

Contracts can be formed face-to-face or at a distance. Determining the moment of formation does not generally raise problems in face-to-face dealings: one party speaks the other listens, the moment words are spoken, the other party hears them.⁴ Communication is actual and immediate. Acceptance is effective the moment it is manifested, there is no distinction between dispatch and receipt, or between receipt and notification. In dealings at a distance, the dispatch of acceptance may be distinct from its receipt. The delay is the result of spatial remoteness, its length derives from the method of communication. The implications of delay are twofold. First, an offer may be revoked until acceptance is received.⁵ Second, both parties remain in a state of uncertainty as neither knows whether and when a contract is formed.⁶

Dealings at a distance can be subdivided into those occurring with the intermediation of the post and those occurring with the intermediation of devices, which render the interaction similar to either dealings face-to-face or to dealings occurring through the post. When the post is used, acceptance is generally effective upon dispatch of the letter. If dealings are regarded “as if” occurring face-to-face, acceptance is effective on receipt. Whenever a specific method or device is used to communicate at a distance, attempts are made to place it either in the “postal” or in the “as if face-to-face” category.⁷

When the existing rules were conceptualised, the methods of communicating at a distance were few. Apart from personal delivery or the use of agents, the post was the only viable means of conveying acceptance. Distance always implied a delay between dispatch and receipt of the letter. Distance is, however, no longer synonymous with delay. Internet-based methods of communication can reduce the interval between dispatch and receipt to the point of non-existence. This lack, or brevity, of delay is often accompanied by a high risk of non-delivery. Neither the principle, nor the exception, address such scenario. A closer look at the existing case law and literature reveals a grey zone created by unforeseen permutations of old principles and novel communication scenarios.

The judges in the leading cases, *Entores Ltd v Miles Far East Corporation*⁸ (“*Entores*”) and *Brinkibon v Stahag und Stahlwarenhandels-gesellschaft mbH*⁹ (“*Brinkibon*”) did not anticipate that their reasoning would form the basis for evaluating the expansion of the PAR to email, instant messengers and web-applications. Although these cases are cited in practically all discussions, it is often forgotten, that “there is no absolute rule as to the time when an acceptance by fax, telephone or telex takes effect, but the question depends in each case on the facts and reasonable expectations of the parties.”¹⁰ In his

⁴ A L Corbin, *Corbin on Contracts*, vol 1 (1993) par 3.25

⁵ *Carter on Contract* [03-150]

⁶ *Carter, Peden, Tolhurst* [3-31]

⁷ See Restatement (Second) Contracts, par 64

⁸ [1955] 2 QB 327

⁹ [1983] 2 AC 34

¹⁰ *Brinkibon v Stahag und Stahlwarenhandels-gesellschaft mbH* [1983] 2 AC 34 at 42; See also: B Coote, *The Instantaneous Transmission of Acceptances* (1971) 4 NZULR 331

famous speech, Lord Wilberforce stated that cases must be resolved “by reference to the intention of the parties, by sound business practice and . . . by a judgement where the risks should lie.”¹¹

The principle of receipt derives from face-to-face dealings, whereas the exception developed around the post.¹² Two assumptions flow from this statement: first, a principle that originated from a perfect communication scenario cannot be automatically applied to govern scenarios, which are “less perfect”; second, the PAR was conceived to accommodate a *specific* method of communication.

ROADMAP

This paper starts with a comprehensive recount of the basic rules pertaining to the time of contract formation. The principle and the concepts used in its formulation are described, the tension between the “meeting of minds” and the objective theory of contract as well as the division between dealings at a distance and face-to-face are explained. Subsequently, the exception is presented.

Determining the time of formation with regards to contracts concluded via the Internet is usually presented in the form of the question “does the PAR apply to email?” Such inquiry is based on reverse reasoning: “should the exception govern electronic acceptances?” instead of “should the principle apply?” Arguably, only the first question merits attention as the principle applies by default. While it appears more appropriate to examine effectiveness in relation to the principle, not the exception, the “traditional” line of reasoning is followed and the popular arguments *against* the application of the PAR to email are tested. After analysing the technical assumptions underlying most arguments, some novel elements are introduced into the discussion.

Next, it is examined whether emailed acceptances “fit” under the principle. The focus is on the characteristics of face-to-face dealings. The discussion centres around email as to-date legal analysis has focused almost exclusively on this method. Email also constitutes a useful point of comparison with other Internet-based communication methods, such as instant messengers and web-based interactions.¹³

CAVEATS AND CLARIFICATIONS

The moment of effectiveness depends on the intention of the parties. Absent a definite indication of intention, it remains unclear what factors should be taken into account when choosing between effectiveness on receipt and effectiveness on dispatch. The question “what are the criteria for deciding when an acceptance communicated by electronic means should become effective?” remains unanswered. At the same time, the once popular subject of “email and the postal acceptance rule” seems to have disappeared from the radar – leaving the problem of effectiveness unsolved. It is time to close this chapter.

Demise or revival?

Admittedly, in light of the novel communication landscape, the PAR should be facing its demise. If the PAR developed around the post, why even consider its application on-line? Upon closer examination, it turns out that the PAR may be facing its revival in relation to *some* novel methods of communication. It cannot

¹¹ *Brinkibon v Stahag und Stahlwarenhandels-gesellschaft mbH* [1983] 2 AC 34 at 42

¹² P Goodrich, *The Posthumous Life of the Postal Acceptance Rule* (2005) Benjamin N Cardozo School of Law, Working Paper No 127 p 8

¹³ see also: W A Effross, *The Legal Architecture of Virtual Stores: World Wide Web Sites and the Uniform Commercial Code* (1997) 34 San Diego L Rev 1263 at 1281

be discarded solely on the ground that everything on the Internet “happens fast:” as messages are transmitted in the form of electrical impulses and not carried by trucks over bumpy roads, the contract formation process is accelerated. Contrary to popular belief, however, this paper demonstrates that speed of transmission alone is not decisive. The simplistic (yet predominant) view that the PAR relates to non-instantaneous methods of communication disregards the historical background of the rule and provides no guidance as to its potential application.

Isolating the problem

Ascertaining the exact moment of contract formation necessitates two separate investigations: when does acceptance become effective, and when do “dispatch” and “receipt” occur. The focus of this paper is on “effectiveness” only. It does not attempt to define either “dispatch” or “receipt” but to establish which of these two events is relevant in the first place. This somewhat surprising separation is dictated by the necessity to isolate certain problems. The effectiveness of electronic acceptances raises different questions than the definition of “dispatch” or “receipt.” “Effectiveness” involves a search for distinguishing criteria between different methods of communicating intention, “dispatch” and “receipt” require a fine-grained analysis of the network infrastructure, including a search for a point of risk transfer. Accordingly, any analysis of on-line contract formation warrants two separate investigations: “when does an acceptance become effective – upon dispatch or upon receipt?” and “when does dispatch and receipt occur?” The answer to the second question is relegated to a separate paper.

Importance of problem

Determining the time of formation has important implications. All on-line contracts are formed at a distance, with the parties often being in two different jurisdictions. Absent agreement, the time of formation may determine the applicable law, including its implied terms. As the place of formation depends on the place acceptance became effective, establishing *where?* must be preceded by establishing *when?*¹⁴ The moment of formation also affects the contents of the contract.¹⁵ It determines such contents “according to what the offeree knew or had notice of at the time of sending the letter of acceptance.”¹⁶ If one of the parties attempts to incorporate his terms, those terms must generally be brought to the notice of the other party *before* the final act concluding the contract. Similarly, statements made *during* the formation process may become part of the contract as representations or warranties. In both instances, acceptance is the final cut-off point for establishing the contractual obligations of the parties.

The model laws are silent

None of the model laws or conventions designed to facilitate electronic contracting contains substantive rules governing the time of formation. Interestingly, all of them focus on defining “dispatch” and “receipt”¹⁷ – not on whether acceptances become *effective* on dispatch or receipt...

¹⁴ J Hogan-Doran, *Jurisdiction in Cyberspace: the When and Where of On-line Contracts* (2003) 77 ALJ 377

¹⁵ J C Dodd, *Time and Assent in the Formation of Information Contracts: the Mischief of Applying Article 2 to Information Contracts* (1999) 36 Hous L Rev 195 at 201

¹⁶ P Goodrich, above at note 12 p 15

¹⁷ see e.g UNCITRAL Model Law on Electronic Commerce with Guide to Enactment (1996) with additional article 5 *bis* as adopted in 1998, Art. 15

DISSECTING THE PRINCIPLE

The principle can be formulated as follows: “acceptance must be communicated.”¹⁸ “Communication” can be tied to a number of events and does not indicate the specific moment that concludes the formation process.¹⁹ Its definition depends on how far one departs from the classic “meeting of minds” and how much focus is placed on the objective theory of contract. On one hand, agreement is reached when the offeror knows that the offer has been accepted.²⁰ On the other, offerees may not be able to ensure anything beyond the receipt of the letter and acceptance must be tied to an objectively ascertainable event. As the principle has always been approached in an intuitive fashion, rather than based on consistent criteria, it proves difficult to transplant onto novel communication scenarios.

In dealings at a distance, communication need not be actual, it suffices that the offeree enables the offeror to take cognisance of acceptance, such as by delivering it to his address or telex machine, *even if the latter are unattended*.²¹ The requirement to communicate acceptance is therefore not absolute.²² Communication is actual and immediate only in face-to-face dealings. While textbooks state that acceptance must be *communicated*, it is common to refer to the principle of *receipt*. The principle appears more intuitive but is also more difficult to formulate in light of the objective theory of contract. A closer look is taken at its constituent parts.

“Communication”

“Communication” is the process of conveying information, especially by electronic or mechanical means, and the act of transmitting information by telephone, radio, etc.²³ “Communication” can therefore denote *notification* or *transmission*. This distinction gains importance when comparing dealings at a distance with dealings face-to-face. “Communication” is traditionally associated with “receipt.” “Receipt” can imply knowledge (bringing the fact of acceptance to the offeror’s mind)²⁴ or the end of transmission (arrival at a machine).²⁵ Hereinafter, when italicised, the term *communication* means notification.

