PRAESENTIA SUBSTANTIALIS: AN EXAMINATION OF THE THOMISTIC METAPHYSICS OF THE EUCHARISTIC PRESENCE

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Statement of Sources

This thesis contains no material published elsewhere by me, or extracted in whole or in part from a thesis by which I have qualified for, or been awarded, another degree or diploma.

No other person's work has been used without due acknowledgement in the text of the thesis.

This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

No research procedures involved in preparing the thesis required the approval of an Ethics or Safety Committee.

Signed
Colin Goodwin
Dated

Abstract

1. Aim of the Thesis

This thesis is concerned to investigate the schemata of metaphysical concepts, and the lines of philosophical argument, used by Thomas Aquinas in reaching conclusions about the nature of the change through which Christ becomes present in the sacrament of the Eucharist, and about the nature of this continuing presence. Although the object to which the thesis relates is provided by doctrinal and theological affirmations, the perspective within which the investigation takes place is that of the reflective rationality distinctive of philosophy.

Put differently, the aim of the thesis is to examine the speculative rational work undertaken by Thomas Aquinas in the course of his discussion of issues relating to the change of bread and of wine into the body and blood of Christ in the Eucharist - a discussion that Thomas introduces by first arguing to traditional Catholic belief about the outcome of this change. The examination engages with the reasonable explanatory power of the conceptual resources and the philosophical arguments drawn upon by the Angelic Doctor in his systematic study of the Eucharistic change, and of the implications of this change relative to the continuing presence of Christ in the Eucharist.

2. Scope of the Thesis

The parameters of the thesis are set by St Thomas's discussions of Eucharistic change and presence that take place in part three, questions 75-77, of his *Summa Theologiae*, book four, chapters 60-68, of his *Summa contra Gentiles*, and book four, distinctions 10-11, of his *Scriptum super Libris Sententiarum Petri Lombardi*. Within these parameters are to be included contributions to the issues discussed by St Thomas made by Thomas de Vio Cajetan, Domingo Banez, and Silvester of Ferrara (Ferrariensis), major commentators on the work of Thomas. Extensive presentation, and scrutiny, of opposing arguments from Duns Scotus are also included.

Following an introductory chapter concerned to situate, summarise, and indicate its principal assumptions, the thesis explores what is, for St Thomas, a major objection to affirming the substantially real presence of Christ in the Eucharist: such an affirmation is said to imply the ontological impossibility that Christ's bodily reality is simultaneously present in more than one place. The response to this objection involves an analysis of the distinction between the primary and the secondary formal effects of dimensive quantity, and the use of this distinction to argue at some length that one and the same material thing may be simultaneously present in more than one place if the secondary formal effects of dimensive quantity that would spatially situate this thing in relation to its immediate surroundings are suspended.

The thesis then considers three issues dealing with what becomes of the substance of the bread and of the wine at the Eucharistic consecration. In the first of these, Thomas rejects the claim that the substance of the bread and of the wine remains in existence on the altar, affirming that the bread and wine are changed at the level of substance into the body and blood of Christ. This position requires, and receives, sustained treatment of philosophical questions concerning 'substance', and change affecting the *whole* substance of a thing (within a hylomorphic understanding of material realities). Related problems of individuation, causal agency, and the logic of language that both signifies, and brings about, change, are considered.

The second issue investigates the claim that the substance of the bread and of the wine is not changed after all into the body and blood of Christ but is either annihilated or changed into matter-in-an-earlier-state. This claim is rejected by St Thomas on philosophical grounds, and this section of the thesis engages critically with Cajetan on several points connected with Thomas's arguments

The third issue concerns, and affirms, the capacity of bread and wine to be changed substantially into the body and blood of Christ, at which point the thesis widens out to con-

trast a hylomorphic with a hylomeric account of matter, and to consider at some length Duns Scotus's metaphysics of the Eucharist which oppose those of St Thomas.

Chapter six of the thesis explores in some detail the responses of Cajetan and Ferrariensis to the challenges issued by Scotus, and the concluding chapter (chapter seven) provides an analysis of Thomistic ideas regarding three modes of the emergence of being: creation, natural change, transubstantiation.

3. Conclusions

The title asserts that the thesis is "an examination of the Thomistic metaphysics of the Eucharistic presence". This examination endorses the following conclusions:

- 3.1 The schemata of metaphysical concepts employed by St Thomas (e.g. the concepts of substance, accident, *esse*, primary matter, substantial form, creation, natural change, obediential potentiality, primary/secondary formal effects of dimensive quantity), and his lines of philosophical argument, provide a clearly valid response to "the exigencies of the inquiring mind at work" in relation to the presence of Christ in the Eucharist. In other words, their reasonable explanatory power is evidently to be affirmed.
- 3.2 *Pari passu* the thesis indicates something of what could be called 'the mystery of matter' the inexhaustible depths and potentialities of matter that the inquiring mind confronts when exploring matter in the distinctive situation that is matter's special dependence on the First Cause in the Eucharistic change (transubstantiation).
- 3.3 The thesis is an instance of philosophical work undertaken in the first decade of the 21st century, and within the socio-cultural context of this time. This socio-cultural 'situatedness', although vastly different from the socio-cultural 'situatedness' of Thomas Aquinas, Duns Scotus, Cajetan, Ferrariensis, and Banez, has created no culturally relative barrier no 'incommensurability' such as to prevent an understanding of the concep-

tual/argumentative activity in which these thinkers engaged some centuries ago. Human beings always and everwhere 'fit into' the same Universe through their abiding and ineluctably shared openness to *being* and its first principles.

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Chapter 1 Introduction

Content: An Overview

This thesis will be a sustained investigation of the schemata of metaphysical concepts and arguments used by Thomas Aquinas in exploring a range of issues that bear on the presence of Christ in the sacrament of the Eucharist. Given that Thomas engages in *first-order* philosophical and theological reflection on the nature of this presence of Christ in the Eucharist, the concern of the thesis becomes that of *second-order* philosophical reflection on the first-order reflection of St Thomas. In this sense it is an instance of what Bernard Lonergan has called "reaching up to the mind of Aquinas". [1]

The central axis of the thesis will be a systematically reflective engagement with the philosophical aspects of what St Thomas has to say in the eight articles that make up question 75 of the third part of his *Summa Theologiae* [2] These articles themselves deal successively with the following topics: the reality of the presence of Christ in the sacrament of the altar (article 1); the cessation of the substance of bread and wine in this sacrament after the words of consecration have been pronounced (article 2); the non-annihilation, and non-reduction to an earlier state of matter of the substance of the bread (and of the wine) at the consecration (article 3); the capacity of bread to be changed into the body of Christ (and of wine to be changed into his blood) (article 4); the continuance of the accidents of bread and wine in this sacrament (article 5); the non-continuance of the substantial form of the bread (and of the wine) after the consecration (article 6); the instantaneous character of the Eucharistic change or conversion (article 7); the truth of the proposition 'from bread comes the body of Christ' (article 8).

The main focus of discussion aligned with the eight articles of question 75 of this part of the *Summa Theologiae* will be importantly supported in three ways in the thesis. The first will be by interpretative engagement with other texts of St Thomas - in particular with texts taken from his *Scriptum super Sententiis Magistri Petri Lombardi*, and his *Summa*

contra Gentiles, which also deal extensively with issues raised in the eight articles of question 75. The second will be by introducing, and discussing, the contribution made to the understanding of these issues by some of the major commentators on the works of St Thomas (Cajetan, Ferrariensis, and Banez, will be the principal participants here). The third way will be by putting forward, and critically considering, a number of important objections against central positions regarding the metaphysics of the Eucharist that had been proposed and defended by St Thomas. These will relate in particular to objections to Thomistic positions coming from the great medieval philosopher and theologian John Duns Scotus (1265-1308) - objections with resonances into our own time.

While being principally an examination of the metaphysics of St Thomas as brought to bear on issues related to the objective presence of Christ in the sacrament of the altar, the thesis will endeavour to be sensitive to relevant comment from other philosophical traditions and positions, with a view to responding as effectively as it can to what the American philosopher W. Norris Clarke has called "the exigencies of the inquiring mind at work". But, of course, the "exigencies of the inquiring mind at work" will be met principally by a direct scrutiny of the philosophical components of what Thomas Aquinas has said about the presence of Christ in the Eucharist; and this involves indirectly a scrutiny of the received content of the Church's traditional doctrine of the Eucharistic presence. These two directions of conceptual and argumentative scrutinising are intended to issue in acts of reflecting, the content of which will be examined concepts relevant to intellectual insight (however imperfect) into dimensions of the Eucharistic mystery. They are also intended to issue in acts of understanding, the content of which will be judgments that, in connection with the Eucharistic presence, will be answers to what may be called with Bernard Lonergan "the range of intelligent and reasonable questions that admit of determinate answers" [3], or "questions for intelligence, questions for reflection, questions for deliberation" [4]. The judgments that are answers to these questions will refer ultimately to received Catholic teaching about the real and substantial presence of Christ in the sacrament of the altar. The central elements of this teaching or 'doctrina' have recently been set out with attractive succinctness and lucidity in the authoritative *Catechismus Catholicae Ecclesiae* [5] in the following terms:

Per consecrationem transsubstantiatio fit panis et vini in Christi corpus et sanguinem. Sub panis et vini speciebus consecratis, Ipse Christus, vivus et gloriosus, praesens est vere, realiter et substantialiter, Eius corpus et sanguis cum Eius anima et divinitate. (Through [the words of] consecration there is brought about a transubstantiation of bread and wine into the body and blood of Christ. Under the consecrated species of bread and wine Christ Himself, living and glorious, is truly, really and substantially present – His body and blood, together with His soul and divinity.) [Catechismus Catholicae Ecclesiae (1997) no.1413, which includes a footnote referring to the Council of Trent, Session 13, chapter 3, Decretum de ss. Eucharistia.]

This authoritative statement includes a number of terms - 'substance', 'species', 'transubstantiation', 'truly, really and substantially present' - the meanings of which in their Latin forms had been honed in much philosophical and theological reflection and debate from at least the time of Paschasius Radbertus and Ratramnus in the ninth century through to the Council of Trent in the sixteenth. Thomas Aquinas was well aware of the scope of this reflection and debate concerning the Eucharistic presence of Christ up to, and including, his own time. (His own theological work on the Eucharist dates from 1255-56 when he completed the fourth book of his Scriptum super Sententiis Petri Lombardi, which included a study of the Eucharist in distinctions 8-12, through chapters 61-69 of book 4 of the Summa contra Gentiles (book 4 dates from 1264-65), to 1273 when he systematically considered the Eucharist in questions 73-83 of the third part - the 'tertia pars' - of his Summa Theologiae.) His modes of expression, conceptual schemata, and arguments, were, as a matter of historical fact, extremely influential in the formulating of Eucharistic doctrine at the Council of Florence (cf. the Council's Decree for the Armenians, 1439) and the Council of Trent (cf. the Decree on the most holy Eucharist, 1551), as well as in recent papal documents (Humani Generis, 1950 [Pius X11], Mysterium Fidei, 1965 [Paul V1], Ecclesia de Eucharistia, 2003 [John Paul 11]).

In the light of the significant role played by St Thomas in the articulation and employment of a set of metaphysical positions placed at the service of theology [6] - positions that also have had resonances in formal/official/traditional Catholic teaching – in dealing with the presence of Christ in the Eucharist, it is of particular importance that (as already foreshadowed) the thesis take due account both of certain earlier, and of some more recent, lines of criticism of these positions. While specific criticisms will be dealt with at appropriate points in the text of the thesis, it is perhaps worthwhile to notice here one or two more general lines of recent criticism indicative of cultural shifts in speculative thought devoted to an understanding of the Eucharist. The following, drawn from the publication *Eucharist – Experience and Testimony* (2001) is an example of this:

The current movement away from onto-theology [theology such as that of St Thomas which draws on traditional ontological categories and modes of reasoning]] to the subsequent development of a sacramental and symbolic theology under the influence of Heidegger, Ricoeur and Chauvet, is a very exciting and ambitious project. It asks theology to embrace a way of thinking that gives priority to the linguistic, the historical and the cultural.

(*Op. cit.*, p. 78)

In sharp contrast to this high optimism was the accompanying mordant comment that "The medieval writings around transubstantiation are both mind-numbingly complex and cringingly materialistic" (*ibid.*). The introduction to the same book (which published the proceedings of a colloquium on the Eucharist held in Melbourne in 2001) noted that

There was a strong philosophical bent to the proceedings, reflecting the changed world of thought in which we seek to make sense of sacraments and in particular to speak about the eucharist. As is made clear in the opening address...post-modern philosophers have called into question the all-embracing metaphysical theories on which sac-

ramental theology was based in the second millenium" (*Op. cit.*, p. viii).

Another example of a general criticism - but one explicitly 'targetting' Thomas Aquinas - is provided by the prominent American philosopher-theologian Germain Grisez who, in a lengthy article in the *Irish Theological Quarterly* 65 (2000), outlined the following critique of Thomas's thought on the Eucharistic presence of Christ (a critique that he went on to develop in the article):

Since theology proposes to provide understanding, acceptable theology not only must be consistent with faith but intelligible. An account is intelligible only if it is a logically coherent set of propositions expressed in statements whose terms have definite meanings. But Aquinas's theology of Jesus' substantial presence in the Eucharist avoids incoherence only by evacuating key terms of their usual meanings. And he does not supply them with other, definite meanings. So, it seems to me that his account fails to meet the requirement of intelligibility." (*Op. cit.*, p. 113).

Criticisms of the above broad kind give strong indications of the wide-spread movement in Catholic academic circles away from Scholastic philosophy and theology in general, and from Thomistic philosophy and theology in particular. It is hoped that the argument of this thesis will be itself a strong endorsement of the intelligibility and the perennial validity of Thomism - and, therefore, of a major strand of the composite intellectual whole that is Scholasticism - at least in respect of discussion of the inescapably ontological aspects of Christ's presence in the Eucharist [7].

1.2 Nature of the Inquiry

The epistemological assumption of the thesis is one of strong commitment to the cognitively objective value of the human powers of knowing. This epistemological assumption is one that might appropriately be called *natural realism*. The thesis will also assume a certain mode of bi-polarity in the relatedness of human knowing to a mind-independent

world or universe in that it will assume not only the capacity of sensory powers to grasp the perceptible features or aspects of individual things presented to them in the immediate 'shock' of sense experience but also the capacity of the human mind *qua* intellect to grasp the *natures* or *being* of things - what Aristotle called the *ti en einai* (the 'what-it-was-to-be-that-thing') of the objects of our experience. In relation to intellect, Thomas himself neatly makes the point in book 2, chapter 83, of the *Summa contra Gentiles*: "Our intellect *quite naturally* knows *being*, and the essential properties of being *qua* be-ing - knowledge in which is grounded our awareness of first principles" [emphases mine] ("Naturaliter intellectus noster cognoscit ens, et ea quae sunt per se entis inquantum huiusmodi; in qua cognitione fundatur primorum principiorum notitia"). What has been said can be summed up by saying that natural realism affirms the openness and drive of all our human cognitive powers towards the trans-subjective world or universe of individual physical realities, and, in particular, the special openness and drive of the intellect towards the natures or being of things instantiated in this trans-subjective world or universe, and towards universal truths about this world or universe. [8].

Without pausing to dwell on the matter, it may be noticed that what I am calling 'natural realism' has, in line with the realist position of St Thomas, affinities with the epistemological position generally called *foundationalism* in that it endorses a set of basic statements articulating first principles of both being and thought (for example, the principle of identity, the principle of non-contradiction, the principle of sufficient reason). Other statements may formulate justified or warranted or 'entitled' beliefs on the basis of the sufficiency of evidence available to support them, but there is always an epistemologically normative demand that such statements, in addition to being supported by sufficient evidence, be also consistent with basic or foundational statements, that is, with 'first principles'.

In addition to an epistemological assumption, there are several theological assumptions that the thesis makes. Two in particular must be stated:

- 1. There exists one creative Source or Ground of the universe, both transcendent of, and immanent in, the universe, which is causally sustained in existence by this Being. This Being is sovereign, eternal, almighty, with an infinite plenitude of personal life, lived fully by three divine persons, each distinct from the other two the Father, Son, and Holy Spirit though supremely one in the absoluteness of the unique divine nature.
- 2. God the Son, the second person of the Trinity, took on an individual human nature in the event called the 'Incarnation' in order to live in the spatio-temporal world with a view to bringing human beings (and, eventually, the whole spatio-temporal universe itself) into a redemptive and perfecting union with the Trinity. This is the historical reality of the person, Jesus Christ, whose life, death, resurrection, and ascension, are the fundamental fulfillment of the history of God's chosen people, Israel, and the fulfillment in principle through grace of the powers and capacities involved in the life of every human being. The life of the Risen Christ continues on earth in a distinctive way through the life of his Mystical Body which is the Church, in particular through the sign-acts that are the sacraments instituted formally or virtually by Christ himself. Pre-eminent amongst the sacraments is the Eucharist in which, according to traditional Catholic (including Orthodox and Anglo-Catholic) belief, Christ himself is contained.

The thesis is argued out within the context of these theological assumptions. It is, however, work in *philosophy*, not theology, in the sense already indicated above, namely its concern is with the metaphysics of St Thomas as involved in conceptual and argumentative issues relating to the presence of Christ in the sacrament of the altar. Accordingly, such concepts as substance, accident, existence *in se/in alio*, primary or 'proto' matter, substantial form, creation, natural change, annihilation, primary and secondary formal effects of dimensive quantity, and so on, come under systematic scrutiny, together with the lines of argument in which these concepts are employed by St Thomas.

Taking into account this setting of Christian belief (using the term "belief" in the sense of 'fides *quae*', that is, in the sense of *what* is believed) and theology, the thesis may be

understood as an instance of what could be called the *philosophy of Christian doctrine*, and located in consequence in that particular 'universe of discourse'. But the thesis is not thereby work within the field of *systematic theology* since its aim is not an understanding of a particular truth of faith *specifically as a truth of faith*, and *in its relationship with other truths of Christian faith* (fides *quae*), that is, it is not an example of what German theologians are fond of calling *Glaubensverstandnis*.

The aim of the thesis is certainly understanding (what the Angelic Doctor calls 'intellectus'), but it is understanding concerned with the strictly philosophical or metaphysical content and implications of an ensemble of concepts (some of which were identified above), and of the arguments employing those concepts. Here one might align oneself with Richard Rorty's assertion (an assertion Rorty himself does not necessarily agree with) that "Attaining truth as distinct from making justified statements is a goal for metaphysically active inquirers" (emphasis mine) [9]. It is doubtless a goal for theologically active inquirers as well but that is not of concern to us here. In other words, the interest of the thesis is with the sort of reflective rationality that will result in judgments as to the reasonable explanatory power of the conceptual schemata and arguments St Thomas deploys in articles 1-8 of question 75 of the third part of his Summa Theologiae. The thesis requires a prior methodological suspension of judgment regarding this reasonable explanatory power, and undertakes, in effect, a conjectural reconstruction (to borrow a phrase from Wolfhart Pannenberg) of the edifice of ideas built up by Thomas in 3. 75. 1-8. (The adjective "conjectural" is used here to convey the notion that the reasonable explanatory power of this edifice of ideas is not taken to be something already definitively and indubitably agreed upon; the noun "reconstruction" is used to refer to the critical re-assembling of the conceptual and argumentative components of this edifice that takes place in the process of examining the claim of these components to reasonable explanatory power.) [10]

It may be noted that 3. 75. 1-8 of the *Summa Theologiae* is a case of St Thomas's seeking through *first order* philosophico-theological reflection an understanding (albeit necessarily imperfect) of a particular truth of faith - the doctrine of the real and

substantial presence of Christ in the sacrament of the altar - specifically as a truth of faith and linked to other truths of faith such as the doctrines of the Trinity and the Incarnation: it is an instance of Glaubensverstandnis. It then follows that the second order (essentially philosophical) reflection of the thesis, with its concern only about the reasonable explanatory power of Thomas's conceptual schemata and arguments, drawn from philosophy and brought to bear by him on the doctrine of Christ's Eucharistic presence, is an undertaking that differs in kind from that of St Thomas himself in 3. 75. 1-8.

NOTES

- 1. Bernard Lonergan, *Insight* (5th edition, 1992 [revised and augmented]), p. 769.
- 2. The text of the *Summa Theologiae* to be used throughout the thesis is that published by Bibliotheca de Autores Cristianos, Madrid, 3rd edition 1961-65. The five volumes contain the *textus criticus* prepared by scholars working under the aegis of the Leonine Commission, set up originally by Pope Leo XIII (1810-1903), Pope from 1878. However, this edition does not contain the *apparatus criticus* nor variant readings.

The *Summa Theologiae* itself is divided into three parts, with a later 'Supplementum' to the third part added most probably under the editorship of the Dominican friar Reginald of Piperno (c. 1230-1285/95) and drawn from Thomas's *Scriptum super Sententiis Magistri Petri Lombardi*. Each part of the *Summa* (including the 'Supplementum') is divided into questions, and each question is further divided into articles. References to the text will identify part (e.g. 3), question (e.g. 17), and article (e.g. 2), in the sequence 3. 17. 2. The addition of, e.g., '(to) 3', refers to Thomas's reply to the third argument (very often called by writers the third 'objection') against the position that he puts forward in the body of an article. It should be noted that the second part (secunda pars) of the *Summa Theologiae* is subdivided into a first part and a second part, flagged as 1-2 and 2-2 respectively.

Ways of referring to other works of St Thomas will be indicated as required when these works are cited.

- 3. Insight (1992 edition), p. 667
- 4. Method in Theology (1972), p. 120.
- 5. Published by Libreria Editrice Vaticana, Citta del Vaticano, 1997.

6. For an indication of the approach of St Thomas to using philosophy in the service of theology, see 1. 1. 8. (to) 2, and *In Boethium De Trinitate*, qu. 2, a. 3. For Thomas's own extended study of how he views the relationship between revealed doctrine, Christian faith, and the reasonings of philosophy, see his *Summa contra Gentiles*, book 1, chapters 3 to 9. Pages 34 to 43 of Brian Shanley's *The Thomist Tradition*, published in 2002 (cf. Bibliography *infra*), offers a lucid and thoughtful account of how philosophy and theology stand in relation to each other, as this relationship is understood within a Thomistic perspective.

It is also valuable in this connection to notice Pierre Rousselot's succinctly profound way of providing a Thomistic account of the relation between philosophy and theology: "La philosophie et la théologie s'unissent, dans le systeme thomiste, comme la matiere et la forme" (*L'Intellectualisme de Saint Thomas*, Introduction, p. xviii) - a citation translated interestingly by Gerald McCool as "Philosophy and theology combine like matter and form to make a unitary whole" (cf. McCool's important *From Unity to Pluralism: The Internal Evolution of Thomism*, p. 39). The Thomistic point might be expressed in the following way: Just as form is an actualising and teleological field for matter, so likewise is theology able to be an actualising and goal-directing field for philosophy in the sense of challenging it to take up new problems and to be open to a context that transcends the natural order altogether.

(Pierre Rousselot was a French Jesuit philosopher and theologian of extraordinary ability. He died at the age of thirty six in the First World War at the battle of Eparges, 25th April 1915. From 1909 to 1914 he had held a chair in the Faculty of Theology at the Institut Catholique in Paris. Prior to, and during, this appointment Rousselot made major contributions to a fresh understanding of the Thomistic metaphysics of being, knowing, and the human person. His work in theology was principally concerned with the nature of the act of faith, and with the concept of *agape* or charity. His brilliant *L'Intellectualisme de Saint Thomas* was first published in 1909, republished post-humously in 1924, and subsequently honoured by an award from the Academie Francaise. Gerald McCool [see above] commends Erhard Kunz's wide-ranging study of Rousselot published as *Glaube*-

Gnade-Geschichte: Die Glaubenstheologie des Pierre Rousselot, S.J., a work in which careful attention is given not only to Rousselot's theology, but also to the philosophical underpinnings of this theology [McCool, op. cit., p. 84].)

7. In the light of the sort of criticisms pointed to on pages four and five, it is worthwhile to notice the following comment of Bernard Lonergan in his Aquinas Lecture published under the title *The Subject* (for details, cf. the Bibliography *infra*): "In the name of phenomenology, of existential self-understanding, of human encounter, of salvation history, there are those that resentfully and disdainfully brush aside the old questions of cognitional theory, epistemology, metaphysics...to reject the questions is to refuse to know what one is doing when one is knowing; it is to refuse to know why doing that is knowing; it is to refuse to set up a basic semantics by concluding what one knows when one does it" (*op. cit.*, pp32-33).

A challenging and controversial return to a serious scholarly engagement with the texts of St Thomas is occurring within the movement in contemporary theology known as 'Radical Orthodoxy'. Key figures in this development are John Milbank from the University of Virginia and Catherine Pickstock from Cambridge University. Anglo-Catholics rather than Roman Catholics tend to be to the forefront in 'Radical Orthodoxy'. Reference is made in chapter six of the thesis to Pickstock's *After Writing: On the Liturgical Consummation of Philosophy* (1998), and to Milbank and Pickstock's *Truth in Aquinas* (2001). However, for a sometimes strident and provocative response to radical orthodoxy, cf. Wayne Hankey's and Douglas Hedley's *Deconstructing Radical Orthodoxy* (2005) - a set of critical monographs edited by Hankey and Hedley, of which George Pattison's 'After Transubstantiation: Blessing, Memory, Solidarity and Hope', and John Marenbon's 'Aquinas, Radical Orthodoxy and the Importance of Truth' are of particular importance.

8. Within the Thomistic metaphysics of cognition to know something X is to *become* this thing X, not physically or entitatively but *objectively* or *in-tentionally* in the sense that the thing *qua* object *tends into* the conscious subject or knower. X's existence, not as a thing

or entity of this or that kind - as a cat, say, or an atom or a number or an event - but *as an object known by* Y, is not in X but in (the knowing subject) Y. Knowing, then, involves as it were an 'extension' of the being of the knower. As Thomas puts it:

Manifestum est quod natura rei non-cognoscentis est magis coarctata et limitata: natura autem rerum cognoscentium habet maiorem amplitudinem et extensionem. Propter quod dicit Philosophus, lll *De anima* [431b 21], quod *anima est quodammodo omnia*. (1. 14. 1c)

(It is evident that the nature of a being incapable of the activity of knowing is more restricted and limited, whereas the nature of beings capable of the activity of knowing has greater range and extension. For this reason the Philosopher states in book 3 [431b 21] of his *On the Soul* that "the mind is in some sense everything".)

Now, within Thomistic metaphysics, matter is the exemplary instance of a principle of limitation, confining a thing's existence within the limits set by matter itself. It follows that the possibility of the "greater range and extension" of the knowing subject's existence beyond its physical or entitative limits through its objectively/in-tentionally becoming all that it knows, is a function of the knowing subject's being in some way free of, transcendent over, the claims of matter in its regard. Hence Thomas argues *ibidem*:

Coarctatio autem formae est per materiam...Patet igitur quod immaterialitas alicuius rei est ratio quod sit cognoscitiva; et secundum modum immaterialitatis est modus cognitionis.

(The restricting of form comes about through matter...

It is clear, then, that a thing's non-materiality is the reason

why it is capable of knowing; and the measure of its nonmateriality is the measure of its capacity to know.)

But 'anima est quodammodo *omnia*', as St Thomas puts it following Aristotle (he psuche ta onta pos esti panta, cf. *Peri psuches*, 431b 21; that is to say, the human mind has a capacity and dynamism towards objectively/in-tentionally becoming *everything*, that is, every possible instance of *being*, of 'id cui competit esse'. Put differently, there is no inprinciple limit to what the mind can become in terms of objects-to-be-known. Put somewhat colloquially, regardless of how much knowing we do, we can *always* know about more things, and more about the things we already know, with no 'built-in' limits.

In his Gifford Lectures published as *The Openness of Being*, the British philosophertheologian E. L. Mascall - a seriously committed Anglican Thomist - summed up in the following way a number of the features of the Thomistic account of 'knowing'

To know a being is not to achieve some kind of external contact with it analogous to the impact of one material object on another. It is to achieve a vital union with the being, to get it 'into one's mental skin' or, from another aspect, to become identified, however imperfectly, with it. This is what is implied by the scholasic assertion that in knowledge the knower *becomes* the thing known, not entitatively but 'intentionally'. This is...highly mysterious, but it is a fact ...In us humans, compounded as we are of spirit and matter, it is not only mysterious but extremely complex. There is nothing in the intellect that was not first in the senses, the mind spontaneously turns to sensory representations, but, simply as mind, as intellect, as spirit, it can (intentionally) 'become' all things. *Nihil in intellectu quod non prius in sensu; mens convertit se ad phantasmata; mens quodammodo fit omnia*: these well-worn tags are not statements of a theory about knowledge, they are a description of what knowledge is.

(*Op. cit.*, p. 100. Mascall's emphases)

The mystery attaching to the activity of knowing resides ultimately in what I should wish to call the (implicitly or unthematically) experienced identity of existence of the conscious subject qua knower and (some or other) thing or entity qua known, i.e. qua object. Natural realism acknowledges, and in no way resiles from, the mystery involved in every act of knowing. It is tempting to believe that, had Kant acknowledged, and not resiled from, this great mystery of the natural order, he would not, as Bertrand Russell put it, have "deluged the philosophic world with [epistemological] muddle from which it is only now beginning to emerge." Russell went on to add somewhat irreverently; "Kant has the reputation of being the greatest of modern philosophers, but to my mind he was a mere misfortune." (An Outline of Philosophy, p. 83)

9. Cf. Rorty's Truth and Progress: Philosophical Papers, Volume 3, p. 29.

10. The concern of this thesis is with what I have called "the reasonable explanatory power" of the conceptual schemata and lines of philosophical argument used by St Thomas in discussing the Eucharist in 3. 75. 1 - 8. The concern is with the *ontology*, not with the theology as such, of the presence of Christ in the sacrament of the altar. In other words, the perspective is essentially metaphysical, not theological (in any faith-related sense). An analogy to this procedure may be detected in the following case: A mathematician might, for example, prescind altogether from the physics of the Lamb shift - the small difference between two energy levels of the hydrogen spectrum due to interaction between the hydrogen atom's electron and this electron's surrounding electromagnetic field - to concern herself solely with the explanatory power of competing mathematical models of the Lamb shift (a hole-theoretic model, for example, as opposed to a four-dimensional covariant model). The concern of the mathematician would be with the mathematical formalism (the formulas, equations, lines of reasoning) employed by physicists, not with the physics as such. This disengaging of the mathematics from the physics, and consideration of the former in separation from the latter, is analogous to the disengaging of the *metaphysics* from the (faith-related) theology in connection with the presence of Christ in the sacrament of the altar.

Chapter 2 – The Reality of Christ's Presence in the Eucharist – Solving a Problem (3. 75. 1)

Task of This Chapter

Question 75, article 1, of the third part of the Summa Theologiae carries the title 'Is the body of Christ in this sacrament in its full reality or only in a figurative way, or as in a sign?' (Utrum in hoc sacramento sit corpus Christi secundum veritatem vel solum secundum figuram vel sicut in signo). This article plays an architectonic role in relation to all the following articles of question 75, and (whether explicitly or implicitly) to the articles of all subsequent questions to the end of St Thomas's discussion of the sacrament of the altar in question 83 of the third part of his Summa Theologiae. It is concerned to establish by arguments of fittingness (ex convenientia) the truth of the traditional belief of the Church in the real presence of Christ in the Eucharist. (That, throughout Thomas's entire discussion of the presence of Christ in the Eucharist, this presence is to be understood in the sense of something substantial [substantialis] will emerge explicitly in the course of our consideration of articles 2, 3, 4, 6, and 8, of question 75.)

