New Blackfriars

DOI:10.1111/nbfr.12093

Hermeneutics and Preaching the Word

Kevin E. O'Reilly, OP

How does the preaching of the bishop and his co-workers, priests and deacons, differ from that to which all the baptized are called in virtue of their sharing in the prophetic office of Christ? What is the end that preaching seeks to achieve? What is its relationship to the Church as well as to her Scriptures, her Tradition, and her Magisterium? What is its relationship to the Eucharist? These are some of the questions that animate the inquiry of the first section of this article into the nature of the preaching that is proper to bishops, priests, and deacons. As this inquiry progresses it will become clear that the criteria for good preaching are ecclesial, Eucharistic, apostolic, Scriptural, and pertain to Tradition. They establish the ontological foundations for the preacher's hermeneutical vision. David E. Linge explains the significance of ontological hermeneutics in his introduction to Gadamer's *Philosophical Hermeneutics*: "It seeks to throw light on the fundamental conditions that underlie the phenomenon of understanding in all its modes, scientific and unscientific alike, and that constitute understanding as an event over which the interpreting subject does not ultimately preside."[1] Good preaching thus necessarily proceeds from a consciousness that is ecclesial, Eucharistic, and apostolic in character, a consciousness that has its wells-springs in the Church's Scriptures and in her Tradition.

This ontologically grounded hermeneutical vision must however engage meaningfully with the everyday realities of people's lives if this preaching is to be effective. The second section discusses ways in which this engagement can be facilitated. The vital interaction between the ontological foundations of the preacher's hermeneutical vision and the hermeneutical implications of this engagement will become evident: the preacher mediates Tradition to his people while his efforts to address the reality of their lived existence cast new light on the Tradition and conduces to its development. A dialogical structure is evident in this interaction between Tradition and lived experience in which, to borrow from Hans-Georg Gadamer, "The voice that speaks to us from the past ... itself poses a question

[1] Hans-Georg Gadamer, *Philosophical Hermeneutics*, trans. and ed. by David E. Linge (Berkeley/Los Angeles/London: University of California Press, 2008), p. xi.

© 2014 The Dominican Council. Published by John Wiley & Sons Ltd. 2015, 9600 Garsington Road, Oxford OX4 2DQ, UK, and 350 Main Street, Malden MA 02148, USA.
https://doi.org/10.1111/nbfr.12093 Published online by Cambridge University Press

and places our meaning in openness."[2] As Gadamer points out, in response to being questioned, we too begin to question. In order to reconstruct the question to which any traditionary text is the answer requires going beyond the text's historical horizon. In the case of the Church's Tradition, the constant advance into new historical horizons requires that hitherto unthought-of questions that each age poses throw new light on the infinite Truth that Tradition mediates.

The hermeneutical well-springs of preaching

The Church is the Body of Christ and is animated by the Holy Spirit. Jesus Christ is thus not only the first preacher in time but also the One Who preaches when the Church preaches since he is in some way identified with His Church. The command of Christ to preach was meant not only for the apostles and their successors, the bishops as well as their collaborators, the presbyters. While it is true that bishops, priests, and deacons are consecrated to preach the Gospel,[3] Christ's command to preach is intended for the whole Church. Thus, we read in *Lumen Gentium*: "Each disciple of Christ has the obligation of spreading the faith to the best of his ability."[4] Lay people do so however "by engaging in temporal affairs and directing them according to God's will."[5] It falls to their lot "to cooperate in the external spread and the dynamic growth of the Kingdom of Christ in the world."[6] As Stephen Vincent DeLeers writes, "It is the Church – the People of God, the *Christifideles* – who preaches."[7]

Notwithstanding the obligation that falls on all disciples to spread the Gospel, the bishops, "in as much as they are the successors of the apostles, receive from the Lord, to whom all power is given in heaven and earth, the mission of teaching all peoples, and of preaching

[2] Hans-Georg Gadamer, *Truth and Method* (London: Continuum, 2004), pp. 366–7.

[3] *LG* 28. At *Presbyterorum Ordinis* (hereafter *PO*), 4, we read that "it is the first task of priests as co-workers of the bishops to preach the Gospel of God to all men."

[4] *LG* 17.

[5] *LG* 31.