“Means,” “method” and “medium”

“Medium” indicates an intervening substance through which an effect is produced or the channel of communication, such as speech or writing.²⁶ “Medium” can also be a means of conveying information, a carrier of information, like paper or electric impulses. “Method” is described as a mode of procedure.²⁷ In common parlance “medium” and “method” are synonymous with “means” and are also used interchangeably with “device.”

¹⁸ *Carter on Contract* [03-310]

¹⁹ see: P H Winfield, *Some Aspects of Offer and Acceptance* (1939) 55 LQR 499 at 506 for a review of different systems of determining the moment of formation

²⁰ *Carter on Contract* [03-310]; P Goodrich, *Habermas and the Postal Rule* (1996) 17 Cardozo L Rev 1457 at 1463

²¹ *Brinkibon v Stahag und Stahlwarenhandels-gesellschaft mbH* [1983] 2 AC 34 at 42; *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 331; *Shelde Delta Shipping BV v Astarte Shipping Ltd* (The Pamela) [1995] 2 Lloyd’s Rep 249; *Tenax Steamship Co Ltd v The Brimnes (Owners)* [1975] QB 929; *Anson v Trump* [1998] 1 WLR 1404

²² *Carter on Contract* [03-310]; it is unclear whether “actual communication” requires that acceptance is brought to the offeror’s mind, see: *Bressan v Squires* [1974] 2 NSWLR 460, at 461

²³ Macquarie Dictionary, 2003 (online edition)

²⁴ *Holwell Securities Ltd v Hughes* [1974] 1 All ER 161 at 164; *Carlill v Carbolic Smoke Ball Co* [1893] 1 QB 256, at 256, 269; *Tallerman & Co Pty Ltd v Nathan’s Merchandise (Victoria) Pty Ltd* (1957) 98 CLR 93; *Tenax Steamship Co Ltd v The Brimnes (Owners)* [1975] Q B 929 at 970

²⁵ *Shelde Delta Shipping BV v Astarte Shipping Ltd (The Pamela)* [1995] 2 Lloyd’s Rep 249; *Tenax Steamship Co Ltd v The Brimnes (Owners)* [1975] QB 929

²⁶ Macquarie Dictionary

²⁷ Macquarie Dictionary

Although used interchangeably, the above terms refer to different things. When the post is used, the letter is the physical carrier, the *medium*. The post is the *method* of transmission, there is no intermediating device. In the case of electronic messages the carrier of information are copper or fibre optic wires, the means, or devices, are various intermediating and terminating network elements. The method can be described as one of the communication services like email, instant messengers or web-based communications. To add confusion, the Internet itself is often described as a *medium*. Hereinafter, "method" is used in its widest sense, without reference to any particular carrier, device or protocol.

"At a distance" and "face-to-face"

Surprisingly, the distinction between dealings "face-to-face" and "at a distance" is not clear. How far apart should parties be to remain "at a distance"? Is "distance" synonymous with "absence"? The "shouting across the river with planes passing overhead" example, crucial to Lord Denning's reasoning in *Entores* illustrates the difficulty of drawing the above distinction.²⁸ His Lordship described the situation as parties making a contract in the *presence* of each other.²⁹ How wide was the river? Not wide enough to prevent the parties from hearing each other and perceiving each other's presence. It can be assumed that distance turns into absence when the parties can no longer monitor the success of the communication process and require devices to enable communication. It could also be claimed that absence requires not only a spatial but also a *temporal* separation. This lack of a clear-cut distinction becomes important when comparing dealings at a distance with those occurring face-to-face. Common sense dictates that there are only two types of dealings: those at distance and those occurring face-to-face, with no intermediate "grades" of presence or absence.

THE EXCEPTION

When acceptance is communicated through the post, it becomes effective when the letter is posted.³⁰ A contract is formed even though the letter is delayed, lost and never delivered.³¹ For the PAR to apply the letter must be properly addressed and deposited.³² Effectiveness on dispatch does not depend on subsequent successful delivery,³³ the PAR does not have a retrospective effect from the moment of receipt to the moment of dispatch.³⁴ Dispatch need not occur at a time that would enable the letter to be received before expiry of the offer.³⁵ Accordingly, when the PAR applies any occurrences after dispatch, *including receipt itself*, are irrelevant. The application of the PAR is, however, confined by the construction of the offer: it cannot lead to absurd results or where the requirement of actual communication must be presumed.³⁶

²⁸ *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 332

²⁹ *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 332

³⁰ *Henthorn v Fraser* [1892] 2 Ch 27 at 33; *Dunlop v Higgins* (1848) 1 HLC 381 at 409

³¹ *Carter, Peden, Tolhurst* [3-30]

³² *Re London and Northern Bank: Ex parte Jones* [1900] 1 Ch 220; *In re Imperial Land Co of Marseilles, Townsend's Case* (1871) LR 13 Eq 148 at 150. In the United States, depositing a letter with prepaid postage with the post office raises a presumption that it reached its destination, see: *In re Cameron Estate* 130 A 2d 173, 177 (Pa 1957). In England and Australia such presumption is absent.

³³ *In re Imperial Land Company of Marseilles (Harris' Case)* (1872) 7 Ch App 587 at 592, 597; *Household Fire and Carriage Accident Insurance Co Ltd v Grant* (1879) LR 4 Ex D 216 at 223

³⁴ *In re Imperial Land Company of Marseilles (Harris' Case)* (1872) 7 Ch App 587 at 592; *Potter v Sanders* (1846) 6 Hare 1

³⁵ for opposite approach see: *Equity Fire & Casualty Co v Traver* 330 Ark 102, 953 SW 2d 565 (1997)

³⁶ *Tallerman & Co Pty Ltd v Nathan's Merchandise (Vic) Pty Ltd* (1957) 98 CLR at 93, 111-112; *Holwell Securities Ltd v Hughes* [1974] 1 All ER 161; *Nunin Holdings Pty Ltd v Tullamarine Estates Pty Ltd* [1994] 1 VR 74; see also *Corbin on Contracts*, vol. 1 (1993), par. 3.24, p. 443

It is unclear whether it is the *post* or the *letter* that invoke the exception. The letter is the physical carrier, or medium, the post is the method of transmission and delivery. The PAR does not apply when letters are delivered in person or by courier,³⁷ or when parties exchange letters face-to-face. Assumedly, it is not the letter but the post that invokes the exception. At the same time, in the early days not just telexes and telegrams but also telephones were in the domain of the post office. Yet, no attempt was made to extend the PAR on the basis of postal intermediation...³⁸

Effectiveness on dispatch can also be regarded as a derivative of distance and the resulting delay. Consequently, the PAR could be considered whenever parties a) deal at a distance and b) use a method that involves an interval between dispatch and receipt. It must not be forgotten that when the PAR was first conceptualised, distance always implied delay. There was also a direct relationship between the two factors: the greater the distance, the longer the delay.

The PAR continues to generate academic debate and criticism. Admittedly, it is only in the area of its potential adoption to "more recent technologies where justifications for the rule retain their importance."³⁹ It was also observed that "the postal exception may well be more significant than the standard rule."⁴⁰ Despite being the exception, the PAR forms the basis of most analyses regarding the effectiveness of electronic acceptances. The PAR was applied to telegraph,⁴¹ but not to telephone,⁴² telex⁴³ or facsimile.⁴⁴ Allegedly, "this reluctance to extend the rule any further ... is proof that the law recognises what a radical departure from the fundamental principles of contract law this rule is."⁴⁵ It must be noted, that in the US - the biggest e-commerce economy⁴⁶ - the PAR applies in situations that in Australia are governed by the principle of receipt.⁴⁷

³⁷ But see: *Household Fire and Carriage Accident Insurance Co Ltd v Grant (1879)* LR 4 Ex D 216 at 237

³⁸ P H Winfield, above at note 19 p 14

³⁹ P Goodrich, above at note 20 at 1462

⁴⁰ C Douzinas, R Warrington, *Posting the Law: Social Contracts and the Postal Rule's Grammatology* (1991) 4 Int'l J for Semiotics Law 115 at 123-125

⁴¹ *Cowan v O'Conner* (1888) 20 QBD 640 at 642. PAR also extended to telegram, with little analysis in *Island Properties Ltd v Entertainment Enterprises Ltd* (1983) 146 DLR (3d) 505 (Nfld TD); *Bruner v Moore* [1904] 1 Ch 305; *Re Viscount Supply Co* (1963) 40 DLR (2d) 501 (Ont SC) at 505

⁴² *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327; *Aviet v Smith and Searls Pty Ltd* (1956) 73 WN (NSW) 274

⁴³ *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327; *Express Airways v Port Augusta Air Service* (1980) Qd R 543; *Brinkibon v Stahag und Stahlwarenhandels-gesellschaft mbH* [1983] 2 AC 34

⁴⁴ *Reese Bros Plastics Ltd v Hamon-Sabelco Australia Pty Ltd* (1988) 5 PBR 97325 (NSW CA), *Egis Consulting Australia Pty Ltd v First Dynasty Mines Ltd (A Company incorporated in Canada)* [2001] WASC 22; *Eastern Power v Azienda Comunale Energia & Ambiente* (1999) 178 DLR (4th) 409 (Ont CA); *Molodyski v Vema Australia Ltd* (1989) NSW Conv R 55-446; *Twynham Pastoral Co Pty Ltd v Anburn Pty Ltd* unreported SC NSW 15 Aug 1989

⁴⁵ S Hill, *Flogging A Dead Horse – The Postal Acceptance Rule and Email* (2001) 17 JCL 2 at 14

⁴⁶ R Nimmer, *Electronic Contracting: Legal Issues* (1996) 14 J Marshall J Computer & Info L 211 at 222