However, the principal task of this chapter will not be to argue out a theological position supporting the traditional doctrine of the Church endorsing the substantial reality of Christ's presence in the sacrament of the altar. It will be to examine in some detail what St Thomas has to say in reply to the crucial objection that Christ could not be present in the Eucharist in His substantial reality, since such a presence would involve the ontological impossibility of His bodily reality's being simultaneously present in more than one place. In other words, the principal task of this chapter will be to inquire from a *philosophical* point of view, that is, from a reflective, rationally constrained, point of view, regarding the reasonable explanatory power of the conceptual schemata and arguments that the Angelic Doctor uses in endeavouring to show the possibility of multiple substantial presences of Christ in the Eucharist, over and above His substantial presence in heaven. Undertaking this task will move us beyond consideration of the brief but pertinent reply Thomas makes to an objection set out in question 75, article 1, itself,

in the direction of an extensive examination of relevant concepts, distinctions, and arguments, drawn on *passim* by him in the articles that make up question 76 where he asks about the mode or manner of Christ's substantial existence in the sacrament of the altar (de modo quo Christus existit in hoc sacramento).

However, before entering upon the principal task of the chapter, it is important to note that it is the content of authoritative pronouncements of the Church - especially the formulations of several general Councils, of two Synods of the Eastern Orthodox Church, and of recent encyclical letters of several Popes [1] - in endeavouring to articulate and defend the traditional scripture-based belief of the Church in the real (the substantial) presence of Christ in the Eucharist, that provides opportunity and wide scope for the use by philosophers and theologians of metaphysical categories, and of philosophical analysis and arguments, in examining traditional belief in this presence of Christ in the sacrament of the altar as authoritatively articulated and defended. Although all the conciliar, synodical, and papal, documentation regarding the Eucharistic presence currently available to philosophers and theologians disposed to consider it was not available to St Thomas writing in the thirteenth century, nonetheless there was sufficient conciliar and papal documentation in existence [2], and available to him and to his contemporaries, to facilitate the production of an extraordinarily wide-ranging, rich, and often contentious, body of philosophical/metaphysical reflection on the real presence of Christ in the Eucharist.

But it remains true that the content of question 75, article 1, is to be considered as a sort of scriptural-historical mise-en-scene for the *philosophy* of Christian doctrine (as well, of course, for the systematic theology) that will be developed by St Thomas in subsequent questions and articles dealing with the sacrament of the Eucharist. It is, therefore, understandable that this article should be the place where - with the exception of what he has to say in reply to the third objection to the position he defends in 3. 75. 1 - St Thomas is least engaged with philosophical matters relevant to a reflective apprehension of issues relating to the presence of Christ in the Eucharist.

Arguments ex convenientia for the Real Presence of Christ in the Eucharist

The *corpus articuli* of 3. 75. 1 offers three arguments concerned to establish the truth of the traditional belief of the Church in the substantially real presence of Christ in the Eucharist. It is of interest that St Thomas does not directly employ arguments providing an exegesis of Christ's words of institution of the Eucharist in order to establish this truth [3], although he does cite an exegetical comment of Cyril of Alexandria [4] on Luke 22,19: 'This is my body which will be given for you' [5]. He does this in the course of introducing his own arguments *ex convenientia*.

The three arguments of Thomas may be restated briefly as follows:

- 1. The sacrifices of the Old Law contained the true sacrifice of Christ's passion only figuratively: they foreshadowed what was to come. It was necessary, then, that the sacrifice of the New Law instituted by Christ should contain something greater (aliquid plus haberet), namely Christ himself who suffered and contain him not just symbolically or figuratively but in his full reality (in rei veritate). So this sacrament, containing as it does Christ himself in his full reality, as (Pseudo) Dionysius puts it in chapter 3 of his *Ecclesiastical Hierarchy*, is the culmination of all the other sacraments (perfectivum omnium sacramentorum aliorum) in which only a sharing in the power of Christ is found [6].
- 2. For our salvation Christ took on full bodily human reality (corpus verum nostrae naturae). Now, as Aristotle pointed out in book 9 of the *Ethics* (Bekker 1171b 32) [7], it is especially distinctive of friendship that friends share life together. So Christ promised His bodily presence for us in our time of pilgrimage, joining us to Himself through the reality of His own body and blood in this sacrament (per veritatem corporis et sanguinis sui...in hoc sacramento). So this intimate joining of us to Christ in this sacrament is a sign of the unlimited scope of Christ's love, and is the underpinning of our hope.
- 3. Fullness of faith is called upon to engage not only with the divinity of Christ but also with his humanity. As we have it in John 14. 1: "You believe in God; believe in me as

well." Now faith relates to realities that are unseen. So, just as Christ offers his divinity to us as something unseen, so likewise does he offer his very flesh to us in a way transcending sight.

Thomas concludes the *corpus articuli* by pointing out that there were people who had failed to pay attention to these points, and who had believed in consequence that Christ was present only symbolically (sicut in signo) in the Eucharist. He singled out the eleventh century French theologian Berengarius of Tours for special mention in this connection. However, later scholarship has established that Berengarius believed in the substantially real presence of Christ in the sacrament of the altar, whilst rejecting any need for a change of substance affecting the elements of bread and wine in order to bring about this presence [8].

Discussion of Question 75, Article 1

As already indicated *supra*, 3. 75. 1 of St Thomas's *Summa Theologiae* offers a scriptural-theological setting-of-the-scene for the Angelic Doctor's examination of a range of issues in question 75 and in the other questions on the Eucharist still to come - an examination that brings into play an ensemble of metaphysical concepts, analyses, and arguments, deployed with a view to giving some degree of rational insight into the reality of Christ's substantial presence in the Eucharist.

St Thomas is concerned in question 75, article 1, to notice some of the New Testament (and patristic) underpinning of what he accepts as the authoritative teaching of the Church regarding the substantially real presence of Christ in the sacrament of the altar. It is the acceptance by him of this teaching that provides the context for the metaphysical investigations that are to come and which will constitute a particular token of the general type of activity that is the Augustinian-Anselmian 'fides quaerens intellectum' - 'faith [fides qua faith by which] seeking understanding'. This is, of course, the perspective of systematic theology, of Glaubensverstandnis (cf. p. 8 of chapter 1 supra). In contrast to this, the

perspective of the thesis could perhaps be described not too paradoxically as that of *intellectus quaerens fidem* - understanding in search of (reasonable) belief.

Faith and Reason

It might perhaps be worthwhile to state at this point that to draw upon metaphysics to pro-vide a degree of rational insight into (and support for) teachings of the Christian faith - to provide conceptual elements for the reasonable asking of questions, for the *Fragenstellung* (to alter slightly one of Heidegger's terms), concerning matters of faith, and for the answer-ing of them - is to move with the intrinsic drive or dynamism of the human intellect itself. Why this is so was pointed out by the Angelic Doctor when he reminded us that, in matters pertaining to faith (to *fides quae*, as approached by *fides qua*) the situation is as follows:

Quia [in fide] intellectus non hoc modo terminatur ad unum ut ad proprium terminum perducatur, qui est visio alicuius intelligibilis, inde est quod eius motus nondum est quietatus, sed adhuc habet cogitationem et inquisitionem de his quae credit, quamvis firmissime eis assentiat; quantum enim est ex seipso, non est ei satisfactum, nec est terminatus ad unum, sed terminatur tantum ex extrinseco...Inde etiam est quod in credente potest insurgere motus de contrario huius quod firmissime tenet, quamvis non in intelligente vel sciente.

(Quaestiones Disputatae de Veritate, qu. 14, art. 1, [to] 7)

(Because [in believing] the intellect does not come to a halt in one object as having being brought to its own proper goal, which is the intrinsic seeing of, insight into, whatever is intelligible, the result is that the intellect remains restless in its movement, still reflecting on and inquiring about the things that it believes, even though it assents most firmly to them.

The reason here is that, within itself, the intellect remains unsatisfied, not finalised [intrinsically] in one object, but finalised only by outside [authority]...In consequence, for a person who *believes* something, there can arise a movemeent [of thought] that conflicts with what that person most firmly holds - a situation that does not apply [in the same way] to the person who *understands* or *knows* something [on intrinsic grounds].)

Ultimately, the drive of the intellect, of the human being as intellective agent, is towards knowing, not towards believing. Involved here is what Bernard Lonergan refers to in many places in one of his major works, *Insight*, as the "detached, disinterested, unrestricted desire to know", the objective of which is unlimited, namely "everything about everything" (cf., for example, pp. 372-76, 659-62, 667-71) [9]. It would be most odd to speak of a detached, disinterested, unrestricted, desire to believe. Such a notion would go against the natural grain of the intellect as such, the objective of which is, as St Thomas has reminded us, the visio alicuius intelligibilis - the intrinsic seeing of, insight into, whatever is intelligible [10]. Put differently, the aim of intellect per se is its own immanently generated knowledge - a statement that does not, and realistically cannot, preclude in areas both of practical and theoretical involvement reliance upon the knowledge immanently generated by the minds of others, and communicated. But reliance of this sort is, in principle at least, and of its nature, calculated to leave the intellect 'nondum quietatus', i.e. remaining restless in its movement, still reflecting on and inquiring about the things that it believes. It is, then, perfectly consistent with the intellective nature of the human person to be involved in an on-going dialectic of fides et ratio - of faith and reason - that may well extend into the problematic of doctrine and theology at their deepest levels, with due attention being paid to the depositum fidei as entrusted to the Church by Christ. [11]

The way is now clear for us to address the principal task of this chapter which is to provide an extensive discussion of that part of 3.75.1 that was referred to above as the

'exception' to Thomas's not being engaged here with philosophical matters but with a scriptural-historical 'setting of the scene' for the systematic theology and - the focus of interest of this thesis - for that section of the *philosophy* of Christian doctrine that deals with Christ's being substantially present in the Eucharist.

Objection and Reply

This 'exception' is Thomas's reply to the third objection to the position that he defends in the *corpus articuli* of 3. 75. 1. The objection runs as follows:

No body can exist simultaneously in several places - something belonging not even to an angel since, on the same principle, [the angel] would be able to exist everywhere [12]. But the body of Christ is a true body and it exists in heaven. So it seems, then, that it is not present in its full reality in the sacrament of the altar but only symbolically.

(Nullum corpus potest esse simul in pluribus locis, cum nec angelo hoc conveniat: eadem enim ratione posset esse ubique. Sed corpus Christi est verum corpus, et est in caelo. Ergo videtur quod non sit secundum veritatem in sacramento altaris, sed solum sicut in signo.)

In reply to this objection Thomas argues that

The body of Christ does not exist in this sacrament in the way in which a body exists in a place: a body is matched to a place by [that body's] dimensions. Rather, it exists in a certain special way that is characteristic

of this sacrament. So we say that the body of Christ is present on various altars not as in different places but *as in the sacrament*. We do not mean by this that Christ is there only symbolically, although a sacrament belongs to the class 'sign'. We do mean that the body of Christ is there, as we have said, in the way characteristic of this sacrament.

(Corpus Christi non est eo modo in sacramento sicut corpus in loco, quod suis dimensionibus loco commensuratur: sed quodam speciali modo qui est proprius huic sacramento. Unde dicimus quod corpus Christi est in diversis altaribus, non sicut in diversis locis, sed *sicut in sacramento*. Per quod non intelligimus quod corpus Christi sit ibi solum sicut in signo, licet sacramentum sit in genere signi: sed intelligimus corpus Christi esse ibi, sicut dictum est, secundum modum proprium huic sacramento.)

The core of the objection against the substantially real presence of the body of Christ in the sacrament of the altar is that the body of Christ is really and substantially present in heaven, and that it is impossible for a substantially real body to be present simultaneously in more that one place. The core of Thomas's reply to this objection is that the body of Christ is really and substantially (not merely symbolically) present in the sacrament of the Eucharist, but is not present there *as in a place*. It follows that the substantially real presence of Christ in the Eucharist does not come under the strictures of the major premise of the ob-jection.

<u>The Non-Spatially Localised Mode of Christ's Presence in the Eucharist - Analysis and Argument</u>

It is not in his brief reply to the third objection, cited above, that St Thomas concerns him- self with an explanatory philosophical analysis of the non spatio-localised mode of Christ's

presence in the Eucharist. This analysis is developed in question 76 of the third part of the *Summa Theologiae*, and its central points may be set out as follows:

- 1. The change (conversio) of bread and wine into the body and blood of Christ comes about at the level of *substance* only (3. 75. 2-5; 76. 1-3, 5).
- For a note on St Thomas's (more generally, the Thomistic) teaching on *substance* (substantia), see *infra* chapter 3, pp. 105-114. Thomas's point in the articles referred to (3. 75. 2-5; 76. 1, 2, 3, 5) is that what was bread and wine *simpliciter* is now the body and blood of Christ *simpliciter*, with the accidents of the bread and of the wine continuing to exist without their connatural subjects. The change or *conversio* takes place, therefore, at the level of *substance*, that is, at that level of the reality of bread and of wine that is normally identified through relevant clusters of accidents. In connection with this last point, the celebrated French Thomist, A. D. Sertillanges, O.P., remarked that "[Accidents] are not secondary beings glued on to [substance] parasitically; indeed, the being of accidents is, as it were, *the being of substance diffusing itself*. And, just as the accidents exist through the substance, so the substance is manifested by them and, in consequence, made known by them" (my emphasis) [13]. The notion of change occurring at the level of substance will be used extensively in subsequent articles of question 75, and explored extensively in my discussion of these articles.
- 2. The dimensions or quantity of the bread and of the wine remain after this change. They are not themselves changed into the dimensions of Christ's body and blood (3. 75. 5; 76. 1. [to] 3.).
- -The dimensive quantity of the bread and of the wine is manifestly there *post conse-* crationem just as it was ante consecrationem. Relative to its own nature, it has undergone no change.

3. Whatever is present in the sacrament of the altar is present *either* in virtue of the sacramental sign (ex vi sacramenti) *or* in virtue of natural concomitance (ex vi naturalis concomitantiae). That is to say, *either* in virtue of the effectiveness of the words of the sacramental form, viz. 'This is my body', 'This is my blood', which directly change the bread and the wine at the level of substance into the body and blood of Christ; *or* in virtue of that natural connection - of that 'implicate order' (to borrow a phrase, though not a meaning, from the eminent modern British physicist David Bohm [14]) - through which there exists in the sacrament of the altar whatever is connected (im-plicated) in reality with the direct term of this change. That is, there are additional factors that cannot be separated in reality from the direct term of the change (from the substance of the body and blood of Christ), viz. the intrinsic accidents of Christ's body and blood, together with Christ's human soul and His divinity, although these factors may be separated *conceptually* from this substance (sola enim operatione animae discernuntur quae realiter sunt coniuncta) (3. 76. 1) [15]

To illustrate this from a different order of things altogether: If God as creative source of the universe willed that, say, a neutron was to be changed into a proton at the level of substance, then (1) the direct term of the change would be ex intentione divina protonic substance (itself involving the substantial nature of two up quarks and one down quark), whilst the dimensive quantity of the proton, its positive electric charge, its mass, the structural arrangement of its quarks, and whatever other intrinsic accidents being-a-proton calls for, would be present ex naturali concomitantia; (2) the dimensive quantity and other accidents of the neutron would continue to exist - though neither in their connatural subject (the substance of the neutron) nor in the substance of the proton (since these are not accidents that could belong to protonic substance) - but as upheld in existence by the First Cause. To anticipate a point to be developed later in the argument, the dimensive quantity and other accidents of the neutron would contain the substance of the newly-caused proton, thus determining its 'whereabouts' (ubi), but would not be inhering in this substance, that is, the material causality involved in being the subject of accidents would not be instantiated in the case of this proton qua substance.

Put differently again, concomitance involves what might be called an 'ontological interface' between two or more components of a single subsistent reality (cf. Thomas's "Si enim aliqua duo sunt realiter coniuncta, ubicumque est unum realiter, oportet aliud esse")

["If two things are actually conjoined in reality then, wherever one is found, the other is found as well"], 3. 76. 1c. As Thomists have always pointed out, if this statement of the Angelic Doctor is applied to a single subsistent reality in which one of the united components is (ontologically) surpassed or transcended by the other, the presence of the first component always involves the presence of the second, without the opposite being the case, e.g. wherever the human body of Christ is, there also are His divine person and nature: but the reverse of this proposition does not hold, given the attribute of ubiquity that belongs to the latter two.)

Leaving aside the issue of something or other's being changed at the level of substance, it may be noted that, on each occasion that the First Cause creates a human soul (cf. 1. 90. 2c; 118. 2c) - a substantial form intrinsically independent of matter (1. 75. 2; S. c. G. 2. 79) - the creative action bears directly on bringing about the soul in its *substantial* nature, with its properties of intellect and will (intellectus et voluntas) being brought about *concomitantly* – ex naturali concomitantia. In this sort of connection St Thomas sometimes speaks of 'naturalis resultantia', e.g. 1. 77. 6. (to) 3: "Emanatio propriorum accidentium a subiecto non est per aliquam transmutationem sed per aliquam naturalem resultationem, sicut ex uno naturaliter aliud resultat, ut ex luce color" (The issuing of properties from a subject is not by way of any kind of transmutation or change but by way of some sort of natural resulting, with one thing just naturally resulting from something else, along the lines of colour resulting from light).

In virtue of the sacramental sign, then, there exists in this sacrament only that which is the *direct term* of the change, viz. the body and the blood of Christ at the level of substance, not their dimensions (cf. 3. 76. 4c: 'Conversio autem quae fit in hoc sacramento terminatur directe ad substantiam corporis Christi, non autem ad dimensiones eius'). A sign of this is that the dimensive quantity of the bread and of the wine remains,

with only the substance of the bread being changed into the body of Christ and the substance of the wine into Christ's blood.

Two points may be made here:

(i). The stringent limit placed upon the immediate result of invoking the power of the sacramental sign - upon the virtus signi sacramentalis - is essentially a function of what the sacramental sign is in the context of the Eucharistic change. We are dealing here with two formulaic sets of words, viz. "This is my body", "This is my blood", that are not merely declarative of what is the case but causative with respect to it, i.e. actually bringing about what is the case in this sacrament (cf. 3. 76. 1c: "...per verba formae, quae sunt effectiva in hoc sacramento sicut et in ceteris"). This efficacy exists on the basis of Christ's institution of the sacrament of the altar, given that this inaugurative action is understood as it has been traditionally understood by the Church. The sacramental sign as such brings about only that which it directly signifies and no more. In the instance of the sacrament of the altar this is the body and blood of Christ which are through and through substances, not accidents. The direct effect, therefore, of the utterance of the words of consecration is to remove from the substance of the bread and of the wine all that prevents the bread and the wine from becoming and being the substance of the body and blood of Christ (a matter that will be further worked out in chapter 6 infra when discussing the replies of Cajetan and Ferrariensis to Duns Scotus's objections to the Thomistic account of transubstantiation). The dimensive quantity and other intrinsic accidents of Christ's body and blood will be present by natural concomitance and per modum substantiae, since whatever is present on the altar is there only through transubstantiation; hence they will, like substance qua substance, not be present in any spatially extended way. Immediately and directly, then, ex vi conversionis (to use a phrase employed by Thomas as well as by Ferrariensis), the accidents of the body and blood of Christ are not present; they become present only mediately and indirectly ex naturali concomitantia - through 'implicate ordering' or 'ontological interface', to put the matter in other terms previously introduced. This is, it scarcely needs stating, a distinction ungraspable by the imagination though not by the intellect; it is a distinction

that is reality-reflecting and rationally constrained, an example of the content of Thomas's 'visio alicuius intelligibilis' (cf. supra under 'Faith and Reason').

- (ii) Change at the level of substance involves change in respect of identity-constituting factors. (Discussion of change at the level of substance involving only substantial form, as opposed to change at the level of substance involving the whole substance, i.e. primary matter as well as substantial form, in the unique case of Eucharistic transubstantiation, will be undertaken in later chapters in connection with Thomas's arguments in 1. 75. 4 and 8 concerning the reality of the change of bread into the body of Christ [and of wine into His blood].) So the claim that, after the words of consecration, the bread and the wine are no longer such but are now the body and blood of Christ, is a claim that the identity-constituting factors of bread and wine no longer exist, but have been changed into the iden- tity-constituting factors of the body and blood of Christ, which are the immediate and direct object of the Eucharistic conversion or change. But the dimensive quantity, shape, colour, aroma, flavour, weight, etc., of the bread and the wine remain. It follows that these fea- tures are not the identity-constituting (or essential) factors that are the intrinsic causes of what-it-is-to-be-bread or what-it-is-to-be-wine. They are, however, most certainly the id-entity-indicating features of the presence of bread and of wine in every context except that of the sacrament of the altar. Not, indeed, that any sort of 'deception' occurs in this con-text since, as the Angelic Doctor points out (3. 75. 5. [to] 2), the perceptible accidents of bread and wine remain truly those of bread and wine, whilst judgment about the substance present belongs to the intellect whose proper object includes primarily the substance of things - judgment that, in this case, is informed by faith concerning the substantial presence of Christ under the appearances of bread and of wine.
- 4. The dimensive quantity of Christ's own body and blood, with all of the accidents intrin-sic to this body and blood, are present in the Eucharist by natural concomitance or 'impli-cate order' since they are not the direct term of the change, though they are always insepa-rably connected with the substance of Christ's body and blood. (Cf. 3. 76. 4c.: 'Quia tamen' substantia corporis Christi realiter non denudatur a sua quantitate

dimensiva et ab aliis acci-dentibus, inde est quod, ex vi realis concomitantiae, est in hoc sacramento tota quantitas dimensiva corporis Christi, et omnia alia accidentia eius.')

5. Since the substance of Christ's body and blood is present in virtue of the sacramental sign (ex vi sacramenti), whereas the dimensive quantity of this body and blood is present only in virtue of natural concomitance, it follows that the substance of Christ's body and blood is naturally ('logically') prior to its dimensive quantity as far as presence is concerned (cf. 3. 76. 3. to 2: 'Ipsa autem natura substantiae praecedit etiam quantitatem di-mensivam'). The body and blood of Christ are, then, present in the Eucharist as if they were substance only: they are present *per modum substantiae*, that is, present in the way in which a substance is envisaged as existing, and contained, under its dimensive quantity (sub dimensionibus), prior to the way in which it exists in a spatially extended way through being 'quantified' and individuated as corresponding part-to-part and whole-to-whole in its integral parts to the spatially extended quantity of what is external to it that encompasses and 'localises' it. (Cf. 3. 76. 3 c.: 'Corpus Christi est in hoc sacramento per modum substantiae, id est, per modum quo substantia est sub dimensionibus; non autem per modum dimensionum, id est, non per illum modum quo quantitas dimensiva alicuius corporis est sub quantitate dimensiva loci.)

Interpreting the Thomistic Argument

The Thomistic reasoning here may be interpreted along the following lines: Although being something bodily (ens corporeum) belongs to the genus 'substance' (substantia), and is very closely associated with the notion of dimensive quantity (quantitas dimensiva), nonetheless the *substance* of something bodily is one thing and its *dimensive* quantity is something else again: one ought not to infer ontological identity from natural inseparability. Moreover, what accounts for the specific nature or quiddity of something for its being *this* or *that* kind of thing, with *these* or *those* sortal properties - which is the *substance* of what a thing is, is not *per se* what accounts for its having distinct integral parts, since substance as such (ratione sui) is *indivisible*, and *material* substance as such has only the (*in se* indivisible) *essential* parts that are primary matter and substantial

form, albeit with an exigency for integral parts. What accounts *per se* for the distinguishing and ordering of integral parts-outside-of-parts of a material or bodily substance is the property of *dimensive quantity*. Accordingly, no inconsistency emerges in claiming that the substance of the bread is changed into the substance of Christ's body (and the substance of the wine into the substance of Christ's blood) without the change that has taken place *ex vi sacramenti* also directly extending to, and including, the dimensive quantity of Christ's body.

For St Thomas, that the dimensive quantity of Christ's body is not present in the Eucharist ex vi sacramenti, i.e. in virtue of the sacramental sign, is something "quod patet ex hoc quod quantitas dimensiva [panis] remanet facta consecratione, sola substantia panis trans-eunte" ("...is [something] that is manifest from the fact that the dimensive quantity [of the bread] remains after the consecration: only the substance of the bread passes away") [Cf 3. 76. 4c]. Behind what St Thomas is saying would be, I think, an argument something like the following: There is always a ratio or proportion between something that is being changed and that into which it is being changed [16]. If, then, only the substance of the bread (and of the wine) is changed, with its dimensive quantity remaining unchanged, then only the substance of the body of Christ is the direct term of the change, i.e. is that into which the bread is changed, with the dimensive quantity of Christ's body being outside the direct term of the change. (Thomas would probably have said something like 'quantitas dimensiva est extra terminum per se conversionis', were he actually to have constructed this argument.) Moreover, since the body of Christ becomes present under the dimensive quantity of the bread (though not actuated by it as its subject: cf. infra), and since the sub-stance of the bread itself was previously immediately present under that same dimensive quantity, there comes about ex vi conversionis sacramentalis what might be called a sym-metry of quasi material causality ('quasi' because Christ's body is not the subject of inhe-sion of the dimensive quantity, whereas the bread was) in virtue of which the substance of Christ's body is itself immediately present under the dimensive quantity (of what previous-ly was bread), without its own dimensive quantity directly coming into play.

Accidents Present 'Per Modum Substantiae"

The point of the claim that the direct - the primary and essential - term of the Eucharistic change is *only* the substance (sola substantia) of Christ's body and of His blood is to direct attention to how it is possible for the dimensive quantity and the other intrinsic accidents of Christ's body and blood to be present *per modum substantiae*, i.e. in the nonspatially loca-lised way that belongs to substance in itself (*in se*). These accidents are not directly present *ex vi sacramenti* - in virtue of the sacramental sign and related change itself - but are in- directly present *ex naturali concomitantia*. That is, they are not present on their own terms, so to speak, in their own connatural way as perceptible features of substance, but by reason of the substance to which they belong, though *in the manner of* this substance which, *qua* substance, is spatially unextended and non-localised.

The argument also points in the direction of how it is possible for the whole Christ (totus Christus) to be really and substantially present in heaven under His (transformed) natural human appearance and simultaneously present on earth in many places in the sacrament of the altar under the appearances of bread and wine (but cf. *infra* for relevant elaboration).

Additional Note

It may be worthwhile to add to the above argument a note to the effect that: (i) Being something material or bodily (ens corporeum) belongs to the genus 'substance' (as said above). (ii) Material substance (substantia materialis seu corporea) is of itself, or qua substance, indivisible, i.e. it does not have integral material parts but is composite only in the line of essence, being made up of primary matter and substantial form (materia prima / forma substantialis) [See discussion of this mode of composition in chapters 3, Note 5A, and 5, pp. 175-188] (iii) By reason of substantial form, each material substance has an inbuilt exigency for qualities and for operative powers; by reason of primary matter, each material substance has an in-built exigency for dimensive quantity and, through dimensive quantity, for external extension, divisibility, measurability, impenetrability, inertia, volume, mass, etc. All of these accidental modes of being belong to the composite substance itself as to something existing in its own right, but belong to it through the relatedness or 'kinship' that some of them have with substantial form and others have with primary matter. (iv) The actual distinguishing of integral material parts is not due to material substance as such but to its intrinsic property of dimensive quantity. Before dimensive quantity (the priority is one of nature, not of time) there are no integral parts at all, only the substantial entitas - the substantial being-ess - that will, through dimensive quantity, be diffused into the sort of integral parts for which a particular kind of material substance has a natural exigency. Dimensive quantity constitutes the integral parts formally (through the causality of being-a-form) as integral, though they are ultimately based as substantial on the essential parts that are primary matter and substantial form that give rise to an instance of this or that sort of being-something-bodily: an ens tale corporeum. (v) The actual extension of integral parts relative to what spatially localises a material substance presupposes an objective distinction or distinguishability of integral parts realised within the material substance. What is indivisible because lacking integral parts already really distinct or distinguishable has no capacity for *local* extension: a body can have parts-outside-parts in space, with each part exclusively appropriating a segment of space for itself, only if the body, the material substance, already (by a priority of nature, not of time) has a plurality of distinct or distin- guishable material parts apt for, capable of, being actually 'stretched out' in space. This 'stretching out' in space involves a relationship of correspondence, of commensurability, of the intrinsic integral parts of a material substance with what is spatially extended outside them.

Dimensive Quantity: Primary and Secondary Functions

What is implied in the above analysis is an objective distinction between the *primary* function and the *secondary* function of dimensive quantity. This distinction had not been lost on St Thomas himself who had employed it in interpreting Christ's mode of existence in the sacrament of the altar (cf., e.g., *Sent.* 4. 10. 2. 4. [to] 3; *S. c. Gent.* 4. 64; *S. Theol.* 3. 76. 3. [to] 2; 3. 76. 5c.)

However, the importance of this distinction used by the Angelic Doctor was apparent also to his later followers. A good example of its explicit use is to be found in the following extract from the commentary of Ferrariensis [17] on book 4, chapter 64, of Thomas's *Sum-ma contra Gentiles*:

Advertendum...quod duplex est quantitatis effectus. Unus est omnino intrinsecus subiecto quanto: scilicet esse quantum, et divisibilitas in partes, atque ordo partium in toto. Alius est aliquo modo extrinsecus, inquantum scilicet convenit subiecto in ordine ad extrinsecum: scilicet condividi alteri quantitati, et partes eius partibus loci correspondere. Primum convenit quantitati necessario et per se: secundum vero sibi non convenit nisi quando habet primo et per se ordinem ad locum et ad extrinsecas dimensiones.

(There are two effects of dimensive quantity. One is altogether intrinsic to the subject affected by quantity, viz. being quantified, divisibility into parts, and an ordering of [these] parts within the whole. The other involves what is extrinsic, insofar as it belongs

to the subject in relation to what is outside [this subject], viz. to be correlated with the quantity of something else, and [so] to have parts corresponding to the parts of the place [in which it is]. The first effect belongs to quantity mecessarily and essentially; the second belongs to it only when it firstly has of itself a relationship to place and to dimensions outside itself.)

Ferrariensis goes on to affirm that

In sacramento ergo altaris quantitas corporis Christi, sub dimensionibus panis existens, habet primum effectum, quia ipsum corpus Christi est in seipso divisibile, et habet ordinem partium in toto:non autem secundum effectum habet, quia partes corporis Christi non correspondent partibus dimensionis panis neque partibus loci, sed totum est sub qualibet parte.

(So, in the sacrament of the altar, the quantity of Christ's body -a body that exists under the dimensions of bread - has its *primary* effect because the body of Christ is a divisible body, with an order of parts within the whole [body]. [This quantity] has no *secondary* effect, however, because the parts of Christ's body do not correspond to the parts of the bread's dimensions, nor to the parts of the [encompassing] place, but the whole [body] exists under each and every part) [Emphases mine.] [18]

What is affirmed, then, within the Thomistic school is an objective or real distinction between (i) the *primary* formal effect on a body of that body's dimensive quantity, viz. the distinguishing and ordering of integral parts of that body *relative to one another and to the body or substance as a whole* - the *ordo partium in toto*; and (ii) the *secondary*

formal effect of that body's dimensive quantity, viz. the distinguishing and ordering of integral parts of the body *relative to the actually extended reality of what externally encompasses and spatially localises it* - the *ordo partium in loco*.