[6] *LG* 36. The words of Pope Francis at *Evangelii Gaudium* 102 call attention to the fact that the vocation of the laity to evangelize the temporal sphere has not been realized to the extent that one would wish since Vatican II: "Even if many are now involved in the lay ministries, this involvement is not reflected in a greater penetration of Christian values in the social, political and economic sectors. It often remains tied to tasks within the Church, without a real commitment to applying the Gospel to the transformation of society. The formation of the laity and the evangelization of professional and intellectual life represent a significant pastoral challenge."

[7] Stephen Vincent DeLeers, "The Place of Preaching in the Ministry and Life of Priests," in Donald L. Goergen and Ann Garrido, eds., *The Theology of Priesthood* (Collegeville: Michael Glazier, Liturgical Press, 2000), p. 90.

© 2014 The Dominican Council

https://doi.org/10.1111/nbfr.12093 Published online by Cambridge University Press

the Gospel to every creature."[8] Indeed, preaching the Gospel is the most important of their duties.[9] The same goes for priests as co-workers of the bishops.[10] This office of preaching bequeathed to the bishops and to priests as their co-workers differs in kind from that which characterizes the whole People of God as prophets in virtue of their baptism, a difference that issues from the sacramental nature of the Church as hierarchically constituted. This hierarchical structure, as Louis Bouyer points out, is "not to be understood as a simple armature, juxtaposed to the Body, but as its vital organization, which assures each member not only his place but his function within the whole."[11] Bouyer proceeds to argue on the basis of chapter three of *Lumen Gentium* that this vital organization which is an expression of the Church's sacramental nature maximally identifies the Church with Christ so that in and through her, as His sacrament,[12] He reveals and communicates Himself in those whom he has sent.[13] Since He communicates Himself by the Holy Spirit, the Church's ministers can be viewed as "instruments, so to say, of the outpouring of the Head to the members,"[14] by the grace of the Holy Spirit. The ultimate expression of this outpouring is the Eucharist, described by St. Thomas Aquinas as the "sacrament of Charity."[15] Henri de Lubac's words come to mind in this regard: "The Church produces the Eucharist."[16] He immediately adds the connection between the production of the Eucharist and the priesthood: "[I]t was principally to that end that her priesthood was instituted – "Do this for a commemoration of me."[17]

[8] *LG* 24.

[9] *LG* 25.

[10] PO 4.

[11] Louis Bouyer: *The Church of God: Body of Christ and Temple of the Spirit*, trans. Charles Underhill Quinn (San Francisco: Ignatius, 1982), p. 167.

[12] See Henri de Lubac, *The Splendor of the Church* (San Francisco: Ignatius, 1999), 202: "The Church is a mystery, that is to say that she is also a sacrament. She is "the total *locus* of the Christian sacraments", and she is herself the great sacrament that contains and vitalizes all the others. In this world she is the sacrament of Christ, as Christ himself, in his humanity, is for us the sacrament of God." The logic of the Church's sacramental nature, de Lubac goes on to argue, means that "Her whole end is to show us Christ, lead us to him, and communicate his grace to us; to put it in a nutshell, she exists solely to put us into relation with him" (ibid., p. 203).

[13] Ibid.

[14] St. Thomas Aquinas, *Summa Theologiae*, *Suppl*., 36, 3, ad 2.

[15] *S.T.*, III, 73, 3, ad 3.

[16] de Lubac, *The Splendor of the Church*, 133. Bouyer writes in a similar vein: "If the Church is the Body of Christ in more than a metaphorical sense, she is constructed and built within the celebration of the Eucharist, where the entire People of God participate in the same Body by which they were reconciled on the Cross, with God and with themselves, simultaneously" (Louis Bouyer: *The Church of God: Body of Christ and Temple of the Spirit*, trans. Charles Underhill Quinn [San Francisco: Ignatius, 1982], 166.)

[17] Ibid. For a distinction between the common priesthood of the faithful and the sacramental priesthood, see ibid., pp. 133 ff.

© 2014 The Dominican Council

https://doi.org/10.1111/nbfr.12093 Published online by Cambridge University Press

By the laying on of hands all priests receive this commission which extends back to the Apostles.