⁴⁷ A L Corbin, *Corbin on Contracts* (1993) vol 1, par 3.25

JUSTIFICATIONS

Textbook explanations of the PAR are often “straightforwardly cynical in tenor.”⁴⁸ The PAR is based on convenience,⁴⁹ the provision of a sense of finality⁵⁰ or simply regarded as arbitrary.⁵¹ It avoids an endless exchange of confirmations of receipt⁵² and concludes the contract at the earliest possible moment.⁵³ Historically, the justifications of the PAR have varied: the post office has been regarded as the common agent of the parties⁵⁴ or the appointed agent of the offeror.⁵⁵ Communicating acceptance to the post equated communication to the offeror.⁵⁶ The latter argument was replaced with the view that the post is only a carrier of letters.⁵⁷ Another justification was the fiction of continuing assent⁵⁸ but this view has long been abandoned.⁵⁹

Most explanations of the PAR combine choice, control and risk allocation: the offeror (who is the addressee of the acceptance) chose the post and should therefore bear the resulting risks.⁶⁰ He could have protected himself by stating that acceptance is effective upon communication.⁶¹ Furthermore, the offeree (who is the sender of the acceptance) has done all he can by posting the acceptance as instructed.⁶² Posting is regarded as the decisive moment because the offeree has put the letter out of his control and done an extraneous act, which shows that each side is bound.⁶³ Another explanation is the protection of the offeree: the PAR terminates the offeror’s power to revoke upon the occurrence of an event under the offeree’s control,⁶⁴ effectively extending the duration of the offer.⁶⁵

⁴⁸ P Goodrich, above at note 20 p 1464

⁴⁹ K N Llewellyn, *Our Case-Law of Contract: Offer and Acceptance II* (1939) 48 Yale L.J 779 at 792-798; but see D H Evans, *The Anglo-American Mailing Rule: Some Problems of Offer and Acceptance in Contracts by Correspondence* (1966) 15 ICLQ 553 at 556-561, who cites 11 reasons for the rule.

⁵⁰ *Adams v Lindsell* (1818) B & Ald 681 at 683

⁵¹ A L Corbin, *Corbin on Contracts* (1993) vol. 1, par. 3.24; S Williston, *A Treatise on the Law of Contracts*, 4th ed., by R Lord, vol 2, 1991, par 6:34

⁵² *Adam v Lindsell* (1818) B & Ald 681

⁵³ *Carter on Contract* [03-390]

⁵⁴ *Dunlop v Higgins* (1848) 1 HLC 381; *Wright v Bigg* (1852) 15 Beav 592

⁵⁵ *Byrne v Leon van Tienhoven* (1880) 5 CPD 344

⁵⁶ *Dunlop v Higgins* (1848) 1 HLC 381; *Household Fire and Carriage Accident Insurance Co Ltd v Grant (1879)* LR 4 Ex D 216 at 221

⁵⁷ *Henthorn v Fraser* [1892] 2 Ch 27 at 35-36

⁵⁸ *Cooke v Oxley* (1790) 3 Times Reports 653

⁵⁹ J M Perillo, *The Origins of the Objective Theory of Contract Formation and Interpretation* (2000) 69 Fordham L Rev 427 at 440

⁶⁰ *Dunlop v Higgins* (1848) 1 HLC 381 at 398

⁶¹ A H Hudson, *Retraction of Letters of Acceptance* (1966) 82 LQR at 170

⁶² *Dunlop v Higgins* (1848) 1 HLC 381 at 398; *In Re Imperial Land Co of Marseilles (Wall’s case)* (1872) LR 15 Eq 18 at 25

⁶³ *Brogden v Metropolitan Railway Co* (1877) 2 App Cas 666, at 669, 691. The assumption that a letter can be retracted formed the basis for dispensing with the mailbox rule in two controversial US Court of Claims cases. See *Rhode Island Tool Co v United States*, 128 F Supp 417 (Ct Cl 1955); *Dick v United States*, 82 F Supp 326 (Ct Cl 1949). These cases have not been followed. It is now generally accepted that the possibility of withdrawal alone is not a sufficient basis for dispensing with the PAR. See: P Fasciano, *Internet Electronic Mail: A Last Bastion for the Mailbox Rule* (1997) 25 Hofstra L Rev 971 at 982; see also: C L Pannam, *Postal regulation 289 and Acceptance of an Offer by Post* (1960) 2 MULR 388. In *Morrison v Thoeke* 155 So 2d 889, 905 (Fla Dist Ct App 1963) it was stated that the change in postal regulations allowing withdrawal of a letter is an insufficient basis for dispensing with the mailbox rule. The issue is of little relevance for electronic communications since they cannot be retracted.

⁶⁴ *Household Fire and Carriage Accident Insurance Co Ltd v Grant* (1879) LR 4 Ex D 216 at 220; *Re Imperial Land Co of Marseilles (Harris’ Case)* (1872) LR Ch Ap 587, at 594; for an interesting explanation of the historical origins of the PAR see: P Goodrich, above note 12, who traces the rule to ecclesiastical law and the protection of the female offeree.

⁶⁵ R Craswell, *Offer, Acceptance and Efficient Reliance* (1996) 48 Stan L Rev 481 at 519

The PAR also places the risk of transmission and receipt on the addressee. Once the letter is dispatched, the sender is “not answerable for casualties occurring at the post-office.”⁶⁶ Logically, if control ceases, risk should cease.⁶⁷ The risk borne by the offeror is small: he trusts a method, which in principle does not fail.⁶⁸ Historically, posting was equated with certainty of delivery based on the reliability of the post.⁶⁹

Two observations come to mind. First, effectiveness on dispatch can hardly be regarded as an arbitrary choice: dispatch is the first objective manifestation of intention by the offeree. It is therefore fair to ascribe legal meaning to this particular event.⁷⁰ Second, due to the difficulty in formulating the principle, the PAR may not be an exception to the principle of communication but only to the requirement of receipt.⁷¹ Due to the reliability of the post, the PAR assumes that the letter will be received and its contents *communicated*.⁷² Without delving into the numerous criticisms of the PAR, which are described elsewhere,⁷³ some arguments are made upfront. General criticism must be distinguished from arguments against the PAR’s extension to electronic acceptances.

Offeree protection?

Protection against revocation cannot be used as an argument against the PAR’s potential applicability to electronic acceptances. Unquestionably, the offeree can protect himself by purchasing an option.⁷⁴ At the same time, it can be the *offeree* who chose the method of acceptance and controls the communication process.⁷⁵ The roles of offeror and offeree are often difficult to discern and arbitrary.⁷⁶ Protection is unwarranted if the offeree retains mastery of the offer. It not necessarily the offeree who requires protection and the event one must be protected against is not necessarily revocation.⁷⁷ As discussed below, it is not the risk of revocation but the risk of failed receipt that gains prominence in electronic communications. Whenever one party chose the method of acceptance, the other deserves protection against the risks inherent in that method.

⁶⁶ *In Re Imperial Land Co of Marseilles; Townsend’s Case* (1871) LR 13 Eq 148, at 150; see also *Dunlop v Higgins* (1848) HLC 381

⁶⁷ *Dunlop v Higgins* (1848) HLC 381 at 398

⁶⁸ *Household Fire and Carriage Accident Insurance Co v Grant* (1879) LR 4 Ex D 216 at 223

⁶⁹ *Stidolph v American School in London Educational Trust Ltd* (1969) 20 P & C R 802 at 805; S Gardner, *Trashing with Trollope: A Deconstruction of the Postal Rules in Contract* (1992) 12 Oxford J of Legal Stud 170 at 184; see also: I R Macneil, *Time of Acceptance: Too Many Problems for a Single Rule* (1964) 112 U Penn LR 947 at 958 speaking of likelihood of receipt; see also: *Morrison v Thelke* 155 So 2d 889 (Fla App D2 1963), “...delay or misdirection of a letter of acceptance is beyond the realm of possibility.”

⁷⁰ R A Samek, *A Reassessment of the Present Rule Relating to Postal Acceptance* (1961) 35 ALJ 38 at 40

⁷¹ B Coote, above at note 10 p 337; nothing in the wording of *Adams v Lindsell* (1818) B & Ald 681 suggests that the PAR is an exception or derogation.

⁷² Williston, S, *A Treatise on the Law of Contracts*, 4th ed, ed Lord, R A, Lawyers Cooperative Publishing, New York, 1991; par 6:32

⁷³ *Household Fire and Carriage Accident Insurance Co Ltd v Grant* (1879) LR 4 Ex D 216 at 235 by Bramwell J; P Goodrich, above at note 21 at 1473

⁷⁴ B Eisler, *Default Rules for Contract Formation By Promise and the Need for Revision of the Mailbox Rule* (1991) 79 Ky L J 557 at 566

⁷⁵ G. Treitel, *The Law of Contract*, London 2003, p 25

⁷⁶ *W A Dewhurst & Co Pty Ltd v Cawrse* [1960] VR 278 at 284; see also: M Yamaguchi, *The Problem of Delay in the Contract Formation Process: A Comparative Study of Contract Law* (2004) 37 Cornell Int’l L J 357 for a description of the implications of each position.

⁷⁷ P Goodrich, above at note 12 p 15

Intention?

The time of formation depends on the intention of the parties, in particular, on the construction of the offer.⁷⁸ The search is, however, for a default rule - absent clear intention.⁷⁹ The only objective indication of intention is the choice of communication method. Arguments that the offeror could have protected himself by requiring actual communication⁸⁰ are therefore futile. They assume the offeror's knowledge that a given method invokes the PAR.⁸¹ The PAR, however, applies where the post is "contemplated."⁸² It applies because the post is used, not because effectiveness on dispatch is intended.⁸³ It is questionable whether the offeror would have chosen the post if had he realized the implications of such choice. Most importantly, intention cannot be imputed if the method of acceptance is imposed.

Neither offeree protection nor intention, constitute decisive criteria for applying or rejecting the PAR.