That the secondary formal effect of dimensive quantity on a body is distinct and separable from the primary formal effect should be evident from the fact that the ordo partium in loco is essentially the relationship of one material reality or substance to an externally encompassing and spatially localising material reality (or realities) - a relationship grounded in the actualised capacity of the first reality to be encompassed and spatially localised on the basis of its dimensive quantity. Were the encompassing bodily reality (or realities) to be withdrawn, with nothing replacing it (or them), and the previously encom- passed and spatially localised thing to be in a vacuum, this relationship, i.e. the secondary formal effect of a thing's dimensive quantity - the ordo partium in loco - would cease, whilst the primary formal effect - the ordo partium in toto - would continue unaffected. This might be rephrased by saying that the nature of material substance, i.e. of what-it-is-to-be (quod quid est esse) an instance of 'material substance', is such as to have superve-nient upon it the property - Aristotle would say the to idion - that is quantity (Aristotle's to poson). The exigency for quantity in a material substance, i.e. in a body, arises from a material substance's being a composite of primary matter and substantial form at its deepest ontological level in the line of essence. Quantity (Thomas often uses the Latin phrase "quantitas dimensiva") is the first expression, the first intrinsic resultant ("per aliquam naturalem resultationem" [1. 77. 6. (to) 3], cf. supra) of the essential composition - of composition in the line of essence - of a receptive, determinable, purely potential, material principle - primary matter (materia prima) - and of a matter-actualising, matter- determining, matter-specifying principle - substantial form (forma substantialis). It is precisely this essentially composite ontological status, with its consequent manifold of matter-based properties, that marks off material substances or bodies from uncomposite, simple, non-material or spiritual, substances, such as traditional Christian belief holds the angels to be (cf. S. Theol.1. 50. 2,3,5; De Sub. Sep. chap. 6 - 8, 19). As a property of material substance, dependent upon it by way of inherence (per modum inhaerentiae), quantity is ontologically inseparable (in the

natural order) from material substance, though really distinct from it as accident (ens in alio) is really distinct from substance (ens in se exsistens). What is immediately and directly brought about by quantity in a material substance is the distinction or distinguishability, and composition, of material parts appropriate to this or that sort of material substance, e.g. the integral material parts appropriate to a cat or to a molecule of sodium silicate, but viewed at this point only as being apt for, capable of, being extended in a local, spatial, external, sense-perceptible, way, not as being actually so extended. The idea here is that a material substance must be understood as already having a plurality of really distinct or distinguishable integral, substantial, parts before (by a priority of nature, not of time) these parts can be understood as existing spatially or locally outside one another, i.e. as being spatially 'stretched' and situated in a place - a state of affairs in which Thomism postulates a strong isomorphism of understanding and reality. That is, spatial extension of integral parts in relation to place presupposes a real distinction (or distinguishability) between these parts themselves, since what is without parts and, therefore, is indivisible, has no capacity for spatially extended parts outside one another. But what is presupposed to something cannot be identical with what it is presupposed to. The intrinsic property that is quantity, then, is essentially that by reason of which (as formal cause) a material substance has within it a plurality of really distinct or distinguishable integral parts in virtue of which it is apt for, capable of, being spatially extended and exclusively appropriating place and, in consequence, of being in principle divisible, measurable, impenetrable, inertial, etc. Actual spatial extension, however, with its consequences of location, determinate position of parts in a place, being actually divisible or measurable, and so on, is *supervenient* upon quantity: these features are the secondary formal effects of quantity, really distinct from, and supervenient upon, the primary formal effect, namely the distinction or distinguishability, and composition, of integral, material, parts (ordo partium in toto), which is what the accident that is quantity essentially brings about as formal cause in the material substance that is its subject. The non-identity or distinction involved here is part of the world, i.e. it is a real distinction occurring between two mind-independent features of the world, not between two ways of looking at the same thing. In the course of the normal workings of the spatio-temporal world, however, quantity as giving rise (as formal cause) to distinction or distinguishability, and composition, of integral parts in a material substance - the *primary* or defining formal effect of quantity - is always accompanied by the cluster of *secondary* formal effects (centred on actual spatial extension of parts, each in its own place and related to what lies outside it) that is characteristic of every substance that is affected by the accident of quantity.

Using a 'thought experiment'

6. The use above of a 'thought experiment' to establish the distinction and separability of the secondary formal effect of dimensive quantity from its primary formal effect - an experiment that consists of thinking of *one* actually extended material reality or substance existing in absolutely empty space ('in spatio imaginario', as the Scholastics would put it), with the rest of the Universe of extended things considered as non-existent - exhibits a situation in which the secondary formal effect of dimensive quantity does not result *naturally*: there is no other dimensive quantity in relation to which it *would* result. Such a situation is utterly unlike what is the case for the body (and the blood) of Christ in the Eucharist, however. This point is made very effectively by Joseph Gredt in the course of his discussion of the nature of *place*, *presence* in place, and the *primary* and *secondary* formal effects of dimensive quantity, in his *Elementa Philosophiae Aristotelico-Thomisticae*:

Notetur tamen maximam differentiam intercedere quantitatem ex qua *naturaliter* non resultat effectus secundarius, quia non datur alia quantitas, ad quam ordinem habere posset, et quantitatem corporis Christi eucharistici, qua praeternaturaliter non resultat effectus secundarius, non obstantibus quantitatibus aliis, ad quas ordinem quantitativum haberet, si effectus secundarius non impediretur divinitus. Hoc possibile esse probare nequit ratio, quae solummodo probat effectum secundarium separari a quantitate, sublatis aliis quantitatibus; quo ipso tamen ex ratione etiam ostenditur non impediatur apparere repugnantiam, quominus effectus secundarius, aliis quantitatibus non sublatis. (Gredt's emphases)

(What should be noted is the vast difference that lies between a quantity from which no secondary [formal] effect *naturally* results *because no*

other quantity is given to which it could stand in relation, and the quantity of Christ's body in the Eucharist from which no secondary [formal] effect preternaturally results in spite of there being other quantities to which it would naturally stand in a relation based on quantity, were this secondary [formal] effect not prevented by divine power.

Reason is unable to prove that this [latter] is possible: it proves only that a secondary [formal] effect is separable from quantity when other quantities are removed. On this basis, however, reason shows that *no contradiction is evident* in the idea of a secondary [formal] effect being prevented even when other dimensive quantities have not been removed.) [19]

For Gredt, the 'thought experimental' separation of the secondary formal effects of quantity from quantity itself - from the *ordo partium in toto* - discloses the non-identity of actual spatial extension, location, divisibility, etc., with quantity as an intrinsic property of material substance. Since the secondary formal effects of quantity *can* be separated in specifiable circumstances from quantity (itself the formal cause giving rise of itself only to the *ordo partium in toto*), it follows that this radical non-identity at least leaves open the possibility of real separation occurring in other specifiable circumstances, i.e. it precludes the *a priori* objection of *contradiction* from any such allegedly possibile state of affairs. Given this preclusion of contradiction, Gredt does not hesitate to invoke, in the case of the dimensive quantity of Christ's body in the Eucharist, divine power to bring about *praeternaturaliter*, i.e. supernaturally, the separation of all secondary formal effects from the dimensive quantity intrinsic to Christ's body present there. Gredt shares the view of St Thomas about divine power as set out, e.g., in a passage of Thomas's commentary on the *Ethics* of Aristotle (cf. *In Eth.*, book 6, lectio 2, no. 1140):

Necesse est enim quod potestati cuiuslibet causae subsit omne illud quod potest contineri sub proprio obiecto virtutis eius, sicut ignis potest calefacere omne calefactibile Virtus autem Dei, qui est universalis causa entium, extendit se ad totum ens; unde

solum illud subtrahitur divinae potestati quod repugnat rationi entis, ut hoc quod implicat contradictionem.

(It is necessarily the case that there comes under the range of any cause all that comes under the proper object of a cause's power, as fire is able to heat up anything at all that can be heated up. God is the universal cause of beings, and God's power extends to the whole of being. So that alone is withdrawn from the scope of divine power that conflicts with the notion of being, as is whatever involves a contradiction.)

[In connection with the above argument, Chapters 18-20 of Thomas's *Compendium Theologiae* might usefully be consulted.]

7. As was pointed out in 3. above, the direct term of the change of bread and wine into the body and blood of Christ is the *substance* of Christ's body and blood, i.e. the substance of Christ's body and blood is present *ex vi sacramenti*, with the dimensive quantity (and other intrinsic accidents) of Christ's body and blood present *ex reali concomitantia* (above, 4.). The consequence of this is an acknowledgement of the (natural/logical) priority of the *substance* of Christ's body and blood over the dimensive quantity of this body and blood (above, 5., and cf. 3. 76. 3. to 2) - a consequence that readily accommodates the fact that (intrinsic) dimensive quantity is always a (naturally) inseparable property of material substance, though always distinct from it in the way that accident (*idion / sumbebekos*) is always distinct from substance (*ousia/ hupokeimenon*).

However, since the *whole reality* of the body and blood of Christ is present in the Eucharist (together with Christ's soul and divinity, which are present *ex reali concomitantia*: cf. 3. 76. 1. [to] 1), the distinguishing and ordering of the integral parts of Christ's body and blood - the *ordo partium in toto* or primary formal effect of dimensive quantity - remains as a real factor affecting Christ's Eucharistic body and blood. In

Christ's Eucharistic body and blood, then, each integral or substantial part is distinct from every other integral or sub- stantial part: one part is never another (the integral parts of Christ's body or of his blood do not merge or coalesce into one another, as it were).

So what Thomas calls the 'determinata distantia partium in corpore organico' (the definite distance of parts from each other in an organic body), based as it is on the (intrinsic) di- mensive quantity of the organic body ([quae] fundatur super quantitatem dimensivam ipsius) [for both citations, cf. 3. 76. 3. to 2] is found in the body and blood of Christ in the sacrament of the altar. (It should be noted, of course, that Thomas is here using the term "distantia" to mean 'distinction' or 'diversity'.)

So this 'definite distance of parts from each other' is another way of talking about the distinguishing and ordering of the integral or substantial parts of a body relative to one another and to the bodily reality or substance as a whole: it expresses the *primary* formal effect of dimensive quantity (cf. 5., above).

- 8. Thomas then goes on to argue as follows in 3. 76. 5c. (I set out his argument in point form, with occasional elaboration on his propositions):
- (a). "The body of Christ does not exist in this sacrament in the normal way in which a body exists under its dimensive quantity, but rather just as if it were simply substance" (Corpus Christi non est in hoc sacramento secundum proprium modum quantitatis dimensivae, sed magis secundum modum substantiae.)

In support of this proposition reference may be made to the argument Thomas provides in 3. 76. 3c. where he is concerned to show that "the whole Christ exists under each and every part of the species of bread and wine" (totus Christus est sub qualibet parte specierum panis vel vini). This argument itself draws on what St Thomas has said in 3. 76. 1. (to) 3 in reply to the down-to-earth objection that "A body of larger size cannot be totally contained under smaller dimensions. But the dimensions of the consecrated bread and wine are much smaller than the dimensions that belong to Christ's body. It cannot be the case, then, that the whole Christ exists under this sacrament" (Corpus maioris quantitatis non potest totum contineri sub minoris quantitatis mensura. Sed mensura panis

et vini consecrati est multo minor quam propria mensura corporis Christi. Non potest ergo esse quod totus Christus sit sub hoc sacramento). Thomas makes the following carefully nuanced reply to this objection:

When the change of the bread into the body of Christ or of the wine into the blood of Christ has taken place the accidents of both [the bread and the wine] remain. From this it is clear that the dimensions of the bread or of the wine are not changed into the dimensions of Christ's body; rather, substance is changed into substance. So the substance of Christ's body or of His blood is in this sacrament in virtue of the sacramental sign; not so the dimensions of the body or blood of Christ. Accordingly, the body of Christ exists in this sacrament just in the manner of substance (per modum substantiae), and not in the manner of something [spatially] extended (per modum quantitatis). But the complete specific nature of a substance is contained unreservedly under small or large dimensions: the complete nature of air, say, in a small or large amount of air, or the complete nature of being human in a small or in a large human being. So the whole substance of Christ's body and blood is contained in this sacrament after the consecration, just as the substance of bread and of wine was contained there before the consecration. [20]

(b) "Every body that is in a place is in a place in terms of its dimensive quantity; that is, to the degree to which it corresponds to a place on the basis of its dimensive quantity (omne autem corpus locatum est in loco secundum modum quantitatis dimensivae, in quantum scilicet commensuratur loco secundum suam quantitatem dimensivam).

(c) "So it follows that the body of Christ does not exist in this sacrament as in a place but in the manner of *substance*, that is, in the manner in which a substance is *contained* by dimensions (unde relinquitur quod corpus Christi non est in hoc sacramento sicut in loco, sed per modum substantiae: eo scilicet modo quo substantia continetur a dimensionibus). [The distinction that Thomas begins to draw here is the distinction between a substance's *being contained by* its dimensive quantity, and its *being the subject of* this dimensive quantity, with 'being contained by' understood as distinct from, and prior to, 'being the subject of'. To use the language of Cajetan, the *novitas conversionis* [the novel mode of (Eucharistic) conversion or change] gives rise to a *novitas continentiae* [a novel mode of containing] in a unique situation in which there is no substance that is the subject (subjectum) either of the conversion or of the dimensive quantity that does the containing [21].

We know that the dimensive quantity of the bread belonged to the bread as both containing it and also inhering in it as one of its properties, thereby making it capable of being spatially localised. We accept that the same dimensive quantity no longer inheres in anything at all as in a subject: not in the substance of the bread, since this has been changed -transubstantiated - into the substance of Christ's body; not in the substance of Christ's body, since the accidents of bread are not the accidents of a human body. Since the body of Christ is not the *subject* of the dimensive quantity that previously belonged to the bread, it is not able to be spatially extended under this dimensive quantity. Nor, of course, is it able to be spatially extended under its own dimensive quantity (present ex naturali concomitantia), since this dimensive quantity is present per modum substantiae. This is so since transubstantiation of itself makes only substance present, with the consequence that whatever else comes to be present (through natural concomitance) in the state of affairs brought about by transubstantiation comes to be present in the manner of substance, i.e. in a non-spatially extended way (since substance ratione sui is indivisible and becomes capable of divisibility only through the dimensive quantity for which its primary matter has an exigency - cf. Additional Note, p. 30 supra).

What we have, then, in the sacrament of the altar is an exceptional state of affairs, a unique Sachverhalt, in which dimensive quantity - the dimensive quantity of the bread contains the substance to which it is related, which is the substance of Christ's body, without inhering in it, i.e. without having the body of Christ as its subject. On the basis, therefore, of a combination of reflective inquiring and thoughtful believing with respect to the content of traditional Eucharistic doctrine, we are compelled to acknowledge two distinct moments or perspectives in the relationship of accidents to substances: There is the moment or perspective of containing, i.e. of the substance's being contained by its accidents, which is (ontologically) distinct from, and prior to, the moment or perspective of inhering in, i.e. of the substance's becoming and being the subject of these accidents. It scarcely needs to be added that these distinctions (between 'containing' and 'inhering in'), with the acknowledgment of distinct moments or perspectives in the relationship of accidents to their substances, are being afffirmed and employed in the wider setting of the Thomistic metaphysics of the Eucharist - a setting that both invites and sustains reflective inquiry as to its reasonable credentials by anyone accustomed to operating wide of this context. Anyone operating wide of this context of Thomistic metaphysics is, of course, most unlikely to have considered that *containing* and *inhering in* are not to be identified, and that the former may occur without the latter. There is a relationship of 'containing' and 'being contained' that unites the dimensive quantity of what was bread and the body of Christ. It is not at all like the (external) relationship of 'containing' and 'being contained' that unites a jug, say, and the water within it. It is perhaps analogous to the (internal) relationship of 'containing' and 'being contained' that unites a sentence and the proposition contained by it; or analogous to the relationship of 'containing' and 'being contained' that unites an electromagnetic radio frequency carrier wave and the meaningful sound wave signal it contains virtually. But, of course, these are analogies only, and fall short of the Eucharistic reality to which they are being used to refer.

(d) "This is so [substance being *contained* by dimensive quantity] since, in this sacrament, the substance of Christ's body succeeds the substance of the bread. Accordingly, as the substance of the bread was not under its dimensions as something that is spatially localised, but in the way that is proper to substance [merely as existing

under dimensive quantity causing the *ordo partium in toto* only - cf. 5. above], so neither is the substance of the body of Christ [under the dimensions of the bread in a spatially localised way] (Succedit enim substantia corporis Christi in hoc sacramento substantiae panis. Unde, sicut substantia panis non erat sub suis dimensionibus localiter, sed per modum substantiae, ita nec substantia corporis Christi).

- (e) "However, the substance of Christ's body is not the subject of the dimensions [of the bread] as the substance of the bread was" (Non tamen substantia corporis Christi est subjectum illarum dimensionum, sicut erat substantia panis).
- (f) "So, on the basis of [its being the subject of] its dimensions, the bread was localised in a place as being related to a place by means of its own dimensions. The substance of Christ's body, on the other hand, is related to that place by means of dimensions that are not its own" (Ideo panis ratione suarum dimensionum localiter erat ibi: quia comparabatur ad locum mediantibus propriis dimensionibus. Substantia autem corporis Christi comparatur ad locum illum mediantibus dimensionibus alienis). [Because Christ's body is not the *subject* of the dimensions of the bread, there is no ontological basis for its being spatially localised by these dimensions.]
- (g) "In opposite fashion, the dimensions proper to Christ's body are related to that [same] place by means of the substance [of Christ's own body] a state of affairs contrary to the idea of a body that is localised in a place" (E converso dimensiones propriae corporis Christi comparantur ad locum illum mediante substantia. Quod est contra rationem corporis locati).
- (h) "Therefore in no way is the body of Christ in this sacrament as something locally extended" (Unde nullo modo corpus Christi est in hoc sacramento localiter).

As a coda to what has been said by St Thomas about the non spatially localised mode of Christ's substantially real presence in the Eucharist (and to my occasional elaborations of what he has said), the following reply of Thomas to the first objection to the position he defends in 3. 76. 5, viz. that the body of Christ is *not* present in this sacrament as in a place (sicut in loco) is here added (I use the excellent translation of William Barden O.P.):

Christ's body is not in this sacrament in the sense of being restricted to it. If that were so, it could only be on that altar where the sacrament is actually being consecrated. But it is always in heaven in its proper appearance and it is on many other altars under its sacramental appearance. It is also clear that it is not in this sacrament in the sense of being surrounded by it, because it is not there with its dimensions running in conformity with the dimensions of the bread, as we have just seen [in the *cor-pus articuli*]. The fact that it is not outside the containing dimensions of the bread or that it is not in any other part of the altar does not prove that it is limited to the sacrament or circumscribed by it; all that that shows is that it began to be in the sacrament as a result of the consecration and of the changes of the bread and wine, as was said above [3, 76, 1; 75, 2-6] [22]

<u>The Reality of Christ's Presence in the Eucharist – Solving a Problem:</u>
<u>Some Other Texts of St Thomas</u>

i) The Scriptum super Sententiis Magistri Petri Lombardi [23]

In book 4, distinction 10, article 1, of his *Scriptum super Sententiis Magistri Petri Lombardi* = a text that corresponds to 3. 75. 1 of the *Summa Theologiae* - St Thomas, in the course of arguing that Christ is really present in the sacrament of the altar, faces two objections to this real presence based on the idea that a body cannot exist simultaneously in more than one place.

Thomas's reply to the first objection involves developing the contrast between a body's being present in a place *absolutely* (in loco per se loquendo), and a body's being present *sacramentally* (ut in sacramento). His development of this contrast is carefully articulated in the following passage from book 4, distinction 10, article 1 ('to 5') of his *Scriptum super Sententiiis*:

A body is made to correspond to a place only by means of dimensions arising from quantity. So a body is there as in a place (ut in loco) when its dimensions are matched to the dimensions of the place. And, on this account, the body of Christ is not present except in one place only, namely in heaven. But, because the substance of bread has been changed into the body of Christ – bread which before was determinately in this place by means of its dimensions, which remain after transubstantiation has taken place – there remains in consequence a place, not in fact having an immediate relationship to the body of Christ in accordance with [that body's] own dimensions, but in accordance with the abiding dimensions of the bread beneath which (sub quibus) the body of Christ replaces the substance of the bread. Therefore [the body of Christ] is not here as in a place (ut in loco) absolutely speaking (per se loquendo) but as in a sacrament not only signifying but containing it (non solum significante sed continente ipsum) in virtue of the change that has taken place.

In saying that "A body is there as in a place (ut in loco) when its dimensions are matched to the dimensions of the place", St Thomas's implication is that it is only the *preexisting* spatial extension - the dimensions - of an encompassing body or bodies (immediately present, nearby, remote) that designates the position or 'whereabouts' of a material thing in the Universe. It is on the basis of their *being already dimensional* that material objects can constitute presence-in-place or 'whereabouts' for one another within the Universe, which manifestly cannot itself be present-in-a-place or have 'whereabouts'.

The capacity of material objects to constitute presence-in-place or 'whereabouts' for one another is a property of the substantial materiality of bodies (grounded in their primary or 'proto' matter) insofar as this substantial materiality diffuses itself (to use the expression of Sertillanges: cf. *supra* p. 23) in dimensive quantity.

In reply to the second objection Thomas states that

The body of Christ is said to be somewhere (alicubi) either by rea-son of its own dimensions or by reason of the dimensions of the material substance that has been changed into it. It is not, how-ever, possible that its own dimensions be everywhere (ubique), nor that the material substance to be changed into it be everywhere. And so, though the body of Christ is present in many places in some way (aliquo modo), it cannot possibly be everywhere. [24]

In an interesting piece of dialectic that involves the eighth objection [to the real presence of Christ in the Eucharist] and the reply to this objection, Thomas agrees that the capacity for multiple presences cannot belong to the body of Christ *qua* body (otherwise, as the objection says, multilocation could belong to all bodies indiscriminately). Nor does it result from the fact that Christ's body is now glorified in heaven (since, as objected, a capacity for multiple presences does not belong even to glorified *spiritual* substances - the angels). Nor is it due to the (hypostatic) union of Christ's body with the divine nature (such a union, as the objection insists, does not place this body outside the limits connatural to bodies). The capacity of Christ's body for simultaneous multiple presences arises only from its being what Thomas calls the '*terminus conversionis*' - from its being the term of a change in which all that prevents the substantial reality of bread and of wine from becoming and being the substantial reality of the body and blood of Christ ceases to exist by divine intention (cf. chapter 6, sections 1 and 2, *infra*). Whenever and wherever this *conversio* takes place, it has as its direct term or outcome the body (or blood) of Christ - and, through natural concomitance, the other components of the full reality of

Christ (blood or body, soul, and divinity). Thomas adds that an analogous situation would arise (similiter accideret) were God to change the substance of bread into the substance of a stone: one and the same stone would be present in as many places as the substance of bread that had been changed into it [25].

ii) The Summa contra Gentiles [26]

Book 4, chapter 62, of the *Summa contra Gentiles* sets out five categories of arguments against the real, i.e. substantial, presence of Christ in the sacrament of the altar. These categories cover (1) arguments against the possibility of Christ's body's *beginning* to exist on the altar, (2) arguments based on the requirements of the concept of 'place' (locus) [ruling out the integral presence of Christ in consecrated bread separated from consecrated wine, and the possibility that Christ's body is present simultaneously in more than one place], (3) arguments posing difficulties about accidents existing apart from their natural subjects of inhesion, (4) arguments indicating that the properties and effects of bread and wine are the same after, as before, the Eucharistic consecration of bread and wine, and (5) arguments affirming that the breaking (fractio) of the consecrated bread demands a subject of the breaking that could not possibly be the body of Christ.

Chapter 62 can, then, be seen as a strongly argued compendium of serious difficulties against the concept of Christ's 'praesentia substantialis' in the Eucharist as proposed in the traditional teaching of the Church - teaching that claims to be based ultimately on New Testament teaching. This compendium of difficulties rests largely on philosophical notions most of which appear closely connected to the imperatives of well-founded ordinary human experience, for example, that the parts of something cannot be located in separation in various places whilst the thing itself remains integral, or that a thing cannot be moved locally from point A to point B without its ceasing to exist at point A.

St Thomas systematically addresses in the next five chapters (63-67) of book 4 of the *Summa contra Gentiles* the categories of arguments identified above. The five chapters provide responses to these arguments that coalesce into an impressive model of the use of philosophical distinctions, analyses, and lines of reasoning, in handling serious objections

to an instance of the traditional teaching of the Church. *Eo ipso* it may also count as an impressive example of what was earlier called the 'philosophy of Christian doctrine' (cf. chapter 1, p. 8 *supra*).

In connection with all of this it is worth noticing the Angelic Doctor's own preliminary comment on what he is intending to do in chapters 63 to 67:

Licet autem divina virtus sublimius et secretius in hoc sacramento operetur quam ab homine perquiri possit, ne tamen doctrina Ecclesiae circa hoc sacramentum infidelibus impossibilis videatur, conandum est ad hoc quod omnis impossibilitas excludatur.

(Although God's power works in this sacrament in a more sublime and hidden way than can be searched out by human beings, nonetheless in order to avoid the Church's teaching about this sacrament being looked upon by non-believers as impossible, an effort must be made to close out all semblance of impossibility.)

(op. cit., ch. 63, init.)

Special attention will not be given at this point to the Angelic Doctor's philosophical treatment of all of these issues. The reason for proceeding in this way is that Thomas revisits much of this material in the course of the multi-faceted discussions of the 'praesentia substantialis' of Christ in the Eucharist that take place within question 75 of the third part of the *Summa Theologiae* - discussions that are augmented at appropriate points in the thesis by the introduction of central philosophical ideas, analyses, and arguments, from questions 76 and 77. (Reference will also be made to the text of the *Summa contra*

Gentiles in the course of examining what the Angelic Doctor has to say in dealing with these issues as they arise within the context of the Summa Theologiae itself.)

However, in the current context of treating a major objection to the real presence of Christ in the Eucharist based on the (alleged) impossibility of Christ's being substantially present in more than one place simultaneously, it will be worthwhile to look briefly at what the Angelic Doctor has to say in book 4, chapter 64, in response to three difficulties about the real presence originating from the notion of 'place' (locus) - a notion that recurs in the discussion above (cf. pp. 21 seqq. *passim*) regarding the way in which Christ exists in the sacrament of the altar (de modo quo Christus existit in hoc sacramento).

(a) Separated parts/integral whole?

The first difficulty relating to *place* is that the parts of something cannot be separated and put in different places (in diversis locis) whilst the thing itself remains integral (ipso integro permanente). But this is precisely what happens in the sacrament of the altar: The bread and the wine are apart in separate places on the altar. If the body of Christ becomes present under the appearance of bread, and His blood under the appearance of wine, it follows that they would be actually separated each time the Eucharist is celebrated, thus destroying Christ's post-resurrection physical integrity. Since this consequence is unacceptable (given the glorified condition of Christ's humanity, post resurrection), the notion of a 'real presence' of Christ's body and blood in the Eucharist must be rejected.

Thomas's reply to this difficulty invokes a distinction between something being present in virtue of a particular change (ex vi conversionis), and something being present by natural concomitance (ex naturali concomitantia). In virtue of the change that occurs when the words of consecration are spoken over the bread and the wine - the transubstantiation (a concept discussed at length in later chapters) - there exists in the sacrament of the altar that in which the change directly terminates: Under the accidents or appearances of the bread, the body of Christ into which the substance of the bread is changed, as the words of consecration (This is my body) make clear; similarly, under the accidents or appearances of the wine, the blood of Christ into which the substance of the

wine is changed, as the words of consecration (*This is the chalice of my blood*...) make clear. But, in virtue of natural concomitance, there exists in the sacrament "everything else in which the change does not terminate, but which is connected in reality with that in which the change does terminate" (ex naturali concomitantia sunt ibi omnia alia ad quae conversio non terminatur, sed tamen ei in quod terminatur sunt realiter coniuncta).

Thomas goes on to point out that neither the divinity nor the soul of Christ are, as such, terms of the *change* that takes place on the altar. They are, however, present on account of the union of both with the body (and with the blood) of Christ (propter unionem utriusque ad corpus Christi). Furthermore, were the Eucharist to have been celebrated during the triduum of Christ's death, neither the soul nor the blood of Christ would have been present under the appearances of the bread, nor would the soul or the body of Christ have been present under the appearances of the wine, because of the real separation of these components of the human reality of Christ during the time of His being dead (propter se-parationem utriusque in morte) - a point not applicable to the divinity of Christ which al-ways remained hypostatically united to the components of the human reality of Christ (cf. S. Theol. 3. 50. aa. 2, 3; Quaest. Quodl. 2. q. 1. a. 1). But, because the body of Christ does not now exist without its blood, the body and the blood of Christ are contained under each of the two sets of appearances: the body of Christ ex vi conversionis under the appearances of the bread, and His blood ex naturali concomitantia, with the reverse holding true for the appearances of the wine: the blood of Christ ex vi conversionis, the body of Christ ex naturali concomitantia. Christ's soul and divinity are concomitantly present under both sets of appearances.

By this argument Thomas effectively responds to the difficulty set out above.

b) Christ's body/wafers of bread: Unequal in Size

The second difficulty relating to *place* is what an objector sees as an obvious mismatch in terms of size: the body of Christ greatly exceeds in size the dimensions of the wafers of

bread placed on the altar. It is not, then, possible for the real body of Christ, whole and entire, to be contained there under the dimensions of a wafer of bread. Nor could the body of Christ be divided into portions, each of which is separately present under the appearances of a wafer of bread: the physical integrity of Christ would thereby be destroyed (cf. p. 47 *supra*).

Thomas's reply again draws on the distinction between what becomes present directly in virtue of the change, and what becomes present indirectly through natural concomitance. Only the *substance* of Christ's body is directly involved in the Eucharistic change as that into which the substance of the bread is directly changed (substantia enim panis directe convertitur in substantiam corporis Christi). The dimensive quantity of Christ's body becomes present in the sacrament by natural concomitance (as something in the order of accident, naturally inseparable from material substance though also objectively distinct from it [cf. p. 37 supra]), not directly ex vi conversionis. The continuing existence of the dimensive quantity of the bread is an indication of this: substance is changed into substance, not into substance and accidents since, as previously noted (p. 28 supra) there is always a ratio or proportion between what is changed and that into which it is changed (perhaps resting ultimately on a principle of essential/structural identity controlling the terminus a quo as related to the terminus ad quem). Moreover, the dimensive quantity of Christ's body, as well as all the other accidents of this body, are present not in their normal spatially-extended manner but per modum substantiae, since substance is the only reality made directly present through transubstantiation itself. Thomas is now positioned to con- clude that the body of Christ is not related by means of its own dimensive quantity (mediantibus dimensionibus propriis) to the place once occupied by the bread: there is no requirement that His body correspond to this place on the basis of this - His own - dimensive quantity. Rather, it is by way of the continuing dimensive quantity of the bread that His body is related to the place once occupied by the bread. It ought not, then, to be said of the human body of Christ that it could not be present in the sacrament of the altar because its size exceeds that of the bread that is placed on the altar, with the intention of its being changed into this body.

c) <u>Is Multi-Location Possible?</u>

The third difficulty relating to 'place' is stated quite abruptly in Thomas's text: "Impossibile est unum corpus in pluribus locis existere. Manifestum est autem hoc sacramentum in pluribus locis celebrari. Impossibile igitur videtur quod corpus Christi in hoc sacramento veraciter contineatur" (It is impossible for one body to exist in several places [at the same time]. But it is obvious that this sacrament [the Eucharist] is celebrated in a number of places [at the same time]. It seems, then, impossible for the body of Christ to be contained *in its reality* in this sacrament). Against the idea that a small part (aliqua particula) of Christ's body could be *here* (hic), and another small part *elsewhere* (alibi), the objection notes that the celebration of this sacrament would, in that case, cause Christ's body to be divided into parts - an unacceptable conclusion (cf. p. 47 *supra*). Moreover, the large number of places in which the Eucharist is celebrated would, apart from any other consideration, preclude any such dividing up of Christ's body into small parts.