The foregoing brief discussion of the relationship that obtains between Church, Eucharist, and priesthood is necessary in order to appreciate the nature of preaching as it occurs during the celebration of the Eucharist. Just as we must distinguish between the priesthood common to all believers and the ordained priesthood, so too must we call attention to the difference between Christ's fulfilment of His prophetic office in the laity and in the hierarchy "who teach in his name and by his power."[18] The bishops and, by extension, their co-workers, the priests and deacons, have a special commission from the Lord, to Whom "All authority in heaven and on earth has been given,"[19] which commission has been passed down to them through the apostolic succession: "Go, therefore, make disciples of all the nations; baptise them in the name of the Father and of the Son and of the Holy Spirit, and teach them to observe all the commands I gave you."[20] The apostle, Ratzinger tells us, "acts not out of his own authority but Christ's, not as a member of the community, but over against the community and addressing it in Christ's name."[21] The Lord promised the Apostles the Holy Spirit in this regard so that they might be His witnesses "not only in Jerusalem but throughout Judaea and Samaria, and indeed to the ends of the earth,"[22] the same Spirit Whose grace expresses itself in the most exalted manner in the Eucharist, the Sacrament of Charity.

Indeed, it was in the context of the Church's sacramental liturgy that the canon of Scripture and the original confession of faith were formed. Ratzinger expresses this point thus: "A book was recognized as 'canonical' if it was sanctioned by the Church for use in public worship."[23] The sacramental life of the Church also furnished the sphere in which the faith received its authentic expression. In other words, "In the ancient Church, the reading of Scripture and the confession of faith were primarily liturgical acts of the whole assembly gathered around the Risen Lord."[24] The proclamation of the Word of God engenders communion among the faithful, a communion that

[18] *LG* 35.

[19] Mt. 28:18. *The Jerusalem Bible: Popular Edition* (London: Darton, Longman & Todd).

[20] Mt. 28:19–20. On this point, see *LG* 24.

[21] Joseph Ratzinger, "Biblical Foundations of Priesthood," *Origins* 20 (October 18, 1990): 310–14, at 312. Quoted in Avery Dulles, S.J., *The Priestly Office: A Theological Reflection* (New York/Mahwah, New Jersey: Paulilst Press, 1997), p. 22.

[22] Acts 1:8.

[23] *Principles of Catholic Theology: Building Stones for a Fundamental Theology*, trans. Sister Mary Frances McCarthy, S.N.D. (San Francisco: Ignatius, 1987), p. 148.

[24] Ibid., p. 150.

© 2014 The Dominican Council

https://doi.org/10.1111/nbfr.12093 Published online by Cambridge University Press

"reaches its climax in the eucharistic encounter with the Lord."[25] The proclamation of the Word is thus ordered towards sacramental encounter with the Lord, most especially in the Eucharist. As DeLeers explains, "In each celebration of the sacraments, it is the proclamation of the word that precedes and grounds the sacramental act."[26] Summarizing Ratzinger's views on the relationship between word and Eucharist, Dulles writes that "The eucharist itself, as a powerful form of the word, fulfils the gospel by rendering the paschal mystery present."[27]

The idea of the formation of the canon of Scripture introduces another concept, namely Tradition, that is also fundamental to an adequate understanding of the nature of preaching. The gathering of the various writings into a single Scripture began in the second century and came to a conclusion only in the fourth or fifth centuries under the guiding authority of the Roman see. Thus, writes Ratzinger, "Scripture became Scripture through the tradition, which precisely in this process included the *potentior principalitas* – the preeminent original authority – of the Roman see as a constitutive element."[28] Scripture and Tradition are thus inextricably entwined. Ratzinger, building upon *Dei Verbum* 7–10, goes so far as to proclaim that "Scripture is nothing other than Tradition."[29] What we have said also makes it clear why the Fathers deemed a true understanding of the Scriptures to be found only in the Church. Yves M.-J. Congar, O.P., proclaims that "Their statements to this effect are so numerous that they would fill a whole chapter."[30] Origen provides an illustration of the point in question: "The true disciple of Jesus is he who enters the house, that is to say, the Church. He enters it by thinking as the

[25] Joseph Cardinal Ratzinger, *God is Near Us: The Eucharist, The Heart of Life*, trans. Henry Taylor (San Francisco, 2003), p. 122.

[26] DeLeers, "The Place of Preaching," p. 91.