Technical Considerations

The search for answers must begin with establishing the technological factors (if any) that merit attention and should be included in the discussion. Such factors should withhold technological change to avoid re-examining problems of effectiveness whenever a new communication method is introduced. Factors that refer to the physical transmission itself and remain transparent to the parties must be distinguished from those, which directly affect the communication process. The impatient reader might ask: *why include technological factors in a legal discussion?* There are two reasons. First, most writers do not. This results from a fear of technology or a simple refusal to acknowledge that technological change might affect the application of legal principles. Second, many writers do – without, however, understanding the technology involved. This often leads to legal arguments based on incorrect *technical* premises.

To start with a popular misunderstanding: the Internet is not a technology, medium or means. The Internet constitutes a general-purpose infrastructure that permits applications on an arbitrary pair of computers to exchange information.⁸⁴ It is unified by a set of core protocols: the TCP/IP protocol stack.⁸⁵ TCP/IP provides a range of functions: from application-specific, like email and web-browsing, down to low-level networking protocols like IP and TCP.⁸⁶ The TCP/IP suite consists of five layers: application, transport, network, data link and physical. Each layer solves a set of problems involving data transmission and provides pre-defined services to the upper layer based on services from the lower layers. Upper layers are logically closer to the user and deal with more abstract data, relying on lower layer protocols to translate data into forms that can be physically transmitted.⁸⁷ The top layer conveys information in the form of words, the lowest layer conveys electrical impulses.

⁷⁸ *Carter & Harland* [231]

⁷⁹ M A Eisenberg, *Expression Rules in Contract Law and Problems of Offer and Acceptance* (1994) 82 Cal L Rev 1127

⁸⁰ A H Hudson, above at note 61 at 172

⁸¹ *Carter on Contract* [03-360]

⁸² Furmston, M P, ed., *The Law of Contract*, Butterworths, London 1999; par 2.230; *Household Fire and Carriage Accident Insurance Co Ltd v Grant* (1879) LR 4 Ex D 216 at 217, 227

⁸³ *Bressan v Squires* [1974] 2 NSWLR 460

⁸⁴ D E Comer, *Computer Networks and Internets with Internet Applications*, 4th ed, New Jersey 2004, p 421

⁸⁵ For general descriptions see: C Hunt, *TCP/IP Network Administration*, 3rd ed, Sebastopol, 2002; L B Solum, M Chung, *The Layers Principle: Internet Architecture and the Law* (2004) 79 Notre Dame L Rev 815; D Benoliel, *Cyberspace Technological Standardization: An Institutional Theory Retrospective* (2003) 18 Berkeley Tech L J 1259 at 1276. The TCP/IP protocol stack is often compared to the Open System Interconnect ("OSI") model, which was developed by the ISO and serves as a conceptual framework used to compare different networking protocols.

⁸⁶ TCP stands for Transmission Control Protocol, whereas IP stands for Internet Protocol. See also: M Froomkin, Habermas@discourse.net: *Toward a Critical Theory of Cyberspace*, 116 Harv L Rev 749 at 779

⁸⁷ Additional layers are often singled out for analytical purposes, for example a user- or content-layer; see: E J Feigin, *Architecture of Consent: Internet Protocols and Their Legal Implications* (2004) 56 Stan L Rev 901 at 904; M Cooper,

From a contract law perspective, all relevant technologies are located at the application layer.⁸⁸ Contractual intention is manifested by email, websites or instant messengers.⁸⁹ It is those individual *applications* that determine the manner information is communicated (i.e. displayed and transmitted).⁹⁰ Although the “data link,” “network” and “transport” layers form the core infrastructure, they remain “network or system-oriented (rather than user-oriented).”⁹¹ They deal exclusively with the physical transmission of electrical impulses and packets. To claim that that the bearer network or physical transmission channel affects the application of contract formation principles would imply the need to differentiate between fixed-line and mobile phones, between letters carried by railway, car or submarine. Questions regarding transmission technologies are relegated to telecommunications law and the regulatory aspects of the Internet.⁹² The time of formation does not depend on cables, routers or switches.

Despite the above, some legal arguments refer to factors from the lower layers of the TCP/IP stack. For example, it is often stated that email travels in packets.⁹³ So do *all* other messages on the Internet. The Internet is a packet-switched network and the disassembly of the payload into packets at the transport layer is its inherent characteristic. Email, instant messengers and web-based interactions provide different communication possibilities, which are unrelated to the manner of transmission. Depending on which layer of the TCP/IP stack is examined, messages take the form of text, strings of 1s and 0s or electrical impulses. Legal arguments cannot be constructed on the basis of an arbitrary selection of technical features, which are either layer-specific or apply to *all* Internet-based communications. To the contracting parties, packets are transparent and have no impact on the communication process. Arguments that email is instantaneous because it travels in packets are inherently absurd and must be rejected.

Communication devices

It can also be assumed that the *terminating* devices (such as phones, faxes or computers) cannot form a criterion in deciding between the principle and the exception. This is so despite the traditional equation between telephone conversations and face-to-face dealings. *First*, one communication process can combine multiple devices: a message may originate on the phone and terminate on a fax machine. The originating device may differ from the terminating device.⁹⁴ Which side of the transaction would be decisive: the sender’s or the addressee’s? *Second*, due to a growing trend for convergence, a single device can combine multiples functionalities. The distinction between phones and computers is blurred: most mobile phones carry the computing power of early computers. Telephone calls can originate on computers and terminate on fixed or mobile phones, email and instant messengers can be sent and received from mobile phones. Computers are phones and phones are computers. It is therefore impossible to chose between the principle and the exception on the basis of the communication device alone.

Open Communications Platforms: the Infrastructure as the Bedrock of Innovation and Democratic Discourse in the Internet Age (2003) 2 J Telecomm & High Tech L 177 at 182

⁸⁸ Wu, T, *Application-Centered Internet Analysis* (1999) 85 Va L Rev 1163 at 1163

⁸⁹ K C Laudon, C G Traver, above at note 6 p 118

⁹⁰ D E Comer, above at note 84, p 422

⁹¹ D Benoliel, above at note 85, p 1278

⁹² For a detailed discussion of the various interactions between law and the respective layers see: L B Solum, M Chung, *The Layers Principle: Internet Architecture and the Law* (2004) 79 Notre Dame L Rev 815

⁹³ V Watnick, *The Electronic Formation of Contracts and the Common Law “Mailbox Rule”* (2004) 56 Baylor L Rev 175 at 200

⁹⁴ See: *Express Airways v Port Augusta Air Services* [1980] QdR 543, where the acceptance was sent by telegram to the Post Office and then via telex to the offeror; Douglas J held, without a detailed explanation, that acceptance was effective on receipt; see also *Leach Nominees Pty Ltd v Walter Wright Pty Ltd* [1986] WAR 244 at 431 for explanation of possible combinations of telex, telegram and telephone.

Method and Protocol

The characteristics of any communication method depend on its underlying protocol(s). The relationship between “method” and “protocol” is not straightforward. It illustrates the difficulty in correlating one factor (e.g. technology) to another (e.g. characteristics of the communications process). Email, Instant Messengers and web-based communications can be regarded as “methods,” whereas SMTP,⁹⁵ OSCAR,⁹⁶ XMPP⁹⁷ and HTTP⁹⁸ are protocols. Each communication method relies on one or more protocols: Internet email uses SMTP, web-based communications are based on HTTP. Instant messengers lack a single standardized protocol, but share common features and provide an identical communication process. Multiple protocol combinations are possible: email may use HTTP, web form input can be transmitted via HTTP or SMTP. Different protocols can yield a similar type of communication and some methods deploy protocols underlying other methods. Accordingly, there is no strict correlation between a given method and a protocol. Protocols remain concealed to the user, whereas the method is chosen depending on the specific communication goal, including the urgency of reply or the ability to reach the other party in real-time. Protocols must be examined only to the extent they determine the characteristics of the respective methods *in casu*.

In sum, the time of formation cannot depend on the medium of transmission, the protocol or the communication devices. These factors are transparent, unpredictable or purely random. Senders have no control over how their messages are transmitted and received. Addressees do not know how a message originated. The transfer of an acceptance may involve multiple devices, protocols, connection types and transmission media. None is decisive in choosing between the principle and the exception.

DOES THE PAR APPLY TO EMAIL?

Arguments against extending the PAR to electronic acceptances are usually based on two factors: “instantaneousness” and “control.” It is commonly stated that the receipt rule applies to “instantaneous” methods of communication, the PAR, where acceptance is communicated by a “non-instantaneous” method.⁹⁹ Control relates to the sender’s ability to ensure receipt, which in turn is associated with knowledge of successful or failed receipt. Following the traditional line of reasoning, the question “does the PAR apply to email?” requires the examination (a) whether email is instantaneous and (b) whether the sender has control of the communication process.

⁹⁵ RFC 2821, *Simple Mail Transfer Protocol* (2001) J Klensin, ed

⁹⁶ OSCAR is AOL’s flagship instant messaging and presence information protocol standing for Open System for CommunicAtion in Realtime. Currently in use in two instant messaging systems: ICQ and AIM

⁹⁷ RFC 3920, *Extensible Messaging and Presence Protocol* (2004), P Saint-Andre, ed

⁹⁸ RFC 2621, *Hypertext Transfer Protocol-HTTP/1.1* (1999), T Berners-Lee, et al

⁹⁹ *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 327, *Brinkibon v Stahag und Stahlwarenhandels-gesellschaft mbH* [1983] 2 AC 34 at 41; Fasciano, above at note 63 at 986; See also; Eisler, above at note 74 at 583; Farnsworth.