The Angelic Doctor is nicely laconic in his reply: "Corpus Christi per suas proprias dimensiones in uno tantum loco existit: sed mediantibus dimensionibus panis in ipsum transeuntis in tot locis in quot huiusmodi conversio fuerit celebrata: non quidem divisum per partes, sed integrum in unoquoque; nam quilibet panis consecratus in integrum corpus Christi convertitur" (The body of Christ exists under its own dimensive quantity in only one place. But, by means of the dimensive quantity of the bread changed into it, the body of Christ exists in as many places as this change is brought about. And not as divided into parts, but integral in each place, since every consecrated bread is changed into the whole body of Christ).

Given the lengthy discussion that was conducted above (pp. 21 seqq.), no attempt will be made to amplify here what has been said in this third difficulty, and in the reply of St Thomas to this difficulty. The assumption made in introducing the above three 'place'-related difficulties concerning the real presence of Christ in the sacrament of the altar, and the replies of the Angelic Doctor, is that it is worthwhile to traverse again ground that

has already largely been traversed, with a view to deepening insight and understanding relative to the Thomistic metaphysics of Christ's Eucharistic presence.

Scholia

1. The 24 Thomistic Theses: Thesis 10 on Quantity

In the discussion of 3. 75. 1 *supra*, in particular in sections 5 and 7 of Thomas's analysis of the mode of Christ's presence in the sacrament of the altar (and cf. 3. 76. 3. to 2), a real or extra-mental distinction between a material substance and the dimensive quantity of that substance was implied, with the primary role of dimensive quantity being identified as the distinguishing and ordering of the integral parts of a body relative to one another and to the bodily reality or substance as a whole. The real distinction between a material substance and its dimensive quantity is clearly affirmed in the tenth of the twenty four philosophical theses drawn from the teaching of St Thomas, and approved as such in Rome, July 27th,1914, by the (then) Sacred Congregation of Studies. This thesis is the following:

X. Etsi corpoream naturam extensio in partes integrales consequitur, non tamen idem est corpori esse substantiam et esse quantum. Substantia quippe ratione sui indivisibilis est, non quidem ad modum puncti, sed ad modum eius quod est extra ordinem dimensionis. Quantitas vero, quae extensionem substantiae tribuit, a substantia realiter differt, et est veri nominis accidens.

(10. Although extension into integral parts is consequent upon something's bodily nature, nonetheless it is not the same thing for a body to be a substance and to be something extended. Indeed, substance is of itself indivisible, though not in the manner

of a point, but in the manner of what lies outside the domain of dimensions. Moreover, dimensive quantity, which imparts extension to a substance, differs in reality from any substance, and is an accident in the strict sense of the term.)

The content of the above thesis was affirmed unequivocally by Aristotle in book Z, chapter 3, of the *Metaphysics*: "To gar poson ouk ousia [1029a 15] (...since quantity is not substance) [he hule]...mete poson [*ibid*. 20] ([matter] is not quantity). What Thomas, following Aristotle, claims is that the *geometry* of a material substance or body is not to be identified with what-it-is-to-be-a-material-substance - with 'to ti en einai' of a material substance. In setting out this distinction, thesis ten of the twenty four Thomistic theses is expressing a profound insight into the nature of material reality.

2. Dimensive Quantity and Aristotle's 'Poson'

In the course of the Thomistic analysis *supra* of the mode of Christ's existence in the Eucharist (cf. in particular section 5) a distinction was introduced between the *primary* formal effect and the *secondary* formal effect of dimensive quantity. This distinction is a way of taking seriously the fact that dimensive quantity is one of the nine categories of *accidents* acknowledged by Aristotle in chapter 4 of his *Kategoriai* (and in book 5, section 13, of the collection of Aristotle's writings arranged by Andronicus of Rhodes and called 'ta meta ta phusica' – the *Metaphysics*) – 'poson' is an instance of 'sumbebekos kath hupokeimenou'. This distinction is also a way of recognising that dimensive quantity has two separable functions in connection with the substance to which it belongs. As a form, i.e. as an actualising principle, in the line of accident, the primary function of dimensive quantity is to give rise to, and thereby distinguish and order relative to one another and to the substance as a whole, integral or extended parts in a substance, i.e. to give rise to a substantia quanta. It is in doing this that dimensive quantity discloses its distinctive character or nature - its ti en einai, to use an Aristotelian

phrase - amongst the ten categories or classes of realities (substance plus nine accidents) pointed out by the Stagirite. The secondary function - the secondary formal effect - of dimensive quantity in connection with the substance to which it belongs is the relating of that extended substance, of that *substantia quanta*, to other encompassing, near, or distant, extended substances, i. e. to other *substantiae quantae*, given that there are such. This is to bring about as formal cause the 'whereabouts' (ubi) of that substance, to put it *in a place*, with its parts corresponding to the extended parts of the surrounding place that localises it.

By way of analogy one may note that the *primary* formal effect of the quality *red* is simply to make something or other red. The *secondary* formal effect of the quality *red* is to make what is red *similar to* - to establish a relationship of *similarity to* - any other thing that also happens to be red (with the implication that, if there were no other red thing in existence, this secondary formal effect would not obtain).

3. Quantity's Formal Effects and Quantum Non-Locality

Note: The following brief excursus into a (sometimes contested) feature of quantum mechanics, viz. quantum non-locality, in its connection with the Thomistic metaphysics of the primary and secondary formal effects of dimensive quantity, is a small-scale attempt to respond to a valuable piece of advice offered by the celebrated Belgian Thomist metaphysician Joseph Maréchal (1878-1944). (Maréchal, and his fellow Jesuit Pierre Rousselot [for Rousselot, cf. ch.1, Note 6, *supra*], were the authors of outstanding seminal works - Maréchal's five-volume *Le point de départ de la métaphysique*, and Rousselot's *L'Intellectualisme de saint Thomas* - from which developed the modern movement known as 'Transcendental Thomism', amongst the leading exponents of which are Karl Rahner, Johannes Lotz, Emerich Coreth, and Bernard Lonergan.) Maréchal, himself the holder of a Ph.D. in biology, and a person committed unwaveringly to the value of work in the empirical sciences, advised that philosophy should always be in conversation with the sciences to create a dialogue that would, in addition to having its own intrinsic intellectual importance for both sides, assist those

working in philosophy to avoid the danger of what he called "l'autosuggestion métaphysique" - metaphysical autosuggestion. This is advice that ought not to be disregarded. [27]

Given that ordo partium in toto is the primary formal effect of dimensive quantity, and that this effect may obtain without any secondary formal effect - without an ordo partium in loco – in the absence of other extended bodily realities, it is interesting to reflect on the connection between this piece of Thomistic teaching and the phenomenon of quantum non-locality. The concept of quantum non-locality emerged from the celebrated 1934 'thought experiment' of Albert Einstein and two young associates, Boris Podolsky and Nathan Rosen. This 'experiment' was designed to show that two sub-atomic particles, e. g. two protons, that had once interacted with each other would exhibit an instantaneous influence one on the other whenever one or the other was disturbed, regardless of the extent of spatial separation between them. For Einstein and his associates this constituted what Einstein called "spooky action-at-a-distance" [28] that violated special relativity's rejection of faster-than-light communication between entities or systems, sub-atomic or otherwise [29]. They saw this paradoxical implication of quantum mechanics as indicating a crucial conceptual incompleteness in the theory. For most theoretical physicists, however, this counter-intuitive 'togetherness-in-separation' was to be taken as evidence of a factor of non-locality to be acknowledged as an objective feature of the sub-atomic world. Careful laboratory experiments performed in several places, most notably the experiments of Alain Aspect and his collaborators in Paris (with results published in 1981-82) - experiments performed using photons rather than protons - found strongly in favour of instantaneous mutual influence between previously interacting, now spatially separated, particles. In his *The Quantum World* British mathematical physicist John Polkinghorne (now Sir John Polkinghorne) commented that

However illuminating thought experiments may be, nothing carries conviction like an actual series of measurements made in a real-life laboratory. The problem of the nature of locality, raised by EPR [Einstein, Podolsky, Rosen], clearly demanded

some form of empirical investigation...We are back again to the idea that quantum systems exhibit an unexpected degree of togetherness. Mere spatial separation does not divide them from each other. It is a particularly surprising conclusion for so reductionist a subject as physics. After all, elementary particle physics is always trying to split things up into smaller and smaller constituents with a view to treating them independently of each other. I do not think that we have yet succeeded in taking in fully what quantum mechanical non-locality implies about the nature of the world. [30]

Whatever quantum non-locality may finish up implying about "the nature of the world", the Thomistic distinction between the primary and secondary effects of dimensive quantity will remain as a valuable conceptual context within which to situate what is going on in quantum non-locality. On the assumption that the simultaneously interacting, spatially separated, particles are to be understood as forming a unitary system, that is, to be under-stood as a single substantia quanta, it will follow that the ordo partium in toto the primary formal effect of dimensive quantity - affecting the system as a whole, will involve relatedness to two (or more) discontinuous spatially separated 'centres' or components of a single unitary system. Put differently, dimensive quantity which, as an accidental mode of being, is to be defined in terms of its subject, that is, of the substance in which it inheres, will ex hypothesi, exist in only one subject, although this one subject will be discontinuous, as well as involving actual spatial separation of its components. The ordo partium in loco - the secondary formal effect of dimensive quantity - will involve, in consequence, multiple space-related situations which, given the per se unitary character of the system, will coalesce, as it were, into a single place or 'whereabouts' (ubi) for the unitary or single *substantia quanta* as a whole.

4. Presence on the Altar: Anthony Kenny's Difficulty

In a volume edited some years ago under the title *Theology and the University* (see bibliography), Anthony Kenny (now Sir Anthony Kenny) formulated in the course of a contribution entitled "The Use of Logical Analysis in Theology" (*op. cit.*, pp. 220-235) a difficulty that has continued to attract thoughtful attention (cf. Brian Davies, *The Thought of Thomas Aquinas*, pp. 371, 374-6; cf. pp. 371-2 for a similar difficulty proposed by another Oxford philosopher, Sir Michael Dummett):

Among the accidental categories of Aristotle is the category of place. '...is on the altar', for instance, is an accidental predicate. But if the accidents which once belonged to the bread do not inhere after consecration in the substance of Christ's body, then it appears that it by no means follows from the presence of the host upon the altar that Christ is present on the altar. Thus the doctrine of transubstantiation appears in the end to fail to secure that for which alone it was originally introduced, namely the real presence of Christ's body under the sacramental species.

(op. cit., p. 235)

In this citation, Kenny begins unpromisingly by confusing Aristotle's 'to pou' (Latin 'ubi'. English 'whereabouts'), which is one of the nine categories of accidents, or accidental modes of being - sumbebekoi identified by the Stagirite (cf. Kategoriai, 1b 25), with 'ho topos' [cf. Phusike akroasis 212a 20] (Latin 'locus', English 'place'), which, according to Aristotle, is not a distinct category of accident at all, but refers to the surface(s) of a surrounding body (or bodies) qua encompassing another material thing and thereby designating its position within the physical Universe. Having noted Kenny's confusion on this point, one would be justified in amending the first sentence of the citation from his paper to read: "Amongst the accidental categories of Aristotle is the category of 'presence in a place' or 'whereabouts' (to pou)."

Kenny continues: "'...is on the altar', for instance, is an accidental predicate". But, according to St Thomas, none of the accidents of what was bread inhere in the substance of Christ's body as in a subject (cf. S. Theol. 3. 76. 5c; 77. 1c). Since 'presence in a place' - in this case 'being in a particular place on the altar' - is one of these accidents, it follows that, since this accident does not inhere in the substance of Christ's body, Christ's body is not made present 'in a particular place on the altar' by transubstantiation. Taking this into account, transubstantiation fails to secure "that for which alone it was originally introduced", viz. the substantial presence of Christ's body on the altar under the appearances of bread. Kenny concludes modestly: "I do not know of any satisfactory answer to this problem. If I did, I would give it" (ibid.).

I find myself unpersuaded by the reasoning used by Anthony Kenny in affirming that the doctrine of transubstantiation fails, in the last analysis, to account for the real presence of the body of Christ in the sacrament of the altar. Kenny appears to have missed the distinction that St Thomas begins to develop in 3. 76. 5c. (cf. 8., C, pp. 39 supra) where he picks out the concept of being contained by as other than the concept of being the subject of. Thomas speaks of "...eo scilicet modo quo substantia continetur a dimensionibus" (emphasis mine), and distinguishes this state of "...[being]contained by dimensions" from "non tamen substantia corporis Christi est subjectum illarum dimensionum, sicut erat substantia panis" (emphasis mine) - "the substance of Christ's body, however, is not the subject of those dimensions as was the substance of the bread."

The reply to Kenny's objection is clear. After the consecration the dimensive quantity of what previously was bread now *contains* - Cajetan's "novitas continentiae" - the body of Christ (and the dimensive quantity of what previously was wine now *contains* the blood of Christ). But this dimensive quantity, i.e. the dimensions of what was bread, is now quite evidently present on the altar. Contrary to Kenny's conclusion, then, it *does* follow "...from the presence of the host upon the altar" that Christ is present on the altar, even though none of the accidents of what previously was bread actually inheres in the body of Christ after the consecration. It is pertinent to add here what St Thomas has to say on the question of presence on the altar in his *Summa contra Gentiles*, book 4, chapter 63:

Si substantia panis in corpus Christi converteretur et panis accidentia transirent, ex tali conversione non sequeretur quod corpus Christi, secundum suam substantiam, esset ubi prius fuit panis; nulla enim relinqueretur habitudo corporis Christi ad locum praedictum. Sed cum quantitas dimensiva panis remanet post conversionem, per quam panis hunc locum sortiebatur, substantia panis in corpus Christi mutata fit corpus Christi sub quantitate dimensiva panis; et per consequens locum panis quodammodo sortitur, mediantibus tamen dimensionibus panis.

(If the substance of the bread were changed into the body of Christ and the accidents of the bread disappeared, it would not follow from a change of this sort that the body of Christ, in its substantial reality, existed where previously the bread had existed, since there would be no basis for a relationship of the body of Christ to this place. But, because the dimensive quantity of the bread, through which the bread had occupied this place, remains after the change, the substance of the bread changed into the body of Christ becomes the body of Christ under the dimensive quantity of the bread. Consequently, [the body of Christ] occupies in a distinctive way the place that belonged to the bread, by means of the dimensions that were those of the bread.)

As we have seen, it is also the case that, *ex reali concomitantia*, Christ's own dimensive quantity - the dimensions belonging intrinsically to His own body and blood - is really present on the altar, since the 'totus Christus", the 'whole Christ', is integrally present there (cf. 3. 76. aa. 1-4.). But, as we have also seen, the extended or 'quantified' body and blood of Christ are not present as encompassed and spatially localised by immediately encompassing, nearby, and distant, 'quantified' things (cf. 3. 76. 5c), that is, there is no

correspondence or 'matching' between the intrinsically extended parts of Christ's body and blood and the extended parts of immediately encompassing, nearby, and distant, external bodies: the secondary formal effect of dimensive quantity has been withheld or suspended *virtute divina* in this particular case. (The last sentence contains a *non-modal* claim. The corresponding *modal* claim would be along the following lines:

"Given the existence of other 'quantified' [spatially extended] objects, there *can be* no other instance(s) of the suspension of the secondary formal effects of dimensive quantity in addition to the case of Christ's body and blood in the Eucharist." On the basis of what may be argued about the absolute power of God [potentia divina absoluta], and the logical coherence of a separation of the secondary formal effects of quantity from the primary formal effects, this modal claim would appear to be false.) [31]

General Conclusion

1. This chapter has been an extended examination of the content of the Angelic Doctor's reply to the objection that Christ could not be present in the Eucharist in His substantial bodily reality since a presence of this kind would involve the ontological impossibility of a body's being simultaneously present in more than one place. This reply crucially draws on distinctions between (1) material substance and dimensive quantity; (2) the primary and the secondary formal effects of quantity; (3) integral substantial parts and essential substantial parts; (4) the presence of something by reason of its being the direct term of a change, and the presence of something by reason of natural concomitance (with what is the direct term of a change); (5) the identity-constituting factors of a thing (its substance) and the identity-indicating features of a thing (its accidents); (6) accidents as containing a substance, and accidents as inhering in a substance; (7) substance as being contained by accidents, and substance as being the subject of accidents; (8) presence per modum substantiae, and presence per modum quantitatis dimensivae; (9) absolute divine power, and ordered divine power.

- 2. The setting in which the discussion of Thomas's reply to the above objection takes place is that provided by the traditional teaching of the Church regarding the substantially real presence of the body and blood of Christ in the sacrament of the altar (with His soul and divinity present by real concomitance). But the concern of the chapter has not been to argue in support of this teaching to contribute something to theological apologetics, as it were. Its concern has been the philosophical one of reflective, rationally-constrained setting out, and consideration, of the conceptual schema and arguments of St Thomas when engaged with a crucial objection to the substantial Eucharistic presence of Christ (an objection to the effect that such a presence would involve an impossibility: the simultaneous multilocation of a body) and, by engaging in this activity, testing the reasonable explanatory power of the Thomistic conceptual schema and arguments.
- 3. In his great work *Distinguer pour unir ou les degres du savoir* (To distinguish in order to unite, or the degrees of knowledge [published in English under the shorter title *The Degrees of Knowledge*] Jacques Maritain reminded us that the whole point of drawing distinctions when working in metaphysics was to assist the inquiring mind to fulfill itself by uniting itself more closely with mind-independent reality. (Elsewhere and invaluably Maritain had remarked that "Not a whimsy spun out of his own brain, but the entire universe with its enormous multitude and variety of data must be the philosopher's teacher" [32].)

The above nine distinctions gathered from the writings of Thomas and certain Thomists on the occasion of their - and (later) our - endeavouring to gain some insight into the nature of Christ's presence in the Eucharist form a conceptual schema that is strongly reality-reflecting. This claim may be made with some confidence since each of these distinctions has been reflectively and coherently articulated, and incorporated into lines of argument that respect both our basic, shared, experience of things-that-change, and our awareness of first principles of being and thought (each thing is what it is, and is not at the same time some other thing [principle of identity; Quine's "No entity without identity"]; a thing cannot, at the same time and under the same aspect, both exist and not

exist [principle of non-contradiction]; whatever exists has all that it requires in order to exist [principle of sufficient reason]). These principles are also such as to lead on to affirmations regarding divine power. Accordingly, these nine distinctions may be strongly endorsed as having the capacity to satisfy the inquiring mind by connecting it more closely with mind-independent reality than would have been the case without them.

Moreover, in spite of the abstract character of their formulation, these distinctions inform or actualise an inquiring mind that is already existentially situated within the life or living reality of an inquiring person understood as totally, that is, in terms of concrete existence, engaged in both practical and speculative ways with the real order of things - with that person's *Umvelt*, given that each person is immersed in the surrounding realities (natural and artifactual) of his or her situation of being-*within*-the-world, of *Innerweltlichheit* (cf. Heidegger's *Sein und Zeit* [8th edition, 1957], pp. 65, 72-6, 82-8, 102-4) [33]

4. Epistemologically, then, the conceptual schema and argumentation of this chapter are well founded. But, as has already been said, this chapter to not concerned to contribute to theological apologetics, important though such a concern might be. Its importance is the perhaps less exalted one of speculative exploration in philosophy that is being undertaken for its own sake as an attempt to disclose or bring to light, via the distinctions and the argumentation put forward, some of the metaphysical components - some of the ontological contours - of the world itself. Its importance resides ultimately, therefore, in its being part of the object of what we might call our 'speculative existence', and eo ipso in its being part of the distinctively human task of our becoming what the American philosopher Richard Hinners has called in a remarkable phrase "speculative existers" [34]. From this point of view, the importance of the Thomistic philosophical work undertaken in this chapter - the careful drawing of reality-reflecting distinctions, and the construction of cognate lines of argument - is analogous to, say, the importance of work in astronomy concerned with gravitational lensing, or of work in astrophysics exploring nucleosynthesis in stars. That is to say, it offers nothing to meet the basic demands of everyday living, but it has, as was said a moment ago, the intrinsic importance - the selfcontained value - of being part of the object of our 'speculative existence' (a feature that will, I believe, belong also to subsequent chapters of this thesis). And 'speculative existence', in the context of this thesis, bears especially on the metaphysics of the Eucharistic presence.

In making these comments about 'intrinsic importance', I am put in mind of Nobel prize winning physicist Steven Weinberg's words at the end of the epilogue to his book *The First Three Minutes*:

Men and women are not content to comfort themselves with tales of gods and giants, or to confine their thoughts to the daily affairs of life; they also build telescopes and satellites and accelerators, and sit at their desks for endless hours working out the meaning of the data they gather. The effort to understand the universe is one of the very few things that lifts human life a little above the level of farce, and gives it some of the grace of tragedy. [35]

I regard these words of Steven Weinberg as being very much ad mentem divi Thomae.

NOTES

- 1. A The principal Conciliar formulations of the doctrine of the real presence of Christ in the Eucharist, brought about by the change of the substances of bread and wine into the body and blood of Christ, are found:
- (1). In chapter 1 of the decrees of the fourth Lateran Council (1215):

...corpus et sanguis [Christi] in sacramento altaris sub speciebus panis et vini veraciter continentur, transubstantiatis pane in corpus, et vino in sanguinem potestate divina: ut ad perficiendum mysterium unitatis accipiamus ipsi de suo, quod accepit ipse de nostro.

(Denzinger – Schonmetzer: 802)

(The body and blood [of Christ] are truly contained in the sacrament of the altar under the appearances of bread and wine when, by divine power, bread has been transubstantiated into [his] body and wine into [his] blood so that, in order to fulfill the mystery of unity [with him] we may receive from him what he received from us.)

[This statement includes the first formal Conciliar use of a term derived from the verb "transubstantiare".]

(2). In the Decree for the Armenians of 1439 from the Council of Florence (1438-45):

...ipsorum verborum [consecrationis] virtute substantia panis in corpus Christi et substantia vini in sanguinem convertuntur: ita tamen, quod totus Christus continetur sub specie panis et totus sub specie vini. Sub qualibet quoque parte hostiae consecratae et vini consecrati, separatione facta, totus est Christus.

(Denzinger – Schonmetzer: 1321)

(In virtue of the very words [of consecration] the substance of bread is changed into the body of Christ, and the substance of wine into [his] blood; in such manner, however, that the whole Christ is contained under the appearance of bread and the whole [Christ] under the appearance of wine. Moreover, under any part at all of the consecrated host and of the consecrated wine, the whole Christ exists after separation [of the elements into parts].)

(3). In chapter 4 of the Decree on the most holy Eucharist, Session 13 (1551) of the Council of Trent (1545-63):

Quoniam autem Christus redemptor noster corpus suum id, quod sub specie panis offerebat...vere esse dixit, ideo persuasum semper in Ecclesia Dei fuit, idque nunc denuo sancta haec Synodus declarat: per consecrationem panis et vini conversionem fieri totius substantiae panis in substantiam corporis Christi Domini nostri, et totius substantiae vini in substantiam sanguinis eius. Quae conversio convenienter et proprie a sancta catholica Ecclesia transsubstantiatio est appelata.

(Denzinger – Schonmetzer: 1642)

(However, since Christ our Redeemer said that what he was offering under the appearance of bread was truly his body, accordingly the Church of God has always been convinced, and this holy Synod again declares, that, through the consecration of bread and wine a change is brought about of the whole substance of the bread into the substance of the body of Christ our Lord, and of the whole substance of the wine into the

substance of his blood. This change is appropriately and properly called by the holy catholic Church transubstantiation.)

Canon 2 of the same Decree lays down that

Si quis...negaverit mirabilem illam et singularem conversionem totius substantiae panis in corpus [Christi] et totius substantiae vini in sanguinem [eius], manentibus dumtaxat speciebus panis et vini, quam quidem conversionem catholica Ecclesia aptissime transsubstantiationem appellat: Anathema sit.

(Denzinger – Schonmetzer: 1652)

(If anyone...denies that extraordinary and unique change of the whole substance of bread into the body [of Christ], and of the whole substance of wine into his blood, with indeed the appearances of bread and wine remaining – a change that the catholic Church calls most fittingly ransubstantiation: let that person be anathema.)

B. Authoritative statements of the Eastern Orthodox Church:

Of special relevance to this thesis are the authoritative statements on the Eucharist of the Councils or Synods of Jassy (1642) and Jerusalem (1672) - acknowledged to be the most important Councils of the Orthodox Church since the fall of Constantinople to the Turks in 1453. Both Councils (or Synods) were concerned to combat Calvinist teachings that had begun to enter the Orthodox Church from late in the 16th century.

Orthodox Church teaching is to the effect that, at the Eucharistic consecration, the bread and the wine become the real body and blood of Christ, and this belief has always been expressed in the liturgical texts, and embodied in the sacramental practice, of the Orthodox Church. However, explicit doctrinal formulation of this belief was undertaken

by the Orthodox bishops at both Jassy and Jerusalem. At the Synod of Jassy, the authoritative statement made about the Eucharist (as part of the Synod's affirmation of an 'Orthodoxos homologia') referred to the *metousiosis* - the *transubstantiation* - of bread and wine into the body and blood of Christ when the Eucharist was celebrated. The Synod of Jerusalem declared that the Orthodox Church believed the elements of bread and wine "metousiousthai" - "to be transubstantiated" - into the body and blood of Christ at the Eucharistic consecration. (It should be noted, however, that, because of the proximity of this language in the concepts it expresses to the language of Latin scholasticism, some modern Orthodox theologians are reluctant to employ it, whilst remaining unreservedly committed to the belief that, in the Eucharist, what was previously bread and wine be-comes the real body and blood of Christ.)

C. Recent papal statements bearing on the Church's traditional teaching regarding the real presence of Christ in the sacrament of the altar, brought about by the change of the substances of bread and wine into the body and blood of Christ include the following:

(1). The 1950 encyclical letter *Humani Generis* of Pope Pius X11:

Nec desunt qui contendant transsubstantiationis doctrinam, utpote antiquata notione philosophica substantiae innixam, ita emendandam esse ut realis Christi praesentia in Ss. Eucharistia ad quemdam symbolismum reducatur, quatenus consecratae species nonnisi signa efficacia sint spiritualis praesentiae Christi eiusque intimae coniunctionis cum fidelibus membris in Corpore Mystico.

(Denzinger – Schonmetzer: 3891)

(There are not wanting those who contend that the doctrine of transubstantiation, as resting on an outmoded philosophical notion of substance, ought to be altered in such a way that the real presence of Christ in the most holy Eucharist is reduced to a sort of symbolism, to the point that the consecrated species are only efficacious signs of the spiritual presence of Christ and of his deep union with faithful members in the Mystical Body.)

(Op. cit., par. 23)

(2). The 1965 encyclical letter of Pope Paul V1 Mysterium Fidei:

[Vox Ecclesiae] certiores nos facit non aliter Christum fieri praesentem in hoc Sacramento quam per conversionem totius substantiae panis in corpus et totius substantiae vini in sanguinem ipsius, quam conversionem, plane mirabilem et singularem, Catholica Ecclesia convenienter et proprie transsubstantiationem appellat. Peracta transsubstantiatione, species panis et vini novam procul dubio induunt significationem, novumque finem, cum amplius non sint communis panis et communis potus, sed signum rei sacrae signumque spiritualis alimonii; sed ideo novam induunt significationem et novum finem, quia novam continent 'realitatem', quam merito ontologicam dicimus. Non enim sub praedictis speciebus iam latet quod prius erat, sed aliud omnino; et quidem non tantum ob fidei Ecclesiae aestimationem, sed ipsa re, cum conversa substantia seu natura panis et vini in corpus et sanguinem Christi, nihil panis et vini maneat nisi solae species; sub quibus totus et integer Christus adest in tota sua physica 'realitate' etiam corporaliter praesens, licet non eo modo quo corpora adsunt in loco.

(Acta Apostolicae Sedis 57 (1965), p.766)

([The voice of the Church] informs us that Christ becomes present in this Sacrament not otherwise than through the change of the whole substance of bread into His body and of the whole substance of wine into His blood - a clearly extraordinary and unique change that the Catholic Church fittingly and appropriately calls transubstantiation. With transubstantiation completed, there is no doubt at all that the appearances of bread and wine take on new meaning and new finality, since they are no longer [the appearances] of ordinary bread and ordinary drink; rather, they are the sign of something sacred and the token of what nourishes spiritually. But they take on new meaning and new finality on the basis of their containing a new reality which we rightly describe as *ontological*. For the appearances just mentioned no longer conceal what was previously there, but something else altogether. Nor is this just a matter of the Church's valuing something because of its belief: reality itself is involved since, when the substance or nature of bread and wine is changed into the body and blood of Christ, nothing of bread and wine remains except the appearances. And, under these, Christ is totally and completely present in his physical reality, even present in material or bodily nature, though not in the way in which bodies are present in a place.)

Mysterium Fidei has been cited at some length because of the notably lucid and comprehensive manner of the encyclical's presentation of traditional Catholic belief concerning the 'praesentia substantialis' of Christ in the sacrament of the altar by way of transubstantiation, as well as its explicit addressing of issues centred at the time on questionable teaching about 'transignification' and 'transfinalisation' which had been proposed as an alternative to transubstantiation.

- (3). The 2003 encyclical letter of Pope John Paul 11 Ecclesia de Eucharistia:
 - 4. Ecclesia de Eucharistia vivit. Non modo cotidianam fidei experientiam haec patefacit veritas sed quadam in summa ipsius *Ecclesiae nucleum mysterii* complectitur ... verum sacra in Eucharistia propter panis vinique conversionem in Corpus et Sanguinem Domini gaudet ipsa singulari quadam vehementia de hac praesentia.

(Acta Apostolicae Sedis, XCV, 7th July 2003, p. 433)

(The Church lives on the Eucharist. This truth not only sets out the daily experience of faith, but involves in summary form the very *nucleus of the mystery of the Church itself* ...the [Church] rejoices with a most special enthusiasm regarding this presence [of Christ] in the holy Eucharist, due to the change of bread and wine into the Body and Blood of the Lord.)