[27] Dulles, S.J., *The Priestly Office*, p. 22. DeLeers reference to the "ministerial primacy" of preaching is unfortunate. Since preaching is ordered towards Eucharistic encounter with the Lord, the Eucharist arguably has in this respect primacy over preaching. Thus, writes John Paul II: "The priest fulfills his principal mission and is manifested in all his fullness when he celebrates the Eucharist" (*Dominicae Cenae* 2). This point is a simple application of the metaphysical dictum, *finis est causa omnium causarum* ("the end is the cause of all causes"). See St. Thomas Aquinas, *Super Sent*., lib. 1 d. 1 q. 4 a. 2 expos.; See also *ST* I, q. 5, a. 2 ad 1. It does not however negate the idea that "the prophetic office is more fundamental and more encompassing" (Dulles, *The Priestly Office*, 22). As we read at *PO* 6, "the preaching of the Word is required for the sacramental ministry itself, since the sacraments are sacraments of faith, drawing their origin and nourishment from the Word."

[28] Joseph Cardinal Ratzinger, *Called to Communion: Understanding the Church Today*, trans. Adrian Walker (San Francisco: Ignatius, 1996), p. 71.

[29] Joseph Cardinal Ratzinger with Vittorio Messori, *The Ratzinger Report: An Exclusive Interview on the State of the Church*, trans. Salvator Attanasio and Graham Harrison (San Francisco: Ignatius, 1985), p. 160.

[30] Yves M.-J. Congar, O.P., *Tradition and the Life of the Church* (London: Burns & Oates), p. 83.

© 2014 The Dominican Council

https://doi.org/10.1111/nbfr.12093 Published online by Cambridge University Press

Church does and living as she does; this is how he understands her Word. The key to the Scriptures must be received from the Tradition of the Church, as from the Lord himself."[31]

DeLeeers, drawing upon *DV* 8, is therefore correct in claiming that the preaching of the Church continues the unfolding of Tradition: "Preaching serves an essential role in this "traditioning" dimension of the Church, both in its handing on of tradition and in its development."[32] *DV* 8 tells us that one of the ways in which a growth in "insight into the realities and words that are being passed on" in Tradition comes about pertains to "the preaching of those who have received, along with their right of succession in the episcopate, the sure charism of truth." Preaching not only partakes in the transmission of Tradition but contributes to its development. (The presupposition here is that the bishop, priest, or deacon, is faithful to the Tradition received – and therefore, concomitantly, to Scripture and Magisterium.[33] In the scandalous case where this is not so, the preacher obviously undermines Tradition just as he undermines the faith of those whose faith he is called to nourish.

Thus far we can be said to have dealt with the hermeneutics of preaching in its ontological aspect. In other words, we have exposed the various conditions that undergird the correct understanding of the Word of God, which understanding then spills over into the preaching of the Word. These conditions are at once ecclesial, Eucharistic, apostolic, Scriptural, and pertain to Tradition. The next section deals with the hermeneutics of preaching under a different aspect, namely the right interpretation of the world in which the Christian community lives in order effectively to address the Word of God to its members.

A dialogical hermeneutics of preaching

In order to be effective, preaching must address itself to the lived reality of the faithful. In this regard it is incumbent upon the Church to read the signs of the times and to interpret them in the light of the Gospel.[34] The issue of reading and interpreting these signs objectively arises here, an issue that the documents of Vatican II do not deal with explicitly. The relevant criteria are nevertheless contained therein, as we have seen. They are ecclesial, Eucharistic, apostolic, Scriptural, and pertain to Tradition. The conditions for the correct understanding

[31] Quoted at ibid.

[32] DeLeers, "The Place of Preaching," p. 91.

[33] See *Dei verbum* (hereafter *DV*) 10: "It is clear … that, in the supremely wise arrangement of God, sacred Tradition, sacred Scripture, and the Magisterium of the Church are so connected and associated that one of them cannot stand without the others."

[34] See *Gaudium et spes* (hereafter *GS*) 4.