Being “instantaneous”

The term is used with little precision: email is called “absolutely,”¹⁰⁰ “not completely,”¹⁰¹ “nearly,”¹⁰² “almost,”¹⁰³ “virtually,”¹⁰⁴ “more or less”¹⁰⁵ or “in fact”¹⁰⁶ instantaneous. Only few commentators suggest that email is not instantaneous.¹⁰⁷ As “instantaneousness” allegedly justifies the rejection of the PAR, a more consistent meaning is desirable.¹⁰⁸

Is “instantaneous” a legal or a technical term? A legal definition permits a liberal approach and an adaptation of the term for the purposes of a given argument.¹⁰⁹ A technical approach forces a more disciplined analysis. Interestingly, even if a purely “legal” definition is adopted, instantaneousness remains a question of fact. Moreover, despite the saliency of the term, it is not clear what instantaneousness refers to – the method (means? medium?) of communication or the communication *process* itself. This confusion is also reflected in *Brinkibon* and *Entores*, where the term is used alternatively in reference to the communication process and to the devices used by the parties.¹¹⁰

Strictly speaking, *instantaneous* means “occurring with no delay.”¹¹¹ Another definition states: “occurring, done or completed in an instant.”¹¹² “Delay” and “instantaneousness” are different sides of the same coin: if something is instantaneous there is, logically, no delay. Qualifiers like “virtually,” “almost” or “more or less” permit the existence of *some* delay. How much delay is tolerable for something to remain instantaneous? The delay between dispatch and receipt comes in varying degrees. It ranges from days, in the case of horse-carts, to microseconds in the case of *some* electronic communications. Premising the PAR *exclusively* on the length of delay necessitates a gradation: if the delay is longer than “x” (seconds? minutes?) acceptance is effective on dispatch, otherwise acceptance is effective on receipt. Arguments built around “instantaneousness” lead into a blind alley because they premise effectiveness on a factor that is difficult to quantify and often unpredictable. Speed alone cannot form a decisive criterion for applying or rejecting the PAR.

¹⁰⁰ K B Norman, The ASB Home Page: *Alabama Lawyers Go On-Line for a Wealth of Information* (1996) 57 Ala Law 328

¹⁰¹ *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 337

¹⁰² M R Burnstein, *Note, Conflicts on the Net: Choice of Law in Transnational Cyberspace* (1996) 29 Vand J Transnat'l L 79

¹⁰³ *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 328; C L Counts, C A Martin, *Libel in Cyberspace: A Framework for Addressing Liability and Jurisdictional Issues in This New Frontier* (1996) 59 Alb L Rev 1083 at 1086

¹⁰⁴ *Carter & Harland* [232]

¹⁰⁵ *Carter on Contract* [03-360] [03-390]

¹⁰⁶ *Brinkibon v Stahag und Stahlwarehandelsgesellschaft mbH* [1983] 2 AC 34 at []

¹⁰⁷ Fasciano above at note 63 at 973; D Capps, *Electronic Mail and the Postal Rule* (2004) (7) ICCLR 15, 207-212 at 208; V Watnick, above at note 93 at 182; Davis, J L R, ed, *Contract: General Principles*, Thomson Lawbook, Sydney 2006 at 102

¹⁰⁸ Fasciano, above at note 63 at 1000

¹⁰⁹ S Hill, above at note 45 at 24; Wilmot, L, Christensen, Sh, Butler, D, *Contract Law*, 2nd ed, Oxford University Press, Melbourne 2005 par [3.475], stating that certain methods will be regarded as instantaneous communication for the purposes of contract formation.

¹¹⁰ See: *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 327 per Lord Denning and [] per Lord Parker; *Brinkibon v Stahag und Stahlwarehandelsgesellschaft mbH* [1983] 2 AC 34 at 41, 42 per Lord Wilberforce

¹¹¹ WordNet ® 2.0 (2003) Princeton University

¹¹² Macquarie Online Dictionary

A technical analysis

Technically, email is an asynchronous, non-real-time, delayed access, store-and-forward method of communication.¹¹³ Email messages are exchanged independently of each other, without establishing a simultaneously contiguous end-to-end traffic path between the contracting parties. Email systems comprise mail-clients, which are the originators and final destinations for messages, and mail-servers, which relay messages along the transmission path. The protocol underlying email, SMTP, is characterised by intermediate storage, message queuing, delays, retransmission and delivery attempts.¹¹⁴ The transmission between intermediating mail-servers *may* be very fast or “almost instantaneous.” There is, however, no instantaneous transmission between the originating and the destination mail-clients: messages do not travel instantaneously from the computer of the sender to the computer of the addressee.¹¹⁵ Instantaneity can only refer to the speed of transmission between *some* of the relaying mail-servers.

Email communications are characterised by a number of inherent delays.¹¹⁶ The first occurs between the moment the message is composed on the mail-client and the moment it is dispatched from the outgoing mail-server. The dispatch from the mail-server onto the transmission path is *periodic*,¹¹⁷ similar to placing a letter in a mailbox and subsequent collection by a postal employee. The second delay relates to the transmission process itself. The transmission may be delayed by network congestion or mail-server unavailability. Although the transfer between the first and the last mail-server is unlikely to occur without *any* delay, such delay may in fact be minimal. The third delay takes place between the message entering the final mail-server and the moment it is accessed or retrieved by the addressee. It resembles the interval between placing the letter in the addressee’s mailbox and its subsequent retrieval.¹¹⁸ In the final step, mail-clients request (i.e. pull), messages from mail-servers.¹¹⁹ This operation is performed automatically, by configuring mail-clients to poll mail-servers at pre-determined intervals, or manually. Even with always-on broadband connections, retrieval occurs periodically: there is no permanent, open session between the mail-client and the incoming mail-server resulting in the immediate display of new messages.¹²⁰ There is no direct client-to-client transmission of messages and all incoming messages must be requested and retrieved by mail-clients from mail-servers.¹²¹

In light of the characteristics of the underlying protocols and its practical functioning it appears technically incorrect to call email instantaneous – at least with regards to *communication*.

¹¹³ See also: B Wright, J K Winn, *The Law of Electronic Commerce*, Gaithersburg 1999, par 2.02; A Terret, I Monaghan, *The Internet-An Introduction For Lawyers*, p 25, in L Edwards, Ch Waelde ed., *Law & the Internet*, Oxford 2000; SMTP Internet Draft, *Internet Mail Architecture* (2005) D Crocker p 26: “Basic email transfer is accomplished with an asynchronous store-and-forward communication infrastructure, in a sequence of independent transmission through some number of MTSs.”

¹¹⁴ RFC 2821, *Simple Mail Transfer Protocol* (2001) J Klensin, ed, p 5, 10, 57

¹¹⁵ Messages can travel from the sender’s mail-server to the addressee’s mail-server if they are in the same transport service environment, which is not the case if the parties communicate over an open electronic network; see: RFC 2821, p 6

¹¹⁶ J Hogan-Doran, above at note 14 at 384

¹¹⁷ RFC 1123, *Requirements for Internet Hosts – Application and Support* (1989) R Braden, ed, p 58

¹¹⁸ See: Toh See Kiat, *Paperless International Trade: The Law of Telematic Data Exchange*, Butterworths Asia, Singapore 1992 p 51

¹¹⁹ Technologies like blackberry or so-called push-email, enable the “pushing” of messages to the terminating device. They rely on the classic architecture but interpose an additional server between the incoming mail-server and the end-user. The message is pushed to the terminating device because the addressee previously configured a server or device to do so.

¹²⁰ Commentators claiming that email is instantaneous may have been misled by the speed of intra-company communications, when messages are transmitted within the same LAN. See: Fasciano, above at note 63 at 1001

¹²¹ The purpose of this discussion is not establishing *when* receipt occurred but *whether* email is instantaneous.

Being “in control”

The second argument against applying the PAR to email relates to “control.” The PAR assumes that upon posting the letter, senders lose control and are therefore not liable for subsequent events.¹²² If, however, senders retained control, there would be no justification for making acceptance effective on dispatch.¹²³

Treitel combines “control” with “instantaneousness”: the PAR cannot apply to instantaneous methods of communication because “the acceptor will often know at once that his attempt to communicate was unsuccessful.”¹²⁴ Citing *Entores* and *Brinkibon*, he states that the sender is responsible to make a proper communication, “[b]ut a person who accepts by letter which goes astray may not know of the loss or delay until it is too late to make another communication.”¹²⁵ As a result, “control” is tied to the ability to ensure or establish receipt,¹²⁶ which in turn requires knowledge whether receipt occurred or not. It remains unclear whether such knowledge should relate to successful or to failed receipt. Ensuring receipt presumes notice of communication failure, whereas confirmation of receipt appears to be a question of proof and non-repudiation.¹²⁷

The key question in the control argument is: can receipt be determined *without* the addressee’s participation? This problem is illustrated in Lord Denning’s famous example of two clerks sending telex messages between offices in London and Manchester.¹²⁸ It is usually overlooked that in his scenario both parties are *present* at their machines and that the addressee co-operates in ensuring receipt. Lord Denning insists that the sender knows - or has reason to know - that the acceptance has not been received. Lord Denning fails to note that once the message leaves the originating machine, the “reason to know” must be provided by the *addressee*. Addressees, however, may not be able to detect communication failures - even if they await acceptances.¹²⁹ Even if they correctly maintain or attend the device, a problem may occur in the transmission channel. Accordingly, the addressee may not be aware of a communication attempt and will not inform the sender of the communication failure. Senders could learn of communication failures only if notifications to that effect were generated automatically, *without the participation of the addressee*. The “control” argument loses its validity when the sender’s knowledge of failed or successful receipt depends on the co-operation of the addressee. At this point, the reader might observe: “valid receipt can occur without the addressee’s presence at the machine.” This statement is true and the current discussion does not question its validity. It only asks whether the sender can establish the fact of receipt without the addressee’s participation. The sender may not be able to do so if the addressee is *not* present...

The “control argument” relies on the ability to obtain confirmations of receipt or failure notifications.¹³⁰ It is often claimed that in the case of email, the sender knows immediately whether a message has been received. This argument assumes that an inherent feature of email is the generation of

¹²² *Household Fire and Carriage Accident Insurance Co Ltd v Grant* (1879) LR 4 Ex D 216; see also: *Chissick & Kelman* p 79

¹²³ S Hill, above at note 45 at 17; *Brinkibon v Stahag und Stahlwarenhandels-gesellschaft mbH* [1983] 2 AC 34 at 43 per Lord Fraser of Tullybelton

¹²⁴ Treitel, above at note 75 p 26

¹²⁵ Treitel, above at note 75 p 26

¹²⁶ see: S Hill, above at note 45 at 25, *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 333; J Hogan-Doran, above at note 15 at 381

¹²⁷ Ford, W, Baum, M S, *Secure Electronic Commerce, Building the Infrastructure for Digital Signatures and Encryption*, 2nd ed, Prentice Hall, New Jersey 2001 p 340, 341 for a discussion of non-repudiation of delivery and confirmation of receipt.