5. Cultus Eucharistiae extra Missae sacrificium tributus est inaestimabilis cuiusdam pretii in Ecclesiae vita. Talis cultus arte cum eucharistici Sacrificii celebratione iungitur. Christi enim praesentia sacris sub speciebus quae post Missam asservantur – praesentia quae tamdiu manet quamdiu species panis et vini subsistunt – ex celebratione Sacrificii derivatur atque ad communionem sacramentalem ac spiritalem continuatur. Sacrorum est officium Pastorum sustentare, etiam vitae suae testificatione, cultum eucharisticum, praesertim expositionem Sanctissimi Sacramenti, tum etiam adorantem commorationem coram Christo speciebus sub eucharisticis adstante.

(*Op. cit.*, pp. 449-50)

(The worship of the Eucharist outside the sacrifice of the Mass is something of inestimable worth in the life of the Church. This worship is closely linked with the celebration of the Eucharistic sacrifice. This is so since the presence of Christ under the sacred species which are reserved after the Mass – a presence that remains as long as the appearances of bread and wine are there – is derived from the celebration of the Sacrifice and is continued until the time of sacramental and spiritual communion. It is the duty of consecrated Shepherds to maintain, even in the witness of their own lives, worship of the Eucharist, especially exposition of the Most Holy Sacrament, as well as the spending of time in adoration before Christ present under the Eucharistic species.)

2. Instances of conciliar and papal documentation on the Eucharist available to St Thomas included the teaching of Pope Leo 1X against Berengarius at the Council of Rome, 1050, the teaching of Pope Victor 11 against the same theologian at the Synod of Florence, 1055, and the teaching of Pope Gregory V11, also against Berengarius, in two Roman Councils, one in 1078 and the other in 1079. Also available to him would have been the teaching contained in a number of letters to bishops sent by Pope Innocent 111, dealing authoritatively with such matters as the form of words and the elements required for the sacrament of the Eucharist, as well as with questions relating to the celebration of the sacrifice of the Mass. The profession of faith of 1208 prepared by Innocent 111 (to be sworn by Waldensian heretics who had repented and had sought reconciliation with the Church) contained a number of statements articulating doctrine about the reality of Christ's presence in the Eucharist; for example: "In sacrificio Eucharistiae, quae ante consecrationem erant panis et vinum, post consecrationem esse verum corpus et verum sanguinem Domini Nostri Iesu Christi, firmiter et indubitanter corde puro credimus et simpliciter verbis fidelibus affirmamus" (In the Eucharistic sacrifice what, before the consecration, was bread and wine, we firmly, indubitably, and with pure hearts, believe and affirm unreservedly with words of faith - to be, after the consecration, the true body and the true blood of Our Lord, Jesus Christ) [Denzinger, 28th edition, 1952, no. 424] The

teaching of the fourth Lateran Council on the Eucharistic presence (cf. Note 1 *supra*) was well known to St Thomas.

3. Commenting on 3. 75. 1, Cajetan provides some exegesis of the words of institution of the Eucharist, impressively interwoven with Church teaching, and with theological discussion involving some ideas of Scotus and Durandus. (Cf. the commentary of Cajetan, pp. 157-160, volume 12, the Leonine edition of the *Opera Omnia* of St Thomas.) [For Cajetan, see Note 12, chapter 3, infra.] Domingo Banez, also commenting on 3. 75. 1, (1) gives an exegesis of Christ's words of institution of the Eucharist; (2) invokes support from patristic sources (Tertullian, Origen, Augustine, Cyril of Alexandria) for the Church's traditional construal of the meaning of Christ's words ("Secundum fidem catholicam corpus Christi verum realiter existit et continetur sub specie panis, et sanguis eius sub specie vini" ["According to Catholic faith, the true body of Christ really exists and is contained under the appearance of bread, and His blood under the appearance of wine"]; (3) argues against those opposed to the Church's traditional position of 'realism of substance' when it proposes the Eucharistic mystery (and notes vividly that "discedentes a communi fide Romanae Ecclesiae mutuo se iugulant et in varias sectas dividuntur" ["those departing from the common faith of the Roman Church slit one other's throats and are split up into no end of factions"]; (4) makes reference to the authority of a number of Councils in support of the traditional position.

(Cf. Bañez's *Commentarios Ineditos A La Tercera Parte De Santo Tomas*, tome 2, pp. 249-268. For publication details see the bibliography.)

Domingo Bañez (1528-1604) was a Dominican philosopher and theologian, for some years the spiritual counsellor of St Teresa of Avila, and a major participant in sixteenth century controversies concerning divine grace and human freedom. In his book *Medieval Philosophy* (2nd edition 1982), the distinguished historian of medieval philosophy Armand Maurer expressed the view that "[Bañez's] commentary on St Thomas' *Summa Theologiae* is perhaps the most profound and exact written in the sixteenth century. No one of his contemporaries grasped better than he the meaning and implications of St Thomas' doctrine of being."

- 4. St Cyril (c. 376/80-444), Patriarch of Alexandria from 412. Theological contraversialist noted for his attacks on Nestorianism, and for his brilliant expositions of orthodox teaching on the Trinity and the person of Christ. His exegetical work on a number of Old and New Testament books was highly regarded. This work included an exegesis of the Gospel of Luke, referred to by St Thomas in 3. 75. 1c.
- 5. Thomas's Latin text of Luke 22; 19 was taken from the Vulgate edition of the New Testament and read as follows: "Hoc est corpus meum quod pro vobis tradetur." The Greek text used by St Cyril of Alexandria would most probably have been the following: "Touto estin to soma mou to huper humon didomenon."
- 6. Dionysius the Pseudo-Areopagite was a Christian Neoplatonist writing in the late fifth or early sixth century. He employed the literary device of presenting himself as 'Dionysius the Areopagite' who, as reported in *Acts of the Apostles* 17. 34, was a citizen of Athens converted to the Christian religion by the preaching of St Paul when Paul was in that city.

The Pseudo-Areopagite drew on the conceptual resources of Neoplatonism to assist him in setting out the philosophical parameters of a world view that was Christian in inspiration. Three themes dominated his intellectual explorations: the utter transcendence of the universe's First Cause; divine causality as immediately operative in the world; and the whole of reality as ontologically ordered, starting with the Trinity at the very summit of reality, working down through three 'hierarchies' of angels (each with three 'orders'), and finishing with material realities disclosed to us through our sense perceptions. His *Ecclesiastical Hierarchy (Peri tes ecclesiastikes hierarchias)* was a study of the sacraments of the Church, and of the orders of clergy and laity.

7. The practice will be adopted throughout the thesis of referring to a work of Aristotle in the way required by the edition of the Aristotelian texts prepared by Immanuel Bekker (1785-1871) under the aegis of the Prussian Academy, and published in Berlin in five volumes between 1831 and 1870. In the Bekker edition the first Arabic numeral, e.g. 342,

refers to the page in the sequentially numbered pages of the edition, the letter 'a' or 'b' refers to the column on the page (each page of the original edition had two columns), and the second Arabic numeral refers to the line in column a or b, e.g. 17.

8. Berengarius (c. 1010-88), a French theologian whose teaching on the Eucharist caused widespread controversy from around the middle of the eleventh century. This teaching was condemned on several occasions by Church authorities, and definitively rejected in 1079 by the Council of Rome under Pope Gregory V11. Berengarius denied that any change was required in the elements of bread and wine to explain the real presence of Christ's body and blood in the sacrament of the altar. The retraction by Berengarius of his condemned teaching – a retraction noted by St Thomas in 3. 75. 1 – included the words "Ego Berengarius corde credo et ore confiteor panem et vinum...substantialiter converti in veram et propriam ac vivificatricem carnem et sanguinem Iesu Christi Domini Nostri..." ("I, Berengarius, believe in my heart and confess with my mouth that the bread and wine are changed substantially into the real and personal and life-giving flesh and blood of our Lord, Jesus Christ...") [Cf. decrees of the Council of Rome, 1079, De ss. Eucharistia: Iusiurandum a Berengario praestitum]. Berengarius's earlier Rescriptum contra Lanfrancum (Reply to Lanfranc) was a vigorous defence of his belief in the real presence of Christ in the sacrament of the altar, allied with a denial that any substantial change in the bread and wine was required to account for this presence. As scholars have noted, it is of great interest that neither Berengarius nor his opponents hesitated to draw on the conceptual resources of grammar and logic to argue their positions on a question involving Christian belief, thus preparing the way for the beginnings of early 12th century scholastic theology. In his Adversus Berengarium Turonensem de Corpore et Sanguine Domini Liber, Lanfranc (c. 1010-89), who at the time of writing this work (mid 1060s) was abbot of St Stephen's abbey at Caen (and who subsequently became Archbishop of Canterbury), accuses Berengarius of "taking refuge in dialectic, after having abandoned sacred authorities" (Relictis sacris authoritatibus ad Dialecticam refugium facis, op. cit. chapter V11 initio). Having levelled this accusation against Berengarius, Lanfranc himself went on at once to employ the resources of dialectic at considerable length against his opponent, as a reading of virtually all of the later chapters of the work will show (the *Adversus Berengarium Turonensem de Corpore et Sanguine Domini Liber* has twenty three chapters). [I have been consulting the text of Lanfranc's *Adversus Berengarium* in the possession of the library of Canterbury Cathedral, and kindly made available to me on CD-Rom by the librarian. The text is the library's copy of the 1648 edition of the *Opera Omnia* of Lanfranc, published in Paris by Joannes Billaiune.]

- 9. Page references are to the 1992 edition of *Insight*.
- 10. For some references to Lonergan on the notion of 'intelligible', cf. *Collected Works of Bernard Lonergan*, volume 5 *Understanding and Being* (2nd edit. 1990). editorial note d, p. 418.
- 11. In volume 1 of his *Systematic Theology*, the eminent 20th century German-American philosopher and theologian Paul Tillich remarks that

Theology...presupposes in every sentence the structure of being, its categories, laws, and concepts. Theology, therefore, cannot escape the question of being any more easily than can philosophy. The attempt of biblicism to avoid nonbiblical, ontological terms is doomed to failure as surely as are the corresponding philosophical attempts...On every page of every religious or theological text these concepts appear: time, space, cause, thing, subject, nature, movement, freedom, necessity, life, value, knowledge, experience, being and non-being...The theologian must take seriously the meaning of the terms he uses. They must be known to him in the whole depth and breadth of their meaning. Therefore, the systematic theologian must be a philosopher in critical understanding even if not in creative power. (*Op. cit.*, p. 21)

In its authoritative document Gaudium et Spes, Vatican Council 11 declared that

Inquisitio methodica in omnibus disciplinis, si modo vere scientifico et iuxta normas morales procedit, numquam fidei revera adversabitur, quia res profanae et res fidei ab eodem Deo originem ducunt. Immo, qui humili et constanti animo abscondita rerum perscrutari conatur, etsi inscius quasi manu Dei ducitur qui, res omnes sustinens, facit ut sint id quod sunt. (*Op. cit.*, par. 36)

(Provided that it goes forward in a truly systematic way and in accordance with appropriate human norms, structured inquiry in all disciplines will never really be at odds with the content of faith, since secular realities and the realities disclosed to belief have their origen from the same God. Assuredly, anyone who, combining humility and resoluteness, undertakes to investigate the hidden features of things, is, all unknowingly, being led by the hand of the God Who, sustaining all things in being, brings it about that things be what they are.)

On matters to do with the dialectic of 'faith and reason', the 1998 encyclical of Pope John Paul 11 entitled *Fides et Ratio* may profitably be consulted. In the context of this note, the sixth chapter of the encyclical (which has the heading 'Mutua inter Theologiam et Philosophiam Actio' [The Interaction between Theology and Philosophy]) has special importance. Sections 64-67 and section 73 of the encyclical (which occur in chapter 6) deal explicitly with the connections between speculative inquiry, that is, the disciplined use of reason, and the understanding of faith - the *intellectus fidei* - that is the work of theology.

12. There is a valid piece of angelology implicit in this objection. The piece of angelology is to the effect that an angel cannot be in several places simultaneously because an angel, whilst being of stupendous power, remains an entity finite in nature and operational efficacy. As such its range is restricted to what St Thomas calls (1. 52. 2.c.) "aliquid unum determinatum" ("some one determinate thing"). Thomas concludes that "Cum angelus sit in loco per applicationem virtutis suae ad locum, sequitur quod non sit ubique, nec in pluribus locis, sed in uno loco tantum" ("Since an angel is in a place in

virtue of applying its power to [what is in] that place, it follows that an angel is not everywhere, nor in several places, but in one place only") [loc. cit.].

Thomas adds (1. 112. 1c): "Virtus autem angeli, cum sit particulare agens, non attingit totum universum; sed sic attingit unum quod non attingit aliud. Et ideo ita est hic quod non alibi" ("Since an angel is a specific sort of causal agent, the power of an angel does not take in the universe as a whole, but takes in one thing in such a way as not to take in something else. So it exists *here* in a such a way as not to exist *there*.")

13. I owe this reference to Henri Renard's *The Philosophy of Being* (2nd edit.), pp. 204-5. I have slightly amended Renard's translation of the citation from the text of Sertillanges which was originally published in French. (A-D Sertillanges was one of the leading French Dominican respondents [others were Ambrose Gardeil and M. D. Roland-Gosselin] to the challenge to the traditional epistemological and metaphysical bases of Catholic philosophy and theology posed by the work of Henri Bergson and Maurice Blondel in the early decades of the twentieth century. Interestingly, it was Jean-Luc Marion's reading of Sertillanges' La philosophie de saint Thomas d'Aquin [2nd edition, 1940], as well as of other writings of Sertillanges, that moved Marion to set aside the negative account of the Thomistic notion of esse, especially in its applicability to the being of God - the esse divinum - presented in his controversial 1982 work Dieu sans l'etre: Hors texte. As later acknowledged by Marion, it was his study of Sertillanges that brought him to the new understanding of Thomas's idea of esse that he made use of in the 1991 edition of his book, published in English under the title God Without Being. My attention was drawn to this point by Brian J. Shanley's recent book [2002] The Thomist Tradition. I shall return to Marion and God Without Being later in the thesis [chapter 6] when his account of the concept of 'transubstantiation' will be considered, together with related comments regard- ing Marion's account offered by Robyn Horner in her contribution ['The Eucharist and the Postmodern'] to the book Eucharist: Experience and *Testimony*, the published proceedings of a symposium held in Melbourne in 2001.)

In similar vein to Sertillanges, the American philosopher Oliva Blanchette, in his recently published (2003) exceptional work in reconstructive metaphysics entitled *The Philosophy of Being*, affirms that "If there are accidents really distinct from their substance within one and the same being, this does not mean that the accidents are beings unto themselves or in themselves. That would make them substances stuck onto other substances, and not accidents inhering in a substance. As accidents their only being is a *being-in* their substance. Even as distinct from accidents the being of a substance includes the being of accidents or is the being upon which the being of accidents depends in their very distinction from the substance in which they inhere...the substance is not some unknown or unknowable thing in itself which remains hidden behind the appearances...We do not distinguish substance from accidents in order to keep it hidden behind appearances, so to speak, but rather in order to bring it out in the open as being-in-itself through these appearances, especially those that are the proper activity of this being-in-itself" (Op. cit., pp. 278, 281-2. Blanchette's italics).

- 14. David Bohm, *Wholeness and the Implicate Order*, passim, and David Bohm and Basil Hiley, *The Undivided Universe*, chapter 15 'Quantum Theory and the Implicate Order', *passim*. For Bohm, an 'implicate order' involves the enfolding of a whole into every part of that whole a notion not unrelated to Thomas's idea of 'natural concomitance'.
- 15. St Thomas has more to say on some of these points in a brief, but extremely valuable, theological statement (cf. 3. 76. 1. to 1) in which he replies to an objection to the claim that the 'whole Christ' (totus Christus) is contained under this sacrament (sub hoc sacramento). It is worthwhile citing this reply:

Dicendum quod, quia conversio panis et vini non terminatur ad divinitatem vel animam Christi, consequens est quod divinitas vel anima Christi non sit in hoc sacramento ex vi sacramenti sed ex reali concomitantia. Quia enim divinitas corpus assumptum nunquam deposuit, ubicumque est corpus Christi necesse est et eius divinitatem esse. Et ideo in hoc sacramento necesse est esse divinitatem Christi concomitantem eius corpus...

Anima vero realiter separata fuit a corpore, ut supra dictum est (q. 50, a. 5). Et ideo, si in illo triduo mortis fuisset hoc sacramentum celebratum, non fuisset anima, nec ex vi sacramenti nec ex reali concomitantia. Sed quia *Christus resurgens ex mortuis iam non moritur*, ut dicitur Rom. 6:9, anima eius semper est realiter corpori unita. Et ideo in hoc sacramento corpus quidem Christi est ex vi sacramenti, anima autem ex reali concomitantia.

(It must be said that, because the change of bread and wine does not have as its term the divinity or the soul of Christ, the consesequence is that neither the divinity nor the soul of Christ is present in this sacrament in virtue of the sacramental sign, but in virtue of natural concomitance. Because Christ's divinity has never laid aside the body taken up [into hypostatic union], wherever there is the body of Christ, there of necessity is His divinity. So, in this sacrament, it is necessary that Christ's divinity be accompanying His body...

As was said above (qu. 50, art. 5) [there was a time when] Christ's soul was separated from His body. If, then, this sacrament had been celebrated in the triduum of His death, His soul would not have been present, either in virtue of the sacramental sign or in virtue of natural concomitance. But because "Christ, having been raised from the dead, will never die again", as is said in Romans 6:9, His soul is always really united to His body. Accordingly,

the body of Christ is present in this sacrament in virtue of the sacramental sign, whilst His soul is there in virtue of natural concomitance.)

- 16. The concept of 'ratio' or 'proportion' has an important usage in chemistry and applied physics; for example, in applied physics Gay-Lussac's law of gaseous combination under which the combining of gases takes place in simple *ratio* or *proportion* by volume to each other and to the gaseous product, under conditions of constant temperature and pressure. (For a brief account of the law of gaseous combination, and its connection with Avogadro's law relating volume and number of molecules in gases, cf. William A. Wallace's *The Modeling of Nature*, pp. 365-6.) The notion of 'ratio' in mathematics concerns the numerical relation of one quantity to another of the same kind, for example, 40 to 20, and 4 eggs to 2 eggs, are both of the ratio 2:1. To extend the use of the concept of 'ratio' or 'proportion' in an analogous way into what belongs to *ontology* is far from stretching this concept to breaking point.
- 17. 'Ferrariensis' is the name most often used for Francesco Silvestri of Ferrara (c. 1474-1528), a Dominican and celebrated Thomist philosopher and theologian of the first decades of the sixteenth century. He lectured for a time at Bologna, and served a term as Master General of the Dominican Order. His major work was a vast commentary on the *Summa contra Gentiles* of St Thomas. This is a work of such insight, erudition, comprehensiveness, and overall excellence, that it is now published in tandem with the Leonine Commission's critical edition of the *Summa contra Gentiles*.
- 18. For the Latin texts cited, cf. p. 208 of the *Summa contra Gentiles*, volume 15 of the *Sancti Thomae Opera Omnia*, Leonine Commission edition, which includes the commentary of Ferrariensis cited here.
- 19. Joseph Gredt, *Elementa Philosophiae Aristotelico-Thomisticae*, vol. 1, p. 278 (for publication details see bibliography). Gredt (1863-1940) was professor of philosophy at the Benedictine Collegio di San Anselmo, Rome, from 1896 until his death in 1940. He was an eminent contributor to the Thomist movement that developed rapidly following

Pope Leo X111's encyclical letter *Aeterni Patris* (1879) which commended to the Church, and to the world at large, committed study of the philosophy of St Thomas Aquinas. Gredt's *Elementa Philosophiae Aristotelico-Thomisticae* (which went through thirteen editions, and also appeared in German) presented to its readers in two volumes over a thousand pages of closely argued philosophy expressed in lucid, economical, Latin that might well serve as a model for writing in the discipline in any language. The two volumes are notable for their inclusion of a wide range of citations in Greek from the texts of Aristotle, and in Latin from the texts of St Thomas. Over more than four decades Gredt contributed many articles (most of them in German, but some in French) to European philosophy journals. He also made a careful point of keeping up with developments in the empirical sciences, particularly in physics, theoretical cosmology, and biology.

20. The Latin text of Thomas's reply to the objection is the following:

Facta conversione panis in corpus Christi vel vini in sanguinem accidentia utriusque remanent. Ex quo patet quod dimensiones panis vel vini non convertuntur in dimensiones corporis Christi sed substantia in substantiam. Et sic substantia corporis Christi vel sanguinis est in hoc sacramento ex vi sacramenti, non autem dimensiones corporis vel sanguinis Christi. Unde patet quod corpus Christi est in hoc sacramento per modum substantiae, et non per modum quantitatis. Propria autem totalitas substantiae continetur indifferenter in parva vel magna quantitate: sicut tota natura aeris in magno vel parvo aere, et tota natura hominis in magno vel parvo homine. Unde et tota substantia corporis Christi et sanguinis continetur in hoc sacramento post consecrationem, sicut ante consecrationem continebatur ibi substantia panis et vini.

In Thomas's second last sentence ("Propria autem totalitas substantiae continetur indiffe-

renter in parva vel magna quantitate" [But the complete specific nature of a substance is contained unreservedly under small or large dimensions]), one perhaps finds an unintended analogical foreshadowing of two statements of F. H. Bradley in his great work *Appearance and Reality*: "Anything is absolute when all its nature is contained within itself. It is unconditional when every condition of its being falls inside it." (*Op. cit.* p. 536; see bibliography for publication details.)

- 21. For Cajetan's distinction between *novitas continentiae* and *novitas conversionis*, see his commentary on 3. 75. 1 (p. 157 of vol. 12 of the Leonine Commission's *Opera Omnia Sancti Thomae Aquinatis*, with the commentary of Cajetan).
- 22. For Barden's translation, see vol. 58, p. 111 of the Blackfriars edition of the *Summa Theologiae* (see bibliography for publication details). The Latin text translated by Barden is the following:

Corpus Christi non est in hoc sacramento definitive: quia sic non esset alibi quam in hoc altari ubi conficitur hoc sacramentum; cum tamen sit et in caelo in propria specie, et in multis aliis altaribus sub specie sacramenti. Similiter etiam patet quod non est in hoc sacramento circumscriptive: quia non est ibi secundum commensurationem propriae quantitatis, ut dictum est (in c.; a. 4, ad 1-3). Quod autem non est extra superficiem sacramenti, nec est in alia parte altaris, non pertinet ad hoc quod sit ibi definitive vel circumscriptive, sed ad hoc quod incipit ibi esse per consecrationem et conversionem panis et vini, ut supra dictum est (a. 1; q. 75 a. 2-6).

It should be stated at this point that, unless otherwise indicated, translations into English of Latin texts, as well as translations into English of citations in other languages, will be those of the author of the thesis.

23. Peter Lombard (c. 1095-c.1160), the 'Magister Sententiarum' ('Master of the Sentences'), is the author of the renowned Sententiarum Libri Quattuor (The Four Books of the Sentences), published 1155-58. The work is mainly a compilation of the theological teachings of the principal Latin Fathers of the Church, and of the great Greek Doctor of the Church, St John of Damascus (c. 655-750), whose works were known to Peter Lombard in Latin translation. The text of the Sententiae was extensively commented on by the Schoolmen of the thirteenth century, and continued to be commented on by theologians into the seventeenth century. St Thomas's Scriptum super Sententiis is described as follows by James Weisheipl, O.P.: "Strictly speaking, this is not a 'commentary' on Peter Lombard's Sentences, but rather 'writings' (scripta) or elaborations of the text in the form of questions and discussions of relevant themes arising from the text...it is a carefully elaborated and edited version of questions discussed in the classroom, polished after the event" (Friar Thomas d'Aquino: His Life, Thought, and Works, pp.358-9).

References to the Angelic Doctor's *Scriptum super Sententiis* are generally to book (e.g. 4), distinction (e.g. 11), question (e.g. 2), article (e.g. 4), sub-question [quaestiuncula] (e.g. 4), an argument brought up in the sub-question (e.g. 3), and the response of Thomas to the argument (e.g. to 3 [ad tertium]). So: 4, 11, 2, 4, 4, 3, to 3. It should be noted that not all of the distinctions are divided into questions – some distinctions are immediately divided into articles, generally (though not always) further divided into 'quaestiunculae'. It should also be noted that St Thomas sets out *all* of the sub-questions (quaestiunculae) in an article, including the arguments supporting positions he will go on to reject, before going back after the *last* of the sub-questions to respond (in a separate section headed 'responsio') to all of these arguments starting from the first argument in the first sub-question. This may sometimes make for difficulty in verifying a reference.

24. The Latin text for the two translations into English from the *Scriptum super Sententiis* 4. 10. 1 is the following:

(Ad quintum)

Nullum corpus comparatur ad locum nisi mediantibus dimensionibus quantitatis. Et ideo ibi est corpus aliquod ut in loco ubi commensurantur dimensiones eius dimensionibus loci. Et secundum hoc corpus Christi non est nisi in uno loco tantum, scilicet in caelo. Sed quia conversa est in corpus Christi substantia panis, qui prius erat in hoc loco determinate mediantibus dimensionibus suis quae manent transubstantiatione facta, ideo manet locus, non quidem immediate habens ordinem ad corpus Christi secundum proprias dimensiones, sed secundum dimensiones panis remanentes, sub quibus succedit corpus Christi substantiae panis. Et ideo non est hic ut in loco per se loquendo, sed ut in sacramento, non solum significante sed continente ipsum ex vi conversionis factae.

(Ad sextum)

Dicendum quod...corpus Christi non dicitur esse alicubi nisi ratione dimensionum propriarum, et illius corporis quod in ipsum conversum est. Non est autem possibile quod dimensiones propriae eius sint ubique, neque quod corpus in ipsum convertendum ubique sit. Et ideo quamvis corpus Christi sit in pluribus locis aliquo modo, non tamen potest esse ubique.

25. Thomas's reply to the eighth objection is this:

Dicendum quod hoc [sc. esse simul in pluribus locis] non competit corpori Christi neque inquantum est corpus, neque inquantum est glori-

ficatum, neque inquantum Divinitati unitum sed inquantum est terminus conversionis. Unde similiter accideret de corpore lapidis si Deus simili modo panis substantiam in lapidem converteret: quod non est dubium eum posse.

(It has to be said that this [viz. existing simultaneously in many places] does not belong to the body of Christ either insofar as it is a material substance or insofar as it is glorified or insofar as it is united to the Divinity, but insofar as it is the term of a change. So something similar would happen to the material substance of a stone if God in a similar way changed the substance of bread into a stone – and there is no doubting God's power to do that.)

In commenting on book 4, distinction 10, of the *Sententiae Petri Lombardi*, the Angelic Doctor's great contemporary St Bonaventure [John of Fidanza] (1217-1274) replies as follows to some objections to the multiple real, i.e. substantial, presences of Christ in the sacrament of the altar:

Dicendum enim est quod, quamvis natura hoc non possit facere neque ratio intelligere, tamen Deus potest multa in corpus Christi convertere; et ex hoc corpus Christi est in multis locis, non per mutationem quae fit in Christo, sed in pane qui convertitur in ipsum. Similiter patet aliud. Quamvis enim corpus Christi terminum habet in caelo quantum ad existentiam naturalem, non tamen habet quantum ad potestatem conversionis, secundum quam alibi potest corpus converti in ipsum; et ideo illa virtute supernaturali fit

alibi qua aliud convertitur in ipsum.

(It must be said that, although nothing natural can bring this about, nor reason comprehend it, nevertheless God can change no end of things into the body of Christ. On this basis, the body of Christ exists in a number of locations, not through any change that comes about in Christ, but in the bread that is changed into Him. This is clear on other grounds: Although in heaven the body of Christ has a limit with respect to its natural existence, it has no such limit with respect to its power to change things, in terms of which a bodily reality elsewhere can be changed into it. Accordingly, by that supernatural power [Christ's body] is brought about elsewhere when something else is changed into it.)

(Opera Theologica Selecta S. Bonaventurae, volume 4, p. 203 [articulus unicus, quaestio 1]) [See bibliography infra]

These acute arguments of the Seraphic Doctor strongly support the position of Thomas Aquinas concerning simultaneous multiple presences of the body of Christ in the Eucharist, viz. that simultaneous multiple presences are due, *inter alia*, to Christ's body's being the 'terminus conversionis' of the change of the substance of bread into it that is effected in many places.

- 26. The edition of the *Summa contra Gentiles* to be used throughout the thesis will be that published in Rome (1918-30) as volumes 13-15 of the Leonine Commission's critical edition of the texts of St Thomas Aquinas. This edition includes the commentary of Francesco Silvestri of Ferrara (cf Note 17 *supra*).
- 27. I am indebted to Joseph Donceel, S.J., for the point about Maréchal's concern for dialogue between the sciences and philosophy and, for those working in philosophy, the importance of avoiding the danger of 'metaphysical autosuggestion'. Donceel includes this point in his short biographical introduction to Joseph Maréchal in the volume that he edited under the title *A Maréchal Reader* (cf. bibliography for publication details), the

content of which is made up of Donceel's translations of excerpts from the writings - all in French - of Maréchal.

28. See A. Einstein in *The Born-Einstein Letters*, p. 158. I owe this reference to David Bohm's and Basil Hiley's study *The Undivided Universe*, p. 159 (see bibliography).

29. Bohm and Hiley (*cf.* Note 28) put the matter this way:

The interaction is transmitted instantaneously. In this case the interaction would have to be nonlocal, i.e. to operate directly and immediately between the two particles with a strong force even at very large distances. Evidently this would violate the special theory of relativity. (*The Undivided Universe.* p. 136)

30. The Quantum World., pp. 74 and 76.

31. To draw upon the notion of 'absolute divine power' (potentia divina absoluta) as one crucial element in rejecting the modal claim that has been introduced seems perfectly consistent with the thinking of St Thomas. In his *Summa Theologiae* 1. 25. 5. (to) 1, the Angelic Doctor made a clear distinction between the concepts of 'potentia divina *absoluta*' and 'potentia divina *ordinata*' - between the *absolute* power of God and the *ordered* power of God. The latter is the power of God considered under the aspect of God's knowledge and will regarding what He intends actually to bring about (or permit to happen) within the created order of things. The former is God's power considered *simpliciter* as the power to bring about "quidquid potest habere rationem entis" (*op. cit.* 1. 25. 3c), that is, absolutely anything at all that can come under the notion of *being* as not involving in itself a contradiction (a notion that F. H. Bradley describes as follows: "The impossible absolutely is what contradicts the known nature of Reality. And the impossible, in this sense, is self-contradictory", cf *Appearance and Reality*, p. 537). In Thomas's own words: "Quod attribuitur potentiae secundum se consideratae, dicitur Deus posse *secundum potentiam absolutam...* Quod autem attribuitur potentiae divinae

secundum quod exsequitur imperium voluntatis iustae, hoc dicitur Deus posse facere *de potentia ordinata*" (*op. cit.* 1. 25. 5. [to] 1).

It is surprising to find Bernard Lonergan arguing that "fourteenth-century theologians were forever distinguishing between what God could do absolutely and what he may be expected to do in this ordered universe... since God absolutely could do anything that did not involve a strict contradiction, there rapidly followed first scepticism and then decadence" (*Philosophy of God, and Theology: The Relationship between Philosophy of God and the Functional Specialty, Systematics*, p. 6). This sharp condemnation (Lonergan had in mind thinkers such as Duns Scotus and William of Ockham, cf. *op. cit.*, pp. 30-1) is to be connected to Lonergan's even more surprising earlier declaration that "Distinctio inter potentiam absolutam et potentiam ordinatam non invenitur apud S. Thomam" [A distinction between absolute power and ordered power is not found in St Thomas]. Cf. Lonergan's *De intellectu et methodo*, p. 30, where he is talking about the power of God and where, given the above reference to the *Summa Theologiae* 1. 25. 5. (to) 1, he is simply incorrect: Thomas made explicit use of the distinction between the absolute, and the ordered, power of God.