© 2014 The Dominican Council

https://doi.org/10.1111/nbfr.12093 Published online by Cambridge University Press

of the Word are also those that pertain to the right interpretation of reality in the light of the Word. It follows that those who preach the Word ought to be immersed in and faithful to these aspects of an authentically Catholic life. Otherwise they will preach merely themselves and not the Gospel. The priest must therefore commit himself to a life of study in order to gain a deeper understanding of the Church's Scripture, Tradition, and Magisterium. Drawing upon DeLeers's words, we can say that the fundamental importance of preaching, which by nature is a traditioning task, demands that priests grow in their knowledge and appreciation of tradition."[35]

The central focus of preaching in the celebration of the Eucharist is of course the Scriptures. In particular, the apostolic preaching which has been passed down by Tradition is expressed in a special way in the inspired books of the New Testament.[36] The Church for her part has in varying circumstances and throughout the ages "utilized the resources of different cultures in its preaching to spread and explain the message of Christ, to examine and understand it more deeply, and to express it more perfectly in the liturgy and in various aspects of the life of the faithful."[37] Just as the preaching of the apostles found its ultimate expression in Scripture, so now it expounds Scripture in a way that is proportioned to the historical, social, and cultural situation of its hearers. This goal cannot however be realized unless the preacher in the first instance immerse himself in the Scriptures "by constant sacred reading and diligent study,"[38] all the while bearing in mind the indispensable conditions for interpretation that have been outlined above. Otherwise, he risks becoming "an empty preacher of the Word of God to others, not being a hearer of the Word in his own heart."[39]

This personal grounding is a necessary but not sufficient condition for effective preaching. Following the Church's custom the preacher must, as the next indispensable step, seek to express the Word of God that he has listened to in his own heart in the concepts and language of his people. As *GS* 44 tells us, "The Church learned early in its history to express the Christian message in the concepts and language of different peoples," adding that she "tried to clarify it in the light of the wisdom of their philosophers." Some familiarity with the philosophical currents that have been employed throughout the ages by the Church in communicating the Gospel as well as with those contemporary philosophical trends that render the ground of our culture inimical to some extent or other to the seed of the Gospel

[35] DeLeers, "The Place of Preaching," p. 97.
[36] See *DV* 8.
[37] *GS* 58.
[38] *DV* 25.
[39] Ibid. Quotation from St. Augustine, *Serm*. 179: *PL* 38, 966.

© 2014 The Dominican Council
https://doi.org/10.1111/nbfr.12093 Published online by Cambridge University Press

is a *sine qua non* for contemporary preaching. The Congregation for Education explicitly recognized this fact in increasing the period required for the study of philosophy in the first cycle from two to three years.[40] Philosophical awareness enables the kind of "adapted preaching of the revealed Word" that "must ever be the law of evangelization."[41] As DeLeers explains, "This adaptive stance is grounded in the incarnation itself."[42] Philosophy is not the only discipline that can contribute to this "adaptive stance." Also mentioned in *GS* are psychology, sociology, literature and art,[43] although some these are always informed by some philosophical stance or other that stands in need of critical appraisal in order to assess how fit for task they really are.

Interpretation of the contemporary situation of the lives of believers in the light of the Word of God as authentically understood constitutes one side of the interaction between the Word and culture for this engagement with culture in turn can cast new light on the Tradition that comes from the Apostles, thereby contributing to "a growth in insight into the realities and words that are being passed on."[44] Since the time of the Apostles new realities with which the Apostles were unacquainted have constantly emerged and, in demanding to be interpreted in the light of the Gospel, have opened the eyes of believers to hitherto unappreciated aspects of divine revelation. The heresies of the early centuries and the sexual mores of our own time furnish but two radically different examples of these manifold realities. At any rate these realities have, each in their own way, contributed to the development of Tradition. Heresy itself – and rejection of Church teaching in general – does not, however, contribute directly to the development of Tradition but rather only in so far as it provokes an orthodox response. It would be wrong to hold that all preaching develops Tradition. Clearly, when what a priest says runs contrary to the Church's Tradition, Tradition is undermined but, under the

[40] See *Decree on the Reform of Ecclesiastical Studies of Philosophy* 13 and 15 (accessed on 16/10/2013 at http://www.vatican.va/roman_curia/congregations/ccatheduc/documents/rc_con_ccatheduc_doc_20110128_dec-rif-filosofia_en.html).

[41] *GS* 44. The translation is from DeLeers, "The Place of Preaching," 96. In n. 54 he explains why he departs from Flannery's translation: "Flannery has "this kind of adaptation and preaching," which weakens the Latin: "*accommodata praedicatio lex omnis permanere debet*"."

[42] DeLeers, "The Place of Preaching," p. 96.