¹²⁸ *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 333

¹²⁹ J D Gregory, *Receiving Electronic Messages: Eastern Power v Azienda Comunale Energia & Ambiente* (1999-2000) 15 BFLR 473 at 476

¹³⁰ see also: *Household Fire and Carriage Accident Insurance Co Ltd v Grant* (1879) LR 4 Ex D 216 at 224

acknowledgements of receipt or failure notifications. Do the relevant protocols attest to the veracity of this assumption?

SMTP & Delivery Status Notifications

Theoretically, SMTP requires that the relevant mail-server or gateway issue a failure notification whenever a message cannot be delivered.¹³¹ An more detailed analysis of the protocol and its extensions reveals a more complex picture.¹³² Delivery Status Notifications (“DSN” or “notification,” popularly called “bounce message”) indicate conditions like: failed, delayed,¹³³ or successful delivery, temporary failure¹³⁴ It is, however, incorrect to assume that DSNS are always issued by the addressee’s mail-server or that notifications are generated automatically.

First, a notification is not issued if it was not requested. Senders may not be able to issue such requests as their email applications or mail-servers may not provide this feature. Second, the addressee’s mail-server may not support the generation of DSNS or may not be configured to do so. Technical capability must be distinguished from actual configuration. Notification requests may not be honoured. Furthermore, even if a mail-gateway supports the relevant SMTP extension, the mail system on the other side may not generate positive delivery notifications.¹³⁵ A “relayed” notification is produced, indicating that no DSN can be sent. Moreover, SMTP does not always deliver the message to its final destination, i.e. the addressee’s mail-server. It may *relay* it into a different transport environment in which messages are no longer transported via SMTP.¹³⁶ Effectively, senders are informed that their message reached *some point* in the transmission channel and that no DSN can be issued. Third, notifications are generally not issued because of security reasons, as they enable the validation of hosts on a network and expose the mailbox to unsolicited messages (spam).

Interesting situations arise when delay notifications are issued. While they may be obtained immediately after dispatch of the original message, the very notification informs that the message is delayed.¹³⁷ DSNS may also be issued with substantial delay after the inability to deliver is discovered.¹³⁸ What is the status of an acceptance when a delivery failure notification arrives after 2 days? To complicate matters, Apple Mail offers a “bounce message” option, enabling recipients to return messages.¹³⁹ Addressees can generate failure notifications and deny receipt in order to prevent the formation of a contract. Accordingly, the generation of DSNS depends on recipients acquiescing to requests for such notifications and on the technical ability of their systems to generate such. For “knowledge of receipt” to support the control argument, *all* senders would have to be able to request and *all* delivering mail-servers or mail-clients would have to *automatically, immediately* and *unconditionally* generate notifications or confirmations.

¹³¹ RFC 2821, pp 4, 61

¹³² RFC 3461, *Simple Mail Transfer Protocol (SMTP) Service Extension for Delivery Status Notifications (DSNs)*(2003) K Moore; RFC 3464, *An Extensible Message Format for Delivery Status Notifications* (2003) K Moore, G Vaudreuil; note that Delivery Status Notifications must be distinguished from Message Disposition Notification (“MDNs” or “read receipts”) which are sent by mail-clients or mail-gateways to report the disposition of a message *after* successful delivery. See RFC 3798 (2004) T Hansen, G Vaudreuil

¹³³ RFC 3461, p 6

¹³⁴ RFC 3461, p 21

¹³⁵ RFC 3464, p 21

¹³⁶ RFC 3464, p 16

¹³⁷ Similar situations arise in the case of out-of-office replies, see: RFC 3834, *Recommendation for Automatic Responses for Electronic Mail* (2004) K Moore

¹³⁸ RFC 3461, p 14

¹³⁹ Apple Mail 1.3.11 (v622/623)

A final point in relation to the “control” argument: the purpose of the PAR was to prevent an *ad infinitum* exchange of confirmations of receipt. Introducing DSNs into the discussion creates the very situation the exception was designed to avoid. Apart from extending the contract formation process,¹⁴⁰ confirmations raise a number of additional problems.¹⁴¹ Absent prior agreement, recipients have no obligation to acknowledge receipt. They can speculate at the sender’s expense by refusing to confirm receipt of what would otherwise be a valid acceptance. What is the status of an “unconfirmed” acceptance? Depending on the answer to this question, effectiveness may shift to the moment of acknowledgement or create a state of uncertainty for both parties.¹⁴² In sum, confirmations distort the contract formation process and enable the manipulation of acceptance by delaying or refusing to acknowledge its receipt. Absent a general obligation – and a technical capability - to confirm receipt or notify of failed receipt on the addressee’s side, it cannot be assumed that acknowledgements or notifications are always issued. There is no universal rule that DSNs are generated whenever messages cannot be delivered. Due to increasing security concerns¹⁴³ and differences between mail-clients and mail-servers it is impossible to make this general assumption.¹⁴⁴ It is therefore incorrect to claim that the sender of an email controls the communication process.

RELIABILITY AND RISK ALLOCATION

The two assumptions underlying arguments against extending the PAR to email (instantaneousness and control) depend on several technical factors. While it remains debatable whether email is instantaneous, it can be stated that senders are not in control of the communication process. It could therefore be claimed that the PAR *should* apply to email. Before settling on this conclusion it must be determined whether email resembles the post.¹⁴⁵ The latter constitutes the default scenario for effectiveness on dispatch. A comparison with the post reveals that there are other factors, apart from “control” and “instantaneity,” that must be taken into account.

Email and postal communications are structurally similar in the sequence of events: dispatch, transmission, intermediate storage and retrieval. Both are characterized by delayed access: an interval between the receipt of the message (end of transmission), and its retrieval (notification).¹⁴⁶ Both require the performance of an additional step to read the message or letter. The difference between them consists not only in the duration of transmission between the originating and the destination distribution platform – but also in their reliability.

Reliability is a function of the risks inherent in the communication method and the ability to manage those risks. In the case of the post, the risk of receipt was placed on the offeror (addressee) because such risk was minimal. Does this allocation remain justified if the risk increases? The post is

¹⁴⁰ D Capps, above at note 109 at 207

¹⁴¹ See: MLEC Art. 14, “Acknowledgement of receipt,” see also: *Cheshire & Fifoot* at [3.48]

¹⁴² See: MLEC Art 14 (3): “where the originator has stated that the message is conditional on receipt of the acknowledgement, the data message is treated as though it has never been sent, until the acknowledgement is received”. Art 14 (4) deals with the situation where the originator has not stated that the message is conditional upon receipt of an acknowledgement. In the latter situation, he must perform a number of steps, such as requesting the other party to confirm within a specified time, before he can treat himself as relieved from the legal implications of his message, if any. See: official comment no. 96.

¹⁴³ mainly due the possibility of discovering hosts on the network, see: RFC 3834, *Recommendations for Automatic Responses to Electronic Mail*, K Moore (2004) p 15

¹⁴⁴ A R Chacker, *E-ffectuating Notice: Rio Properties v Rio International Interlink* (2003) 48 Vill L Rev 597 at 618

¹⁴⁵ *Cheshire & Fifoot* par 3.44, who state that electronic communications have some parallels with old-fashioned letters: “perhaps the postal rule will have a renaissance”; see also: Sh Christensen, above at note 111, who describes email as an “electronic version of the postal system.”

¹⁴⁶ S Hill, above at note 45 at 21

associated with reliability and a quality of service prescribed by statute.¹⁴⁷ The number of reasons precluding an email from reaching the intended mail-server by far exceeds the number of reasons that might preclude a letter from reaching its destination mailbox.¹⁴⁸ While transmission speeds and Internet accessibility increase, the reliability of email is decreasing.¹⁴⁹

The more risks are involved in a specific method, the more important it is to establish rules of their allocation.¹⁵⁰ The risk of failed communication can be borne by either the offeree (sender) or the offeror (addressee). Logically, these risks are non-existent in face-to-face dealings. Whereas the principle of receipt is not designed to allocate risks, the PAR was conceived to deal with situations where due to the reliability of the post those risks were minimal. Effectiveness on dispatch is fair to the offeror (addressee) if the method is reliable. It seems less fair to the offeror if the likelihood of receipt decreases. Effectiveness on receipt combined with unreliability is not fair to the offeree (addressee). The only way to protect the latter is to require offerors to acknowledge receipt or notify of communication failures. This, however, leads to the very situation the PAR was designed to avoid: circular communications.¹⁵¹ It also requires that offerors be able to detect failed communication attempts and/or that their terminating devices automatically generate failure notifications. These technical requirements are, however, difficult to fulfil. Neither the principle nor the exception produces a fair result as neither accommodates a high risk of failed receipt.

Common sense dictates that the time of formation cannot depend exclusively on the statistical probability of receipt or on the length of the interval between dispatch and receipt. This would imply that the longer the delay or the more reliable a method in terms of delivery statistics, the greater the justification for effectiveness on dispatch. The length of delay and delivery statistics are unpredictable and difficult to quantify. Both "reliability" and "instantaneity" constitute variable factors and necessitate the introduction of a gradation. Neither can form a decisive criterion for choosing between the principle and the exception.

It remains questionable whether email is instantaneous. The sender of an email has no control over the communication process, unless a number of technical conditions are met. Although structurally similar to postal communications, email is not as reliable as the post and increases the need for acknowledgements of receipt and failure notifications.¹⁵² It is therefore difficult to decide whether it can be subsumed under the exception. How does it fit under the principle?