- 32. Jacques Maritain, *An Introduction to Philosophy*, p. 107 (for publication details, cf. bibliography).
- 33. The American philosopher John McDowell, well-known as a serious follower of Wittgenstein, noted that "Where mental life takes place need not be pinpointed any more precisely than by saying that it takes place where our lives take place." McDowell went on to say that "My aim is not to postulate mysterious powers of mind; rather, my aim is to restore us to a conception of thinking as the exercise of powers possessed, not mysteriously by some part of a thinking being, a part whose internal arrangements are characterizable independently of how the thinking being is placed in its environment, but unmysteriously by a thinking being itself, an animal that lives its life in cognitive and practical relations to the world" (italics mine). Cf. McDowell's 'Putnam on Mind and Meaning' Philosophical Topics 20, no. 1 (1992), pp. 40, 45. I am indebted for this refe-

rence to John P. O'Callaghan's recent (2003) book *Thomist Realism and the Linguistic Turn*, p. 279 (cf. bibliography).

- 34. Richard C. Hinners, *Ideology and Analysis: A Rehabilitation of Metaphysical Ontology*, p. 14 (cf. bibliography).
- 35. Steven Weinberg, *The First Three Minutes*: A modern view of the origin of the universe, p. 149 (cf. bibliography).

Chapter 3 - Eucharistic Consecration and the Substance of Bread and Wine (First Issue) [3.75.2]

Introduction

In the Summa Theologiae 3. 75. 2 there is initiated a move from the question of the substantially real presence of Christ in the Eucharist - the concern of 3. 75. 1 - to a series of three interconnected questions, central to St Thomas's thought about the Eucharist, dealing with what becomes of the substance of the bread and of the wine when this sacrament is celebrated. The first question (article 2) asks whether the substance of the bread and of the wine simply remains on the altar under its natural appearances after the words of consecration have been pronounced (utrum in hoc sacramento remaneat substantia panis et vini post consecrationem). Having answered this question in the negative, Thomas then asks (article 3) whether, in that case, the substance of the bread (and of the wine) is either annihilated, or reduced to matter in an earlier state, through the words of consecration (utrum substantia panis, post consecrationem huius sacramenti, annihiletur, aut in pristinam materiam resolvatur). Having argued that neither alternative is the case, he goes on to ask (article 4) whether (the substance of) the bread is able to be changed into (the substance of) the body of Christ (and the wine into His blood) (utrum panis possit converti in corpus Christi) - a question that he answers in the affirmative.

As was just indicated, in the second article of question 75 St Thomas asks whether the substance of the bread and of the wine remains in the sacrament of the altar after the words of consecration have been pronounced. In the course of offering a negative reply to this question as posed in 3. 75. 2, and also in texts to be cited from book 4 of the *Scriptum super Sententiis* and book 4 of the *Summa contra Gentiles*, the Angelic Doctor makes use of a number of metaphysical concepts and arguments that lead cumulatively to his conclusion regarding the non-continuance of the substance of the bread and of the wine *post con- secrationem*. It is the task of this chapter to engage with these concepts and arguments. It is also the task of this chapter to widen the perspective of this engagement by considering the ideas and arguments of some of the major Thomistic

commentators when they introduce in their own writings a principle basic to Thomas's presentation of his case in 3. 75. 2 and in other texts to be cited: the principle that a thing (already real) cannot exist where it did not previously exist except either through a change of its location or through the change into it of something else already existing there (deferring for discussion in chapters 5 and 6 problems associated with the notion of something being changed into something else that already exists). It is of considerable importance to note at this point that St Thomas's principle concerning what, for him, are the only two possible ways in which something (already real) can become present where it was not present before, also forms part of his lines of argument in articles 3 and 4 of question 75 that explore, in turn, what does not happen (article 3), and what does happen (article 4), when the words of Eucharistic consecration are pronounced. (It should be noticed that the qualification "already real", twice occurring supra, is intended as flagging the fact that, since Christ already exists in His physical human nature, St Thomas leaves aside as irrelevant to the present discussion the possibility that something could begin to exist where it did not exist before through its being created there ex nihilo.)

The chapter also considers what one major commentator, Francesco Silvestri of Ferrara (Ferrariensis), has to say about the important related issue of the nature of the language employed in the formulas of consecration used over the bread and the wine when the sacrament of the altar is celebrated, given the causal role performed by these speech acts on each such occasion.

Moreover, because the concept of *substance* is of ineluctably central importance throughout the discussion undertaken in this chapter (as well as in subsequent chapters), a note on the position of St Thomas regarding 'substance', with some comment from two modern Thomists, is included in the chapter, whilst more on the concept of 'substance' will be in-troduced in later chapters.

Translated excerpt from the Summa Theologiae 3. 75. 2 text of St Thoma

I begin by translating the more philosophically relevant paragraphs of the *corpus articuli* of 3. 75. 2, omitting paragraphs dealing only with points of theology or ritual:

"Some people have taken the view that, after the consecration, the substance of the bread and of the wine remains in this sacrament. But this view cannot be maintained. First of all, because it does away with the distinctive reality of this sacrament which requires that the real body of Christ exist in it - a body that is not present there before the [words of] consecration.

The point is this: A thing is not able to exist where it did not exist before except either through a change in its location or through the change of something else into it. Take what happens in a house: a fire starts afresh there either because it is brought there or because it is kindled there. Now it is clear that the body of Christ does not begin to exist in this sacrament through a change of location. First, because the consequence would be that it would cease to exist in heaven, given that what changes in location does not arrive anew at a place without giving up its former location. Second, because every body changed on the score of location passes through all intervening places - something that cannot apply in this case. Third, because it is impossible that one movement of the same body being changed in location should finish up in different places at the same time; whereas the body of Christ under this sacrament begins to exist in many places at the same time.

The upshot of this account is that it is not possible for the body of Christ to begin to exist *de novo* in this sacrament otherwise than through the change of the substance of bread into it. But what is changed into something else is no longer there following the change. Accordingly, it remains that, when the distinctive reality of this sacrament is safeguarded, the substance of bread can no longer be there after the consecration." [1]

Resolving a Difficulty

In the excerpt from *Summa Theologiae* 3. 75. 2 translated above, as well as in the texts to be referred to or cited below (*Scriptum super Sententiis* 4. 11. 1. 1. [response to]1; *Contra Gentiles* 4. 63), St Thomas argues importantly that Christ's body would cease to exist in heaven were it to become present on the altar at the Eucharistic consecration through change of location (per motum localem) - a situation (the body of Christ ceasing to exist in heaven) that, for St Thomas, is unacceptable doctrinally (because opposed to the Church's traditional creeds) and theologically (because refutable by reasoning based on the facts of Christ's resurrection and ascension).

However, it might be objected to this argument of St Thomas along the lines that heaven is a state or condition, not a place, and that Christ's body in its heavenly condition is risen and glorified, hence freed from the physical constraints belonging to bodies in their normal condition. Therefore Christ's body could remain 'in heaven' yet also be present by local motion on any number of altars. How, then, might a response be made to this objection?

For St Thomas, that Christ is 'in caelo' - 'in heaven' - involves, inter alia, His not being anywhere on earth in His natural appearance, as would have to be the case were His body to begin to exist on the altar through no other change to it than local motion. Thomas makes it clear (3. 54: 1, 3, 4; 3. 57: 4. 5) that Christ's post-resurrection body is a 'verum corpus', i.e. a fully real human body. In 3. 54. 2. (to) 2, he notes that "Corpus autem Christi vere post resurrectionem fuit ex elementis compositum, habens in se tangibiles qualitates, secundum quod requirit natura corporis humani: et ideo naturaliter erat palpabile" ("But the body of Christ after the resurrection was indeed made up of [physical] elements, having in it tangible qualities precisely as the nature of a human body requires, and hence was naturally accessible to the sense of touch.") Moreover, the presence of this body in heaven involves place (locus) as well as pre-eminence (dignitas) (3. 57: 4, 5), and Thomas comments (3. 57. 2) that the "...ascensio [Christi] est motus localis, qui divinae naturae non competit, quae est immobilis et inlocalis. Sed per hunc modum [sc. per motum localem] ascensio competit Christo secundum humanam naturam quae continetur loco, et motui subici potest." ("[Christ's] ascension is an instance of local motion - something not pertaining to His divine nature which is immutable and non-local.

Rather, the ascension befits Christ in this way [i.e. through local motion] in virtue of His human nature which is contained by place and can be subjected to movement.")

It is clear that the line of objection mentioned above could be disposed of by Thomas's arguments about the continuing physical nature and attributes of Christ's post-resurrection body in heaven - arguments underlined by his "Quia veritas naturae corporis est ex forma, consequens est quod corpus Christi post resurrectionem et verum corpus fuerit, et eiusdem naturae cuius erat prius." ("Because the reality of a bodily nature is due to [substantial] form, the consequence [of Christ's soul, i.e. form, being re-united with the same body] is that this body after the resurrection was a fully real body, and of the same nature that it was prior [to the resurrection].") (3. 54. 1). Thomas moves further in his account by adding that, were Christ's post-resurrection body to possess *only* its natural features ("...si nihil aliud habuisset supra corporis humani naturam...", *op. cit.* 3. 54. 2. [to] 2) it would be *perishable* in addition to being tangible. This consequence, unacceptable doctrinally and theologically (see *supra*) is rejected in the following analysis:

Habuit autem aliquid aliud quod ipsum incorruptibile reddidit: non quidem naturam caelestis corporis ut quidam dicunt sed gloriam redundantem ab anima beata: quia ut Augustinus dicit ad Dioscorum [Epistula 118], tam potenti natura Deus fecit animam ut ex eius plenissima beatitudine redundet in corpus plenitudo sanitatis, idest incorruptionis vigor. Et ideo, sicut dicit Gregorius [In Evang. 1. 2, homilia 26], ostenditur corpus Christi post resurrectionem fuisse eiusdem naturae sed alterius gloriae. (loc. cit.)

([The post-resurrection body of Christ] had something further that made it imperishable, not - as some say - the nature of a heavenly body...but an intrinsically brilliant quality overflowing from His beatific soul since, as Augustine puts it to Dioscorus [Letter 118], God imparted to His soul so powerful a nature that the fullness of well-being, i.e. the strength of imperishableness, overflows into the body from the soul's abundance of bliss. And so, as Gregory indicates [On the Gospels,book 2, homily 26], The body of Christ is shown to have been of the same nature but of a different intrinsically brilliant quality.)

St Thomas also argues that no local motion of Christ's body on to the altar could happen because "omne corpus localiter motum pertransit omnia media, quod hic dici non potest." ("Every body changed on the score of location passes through all intervening places - something that cannot apply in this case.") (3. 75. 2).

Passage through intervening places cannot apply in the case of Christ's becoming present on the altar at the Eucharistic consecration since "Motus localis instantaneus esse non potest sed tempore indiget. Consecratio autem perficitur in ultimo instanti prolationis verborum." ("Change of location cannot be instantaneous: time is needed. But the [Eucharistic] consecration is effected in the final instant of the words being pronounced" (Summa contra Gentiles 4. 63). Thomas argues as follows that a body's change of location cannot be instantaneous but requires time: "Corpus autem non est capax ut in instanti localiter moveatur: quia oportet quod commetiatur se spatio, secundum cuius divisionem dividitur tempus, ut probatur V1 Physic." ("A body is incapable of instantaneous movement in respect of location, since of necessity a moving body is measured against space, the dividing of which into parts also involves time's being divided into parts, as is proved in book six of the Physics [of Aristotle].") (3. 57. 3. [to] 3) [2]

Other Texts of St Thomas

1. In book 4, distinction 11, question 1, article 1, sub-question 1, (response) to 1, of his *Scriptum super Sententiis Petri Lombardi*, St Thomas rejects as impossible the position

that "ponit substantiam panis ibi remanere post consecrationem simul cum vero corpore [Christi]" ("[the position that] affirms that, after the consecration, the substance of bread remains there simultaneously with the real body [of Christ]").

Central to Thomas's rejection of this position is his use of the principle that "impossibile est aliquid esse nunc cum prius non fuerit nisi ipso mutato vel aliquo in ipsum" ("It is impossible for something to be now what previously it was not unless there is change involving it, or involving something being changed into it"). Thomas adds that "Aliter enim se habere nunc et prius est idem quod moveri vel transmutari" ("For something to exist differently now from what it was before is the same as to be moved or changed").

In the case of the Eucharist Thomas argues that, if Christ's body becomes present on the altar where it did not previously exist, then some movement or change relating to it must have taken place. The position he is opposing holds that no movement or change affects the (sacramental) bread. The consequence is that the body of Christ has, at the very least, been changed in location (mutatum saltem localiter) to make it present on the altar. But such a change has to be ruled out as demanding that numerically one body be moved at the same time and with the same movement (simul et semel) into different places - something that would be called for whenever Eucharistic consecration occured at the same time on different altars. St Thomas leaves unstated (and to the inferential capacity of his readers) the conclusion that what was previously the substance of bread has been changed into the substance of the body of Christ in order to bring about the presence of Christ's body on the altar.

2. In book 4, chapter 63, of the *Summa contra Gentiles* the Angelic Doctor addresses the question of how the real body of Christ begins to exist under this sacrament, and again poses the alternative: the body of Christ is really present in the sacrament of the altar where it did not exist previously *either* through its change of location (per motum localem) *or* through the substance of bread being changed into it. Thomas's argument rejecting the first limb of this alternative, and accepting the second, is this:

Impossibile autem est quod hoc [sc. praesentia realis Christi in Eucharistia] fiat per motum localem corporis Christi. Tum quia sequeretur quod in caelo esse desineret quandocumque hoc agitur sacramentum. Tum quia non posset simul hoc sacramentum agi, nisi in uno loco: cum unus motus localis non nisi ad unum terminum finiatur. Tum etiam quia motus localis instantaneus esse non potest, sed tempore indiget. Consecratio autem perficitur in ultimo instanti prolationis verborum.

Relinquitur ergo dicendum quod verum corpus Christi esse incipiat in hoc sacramento per hoc quod substantia panis convertitur in substantiam corporis Christi, et substantia vini in substantiam sanguinis eius.

(It is impossible for this [Christ's real presence in the Eucharist] to come about through a change of location of the body of Christ. First, because it would follow that [Christ's body] ceased to exist in heaven when this sacrament was celebrated. Next, because it would not be possible for this sacrament to be celebrated in more than one place at the same time, since one change of location terminates in only one place. Again, change of location cannot be instantaneous: time is needed. But the [Eucharistic] consecration is effected in the final instant of the words being pronounced.

Consequently, it must be said that the true body of Christ begins to exist in this sacrament in the following way: the substance of bread is changed into the substance of the body of Christ, and the substance of wine into the substance of His blood.)

Thomas goes on to affirm that this change of the substance of bread and wine into the body and blood of Christ is a change of a totally different kind from all purely natural changes. The essential point of the difference is that in every natural change there is an abiding subject of the change that takes on some or other new substantial and/or accidental [3] form as a result of the change, for example, a (previously green) apple is the abiding subject that takes on the new accidental form of 'being red'; and the basic materiality (Aristotle's prote hule, and Thomas's materia prima) of sodium and oxygen is the abiding subject that takes on the new substantial form - the new specific determinateness - of sodium peroxide. In that sense, such a change is always a formal change (conversio formalis). In the case of the change of the substance of the bread and of the wine into the body and blood of Christ, there is no abiding subject since the whole substance of the bread and of the wine is changed into the body and blood of Christ, with the accidents of the bread and of the wine remaining. Such a change is always a substantial change (conversio substantialis) in the sense of a change reaching to the whole substance of the bread and of the wine, with its related accidents 'left behind' as it were, without their corresponding subject. [4]

Having established the *kind* of change that occurs when bread and wine are changed on the altar into the body and blood of Christ - a change involving the whole substance of the bread and of the wine, not merely the substantial forms of the components that make them up - St Thomas at once raises a basic question relating to this change: how is it possible for one complete substance-subject to be changed into another complete substance-subject (quo-modo subjectum in subjectum convertatur) that already exists (...[et] haec individua substantia in illam praeexistentem convertatur)? His response to this question contains two parts: (1) the claim that such a change or 'conversio' of the kind envisaged in the Eucharist completely transcends the powers of nature; (2) the claim that such a change can be effected 'virtute divina' – by the causal activity of God.

Thomas's argument in support of the first claim is attractively laconic:

Omnis...naturae operatio materiam praesupponit

per quam substantia individuatur: unde natura facere non potest quod haec substantia fiat illa, sicut quod hic digitus fiat ille digitus.

(Every activity of nature presupposes matter, through which a substance is individuated. So nature cannot bring it about that *this* substance becomes *that* [substance], as that *this* finger should become *that* finger.) [My emphases]

For St Thomas, the intrinsic cause of each material thing or substance being (numerically) distinct from every other material thing or substance is the particular amount or 'parcel' of primary matter (materia prima) marked off or separated (signata) by dimensive quantity that, together with substantial form, constitutes it as a particular thing or substance (and of some or other kind, by reason of the role of substantial form as a principle of specific determinateness) [Cf. Note 5 b infra on the individuation of material substances]. Now every causal activity of nature - every 'operatio' (Thomas's word) of nature - can work only on an already individual material thing or substance and, so, must presuppose the reality of the [primary] matter through which this thing or substance is individuated. Since, then, every causal activity of nature presupposes, but does not bring into existence, the primary matter individuating a material thing or substance, it follows that no causal activity of nature can effect that this whole substance becomes that pre-existing whole substance, since the intrinsic substantial source of the 'thisness' and the 'thatness' necessarily lies beyond the reach of the causal capacity of natural agents. Therefore, since the sort of change that is affirmed to occur on the altar involves individual instances of whole substances (the components of bread and of wine) becoming other (and pre-existent) individual whole substances (the body and blood of Christ), the conclusion must be drawn that the change or 'conversio' of the kind postulated in the case of the Eucharist completely transcends the causal powers of nature. (It may perhaps be noted at this point that a corresponding argument in S. Theol. 3. 75. 4, where St Thomas is asking whether bread can be changed into the body of Christ [utrum panis possit converti in corpus Christi], excludes any finite/created cause from being able to bring about this effect, not expressly because such a cause must always presuppose individuating [primary] matter, but because its essentially limited actuality restricts it only to bringing about changes of form/s in other things - a line of argument that only *implies* that the causality of a finite/created agent does not extend to primary matter as principle of individuation. [For the full development of the argument of 3. 75. 4, cf. chapter 5, pp. 166-174 *infra*].)

Thomas's argument in support of the second claim follows smoothly from what has just been said:

Materia [prima] subiecta est virtuti divinae cum per ipsam producatur in esse. Unde divina virtute fieri potest quod haec individua substantia in illam prae-existentem convertatur. Sicut enim virtute naturalis agentis, cuius operatio se extendit tantum ad immutationem formae, et existentia subiecti supposita, hoc totum in illud totum convertitur secundum variationem speciei et formae, utpote hic aer in illum ignem generatum, ita virtute divina, quae materiam non praesupponit, sed eam producit, et haec materia convertitur in illam, et per consequens hoc individuum in illud: individuationis enim principium materia est, sicut forma est principium speciei.

([Primary] matter is subject to the power of God, since it is brought into being through this power. So divine power is able to bring it about that *this* individual substance is changed into *that* pre-existing [substance]. For, just as a natural agent's power - power that presupposes the existence of some subject, and which extends only to change affecting form - changes *this* whole into *that* whole

by way of varying the species and form (*this* [amount of] air, say, into *that* newly kindled fire), so does God's power, which does not presuppose, but produces, [primary] matter, change *this* [amount of] matter into *that* [amount of] matter and, in consequence, *this* individual thing into *that* [individual thing], since the principle of individuation is matter, just as the principle of species or kind is form.) [My emphases]

Implicit in this argument of St Thomas is his acceptance of a relationship of absolute ontological dependence on the part of every finite being upon God as the creative Source of all such beings, a relationship such that every finite being is incessantly being-upheldin-actual-being by this creative Source. For Thomas, the 'nerve' of this radical ontological dependence is the real, i. e. the objective or extra-mental, distinction between essence (what a thing actually is) and existence (esse: the activity of being-in-actualbeing) that holds in the case of every finite being (refer, e. g., De ente et essentia, ch. 5, De veritate, qu. 27, a. 1, [to] 8; De potentia, qu. 1, a. 2; Summa contra Gentiles, bk 2, ch. 52; Summa Theologiae, 1. 50. 2. [to] 3. Cf also chapter 6, pp. 232-234 infra). Also implicit in this argument of the Angelic Doctor, and resting on the same metaphysical insight regarding the total existential contingency of every created thing as grounded in the real distinction between essence and esse within it, is the Thomistic idea of obediential potentiality - potentia oboedientialis. It is this obediential potentiality that makes every created reality basically amenable to the causal activity of God should God intend to bring about in it effects totally transcending the power of finite agents. (For 'potentia oboedientialis', cf. infra chapter 7, p. 280, and Note 8) [5]. On this account, Thomas notes, it is quite clear that, in the change of bread into the body of Christ and of wine into His blood, there is no common matter qua subject remaining after the words of consecration. This is the case because, as has been said, this change reaches to the very 'primum subjectum' - the primary matter which is the intrinsic principle of individuation and changeability in material substances.

Thomas is, of course, quick to add that, in order to safeguard the truth of the formula *This is my body* - a formula that both signifies and brings about the change that takes place (huius conversionis significativa et factiva) [6] - something has to remain as the (perceptible) object being pointed out by a formula beginning with the demonstrative pronoun "this" (hoc). Since the substance of bread (including the 'materia prima' of the bread) does not remain, and since the sacramental presence of Christ is not as such sense-perceptible, it is the accidents of the bread that remain, and exist as the perceptible centre or focus in relation to which the Eucharistic body of Christ is declared to be present. Put differently, the perceptible appearances of the bread contain the Eucharistic body of Christ which becomes the referent or *Bedeutung* of the demonstrative pronoun "this" (hoc) when the pronouncing of the formula of consecration over the bread is completed.

The Commentary of Bañez on 3. 75. 2

As we have seen from Thomas's discussion in each of his three major philosophicotheological syntheses (Scriptum super Sententiis Petri Lombardi, Summa contra Gentiles, Summa Theologiae) about how the body of Christ begins to be really present in the sacrament of the altar, the Angelic Doctor uses arguments resting on (some version of) the principle that a thing cannot begin to exist where it did not exist before except either through a change of location bringing it there, or through something else being changed into it there. (Thomas was, of course, well aware that something could exist where previously it did not exist by its being created ex nihilo in that place. But, as has already been indicated, this possibility would not have been relevant to the event of Christ's becoming present on the altar at the moment of Eucharistic consecration, since Christ's body and blood already existed and could not, therefore, be created de novo. Any such act of creation ex nihilo would result only in a sort of ontological replica or 'clone' of the human nature of Christ that could not, in virtue of the principle of identity, be identical with the already existent human nature of Christ. Thomas would, presumably, be quick to add that the impossibility of identity as between a body of Christ newly created ex nihilo and the pre-existent body/human nature of Christ, is not involved in the case of something already existing - bread, say - being changed into something else already

existing: the body of Christ. This matter will receive considerably more attention in chapter 6 *infra*. For the moment, however, it suffices to notice the claim that the transcendent Source of being, that is, the First Cause or God, is able to change all that is of *being* in one thing - "id quod est entitatis in una [re]", in Thomas's words (1. 75. 4 [to] 3) - into all that is of *being* in something else - "ad id quod est entitatis in altera [re]", also in Thomas's words (*ibid.*) - by removing all that distinguishes the first thing (bread, say) from the second thing (the body of Christ).)

In connection with the principle regarding a thing beginning to exist where it did not exist before, it should be noticed that, in his commentary on 3. 75. 2 of the *Summa Theologiae*, the eminent 16th century Thomist commentator Domingo Bañez (for whom, cf. Note 3, chapter 2 *supra*) was concerned to approach the principle from two conceptually distinct perspectives, which had themselves previously been articulated by Thomas, although in the context of a different argument, in 1. 25. 5. [to]1 of his *Summa Theologiae* [7]. These were the perspectives of (1) the *absolute* power of God (potentia Dei absoluta) - the power of God to bring about anything at all that does not involve self-contradiction, that is, anything at all that is logically possible; and (2) the *ordered* power of God (potentia Dei ordinata) [8], that is, the power of God to bring about all that He foreknows and proposes to bring about in actual fact.

Making use of these two perspectives, Bañez claimed that Ferrariensis [9], in his commentary on book 4, chapter 63 of the *Summa contra Gentiles*, took the view that it was not possible even by the absolute power of God for the body of Christ to become present on the altar under the appearances of bread in any way other than the two - local motion or the change of something else (the substance of bread) into Christ's body - posited by St Thomas (who, of course, went on to rule out the first of these two ways). Banez also claimed that Capreolus [10] was "probably" of this opinion ("hoc ipsum opinatur esse *probabile* Capreolus in 4. d.11, q.1") as indicated apparently in his reply to an argument of Scotus against Thomas's conclusion about the change of the substance of the bread and of the wine into the body and blood of Christ at the celebration of the Eucharist. (Scotus had argued at some length that God could bring about the real

presence of Christ's body and blood under the appearances of bread and wine without any such change being required) [11].

Bañez summarised the arguments of Ferrariensis and Capreolus as follows: On the side of the body of Christ really existing in heaven, no other change affecting it except change of location could be understood to initiate the presence of that body on the altar under the appearances of bread. On the side of the substance of bread, no change affecting it other than its change into the very body of Christ could be understood as bringing about the presence of Christ's body in the sacrament. But, given that St Thomas has shown that change of location must be excluded in this case, it follows that change of the substance of bread into Christ's body is the only way of understanding how Christ begins to be present in this sacrament.

Bañez took his discussion further by claiming that Cajetan [12], in his commentary on 3. 75. 2 of the *Summa Theologiae*, held that St Thomas was using there a principle that applied only within the perspective of the *ordered* power of God (potentia Dei ordinata). Within the perspective of the *absolute* power of God (potentia Dei absoluta), there might well be some other way, apart from the two already identified (with one, local motion, to be rejected), in which the body of Christ could begin to exist on the altar under the appearances of bread. (In connection with the distinction between the absolute power of God and the ordered power of God, cf. Note 8 of this chapter and Note 31 of chapter 2 *supra*.)

Bañez set out Cajetan's argument as follows: The presence of the body of Christ in the Eucharist is not a *formal* effect of the change of bread into His body, nor of any change of location. It is strictly an effect that is due to causality within the category of *efficient* cause (in genere causae *efficientis*) when the words of consecration are uttered by a priest duly empowered by God. However, God is able to be immediately operative of Himself (per se ipsum) as efficient cause. So He would be able to bring about the presence of the body of Christ in this sacrament without either a change of the substance of bread into this body caused by the words of consecration, or by a change of location of Christ's

body. No contradiction is involved in this idea (non enim implicat contradictionem). How this would be possible for God in His absolute power is beyond our capacity to understand or explain. Transubstantiation, on the other hand, can to some extent be understood and explained by us. So Thomas's line of reasoning about Christ's presence on the altar remains the best and most persuasive for us.

Bañez himself adopts a position that brings together elements of the positions of Cajetan and Ferrariensis. He acknowledges that God could, in His *absolute* power, annihilate the substance of the bread and of the wine, sustain the accidents of the bread and of the wine in being, and effect the presence of the body and blood of Christ under these accidents. This could be done in such a way that the body and blood of Christ would not be present on the altar by means of their own dimensive quantity; they could even be understood as having been moved "*de caelo ad terram*" - "from heaven to earth" - without having been moved through any intervening space but after the manner in which angels are moved from place to place without having to traverse intervening space (sed modo quo moventur angeli de loco in locum non transeuntes per medium), and also without being restricted to arrival at only one place. This state of affairs *could* be brought about by God since no contradiction is involved in the idea (in dictis a nobis nulla est implicatio contradictionis: ergo non est denegandum hoc fieri posse divina potentia).

However, whilst being in itself (logically) possible, this idea is at variance with the sacramental reality of the Eucharist as actually constituted. This requires that the sacramental formulae (*This is my body*; *This is my blood*) effect what they signify (*efficiunt quod significant*) - an event that, for Banez, entails that the substance of the bread and the wine present on the altar are *what actually become* the body and the blood of Christ. Put differently, what at *this* moment is bread becomes at *this* (later) moment the body of Christ, and what is at *this* moment a cup of wine becomes at *this* (later) moment the blood of Christ; the bread and the wine are not themselves annihilated (Verba consecrationis, quae divina virtute efficiunt quod significant, non poterant verificari nisi per hoc quod substantia panis transubstantiaretur in corpus Christi [et substantia vini in sanguinem Christi] [The words of consecration, which by the power of God effect what

they signify, are able to be verified only through the substance of the bread being transubstantiated into the body of Christ (and the substance of the wine into the blood of Christ)].

It follows that, within the perspective of the *ordered* power of God, the nature of the sacra-mental reality of the Eucharist requires the change or *conversio* of the substance of the bread and of the wine into the body and blood of Christ. The 'annihilation' thesis as sketched out above would entail that we were dealing with a *different* sacrament or 'mystery' (proinde fuisset *aliud* sacramentum vel mysterium), not with the Eucharist as it was actually instituted, that is, sacramentally structured, by Christ under God's ordering foreknowledge and will. (All citations in the above paragraphs are from volume 2 of Banez's *Commentarios Ineditos a la Tercera Parte de Santo Tomas*, pp. 276-277; my italics.)

Note: An examination of the text of Banez would, I believe, show that what has just been set out is an accurate account of what this author has to say in the course of commenting on 3. 75. 2 of the *Summa Theologiae*. The distinction between the *absolute* and the *ordered* power of God - *potentia Dei absoluta/ potentia Dei ordinata* (Banez's text uses the adjective "*ordinaria*") - that he takes from St Thomas is used by him to good effect in what amounts to the provision of a conceptual context for deploying the Angelic Doctor's principle that a thing is not able to exist where it did not exist before except either through a change of its location, or through the change of something else into it at a place where it did not exist before. The setting up of this context involves Banez's introduction and interpretation of views he attributes to Capreolus, Cajetan, and Ferrariensis, and is an initiative of evident worth in developing a metaphysical analysis of the way in which the body and the blood of Christ begin to exist under the appearances of bread and of wine in the sacrament of the altar. However, for certain problems associated with this initiative of Banez, see Note 13 of this chapter *infra*.

Change, presence, and language: A discussion by Ferrariensis

In the course of his commentary on the text of St Thomas in the *Summa contra Gentiles* 4. 63, Ferrariensis offers a valuably nuanced reflection on the Angelic Doctor's words "Necesse est tamen aliquid remanere ut verum sit quod dicitur, *Hoc est corpus meum*, quae quidem verba sunt huius conversionis significativa et factiva" ("It is necessary that something remain [after the consecration] in order that what is said, *This is my body*, be true: these are words that signify, and bring about, this [Eucharistic] change"). These words of the Angelic Doctor occur within the context of his arguing that, in the Eucharistic change, the whole substance of bread (the subject of the accidents of bread) becomes the whole substance of the body of Christ (which continues to be the subject of Christ's own natural accidents, whilst not becoming the subject of the bread's accidents).