[43] See *GS* 62: Psychology and sociology bring the faithful "to a purer and more mature living of the faith." Literature and art, for their part, "seek to give expression to man's nature, his problems and his experience in an effort to discover and perfect man himself and world in which he lives; they try to discover his place in history and in the universe, to throw light on his suffering and his joy, his needs and his potentialities, and to outline a happier destiny in store for him. Hence they can elevate human life, which they express under many forms according to various times and places."

[44] *DV* 8.

© 2014 The Dominican Council

https://doi.org/10.1111/nbfr.12093 Published online by Cambridge University Press

guidance of the Holy Spirit, will forge ahead triumphantly into the future. It is nevertheless true that priests should "take care that what they propose is in fact a legitimate development."[45]

While the "traditioning" function of preaching demands that the priest be faithful to Tradition, it nevertheless remains true that when he preaches, he does so in his own words. His own words therefore communicate in some way the presence of God. As DeLeers writes, "The priest as a man of personal faith trusts that God can work in and through the priest's own life and words."[46] At the same time, DeLeer adds, "the preacher is not God's ventriloquist."[47] Faithful to the "we" of an ecclesial hermeneutic, the preacher must nevertheless address his congregation in the "I" of his own person. Ideally, the prism of the "I" has been so formed through an attitude of obedience and through study and prayer that its individualized mediation of the Scripture is conformed to an ecclesial hermeneutics of faith. Freedom and the obedience of faith interact in creative fidelity.

Conclusion

The considerations of this article have highlighted the ontological foundations of priestly preaching – or, expressed otherwise, the ontological hermeneutics of preaching – as well as the hermeneutical interplay between Tradition and the everyday realities of people's lives as mediated by the preacher. It has not however made explicit a further indispensable element in effective preaching, that is to say, preaching that brings others into a deeper relationship with the Lord. The element in question is personal holiness. Like all Christians, priests are called to seek perfection: "You must therefore be perfect just as your heavenly Father is perfect" (Mt. 5:48). This call to perfection, however, pertains to priests in a particular way. *PO* 12 explains why: "They are consecrated to God in a new way in their ordination and are made the living instruments of Christ the eternal priest." Preaching, no matter how exegetically insightful, theologically erudite, and culturally appropriate, and no matter how well-constructed and well-delivered, will nonetheless ring hollow unless it emanate from holy lips.

Growth in holiness, which is none other than increasing configuration to Christ, cannot however be divorced from the dynamics outlined in this article. *PO* 13 communicates this point. In terms of the discussion of this article one can say that one grows in holiness as one becomes more rooted in Scripture and Tradition by allowing

[45] DeLeers, "The Place of Preaching," p. 98.
[46] Ibid., p. 99.
[47] Ibid.

© 2014 The Dominican Council
https://doi.org/10.1111/nbfr.12093 Published online by Cambridge University Press

their dynamics to become inscribed within the dynamics of one's own being, as one bows with ever greater humility before the Church's Magisterium, and as one becomes more Eucharistic in one's attitude. Holiness is also fostered in the search to find more effective ways to communicate the fruits of one's meditation on the Word of God. Indeed, this search constitutes an authentic part of Tradition – St. Augustine's *De doctrina christiana* comes immediately to mind.[48] In so far as one strives to become more effective as a preacher of the Catholic faith, one grows in holiness and, vice versa, in so far as one increases in holiness, one becomes a more effective preacher.

Kevin E. O'Reilly, OP
keor2007@yahoo.com

[48] St. Augustine draws upon the resources of classical rhetoric in this work in proposing the aims of teaching, delighting and persuading to the preacher. For a discussion of Augustine's theory of preaching, see Michael Dominic O'Connor, O.P., "Preaching to the Whole Person: Classical Wisdom for the New Evangelization," *Homiletic and Pastoral Review* (October 25, 2012 [accessed 17/10/2013 at http://www.hprweb.com/2012/10/preaching-to-the-whole-person-classical-wisdom-for-the-new-evangelization/). O'Connor characterizes Augustine's theory as follows: "At the heart of Augustine's theory of preaching … we find Cicero's precepts on the role of rhetoric taken up and recast, so that the purpose of Christian eloquence is to "show truth, make truth pleasing, and make truth move the audience"

© 2014 The Dominican Council
https://doi.org/10.1111/nbfr.12093 Published online by Cambridge University Press