¹⁴⁷ see: Australia Post Annual Report 2004/05, p. 19, Reliable, on-time delivery is a regulated performance standard prescribed by the Australian Postal Corporation Act 1989, section 28 (c). In 2004/2005 Australia Post delivered 94.9 % of domestic letters on time or early - against the regulated 94 % target. "Of the letters that did not meet our timetable standard, nearly all were delivered by the following day." Independently monitored results show that 98.3 % of domestic letters were delivered on time or within one extra day. As was said by Lord Esher MR in *Kemp v Wanklyn* (1894) 1 QB 583, at p 585: "The Post Office is the authority which, under its statutory powers, determines the ordinary course of the post - that is to say, how the letters shall be carried, and at what time they shall, as a general rule, be delivered within any particular district to the persons taken as a body who reside in that district." See also: *Bowman v Durham Holdings Pty Ltd* (1973) 131 CLR 8 at 13

¹⁴⁸ For a detailed description of what can go wrong see: RFC 3463 "Enhanced Mail System Status Codes" (2003) G Vaudreuil

¹⁴⁹ T Moors, *Email Dependability*, School of Electrical Engineering and Telecom, University of New South Wales, Australia, available at: www.eet.unsw.edu.au/~timm; K Martin, *The Time Has Come to Ditch Email*, The Register, SecurityFocus Published 1st June 2006: "[E]mail is a terrible mess. It's dangerous, insecure, unreliable, mostly unwanted and out-of-control." available at: http://www.theregister.co.uk/2006/06/01/ditch_email/print.html; J E Dunn, *Yahoo accused of poor email service Tests find half its servers are shut down*, Techworld 13 April 2006, available at www.techworld.com

¹⁵⁰ H B Thomsen, B S Wheble, *Trading with EDI, The Legal Issues*, London 1989, p 141

¹⁵¹ Sh Christensen, *Formation of Contracts by Email – Is it Just the Same as the Post?* (2001) 1 QUTLJ 22 at 30

¹⁵² Chissick, M, Kelmann, A, *Electronic Commerce: Law and Practice*, Sweet & Maxwell, London 2000, p 80

DOES THE PRINCIPLE APPLY TO EMAIL?

The principle of receipt derives from the paradigm situation of face-to-face dealings. Whenever the communication process displays the same characteristics as dealings between parties who transact in each other's presence there is not justification to apply the exception.

Face-to-face dealings ensure instantaneous *communication*: the manifestation of acceptance is concurrent with its notification. There is no delay between "dispatch and receipt" and between "receipt and notification." The communication process is interactive: bi-directional, synchronous, imparting not only immediate knowledge of receipt but also ensuring a communication process without the dependencies inherent in dealings at a distance.¹⁵³ Both parties monitor and control the communication process, neither requires protection from the possibility of failed receipt. This is illustrated by Lord Denning's examples in *Entores*: shouting across the river, with planes passing overhead, and talking over the phone with the line going dead in the middle of the conversation.¹⁵⁴ In both instances the "sender" knows of the miscommunication *without* the participation of the other party as communication failures become immediately apparent.

Are email communications sufficiently similar to face-to-face dealings to apply the principle? On one hand, email can be compared to the post, the main similarity being the existence of intermediating distributing platforms, periodic transfer and the mechanics of message dispatch and retrieval. On the other, email does not involve a substantial delay between dispatch and receipt in the way the post does. Most importantly, if both parties attend their computers and regularly poll their mail-servers for new messages, they can exchange messages "as if" they were having a conversation.

To answer the above question, the difference between "transmission and "communication" must be revisited and the two-way nature of face-to-face dealings must be taken into account. Again, the inconsistent use of terminology comes into play.

Transmission and communication

Interactions over the phone are treated like face-to-face dealings.¹⁵⁵ This, however, is justified only if both parties simultaneously use the device. When messages are left on answering machines, the communication process *does not* approximate the quality of face-to-face dealings.¹⁵⁶ *Communication* is delayed due to the very fact that the other party is not present and accesses the message later.¹⁵⁷ This important point was made by Coote as early as 1971. According to Coote, the mere use of an instantaneous mode of *transmission* is never decisive by itself. "It would always be necessary to know in addition whether the parties were thereby placed in *instantaneous communication* with each other."¹⁵⁸ In other words, methods providing instantaneous transmission need not provide instantaneous *communication*.

¹⁵³ "In a two-way communication, one party can determine readily whether the other party is aware of the first party's communication, through immediate verbal response or, when the communication is face-to-face, there are nonverbal cues. When the communication is not instantaneous and is not face-to-face, there is much greater uncertainty as to whether the other party is aware of a particular transaction." M S Baum, H H Perritt, Jr, *Electronic Contracting, Publishing and EDI Law* (1991) New York, p 321

¹⁵⁴ *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 333, 334

¹⁵⁵ *Aviet v Smith & Searle Pty Ltd* (1956) 73 WN (NSW) 274; *Express Airways v Port Augusta Air Services* [1980] Qd R 543; *W A Dewhurst & Co Pty Ltd v Cawrse* [1960] VR 278

¹⁵⁶ H B Thomsen, B S Wheble, above at note 150, p 133

¹⁵⁷ R Nimmer, above at note 46 at 223, who implies that delayed access prevents to application of the face-to-face analogy.

¹⁵⁸ B Coote, above at note 11 at 342

Communication devices can be used in multiple ways. Devices that operate automatically (like telex) can be attended by both parties, rendering the communication process similar to face-to-face dealings. Devices like the telephone, which - by definition - presuppose the simultaneous presence of both parties, may also be used in a way that delays *communication*, e.g. when messages are left on the answering machine. Leaving aside the difference between instantaneous *transmission* and instantaneous *communication*, the above discussion also highlights the difficulties in deciding what "instantaneousness" should relate to: the method (or device?) of communication or the communication process itself. Coote's argument seems to imply that various devices (method or means?) can bring about instantaneous communication but the device should not be regarded as the premise of instantaneousness. It is the actual *exchange* of manifestations of intention that must be instantaneous. Everything depends on how a device is used in a given communication scenario.

In the case of email, instantaneousness relates to the speed of transmission to the addressee's mail-server, it does not imply that the addressee *immediately* accesses or retrieves the message. When an emailed acceptance arrives at the mail-server, the addressee need not be present at his computer and the computer need not be on-line.¹⁵⁹ Instantaneous *communication* is only possible if both parties attend their machines, maintain a permanent connection and regularly request messages from their respective mail-servers.

A further clarification is due. Unquestionably, receipt can occur outside of business hours or when the device is unattended or malfunctions.¹⁶⁰ The present discussion, however, is not aimed at establishing when receipt occurs, but on determining when dealings at a distance can be equated with dealings face-to-face. The question is not: did receipt occur? The question is: which is the legally relevant event – dispatch or receipt? The latter question must be preceded with an analysis whether a given communication process resembles dealings face-to-face or those at a distance. If receipt is the legally relevant event, occurrences precluding receipt on the addressee's side are disregarded. Receipt is either deemed or the addressee is estopped from denying it.¹⁶¹ If, however, acceptance is effective on dispatch, receipt becomes irrelevant altogether.

Two-way

Face-to-face dealings are characterized by their two-way nature. This is reflected in the Restatement (Second) of Contracts: "[a]cceptance given by telephone or other medium of substantially instantaneous two-way communication is governed by the principles applicable to acceptances where the parties are in the presence of each other."¹⁶² "Substantial instantaneousness" requires transmission without any substantial lapse of time,¹⁶³ "two-way," an interaction among the parties, so that "ambiguities and misunderstandings, if perceived, can be cleared up on the spot."¹⁶⁴ Instantaneity is therefore only one of two necessary elements for the interactions to resemble face-to-face dealings. Despite the use of the term "medium" in relation to the telephone, it must be assumed that the Restatement refers to communication devices or methods in general.

The Restatement applies the PAR to situations where the parties are not in each other's presence and the method of communicating acceptance involves a delay between dispatch and receipt. As in the case of "control," the two-way characteristic is tied to the possibility to obtain a confirmation of receipt or

¹⁵⁹ See: SMTP Internet Draft, *Internet Mail Architecture* (2005) D Crocker, p 3, 4

¹⁶⁰ *Brinkibon v Stahag und Stahlwarenhandels-gesellschaft mbH* [1983] 2 AC 34 at 42

¹⁶¹ *Entores Ltd v Miles Far East Corporation* [1955] 2 QB 327 at 333

¹⁶² Restatement (Second) Contracts, Par 64

¹⁶³ Restatement (Second) Contracts, Par 64 comment a; see also: R Nimmer, above at note 46 at 222

¹⁶⁴ Restatement (Second) of Contracts Par 64 comment b

a failure notification.¹⁶⁵ The restatement adopts the approach that the receipt rule should apply where the medium of communication is instantaneous and bi-directional, the postal exception - where communication is time-delayed and unidirectional.¹⁶⁶

This approach is also reflected in Lord Wilberforce's reasoning in *Entores*, who mentioned telephone alongside *radio* communications, not telex.¹⁶⁷ Although in the case of radio, the parties cannot speak simultaneously on the same channel, every disruption is detected immediately and a repeat can be requested while the communication is still in progress.¹⁶⁸ In the case of e-mail, the sender does not know whether the message has been received.¹⁶⁹ As with letters, there is no immediate feedback from the addressee.¹⁷⁰ Technically, email is a one-way method of communication. The two-way characteristic can be "re-created" only if both parties attend their computers, regularly poll their mail-servers and automatically *and immediately* generate confirmations of receipt. As indicated above, the generation of such notifications presupposes certain technical capabilities of the addressee's system and the addressee's general willingness to co-operate, that is – communicate in real-time. The re-creation of the two-way quality may therefore not be possible.

EMAIL COMPARED TO INSTANT MESSENGERS AND WEB-APPLICATIONS

The difficulty in treating email communications at par with face-to-face dealings becomes even more apparent when email is compared to interactions via instant messengers ("IMs") and web-applications.