What is provided below in translation is an unabridged version of the text of Ferrariensis [14]:

It should first be considered that, since a demonstrative pronoun, indicating something to sense and to intellect at the same time, always presupposes something subject to the senses and thus able to be pointed out, it cannot be said of a thing that *This is that* unless by the word "this" is being pointed out either an object that is sense-perceptible of itself (per se) or an object joined to what is sense-perceptible (aliquid sensibili coniunctum). If, then, nothing at all remained after the change [of bread] into the body of Christ, there would be nothing sense-perceptible by means of which the body of Christ could be pointed out, since sacramental being (esse sacramentale) cannot be perceived by the senses. So it is correct to say that it is indispensable that something pertaining to the bread (aliquid panis) remain in order that what is said, *This is my body*, be true.

Secondly, it must be considered from the teaching of St Thomas in [Scriptum super Sententiis] book 4, distinction 8, question 2, article 1, sub-question 4, (to)1, that what occurs in speech corresponds to what occurs in the intellect.

Now, just as in the intellect there is some or other concept (aliqua conceptio) that only *means* or *signifies* what is thought about, that presupposes the objective reality of this thing (quae...praesupponit entitatem rei) as being caused by it [15], so there is some or other concept that not only signifies, but also *brings about*, something (non tantum est significativa, sed etiam factiva rei). It is a *productive* concept (conceptio practica) which does not presuppose, but instead causes, the reality of something (quae entitatem rei non praesupponit sed causat). Correspondingly, there is speech that *means* or *signifies* only, and speech that both means, *and brings about*, the thing that is meant. The speech act *This is my body* is an instance of this: by divine institution it has the power of changing the substance of bread into the substance of Christ's body. Therefore these words are here rightly said to be significative of, *and productive of*, the change in question (*significativa et factiva praedictae conversionis*).

Thirdly, the following should be considered: The meaning of a total speech act is finalised in the uttering of the ultimate unit of speech (in prolatione ultimate particulae), in such a way that the meanings of the preceding parts are related to the meaning of the total speech act as *material* cause, not however as parts of the meaning adding up to the meaning of the total speech act.

But the meaning of the ultimate unit of speech has the nature of *formal* cause in relation to the preceding parts. The forementioned words [*This is my body*.] which both signify and bring about the change, signify it only in the ultimate instant of their being uttered, and they bring the change about precisely in that instant. So, at the beginning of the speech act, the word "this" cannot indicate the body of Christ because the substance of bread has not yet been changed into it. By the same token, it cannot in a determinate way indicate the substance of bread because then the meaning of the total speech act would be impeded - a meaning that is finalised in the ultimate instant of utterance in which the substance of bread is not present. So it is necessary, as St Thomas says *ibidem*, that [the word "this"] indicate something indistinct and non-definite (aliquid indistinctum et indeterminatum) that is common as involving each of the two [the bread and the body of Christ] indistinctly and potentially, but neither of them in an actually determinate way, viz. *This that I declare contained under these appearances...(hoc quod dico contentum sub iis speciebus)* takes on the sense: ...contained under these appearances is my body (contentum sub iis speciebus est corpus meum).

And, just as we say that the pronoun [*This...*] does not indicate something separately marked out, viz. the bread or the body of Christ, present at the time of the utterance of the pronoun *This*, only something indefinite and non-determinate (aliquid vagum et indeterminatum), so we must say of this word *is* that it does not determinately express present time measuring the utterance of the pronoun *This*, but present time measuring the final utterance of the total speech act. This is so because, in productive speech acts of this sort [the word *is*] joins the predicate to the subject with reference to that instant, just as a thing is brought about in that very instant through such speech acts (per tales locutiones).

- It is interesting to notice how much of what Ferrariensis, following St Thomas (refer *Scriptum super Sententiis* 4. 8. 2. 1. 4. [to] 1), has to say in the passage translated above has resonances in recent speech act theory - theory that owes much to J. L. Austin's *How to do Things with Words* (2nd edn 1975). In particular, Austin's distinction between locutionary, illocutionary, and perlocutionary acts is congenial to Ferrariensis' discussion of Thomas's phrase "quae... verba [hoc est corpus meum] sunt huius conversionis significativa et factiva". The act of uttering the words *This is my body* is the relevant significant (meaningful) *locutionary* act. The *illocutionary* act, that is, what is done *in* uttering these words, is *the expressing of an intention* to change the bread into the body of Christ. The *perlocutionary* act - the act *by* which (extra-linguistic) effects are brought about through the locutionary and illocutionary acts - is the actual bringing about of the change of the bread into the body of Christ.

In developing speech-act theory in his Expression and Meaning: Studies in the Theory of Speech Acts (1979) the contemporary American philosopher John Searle (an outstanding analytic philosopher, with a marked openness to issues in ontology) considered what he called "differences in the direction of fit between words and the world" (op. cit., p. 3; my italics). In the case of speech acts that are what Searle calls "performative" or "illocutionary", the purpose of the speech act is "to get the world to match the words" (ibid.; Searle's italics). This is surely the case (assuming the truth of traditional Eucharistic belief) with the speech acts 'This is my body', 'This is my blood', when these speech acts are performed in the context of the celebration of the Eucharist: the purpose of these speech acts in this context is to bring it about that bread and wine change to "match the words" by becoming the body and the blood of Christ. This is the "direction of fit" between these words and the world.

On the other hand, the purpose of *descriptive* propositions is, for Searle, to "get the words...to match the world" (ibid.; Searle's italics). So, in the case of the speech act "This morning the words 'This is my body', 'This is my blood' were uttered in the cathedral in the context of the celebration of the Eucharist", the concern is to "get the

words...to match the world". This is, clearly enough, a *different* "direction of fit" from the utterance of the same two sets of words by a priest within the Eucharistic celebration itself, with the intention of getting a part of the world - the bread and the wine - to "match the words" by becoming the body and the blood of Christ.

Searle's notion of "differences in the direction of fit between words and the world" is clearly congenial to the discussion by Ferrariensis about concepts and words that are 'significativa' only, and concepts and words that are not merely 'significativa' but also 'factiva', in relation to the change or *conversio* that sees bread and wine become the body and the blood of Christ in the sacrament of the altar.

A Note on the Thomistic position regarding 'Substance'

1. St Thomas's discussion:

Perhaps not surprisingly St Thomas spends no time in the texts cited above (*S. Theol.* 3. 75. 2; *Scriptum* 4. 11. 1. 1. [response to] 1; *S. c. Gent.* 4. 63) discussing, and justifying his use of, the notion of 'substance' in connection with the *substance* of the bread and of the wine that is to be changed into the *substance* of the body and of the blood of Christ. The context in which he was working simply assumed his position regarding this notion.

Texts may, however, readily be identified in which the Angelic Doctor discusses what he understands by the notion of 'substance'. Important texts are to be found in his commentary on book zeta of the *Metaphysics* of Aristotle:

Quoddam ens significat 'quid est et hoc aliquid', id est substantiam; ut per "quid" intelligatur essentia substantiae, per "hoc aliquid" suppositum, ad quae duo omnes modi substantiae reducuntur, ut in quinto est habitum. Illud vero significat qualitatem vel quantitatem, aut aliquid aliorum praedicamentorum. Et cum ens tot modis dicatur, palam est quod inter omnia entia primum est quod quid est, id est ens quod significat substantiam... Probat propositum...tali ratione. Quod est per se et simpliciter in unoquoque genere est prius eo quod est per aliud et secundum quid. Sed substantia est ens simpliciter et per seipsam: omnia autem alia genera a substantia sunt entia secundum quid et per substantiam: ergo substantia est prima inter entia.

(Lectio 1, nos 3 & 4)

(Taken one way, "being" denotes 'what-a-thing-is' [quid est] and 'this-something' [hoc aliquid]; that is, it denotes *substance*.

In this case, by "what-a-thing-is" is meant the essential nature of a substance, and by "this-something" is meant a complete substantial being [suppositum]. All modes of 'being a substance' are reduced to these two, was pointed out in book 5 [of Aristotle's *Metaphysics*].

Taken another way, however, "being" denotes quality or quantity or something belonging to the other categories.

Now, although being may be ascribed [to things] in many ways [tot modis dicatur], it is obvious that, amongst all beings, primacy goes to that-which-a-thing-is, i.e. to being as *substance*...[Aristotle] proves the point...with reasoning of this sort: what exists in its own right and absolutely [per se et simpliciter] in any class of things has priority over what exists dependently and relatively [per aliud et secundum quid]. But *substance* is being absolutely and in its own right, whereas all other kinds of being except substance are being only relatively and due to substance [secundum quid et per substantiam]. So substance is first when compared to all other modes of being.) [My emphases]

Thomas goes on to affirm that

as

Ex quo patet quod illa quae significant substantiam dicunt quid est aliquid absolute. Quae autem praedicant qualitatem non dicunt quid est illud de quo praedicatur absolute, sed quale quid. Et simile est in quantitate et aliis generibus.

(Lectio 1, no. 6)

(It is clear from this that words that signify 'substance' say what some thing is *absolutely*. Words that predicate a *quality* [of something] do not say what the thing is *absolutely* of which the quality is predicated, but what the thing is as *modified* [by a quality]. And it is a similar situation for *quantity* and for the other categories.) [My emphases)

Thomas argues further that

Ipsa substantia dicitur ens ratione suiipsius quia absolute significantia substantiam significant quid est hoc. Alia vero dicuntur entia non quia ipsa habeant secundum se aliquam quidditatem, quasi secundum se entia, cum non ita dicant absolute quid: sed eo quod *sunt talis entis*, id est eo quod habent aliquam habitudinem ad substantiam quae est per se ens; quia non significant quidditatem; inquantum scilicet quaedam sunt qualitates talis entis, scilicet substantiae, et quaedam quantitates, et aliae passiones, vel aliquid aliud tale quod significatur per alia genera.

(Lectio 1, no. 7)

(Substance is said to be being in virtue of itself because words signifying substance absolutely speaking are signifying the very 'whatness' of things. Other things are called real objects not because they have any 'whatness' on their own account, as though they were realities in their own right, since they fall short of 'whatness' in an absolute sense. They are regarded as real because they are of what is being-on-its-own-account, that is,

because of some relationship to *substance*, which is being of itself. They have no standing in terms of quiddity or 'whatness'; some of them are *qualities* of such-and-such a being, that is, of a substance; some of them are instances of *quantity*; some of them are other properties again, or something else of this sort signified through the other categories.) [My emphases]

Thomas also notes in Summa Theologiae 1. 90. 2c that

Cum fieri sit via ad esse, hoc modo alicui competit fieri sicut ei competit esse. Illud autem proprie dicitur esse quod ipsum habet esse quasi in suo esse subsistens: unde solae substantiae proprie et vere dicuntur entia. Accidens vero non habet esse sed eo aliquid est et hac ratione ens dicitur, sicut albedo dicitur ens quia ea aliquid est album. Et propter hoc dicitur in V11 *Metaphys*. quod accidens dicitur *magis entis quam ens*.

(Since *becoming* is the way something arrives at *being*, becoming belongs to a thing in the way in which being belongs to it. Strictly speaking, however, *that* is said *to be* which has its being as *subsisting* in it. So only *substances* are properly and truly called *beings*. On the other hand, an *accident* does not have being; rather, *by it* something exists [in a certain way] and, for this reason, being is said of it; as whiteness is called being because, by it, something *is* white. On account of this, book 7 of the *Metaphysics* [of Aristotle] states that an accident is more *of* a being than *a* being [in its own right].) [My emphases]

The account of 'substance' provided by the Angelic Doctor has a vigorously natural realism about it and, as is evident, draws heavily on what Aristotle has to say about substance in books delta and zeta of his *Metaphysics*. John Locke's concept of substance as some sort of inert, unchangeable, essentially unknowable substratum underlying the

so-called primary and secondary qualities of a thing seems far from the experiential facts [16]. David Hume's rejection of substance, that is. of an intrinsically continuing and independently existing reality, or principle of reality, as a "fiction" based on our habitually collecting ideas into groups, in their turn based on 'impressions' that cannot ground a knowledge of objective reality [17], would have seemed to St Thomas totally at odds with what human experience readily discloses to us. On the other hand, it seems reasonable to think that Thomas would have accepted that Peter Strawson's concept of *independent particular* - of something independently existing to which properties and activities can be "tied" - was equivalent to Aristotle's, and his own, notion of *first substance*: of *prote ousia* and *prima substantia* [18]. Again, it is reasonable to think that Thomas would have found congenial Thomas Sheehan's talking about 'substance' in terms of "the ontological realm of the in-itself-ness of objects", Timothy Suttor's use of the language of "out-there-in-itself-hood", and Richard Rorty's reference to substances as "centres of descriptive gravity" [19].

Of particular interest is the following excerpt from question 9, article 1 of St Thomas's *Quaestiones Disputatae de Potentia*:

Substantia quae est subiectum duo habet propria. Quorum primum est quod non indiget extrinseco fundamento in quo sustentetur sed sustentatur in seipso; et ideo dicitur subsistere, quasi per se et non in alio existens. Aliud vero est quod est fundamentum accidentibus sustentans ipsa; et pro tanto dicitur substare.

(A substance, which is a subject, has two distinctive features. The first of these is that it does not need any foundation or base extrinsic to it on which it is supported or maintained; rather, it is supported or maintained in itself, and so is said to subsist, as existing in its own right and not in something else. The second is that it is the foun-

dation or base for accidents and, to that extent, is said to sustain or support them.)

It should be noted that, for St Thomas, what is primary about substance is that it is a mode of real being supported or maintained in itself (in se), not in something else (in alio) as in a subject of inhesion. (This is a description of the 'internal structure' of a mode of real being that does not necessarily imply independence of external causal agents in connection with the actual existence [esse] of individual instances of this particular mode of being.) "De ratione substantiae est quod subsistit, quasi per se ens" ("It is of the nature of a substance that it subsists, as a being-in-its-own- right"), as Thomas puts it (*Scriptum* 2. 3. 1. 1), and adds (in the *S. c. Gentiles*, 1.25) that "Oportet quod ratio substantiae intelligatur hoc modo quod substantia sit res cui conveniat esse non in subjecto...et sic in ratione substantiae intelligatur quod habeat quidditatem cui conveniat esse non in alio" ("It is necessary that the concept of 'substance' be understood in this way: that a *substance* be something real to which it belongs to exist not-in-a-subject...so, in the concept of 'substance', it is understood that there is something that has a quiddity or nature to which it belongs to exist not-in-something-else").[My emphasis]

2. Two modern Thomists on 'Substance': Jacques Maritain and Filippo Selvaggi:

In his valuable propaedeutic to Aristotelico-Thomistic philosophy *An Introduction to Philosophy*, an eminent 20th century Thomist, Jacques Maritain, offered the following *modus tollendo tollens* argument in defence of the reality of substance:

It is evident that the idea of substance represents something which really exists. If no substance existed, no nature capable of existing in itself, all natures would be such as could exist only in something else. But in that case, since nature A could exist only in nature B and nature B only in nature C, there would be an infinite regression which could never reach a nature in which all those natures existed: they therefore could not exist.

(op. cit. pp. 169-70)

Maritain usefully sets out two conclusions at the end of his succinct, yet attractively technical, discussion of the metaphysics of substance and accident, viz. "A substance is a thing or nature whose property is to exist by itself, or in virtue of itself (per se) and not in another thing." (op. cit. p. 169), and "An accident is a nature or essence whose property is to exist in something else." (op. cit. p. 172). He adds that "...though an accident partakes, indeed, of being, it does not exist as a being; it is essentially of a being, ens entis, and capable of existence only as the complement or perfection of a being. Thus the word being is predicable of the accident only in a secondary and indirect sense..." (ibid.; Maritain's italics) [20]

In relation to the substance – accident ontology, St Thomas nowhere asserts that we somehow start off discovering accidents, that is. clusters of sense-perceptible features, and then go on to *infer* the existence of something upholding these accidents or features. On the contrary, for him there is a natural or spontaneous 'openness' of distinctively human consciousness to the 'quid est et hoc aliquid' - the 'what-a-thing-is-and-thissomething' - of the realities with which we are constantly engaged. In this sentioconceptual engagement, we are dealing from the start with objects disclosing themselves to us as things-in-themselves existing in their own right (things existing in se or per se -Thomas uses the prepositional phrases interchangeably) and simultaneously as things intimately combined with features whose whole being is to-be-in-those-things as in their sustaining subjects (features existing in alio or in subjecto). From this point of view, the world may be understood as a world of states of affairs involving substances and their accidents, with each state of affairs bound up with no end of other (substance/accidents) states of affairs, giving rise (on the basis of causal, spatial, temporal, and other, e. g. likeness, relations) to situations that, in the final resolve, are cosmic in their scope. This catches something of what Wittgenstein has to say in the Tractatus (2.011) when he remarks that "Es ist dem Ding wesenlich, der Bestandteil eines Sachverhaltes sein zu konnen" (It is essential to any thing at all that it should be able to be a constituent of a state of affairs).

Within the Thomistic tradition, the point made earlier about our knowledge of 'substance' was made in a more detailed way several decades ago by Filippo Selvaggi, S.J., then professor of cosmology at the Gregorian University, Rome, in the course of contributing to a fascinating and protracted debate that dealt with the Eucharistic presence of Christ and the concept of 'material substance' [21]. In his third (and final) contribution to this exchange (*Gregorianum* 38 [1957], pp. 503-14) Selvaggi commented that

La sostanza materiale...è sensibile *per accidens*, e questo propriamente in due sensi. Il primo senso è in quanto la sostanza materiale appartiene all'oggetto materiale dei sensi; il senso, infatti, non conosce gli accidenti separati dalla sostanza, non conosce il colore, ma il colorato, cioè l'ente concreto composto di sostanza e accidenti. Il secondo senso del sensibile per accidens è che la sostanza materiale è oggetto della conoscenza intellettiva direttamente e immediatamente ottenuta dal sensibile per se. L'affermazione della sostanza non è frutto di ragionamento; il ragionamento è richiesto solo per conoscere chiaramente la distinzione reale fra sostanza e accidenti o l'essenza specifica di essi o per difendere l'esistenza della sostanza contro i suoi negatori... Invece il concetto generico e l'esistenza della sostanza materiale sono conosciuti immediatamente dall'intelletto attraverso i sensi, con un'intuizione propriamente detta, con una conoscenza intellettuale sperimentale... (op. cit. p.506)

(Material substance is indirectly sense-perceptible, and this strictly in two senses. The first sense concerns material substance to the the extent that it belongs to the thing that is the object of the senses. A sense power does not in fact know accidents in separation from substance - the [sense of sight] does not know

colour but *a coloured thing*; that is, the concrete reality composed of substance and accidents.

The second sense of 'indirectly sense-perceptible' is that material substance is the object of intellective knowledge that is immediately and directly drawn from what is essentially (per se) sense-perceptible. The affirmation of substance is not the outcome of reasoning. Reasoning is called for only to know clearly the objective distinction between substance and accidents, or [to know] their specific natures, or to defend the existence of substance against those who deny it...Rather, the general concept, and the existence, of material substance are known at once by the intellect through the [activity of] the senses, with an intuition strictly so called, with an experiential intellectual knowing.)

Clearly, the sort of knowledge of substance that is endorsed by St Thomas and philosophers within the Thomistic tradition requires that intellect and intellective knowledge, on the one hand, be distinguished from the senses and sensory knowledge, on the other. (One must suspect, in fact, that a failure to understand, and draw on, this distinction lies behind much of the empiricist attack, e.g. from Locke and Hume, on the notion of 'substance'.) This distinction is upheld in a number of places in the writings of the Angelic Doctor, but in a particularly direct and concise way in book 2, chapter 66, of his *Summa contra Gentiles*. Three short citations are offered from this chapter which is entitled "Contra ponentes intellectum et sensum esse idem" ("Against those asserting the identity of intellect and sense-power"):

Sensus non est cognoscitivus nisi singularium: cognoscit enim omnis sensitiva potentia per species individuales, cum recipiat species rerum in organis corporalibus. Intellectus autem est cognoscitivus universalium, ut per experimentum patet. Differt igitur intellectus a sensu.

(A sense power is able to know only what is individual, since every sense power knows by means of presentative forms [22] that make present only individual objects, due to its receiving the appearances of things in physical structures or organs.

The intellect, however, is able to know universal objects, as experience discloses. Intellect, then, differs from sense power.)

Cognitio sensus non se extendit nisi ad corporalia. Quod ex hoc patet quia qualitates sensibiles, quae sunt propria obiecta sensuum, non sunt nisi in corporalibus; sine eis autem sensus nihil cognoscit. Intellectus autem cognoscit incorporalia: sicut sapientiam, veritatem, et relationes rerum. Non est igitur idem intellectus et sensus.

(Sense knowledge extends only to what is physical or material. This is evident from the fact that sense-perceptible features - the distinctive objects of the senses - are found only in what is physical or material and, without them, a sense power knows nothing. Intellect, on the other hand, knows non-physical and immaterial objects - wisdom, say, or truth, or the relations between things. Therefore intellect and sense powers are not the same.)

Nullus sensus seipsum cognoscit, nec suam operationem; visus enim non videt seipsum, nec videt se videre, sed hoc superioris potentiae est, ut probatur in libro *De Anima*. Intellectus autem cognoscit seipsum, et cognoscit se intelligere. Non est igitur idem intellectus et sensus.

(No sense power knows itself or its own activity. Sight, for example, does not see itself, nor see that it sees, since this belongs to a more

excellent power, as [Aristotle] proves in his book *On the Soul*. But the intellect knows itself and knows itself to be thinking. So intellect and sense power are not identical.)

In drawing a real distinction between intellect and intellective knowing, on the one hand, and sense powers and sensory knowing, on the other, St Thomas was always careful to avoid the error of turning these cognitive powers of a human being into quasi 'knowing subjects' or agents. A passage from his *Quaestiones Disputatae de Veritate* (*Disputed Questions on Truth*) will help to bring this out:

Homo cognoscit singularia per imaginationem et sensum, et ideo potest applicare universalem cognitionem quae est in intellectu ad particulare: non enim proprie loquendo sensus aut intellectus cognoscit sed homo per utrumque.

(op. cit. qu. 3, art. 6, [to] 3)

(A human being knows individual things by means of imagination and sense powers, and so can apply knowledge that is universal or general in the intellect to particular instances [of something]; because, strictly speaking, neither sense power nor

intellect 'knows' but the human being through both of them.)

[My emphasis]

Summary

This chapter has been concerned to consider within a Thomistic perspective a number of philosophical issues arising out of the doctrinal-theological claim that the substances of the bread and of the wine do not remain in the sacrament of the Eucharist *post consecrationem*, but are replaced by the substance of the body and blood of Christ. After local motion had been rejected as a possible way of bringing about the requisite change affirmed to take place on the altar, considerable attention was paid to the metaphysics of

a change that would involve the whole substance (matter as well as form) of the components of the bread and wine becoming the whole, pre-existing, substance of the body and blood of Christ. Questions concerning the hylomorphic composition of material substances (with related consideration of the principle of invididuation), and questions concerning the effective range of limited, as opposed to unlimited, causal agency, were raised in connection with this mode of change. The logic of language that "both signifies and brings about" change was considered, citing Ferrariensis, and the crucial metaphysical issue of the reality and nature of *substance* was addressed, drawing on texts from St Thomas, Maritain, and Selvaggi.

With the dialectical upshot of the chapter being that the substances of the bread and of the wine do not remain on the altar *post consecrationem*, the way has been opened to examining what *does* happen to them. St Thomas commences this examination by asking in the *Summa Theologiae* 3. 75. 3 whether they are annihilated, or are reduced to matter in an earlier state.

NOTES

1. The Latin text of the translated excerpt from 3. 75. 2 of the *Summa Theologiae* is the following:

Quidam posuerunt post consecrationem substantiam panis et vini in hoc sacramento remanere. Sed haec positio stare non potest. Primo quidem quia per hanc positionem tollitur veritas huius sacramenti, ad quam pertinet ut verum corpus Christi in hoc sacramento existat. Quod quidem ibi non est ante consecrationem. Non autem aliquid potest esse alicubi ubi prius non erat nisi per loci mutationem vel per alterius conversionem in ipsum: sicut in domo aliqua de novo incipit esse ignis aut quod illuc defertur, aut quod ibi generatur. Manifestum est autem quod corpus Christi non incipit esse in hoc sacramento per motum localem. Primo quidem, quia sequeretur quod desineret esse in caelo: non enim quod localiter movetur pervenit de novo ad aliquem locum nisi deserat priorem. Secundo, quia omne corpus localiter motum pertransit omnia media: quod hic dici non potest. Tertio, quia impossibile est quod unus motus eiusdem corporis localiter moti terminetur simul ad diversa loca: cum tamen in pluribus locis corpus Christi sub hoc sacramento simul esse incipiat. Et propter hoc relinquitur quod non possit aliter corpus Christi incipere esse de novo in hoc sacramento nisi per conversionem substantiae panis in ipsum. Quod autem convertitur in aliquid, facta conversione, non manet. Under relinquitur quod, salva veritate huius sacramenti, substantia panis post consecrationem remanere non possit.

2. It is interesting to reflect that the movement of Christ's body from heaven onto the altar - were it to be possible and to occur - would, in the light of St Thomas's arguments cited above affirming the full physical reality of His post-resurrection body, be subject to the requirements of Riemannian four-dimensional geometry (as, indeed, would be

Christ's bodily ascension into heaven). That is to say, it would be specified using three spatial co-ordinates and one time co-ordinate, and be describable by a curved 'world line' or geodesic in this space-time co-ordinate system.

- 3. The adjective "accidental" (from the Latin "accidentalis") is derived from the noun "accident" (from the Latin "accidens"). This noun is used strictly in Thomistic philosophy and theology to designate any attribute or feature of a thing, e.g. its colour or its action, that is distinct from the substance or nature of a thing, e.g. from its being a cat or a neutrino. In this technical usage, neither the noun nor the derivative adjective carries any reference to happenings that are unintended or distressingly serious.
- 4. How it is possible for the natural substance-subject (Aristotle's *hupokeimenon*) to cease, and for its related accidents to continue, and what factors are involved in this situation, are issues considered at some length by St Thomas in question 77 of the third part of the *Summa Theologiae*. The thesis will touch on these issues when referring to question 3.75. 5 (Utrum in hoc sacramento remaneant accidentia panis et vini? [Do the accidents of the bread and of the wine remain in this sacrament?].
- 5. A. <u>Hylomorphism</u>. In his comments about the nature of the change of the whole substance of bread and wine into the body and blood of Christ, St Thomas makes use of the central concepts of *primary matter* and *substantial form*, i.e. of the doctrine known technically as 'hylomorphism' (matter/form-ism'), from the Greek 'hule' [matter] and 'morphe' [form], that he took from Aristotle (cf. in particular book 1 of the *Physics*, and book 7 of the *Metaphysics*, of Aristotle; see also Thomas's commentaries on these books).

The conceptual apparatus of 'matter' and 'form' is not, as both Aristotle and St Thomas were well aware, something remote from the ordinary experience of human beings. In talking about *primary matter* (hule, materia prima) Aristotle and St Thomas were drawing attention to the basic materiality of material things - their proto matter or basic reality as material things. In talking about substantial form (morphe, forma substantialis),

they were drawing attention to what, as an intrinsic principle, imparts specific determinateness to this or that 'parcel' of primary matter'.

The basic materiality or proto matter is the intrinsic factor making things material in the first place, and characteristic of it is its capacity to make things radically mutable, that is, able to change fundamentally in terms of the kinds of things they are. The sort of change envisaged here is change that affects the very identity of material things - change from being alive to being dead, say, or from being non-living, for example, cooked food, to being living cells and tissues in an organism that has ingested this food. Moreover, there is every reason to go beyond ordinary experience here to invoke the whole sweep of changes from one kind of thing into another kind of thing (or other kinds of things) that, for example, affect elementary particles in pair production of an electron and a positron through the interaction of a photon with the electric field of an atomic nucleus; or changes involving chemical reactions that give rise to different chemical substances, for example, sodium and water combining to form hydrogen plus sodium hydroxide.

It may be added that the phrase "basic materiality" fits readily with the idea of hylomorphism's being extended to include the reality of the quantum vacuum, that is. of the set of quantum fields corresponding to all the possible states of matter, though at their lowest energy levels. In terms of hylomorphism, each state of matter constituting a quantum field itself involves basic materiality (materia prima) and substantial form. Under the agent causality of ceaseless 'quantum fluctuations' parts of this field are constantly being constituted as virtual particle – anti particle pairs corresponding to the relevant quantum field, for example, as pairs of virtual electrons and anti-electrons (positrons), or virtual quarks and anti-quarks. These virtual particles are themselves composed of basic materiality and substantial form, and come into existence and disappear from existence within time frames of the order of millionths of a second.

The capacity of material things for fundamental change, familiar to Aristotle and St Thomas and human beings everywhere (without the elaborate trappings of the sciences) is what might be called the essential *plasticity* of matter at its most basic level - at the

level of proto matter - which makes matter endlessly changeable into different sorts of things. The *basic materiality* of material things is, then, the factor or component that abides throughout changes affecting the very nature or substantial identity of a material thing, and is the underlying subject that is the receptive principle of these changes.

But material things exist as things of this or that specific kind, for example, as hydrocarbons, muons, horses or cabbages; hence the receptive principle and underlying subject that is basic materiality takes on through the activity of extrinsic causes the many distinctive forms of material being that make up the Universe. In addition, then, to the receptive, substantially malleable principle that is basic materiality (Aristotle's hule, Thomas's materia prima) there is an exigency for material realities to have an intrinsic actualising or determining principle - a substantial determinant of matter imparting a specific nature to this or that amount or 'parcel' of basic materiality or proto matter belonging to the Universe. The point is that individual material things are always 'specified' in the sense of belonging to a specific kind: they are atoms of lead, say, or lipoproteins, or emus. And form, taken as such, is always what 'specifies' or puts a thing into a determinate class, makes it to be of a certain kind. Aristotle called this component of material things morphe, and St Thomas called it forma substantialis. In consequence, material things are understood within the perspective of Aristotelico-Thomistic hylomorphism to be essential composites of (1) the factor of basic materiality as intrinsic principle of receptivity and as abiding subject of change, that is, primary matter, and (2) a substantial intrinsic determinant of this basic materiality, imparting to it a specific nature as an individual material thing of this or that kind, that is. a substantial form.

It follows from this account that basic materiality or primary matter is also the substantial principle of individuation in material things. Substantial form plays a constitutive role in that it actualises (through what the Scholastics called "inessendo") the receptivity or potentiality of basic materiality - of primary matter - to become some or other *kind* of material thing. It is basic materiality or primary matter (materia prima) that provides the possibility of there being *individual instances* of this or that kind of material thing by being the receptive subject of each such actualisation. Put differently, the existence of

individual, that is. *numerically* distinct, entities, in the case of material substances, has as a condition of possibility the presence within these things of basic materiality or primary matter as the material cause or subject of the species-determining component that is substantial form.