Instant Messengers

In principle, dealings via instant messengers occur in real-time as both parties must be on-line to exchange messages. Messages are typed and immediately appear on the screen, becoming visible to both parties at the same time.¹⁷¹ Dispatch and receipt are simultaneous, *communication* is instantaneous. Both parties monitor the communication process in real-time: if a message cannot be delivered, there is an immediate notification to that effect or the message does not appear on the screen. The communication process is interactive, instantaneous and two-way.¹⁷² Not only can senders ensure receipt, assuming that the immediate failure notification is interpreted as such, but also actual *communication*.

Moreover, virtually all IM applications display so-called presence indicators, which inform whether a person is on-line, off-line, does not want to be disturbed etc. Status information indicates

¹⁶⁵ The Electronic Messaging Services Task Force, *The Commercial Use of Electronic Data Interchange – A Report and Model Trading Partner Agreement* (1990) 45 Bus Law 1645 [no page references available]

¹⁶⁶ Waddams, *The Law of Contracts*, (3rd ed., 1993) pp 73, 74; A A Macchione, *Overview of the Law of Commercial Transactions and Information Exchanges in Cyberspace – Canadian Common Law and Civil Law Perspectives* (1996) 13 CIPR 129 at 133, 134; see also *Vocabulary of Terms for Broadband Aspects of ISDN*, ITU-T Recommendation I.113 (06/97) which distinguishes between conversational services and messaging services. The former are characterised by a bi-directional exchange by means of real-time (no store-and-forward) information transfer, whereas the latter offer communication via storage units with store-and-forward message handling.

¹⁶⁷ *Brinkibon v Stahag und Stahlwarenhandels-gesellschaft mbH* [1983] 2 A C 34 at 41

¹⁶⁸ In the case of radio communication, which are technically one way at a time, custom has developed a distinctive way of communicating: every sequence of sentences after which a reply is expected is finished by the word 'copy' or 'over'. Parties often re-confirm by "do you read me?" questions.

¹⁶⁹ Fasciano, above at note 63 at 1002

¹⁷⁰ It is therefore incorrect to assume that acknowledgements of receipt or failure notification can serve as a "substitute" for the two-way quality of interactions; see: Fasciano above at note 63 at 1002

¹⁷¹ Differences of micro-seconds are disregarded.

¹⁷² Ch P Morrison, *Instant Messaging for Business: Legal Complications in Communication* (2004) 24 J L & Com 141 at 142, 143; see also: R Nimmer, above at note 46 at 222

whether a person can or *desires* to communicate.¹⁷³ Some indicators change automatically, i.e. when a person is inactive for a predefined time the status turns to "idle" or "away," others are changed manually, such as "do not disturb." Senders can tailor their communication behaviour to the addressee's presence information. To complicate matters, whenever an addressee is on-line then – irrespective of his status as "away," "idle" or "busy" – some IM applications can still receive messages. "Away" does not necessarily imply that the addressee is "off-line." As many computers remain on-line for months and parties do not log-off their IM applications, the "away" or "busy" status can be interpreted as an unwillingness to communicate. In other words, despite the technical ability to receive messages, the addressee's status indicates delayed *communication*. Furthermore, some applications provide the option of "deliver now" or "deliver later" in the event the addressee is not online. Another variation is the possibility to send messages despite the addressee's off-line status. Although a failure notification is displayed instantly, the message is delivered once the addressee returns on-line. In principle, senders know whether and when their messages are received and whether the addressee is on-line.¹⁷⁴

Despite the technical differences between email and instant messengers, either method can be used in ways resembling the other: email can be used to exchange messages in real-time, when both parties attend their computers, instant messengers can be used for delayed communications when senders type messages for later delivery. Despite such possibilities and the numerous permutations introduced by presence information, it can be assumed that as a general rule, instant messaging applications provide instantaneous two-way communication, whereas email is one-way and its instantaneous character depends on a number of variables, including the actual presence of both parties and the configuration of their mail-servers.

Accordingly, email can be regarded as instantaneous in comparison to the post. It is not, in comparison to instant messengers. Its speed is relative and depends on what it is compared to. There are also two groups of users: those who are familiar with Internet-based communication methods and those who have acquired Internet skills later in life and are not comfortable with new technologies. The latter group perceives email as fast and essentially does not use instant messengers; the former regards email as slow and prefers instant messengers and text messaging.¹⁷⁵ Taking into account today's fast paced business environment, a delay of even five minutes may appear unacceptable to many.

Web-based interactions

Web-based communications, due to the inherent immediacy of response, raise few problems with regards to effectiveness. The web was designed not as a method of communication but as a system of information *retrieval*. The interactivity of many websites is the result of applications running on the server- or client side. A distinction between *downloading* a website and *interacting* with a website must be made. "Downloading" consists of requests for a particular resource and a response in the form of delivery (i.e. display) of that resource.¹⁷⁶ If the resource, generally in the form of a website, cannot be delivered, an error code is displayed. If the request in the form of typing in a URL or activating a link is treated as the dispatch of a message, then the response from the mail-server must be regarded as immediate. The process can be described as two-way: users requesting web-sites can monitor the responses from the

¹⁷³ See generally: RFC 2778, *A Model for Presence and Instant Messaging* (2000) M Day, J Rosenberg, H Sugano

¹⁷⁴ IM applications differ in their treatment of addressee inaction. A message may appear on the screen, no failure notification is issued - yet no reply from the addressee is forthcoming. Some IM applications display information when the other party is typing, others do not. Accordingly, absent failure notification the sender may not know *why* the addressee is not replying. The sender knows, however, that the message has been successfully delivered. Situations like these illustrate the inability to fully replicate the qualities of face-to-face dealings absent actual physical presence

¹⁷⁵ T Van Riper, Instant Messenger Etiquette, 08.22.06, available at www.forbes.com/2006/08/22/leadership-bizbasics-messaging

¹⁷⁶ RFC 2616, *Hypertext Transfer Protocol -- HTTP/1.1*, R. Fielding *et al.*, 1999; sections 1.4, 4.1,

web-server in real-time.¹⁷⁷ Depending on the bandwidth, the requested resource “appears” on the screen with varying speed.

In the case of server-side or client-side applications the process is not confined to information retrieval and bears signs of interactivity. Users not only request websites but provide input by filling out forms or clicking buttons thereby actively modifying the contents of websites displayed (i.e. sent) in response to their requests. Irrespective of whether user input is processed on the client- or on the server-side, the response from the website can be monitored by the user in real-time. Although responses may be delayed by seconds, or even minutes in cases of server overload or slow connections, the interaction can still be described as instantaneous and two-way.

A comparison of email, instant messengers and web-applications demonstrates the difficulty of subsuming all three under one rule. Divisions between the different communication methods do not fold neatly along technological lines. The only undisputed division is between dealings face-to-face and dealings at a distance.

CONCLUSIONS

Neither the principle nor the exception fit the new permutations introduced by email – speed of transmission coupled with unreliability and lack of control. The question “is email instantaneous?” dooms the outcome of any analysis and leads the argument into a blind alley. Email is “nothing by itself,” it can only enable a certain type of interaction. The “instantaneousness” of email is a logical shortcut that derives from an undisciplined and vague formulation of the principle. It must be admitted, however, that before the emergence of the current, more complex communication landscape, such logical shortcut was excusable. The “traditional” classification into “instantaneous” and “non-instantaneous” must therefore be abandoned. Speed alone is irrelevant. From businessmen with blackberries to schoolkids with mobile phones - everybody is “on-line” and wants to communicate in “real-time.” The instantaneity of transmission is taken for granted. The focus must be shifted from communication devices to the characteristics of the communication process. The latter resembles either dealings face-to-face or dealings at a distance. This simple division should constitute the starting point for all analyses. Whenever the communication process is interactive and real-time, i.e. resembles face-to-face dealings, the application of the principle is unquestionable. The exception can only be debated in those instances where the exchange between the parties does not resemble face-to-face dealings.

In light of the above, arguments based on the speed of transmission - or “instantaneousness” - must be retired from analyses of contract formation on-line. An additional factor, however, that may be included is “reliability.” The choice between the principle and the exception may be crucial not because of the length of delay between dispatch and receipt but because the increased risks of communication failure. Accordingly, the inquiry “when was the contract formed” turns into “who should bear the risk of failed receipt”? The “risk factor” was also explicitly mentioned by Lord Wilberforce in *Brinkibon*.¹⁷⁸ Placing the risk of receipt on the sender is unfair whenever receipt depends on the unpredictable workings of the transmission channel *and* the participation of the addressee. Placing the risk of receipt on the addressee is fair whenever the sender cannot guarantee receipt and the method of acceptance is imposed by addressee. As a result, an important consideration is the “reliability” of a given method as well as who imposed such method.

It must not be forgotten that the method of acceptance is chosen with a specific communication goal in mind. If the offeror must be reached in real-time and communication must be ensured, the offeree

¹⁷⁷ J Hogan-Doran, above at note 14 at 384

¹⁷⁸ *Brinkibon v Stahag und Stahlwarehandels-gesellschaft mbH* [1983] 2 AC 34 at 42

will use the phone or an instant messaging application. As Internet-based technologies enable the detection of the offeror's presence and communication status, offerees can tailor their response to this information. If an immediate response is required, it is questionable whether the offeree would *email* the acceptance. Again, the "communication goal" is closely related to the "reasonable expectations" of the parties mentioned by Lord Wilberforce.¹⁷⁹

It is impossible to state one universal rule encompassing all acceptances communicated via email. In principle, email does *not* provide a communication process resembling face-to-face dealings. An acceptance sent via email should not be effective on receipt but on dispatch. At the same time, it is difficult to equate email with the post – at least in terms of reliability. One is therefore left with the necessity to examine each communication scenario involving an emailed acceptance on a case-by-case basis. In the event, however, an acceptance is communicated by means of instant messengers or web-based interactions it can be stated with confidence that there is no other option but effectiveness on receipt.

¹⁷⁹ *Brinkibon v Stahag und Stahlwarehandels-gesellschaft mbH* [1983] 2 AC 34 at 42