When commenting on Aristotle, St Thomas neatly rounds off this account by noting, *inter alia*, the part played by *dimensive quantity* in combining with the substantial factor that is basic materiality to individuate material substances (but cf. *infra*):

[Aristoteles dicit] quod quaedam sunt unum numero, quaedam specie, quaedam genere, quaedam analogia. Numero quidem sunt unum quorum materia est una. Materia enim secundum quod stat sub dimensionibus signatis est principium individuationis formae. (*In V Metaph.* Lectio 8, no. 876)

([Aristotle states] that some things are one in number, some in species, some in genus, and some on the basis of analogy. Those things are one in number whose matter is one, since matter, to the extent to which it exists under designated dimensions, is the principle of the individuation of form.)

B. The Principle of Individuation. Presuming, and invoking, the doctrine of hylomorphism is what the three major contributors to Scholastic metaphysics - Thomas Aquinas, Duns Scotus, and Francisco Suarez - have to say about the 'principle of individuation' in the case of material substances. This issue of the individuation of material substances is one of the most vexed questions dealt with in Scholastic philosophy, and answers to this question necessarily underlie much of what the Scholastic doctors have to say about the metaphysics of the Eucharistic prescence. This metaphysics is compelled to conceptualise, and argue about, substances that are *individuated*, viz. the physical components of bread and of wine, and the (unitary) substances of the body and blood of Christ. It must also conceptualise, and argue about, the accidents of all of these substances, which are themselves individuated by the

(individual) substance-subjects in which they inhere and, in the case of the accidents of bread and wine *post consecrationem*, upheld in being as individual by the power of God. Thomas makes this last point with terse lucidity (*S. Theol.* 3. 77. 1. [to] 3

Huiusmodi accidentia [sc. panis et vini] acquisierunt esse individuum in substantia panis et vini: qua conversa in corpus et sanguinem Christi, remanent virtute divina accidentia in illo esse individuato quod prius habebant. Unde sunt singularia et sensibilia.

(The accidents of this sort [viz. of the bread and wine] acquired individual being in the substance of the bread and the wine. When this is changed into the body and blood of Christ, these accidents remain by divine power in the individuated existence they previously had. So they [remain] individual and sense-perceptible.)

The positions of Thomas Aquinas, Duns Scotus, and Francisco Suarez on the 'principle of individuation' are briefly sketched out below.

1. For St Thomas, as we have seen, the individuating principle of material substances is primary matter, designated or 'marked off' by dimensive quantity, giving rise (as material cause) to *this* numerically distinct substance, as opposed to *that* numerically other substance. To repeat part of an earlier citation from Thomas's commentary on book delta of the *Metaphysics* (lectio 8, no. 876):

Numero quidem sunt unum quorum materia est una [Aristotle's "Arithmo (estin en) hon he hule mia", 1016b 32]. Materia enim secundum quod stat sub dimensionibus signatis est principium individuationis formae.

(Those things are one in number whose matter is one since matter, to the extent to which it exists under designated dimensions, is the principle of the individuation of form.)

A further statement (one of many) of Thomas's position regarding the principle of individua-tion of material substances may be found in his commentary on the *De Trinitate* of Boethius (qu. 4, a. 2, [to] 4):

Illa quae differunt numero in genere substantiae non solum differunt accidentibus sed etiam materia et forma. Sed, si quaeratur quare haec forma differt ab illa, non erit alia ratio nisi quia est in alia materia signata. Nec invenitur alia ratio quare haec materia sit divisa ab illa nisi propter quantitatem. Et ideo materia subiecta dimensioni intelligitur esse

principium huius diversitatis.

(Things that differ numerically in the genus of 'substance' differ not only in their accidents but also in their matter and form. But should inquiry be made as to why *this* form differs from *that*, no other reason will be found apart from its existing in a different [amount of] designated matter. Nor will any other reason be found why *this* [amount of] matter is separated from *that* apart from dimensive quantity. So it is *matter as subject to dimensions* that is understood to be the principle of [numerical] diversity.) [My emphases]

For a masterly presentation of Thomas's position on the principle of individuation, with careful attention to variations in Thomas's conceptualising of the role of dimensive quantity in the individuating of material substances, reference should be made to John Wippel's *The Metaphysical Thought of Thomas Aquinas*, pp. 351-375 (cf. bibliography *infra*). This account is arguably definitive as far as the critical study of Thomas's texts on the individuation of material substances is concerned.

2. The Angelic Doctor's account of the principle of individuation of material substances was quite unacceptable to Duns Scotus (c. 1265-1308). The great Franciscan doctor took the view that nothing at all on the side of the *nature* of a thing - whether matter or form or the composite of matter and form - could be what individuated a material substance. Scotus's reasoning was that anything on the side of the nature of a thing was of itself indifferent to being this or that individual instance of the nature or essence concerned (as well as indifferent to being 'predicable of many' when considered abstractly by the mind) (Omnis entitas quiditativa - sive partialis sive totalis - alicuius generis est de se indifferens ut entitas quiditativa ad hanc entitatem et illam). Moreover, the nature of a thing has its own distinctive unity (unitas propria) qua nature that is less than numerical unity (minor unitas quam sit unitas numeralis), albeit real or objective (et est realis). For Scotus, then, what brings about the *numerical* unity of a thing - the numerical unity of every entitas quiditativa -is a formally distinct component or factor that Scotus calls entitas individualis or entitas singularis. As would follow from what was said above, this component or factor is neither primary matter nor substantial form nor the composite substance itself, but is additional to the *entitas naturae* - the entity of a thing *qua* nature. It is a positive reality or act that completes or 'seals' an instance of a specific nature, e.g. of a tree or a molecule of sodium silicate, rendering it ontologically incommunicable to other instances of the same specific nature, and to instances of any other substantial nature whatsoever. It is what the Subtle Doctor calls (in his Opus Oxoniense) the ultima realitas entis: a being's 'ultimate reality', and what on several occasions in the Reportata Parisiensia and the Quaestiones in libros Metaphysicorum he calls haecceitas or 'thisness'. (In his important Medieval Philosophy [revised edition 1982], the noted historian of medieval philosophy Armand Maurer comments [p. 412] that "The term haecceitas appears several times in the printed works of Scotus, although its authenticity has been questioned. In any case, it was used widely by followers of Scotus.") For Scotus,

therefore, each substance includes two formally distinct components or 'realities' that fall short of being *things* (nec possunt istae duae realitates esse res et res), one of which is the 'entity of a *nature*' (entitas naturae), and the other the 'entity of singleness' (entitas singularitatis), this latter being the principle of individuation of material substances.

The relevant implication here is that because, according to Scotus, St Thomas is in error in invoking primary matter under dimensive quantity as the principle individuating material substances, his argument (in *S. c. Gentiles* 4. 63) making use of this principle to show that no finite agent could change one whole substance-subject into another preexisting whole substance-subject - the very situation, according to St Thomas, involved in the Eucharistic change or 'conversio' - is to be rejected.

(The bracketed Latin citations above are excerpted from the *Opus Oxoniense* (or *Ordinatio*), book 2, distinction 3, nos. 172, 175, 187-88. I use the Latin text as published in W. Frank and A. Wolter's *Duns Scotus, Metaphysician*. This Latin text is excerpted from the Wadding-Vivès edition of the works of Scotus, and corresponds to volume 7 (nos. 476, 477-78, 483-84) of the Vatican edition of Scotus's works being published by the Scotus Commission, Rome.)

3. In disputation 5, section 6, paragraph 1, of his great work entitled *Disputationes Metaphysicae* (the first systematically comprehensive and 'free standing' treatise in Scholastic metaphysics to be published) Francisco Suarez (1548-1617) took the view that "every entity is, by itself, the principle of its own individuation" (...unamquamque entitatem per seipsam esse suae individuationis principium). Consistently with this view, he taught that "[primary matter] is individuated in its own reality, and the basis of such oneness is the very entity [of primary matter] by itself, according as it is in reality without any extrinsic addition" (...[primam materiam] esse in se individuam, et fundamentum talis unitatis esse entitatem eius per seipsam, prout est in re absque ullo extrinseco superaddito) [ibid., par. 2]. It was a similar case for substantial form: "Substantial form is intrinsically a *this* by its very entity, from which its individual difference is derived in respect of its ultimate level or reality" (...formam substantialem esse hanc intrinsice per

suammet entitatem a qua secundum ultimum gradum seu realitatem sumitur differentia individualis eius) [ibid., par. 5]. Consequently: "It must be said that, in a composite substance, and as such-and-such a composite, the sufficient principle of individuation is this matter and this form combined with each other. Relative to these two, the more important principle is [substantial] form, which suffices on its own for this composite reality, qua an individual thing of such-and-such a kind, to be reckoned as numerically one" (dicendum est in sub- stantia composita, ut tale compositum est, adaequatum individuationis principium esse hanc materiam et hanc formam inter se unitas, inter quas praecipuum principium est forma, quae sola sufficit ut hoc compositum, quatenus est individuum talis speciei, idem numero censeatur) [ibid., par. 15]. (The bracketed Latin citations are from volume 25 of the 28 volume Vivès edition of the works of Suarez, published in Paris 1856-78.)

In connection with the Angelic Doctor's argument (*S. c. Gentiles* 4. 63) that no finite cause can bring it about that *this* whole substance (each component of the bread and of the wine) becomes *that* pre-existing whole substance (the body and blood of Christ), because the causal activity of a finite agent presupposes, but does not produce, primary matter which, as 'marked off' by dimensive quantity, is the individuating principle of material substances, it is interesting to reflect that Suarez's position - essentially that "every entity is by itself the principle of its own individuation" - would entail even more strongly that no finite agent could bring about the change or 'conversio' affirmed to take place on the altar when the Eucharist is duly celebrated. Indeed, on Suarez's showing it would appear that the causal activity of finite agents is restricted only to bringing about changes of *accidents* in self-individuating material substances.

- 6. See the development of this point by Ferrariensis later in this chapter. For Ferrariensis, cf. Note 17, chapter 2 *supra*.
- 7. Banez, Comentarios Ineditos a la Tercera Parte de Santo Tomas, volume 2, p.276.

8. I use here (as previously in Note 31 of chapter 2 *supra*) Timothy McDermott's translation of the relevant Latin adjective as "ordered" (cf. his *Summa Theologiae*: *A Concise Translation*, p.61). "Ordered" captures well Thomas's point that 'potentia ordinata' (Banez uses the adjective "ordinaria") is God's power considered in relation to His ordering foreknowledge and will - "Ipsum facere subjacet [divinae] praescientiae et praeordinationi", in Thomas's own words (*S. Theol.* 1. 25. 5. [to] 1). In connection with this important distinction made by the Angelic Doctor, cf. also what was said in Note 31, chapter 2 *supra*.

To dwell for a moment on this centrally important - and recurring - notion of 'divine power':

It should be remembered that St Thomas is concerned to attribute only *active* power to God. For him, God has no *receptive* or *passive* power or capacity whatsoever in relation to the activity of any other agent, since there is no trace of receptivity or potentiality in God (*In Boeth. De Trinitate* 5. 4. [to] 2; *Summa c. Gent.* bk 2, chap. 7; *Summa Theol.* 1. 9. 1c; *Comp. Theol*, chap. 4).

Again, Thomas's claim about the power of God does not extend to the claim that God can do *formaliter* absolutely everything that other agents can do. He would, for example, reject the statement that God could open the batting in a Test match (given that what this situation involved had been explained to him), since such a statement would imply God's having a body, therefore being affected by potentiality, and hence falling short of the *esse infinitum* intrinsic to the divine nature (cf. *Summa Theol.* 1. 7. 1 c.; *Comp. Theol.* chaps 18 and 20). The same would hold for God's not being able to sin, since the capacity to sin involves the capacity to fall short of the perfect goodness that is intrinsic to God's nature (*Summa Theol.* 1. 25. 3 [to] 2; cf. also St Anselm's acute argument in *Proslogion*, chap. 7).

For Thomas, the power of God is an unrestricted active energy - a *virtus* - to bring about whatever can exist, that is, whatever involves no logical impossibility in relation either to the thing itself or to the nature of God. This *virtus* is due to God's having unrestricted

being - esse infinitum - and to an agent's being able to act to the extent to which that agent is itself in actuality - in actu. This is the potentia Dei absoluta. Since God's actually bringing things into existence engages divine foreknowledge and will, Thomas speaks of this state of affairs as being an exercise of the potentia Dei ordinata - the power of God seen within the perspective of this divine foreknowledge and intention.

An additional text (without comment): Compendium Theologiae, chapter 19

Virtus consequitur essentiam rei: nam unumquodque secundum modum quo est agere potest. Si igitur Deus secundum essentiam infinitus est, oportet quod eius virtus sit infinita. Hoc etiam apparet si quis rerum ordinem diligenter inspiciat. Nam unumquodque quod est in potentia, secundum hoc habet virtutem receptivam et passivam; secundum vero quod actu est, habet virtutem activam. Quod igitur est in potentia tantum, scilicet materia prima, habet virtutem infinitam ad recipiendum, nihil de virtute activa participans; et supra ipsam quanto aliquid formalius est, tanto id abundat in virtute agendi; propter quod ignis inter omnia elementa est maxime activus. Deus igitur, qui est actus purus, nihil potentialitatis permixtum habens, in infinitum abundat in virtute activa super alia.

(Power is consequential upon the essence of a thing, since anything at all is able to be active along the lines according to which it exists.

If, then, God is infinite in terms of essence, it must be the case that divine power is infinite. This point is also clear to anyone who carefully considers the order of things. After all, everything that is in potentiality has, in terms of this, a receptive and passive capacity; in terms of its being in actuality, however, it has an active capacity or power. So, what is in potentiality only, namely

primary matter, has an inexhaustible capacity of receptivity, given that it has no share at all in active power. And the more something is above [prime matter] by having more of form about it, to that extent does such a thing abound in the power to make or do. For this reason, fire is the most active of all the elements. It stands to reason, then, that God, who is actuality only, having no trace of potentiality about Him, abounds above all others to infinity in active capacity or power.)

- 9. For Ferrariensis, see Note 17, chapter 2 *supra*.
- 10. Capreolus, John (c.1380-1444) was a French Dominican, and notable fifteenth century Thomist philosopher and theologian, widely known as the 'princeps Thomistarum' 'prince of Thomists'. His most important work was his *Defensiones Theologiae Divi Thomae Aquinatis*. This was a wide-ranging study of the teaching of St Thomas that reflected the order established by Peter Lombard in his *Sententiarum Libri Quattuor*, an order earlier followed by the Angelic Doctor in his *Scriptum super Sententiis Petri Lombardi*. This work of Capreolus included extensive consideration of, and detailed responses to, arguments of thinkers such as Henry of Ghent, Petrus Aureolus, Duns Scotus, and Durandus, who were opposing positions adopted by St Thomas. (For a valuable recent approach to the work of Capreolus, cf. Edward P. Mahoney's 'The Accomplishment of Jean Capreolus, O.P.' *The Thomist*, 68 [2004], p. 601 ff.)
- 11. Comentarios Ineditos a la Tercera Parte de Santo Tomas, volume 2, p. 276.
- 12. Cajetan, Thomas de Vio (1469-1534) was one of the chief contributors to the resurgence of Thomistic philosophy and theology in the sixteenth century. He served as Master General of the Dominican Order for ten years (1508-18), was created Cardinal in 1517, represented Pope Leo X in discussions with Martin Luther in 1518, and became Bishop of Gaeta, his birthplace, in 1519. He had previously lectured for some time in

Padua where he had defended Thomism against attacks from the followers of Averroes and of Scotus.

The entry on Cajetan in the *Oxford Dictionary of the Christian Church* (3rd edition, 1997) notes that "In philosophy and theology his acute Commentary on St Thomas' 'Summa Theologiae' (1507-22) was the first monument of a great revival of Thomism in the 16th century, and remains today one of the chief classics of scholasticism." In his *Medieval Philosophy* (2nd edition, 1982) Armand Maurer states that "The revival of scholasticism at the end of the nineteenth century, initiated by Pope Leo X111, brought Cajetan into prominence, and he has exercised a deep influence on modern Thomism" (p.349). His commentaries on the *Peri psukhes* of Aristotle and the *De Ente et Essentia* of St Thomas, together with his study of the Thomistic doctrine of analogy in his *De Nominum Analogia*, should particularly be kept in mind when assessing this influence.

13. It should be stated that a careful search of Banez's reference to Capreolus (in 4. d.11, qu.1 *ad primum Scoti contra tertiam conclusionem*) failed to turn up any statement/s that would unequivocally support Banez's firm claim that "hoc ipsum opinator esse probabile Capreolus" - that Capreolus regarded as 'probable' the thesis that not even within the perspective of the *absolute* power of God could there be any other way for the presence of Christ's body in the sacrament of the altar to begin than through a change of location (its coming from heaven), or through the substance of bread being changed into it on the altar. It must also be said that a careful search of the commentary of Ferrariensis on book 4, chapter 63, of the *Summa contra Gentiles* was no more successful in turning up any statement/s that would provide an explicit endorsement of Banez's strong claim about the opinion of Ferrariensis on this same matter.

I must, therefore, call in question what Banez had to say regarding the views of several Thomistic commentators about possible ways in which Christ might become present on the altar when the Eucharist is celebrated. My conjecture is that Banez adopted his particular mode of presentation in order to contrast quite sharply the positions of Capreolus and Ferrariensis, on the one hand, with the position of Cajetan, on the other,

with a view to facilitating a deeper insight into the possible ways in which Christ could become present on the altar which might be gained by drawing on the conceptual resources provided by a distinction between the *absolute* power of God and God's *ordered* power.

However, Bañez certainly appears to be correct in attributing to Cajetan the view that God could, in His absolute power, bring about the presence of Christ's body in the sacrament of the altar without changing bread into Christ's body or without a change of location affecting His body (cf. Cajetan's commentary on 3. 75. 2). Cajetan's text includes the following important introductory comment:

Praemittendum est quod non est hic quaestio de divina potentia, non enim ad hunc tractatum haec spectat quaestio, sed quaerimus quid institutus ordo causarum habeat. Unde, cum dicitur in littera *Impossibile est* etc., non est sermo de impossibili secundum divinam potentiam absolute, sed secundum potentiam ordinatam, secudum quam attenditur possibile vel impossibile in ecclesiasticis mysteriis.

(Leonine edition, Rome, 1906, vol. 12, p. 162)

(A prefatory remark is that there is no inquiry here regarding [the nature of] divine power: this issue is not one for the present treatise. Rather, we are inquiring about what the appointed causal order actually involves. So, when such words as *It is impossible* etc., are used in the text [of St Thomas], the topic is not what is impossible in terms of divine power taken *absolutely*, but in terms of *ordered* divine power. This is so because it is the 'possible' or the 'impossible' in the mysteries *entrusted to the Church* that is being attended to.) [My emphases]

- 14. Cf. volume 15, p.205 (column 2), of the Leonine edition of the *Summa contra Gentiles* for the Latin text of Ferrariensis.
- 15. My translation assumes that the Latin phrase in the text of Ferrariensis "utpote ab *ipso* causata" includes a typographical mistake, and should read "utpote ab *ipsa* causata", with the gender of the pronoun (*ipsa*) in agreement with the feminine gender of the noun "entitas" (occurring in the phrase "...praesupponit *entitatem* rei"), as obviously required by the sense of what Ferrariensis is saying.
- 16. For John Locke on 'substance', see his *An Essay Concerning Human Understand-ing* (two vol. edition, London, 1961). Volume 1, book 2, chapter 23 (pp. 244-264) and chapter 24 (pp. 264-265), and volume 2, book 3, chapter 6 (pp. 42-71), contain Locke's principal discussions of 'substance'.
- 17. For David Hume on 'substance', see his *A Treatise of Human Nature* (2nd edition, revised Oxford text, 1978), book 1: part 1, section 6 (pp.15-16); part 4, section 3 (pp. 219-225), section 5 (pp. 232-251), section 6 (pp. 251-263), and the Appendix (pp. 633-636), which contain the main points of Hume's critical reflections on the notion of 'substance'.
- 18. See Strawson's *Individuals* (1959), pp. 167-170, which include Strawson's comparison of his notion of 'independent particular' with Aristotle's notion of 'prote ousia'.

In connection with the analysis and interpretation of human experience as revelatory of *substance*, it is worth noting the comment of Karol Wojtyla (later Pope John Paul 11) in his *Osoba i Czyn* about "allow(ing) experience to present all its evidence to the end...allow(ing) experience to speak for itself as best it can right to the end." This comment was made in the context of Wojtyla's concern (as a phenomenologist, though one deeply influenced by Thomistic ontology and philosophical anthropology) that empiricists are simply *not empiricist enough* in their hermeneutic of human experience,

that is, not thorough-going enough in their empiricism. Thomas himself would surely say (were he in a position to do so) that empiricists such as Locke and Hume were either ignoring or misreading what is quite central to human experience: the experience of objects that have an identifiably enduring, radical, unity-identity-wholeness, that is to say, the experience of things as (individual) substances, as *hupokeimena* or *supposita* - experience from which the notion of *substance* as capacity for separate [distinct] existence is immediately abstracted. (The citation above from Wojtyla's *Osoba i Czyn* uses the English translation from the Polish made by Andrzej Potocki. The citation is from p.133 of Potocki's text, published in English [as edited by Anna-Teresa Tymieniecki] under the title *The Acting Person* [cf bibliography *infra*].)

- 19. Refer Thomas Sheehan's *Karl Rahner: The Philosophical Foundations*, p. 20; Timothy Suttor's appendix to his translation of *Summa Theol.* 1. 75-83 (Blackfriars edition), p. 253; Richard Rorty's *Truth and Progress*, p. 105. For publication details, cf. bibliography *infra*.
- 20. Full publication details of Maritain's *Introduction to Philosophy* (as of all other works cited or referred to in the thesis) will be found in the Bibliography.
- 21. The debate referred to arose out of the publication of a long article by Filippo Selvaggi, S.J., under the title 'Il concetto di sostanza nel Dogma Eucaristico in relazione alla fisica moderna' ('The concept of substance in the dogma of the Eucharist in relation to modern physics') (*Gregorianum* 30 [1949], pp. 7-45). The debate was conducted (firmly but courteously) by Selvaggi, Carlo Colombo, who was professor of theology at the Pontifical University in Milan at the time, Roberto Masi, a distinguished Italian theologian (unattached to a university), and the Spanish Dominican philosopher-theologian Manuel Cuervo. At the centre of the debate were conflicting views about the physical and metaphysical status of material substance in the light of doctrinal and theological positions regarding Eucharistic transubstantiation. Insofar as the debate involved Filippo Selvaggi, who was (perhaps unintentionally) its initiating participant, it ended in 1957. *Gregorianum*, *La Scuola Cattolica*, *Doctor Communis*, *Studia Patavina*,

and *Ciencia Tomista* were the journals in which Selvaggi, Colombo, Masi, and Cuervo, engaged extensively and vigorously with each other on philosophical issues concerning substance in general, and material substance in particular, that had implications of major importance for doctrine and theology dealing with the Eucharist.

(Cf. also chapter 5, pp. 176-178 *infra*.)

22. I have used the English phrase "presentative form" to translate the Latin noun "species". This phrase has been borrowed from Gerald B. Phelan's excellent translation of the fourth French edition of Jacques Maritain's Distinguer pour unir ou Les degrès du savoir (the English translation is entitled *The Degrees of Knowledge*; refer pp. 115-6 for comments on the term "species"). The phrase "presentative form" captures Thomas's meaning of an actualising factor (form) in the order of cognition that makes something or other present (hence a 'presentative' form) to a cognitive power as its object. In the passage cited from the Summa contra Gentiles book 2, chapter 66, the Angelic Doctor is concerned about the 'species individuales' appropriate to sense powers, since these powers are restricted to the knowledge of individual objects. These are the 'species sensibiles' - the presentative forms of what is sense-perceptible - which are to be distinguished from the 'species intelligibiles' - the presentative forms of what is thinkable - that belong to the intellect. These latter are 'species universales' as giving the intellect direct access to objects that are universal: the intellect is "cognoscitivus universalium, ut per experimentum patet" [aware of what is universal, as experience discloses], as Thomas notes in the same passage; whilst arguing elsewhere (e.g. in Summa Theologiae. 1. 84. 7, and 1. 89. 1) that the human intellect is cognitive of individual objects "per reditionem ad phantasmata" - by 'going back' to the play of sense imagery, itself acquired through the activity of the senses and dealing only with objects that are individual.

Chapter 4 - The Substance of Bread after the Eucharistic Consecration (Second Issue) [3. 75. 3]

1. Texts of St Thomas

1.1. Summa Theologiae 3. 75. 3

In 3. 75. 1 St Thomas sets out grounds for belief in the real, that is, the objective, presence of the body and of the blood of Christ in the sacrament of the altar after the consecration. His reaching this conclusion logically opens the way for discussion of what, if anything, happens to the bread and to the wine over which the words of Eucharistic consecration have been pronounced by the celebrant. In 3. 75. 2 the first issue Thomas addresses concerns whether or not the substance of the bread and the wine simply remains on the altar post consecrationem, together with the body and blood of Christ. As we have seen, he argues for a negative conclusion on this issue. Notice, however, that St Thomas actually couches the issue in terms of the substance of the bread and of the wine remaining on the altar after the consecration - "Utrum in hoc sacramento remaneat substantia panis et vini post consecrationem" (my italics). This formulation is used by him in preference to his simply asking whether the bread and the wine remain on the altar post consecrationem. This language reflects Thomas's acceptance that what remains on the altar appears to be bread and wine (all the features or 'appearances' of bread and of wine are as manifestly present after the Eucharistic consecration as they were before it). Yet what remains on the altar cannot actually be bread and wine: its being bread and wine would be (ontologically) incompatible with its being the body and blood of Christ which, according to the argument of 3. 75. 1, is precisely what is actually present on the altar post consecrationem.

In the light of this distinction between *appearance* and *reality* in connection wih what is present on the altar, Thomas's realism or objectivism regarding the presence of the body and blood of Christ after the consecration of the bread and of the wine - a presence on the altar where they were not present before - entails for him that there must be something

else about the bread and the wine, something at an ontologically 'deeper' level than that of perceptible features or 'appearances', that makes bread and wine *what they are*. This, for St Thomas, is their *substance*, their *esse substantiale* or substantial reality, which amounts to their capacity for separate (distinct) existence structured in terms of an essential unity-identity-wholeness, marking them off from absolutely everything else. It is at this ontologically 'deeper' level according to Thomas that bread and wine become the body and blood of Christ at the celebration of the Eucharist. (For Thomas's account of 'substance', see pp. 105-114 of chapter 3 *supra*.)

It also follows for St Thomas that there can be no question of the bread and of the wine remaining on the altar in their substantial reality after the consecration and, as it were, coexisting with the body and blood of Christ: the substantial reality of the bread and of the wine has ceased to be present, and has been replaced by the substantial reality of Christ's own body and blood, with the appearances or accidents of the bread and of the wine remaining in existence by divine intention and power. There was, however, one particular problem that St Thomas believed he should address at this point. It is the prob-lem that forms the central issue of this chapter.

Having concluded that the substance of the bread and of the wine does not remain on the altar after the consecration (3. 75. 2), Thomas is positioned to consider in 3. 75. 3 as a *second* issue the following alternative: *either* this substance is reduced to matter-in-anearlier state (vel resolvatur in praeiacentem materiam), *or* it is actually annihilated (vel... annihiletur), at the moment of Eucharistic consecration. The consideration of the problem expressed in this alternative had been forced upon the Angelic Doctor by views that had arisen explicitly in the twelfth century [1], and that continued to be upheld in the thirteenth century - views claiming that it was impossible for the substance of the bread and of the wine to be changed into something *already existent*, namely the living body and blood of Christ. It was accepted that the living body and blood of Christ were really present in the sacrament of the altar, but this was not because something else - the substance of the bread and of the wine - had been changed into them. (This, in fact, may well have been the view of Berengarius in the eleventh century although, as previously

noted [cf Note 8 of chapter 2 *supra*], Thomas took Berengarius to have denied the substantially real presence of the body and blood of Christ in the sacrament of the Eucharist. Lanfranc [1010-89], who was Abbot of St Stephen's Benedictine monastery at Caen when he wrote his tract *Liber de Corpore et Sanguine Domini* [cf. *ibid.*], the first widely-diffused response to Berengarius, made it perfectly clear in chapters iv, vii, viii, xiii, xvi, and xviii, of this tract that it was Berengarius's denial of the *conversio* or change of the "terrenas substantias" - the "earthly substances" - of bread and wine into the body and blood of the Lord that had brought upon him the censures of the Church.) So, given that the substantial reality of the bread and of the wine was no longer present on the altar under its natural appearances, it followed that it had ceased to exist, with the following alternative being posed by a number of twelfth and thirteenth century thinkers: *either* it had been annihilated, that is, reduced to total non-being; *or* it had been reduced to matter-in-an-earlier-state, identified by St Thomas as (some or other combination of) the four elements. [2]

For St Thomas, the implication of both limbs of this alternative is that there would be nothing on the altar that is actually changed into the body and blood of Christ. On the assumption that Christ was not present on the altar before the Eucharistic consecration, but became present in his bodily reality by means of the consecration, Thomas is again committed in 3. 75. 3 to the position set out in the principle previously enunciated in 3. 75. 2: "Non autem aliquid potest esse alicubi ubi prius non erat nisi per loci mutationem, vel per alterius conversionem in ipsum" ("A thing is not able to exist somewhere that it did not exist before except either through a change in its location, or through the change of something else into it."). As was indicated in chapter 3 p. 87 *supra*, the Angelic Doctor disregards as irrelevant to the present discussion the possibility that something could be created *de novo* in a particular place from absolutely nothing at all, since Christ *qua* human is already in existence. (There could be no question of His being created *qua* divine.)

Structurally, then, Thomas's argument in 3. 75. 3 is the following:

- **4.** Annihilation of the substance of the bread and of the wine, or its reduction to matter-in-an-earlier-state implies that nothing on the altar is changed at the consecration into the body and blood of Christ.
- **4.** Change of location bringing the body of Christ from heaven on to the altar is (ontologically) impossible, as argued in the *Summa Theologiae* 3. 75. 2, and in the *Summa contra Gentiles* 4. 63.
- **4.** Therefore the position postulating that it is impossible for the substance of the bread and of the wine to become the sacramental body and blood of Christ is false as, in effect, entailing a rejection of the real presence of Christ in the Eucharist (as argued for in 3. 75. 1).
- 4. Accordingly, at the consecration of this sacrament, the substance of the bread and of the wine is changed into the body and blood of Christ, and is neither annihilated nor reduced to matter-in-an-earlier state. [3]

1.2. Quaestiones Quodlibetales

In (sub) question 6, article 1, of the fifth of the *Quaestiones Quodlibetales* [4], the Angelic Doctor takes up the issue of the annihilation of the substance of bread when the Eucharist is consecrated, though addressing this issue by asking whether the substantial form of the bread is annihilated in this sacrament [5]. I translate this short article in full:

"Is the [substantial] form of the bread annihilated in the sacrament of the Eucharist?

1. It seems that the form of the bread is annihilated in the sacrament of the Eucharist. A thing seems to be annihilated when it ceases to exist without being changed into anything

else. But the form of bread ceases to exist when the consecration takes place, nor is there anything else into which it is changed: it is not changed into the [primary] matter of Christ's body nor, of course, into its form which is His soul - otherwise His soul would be present in virtue of the sacramental sign (ex vi sacramenti) [6]. So the form of the bread is annihilated.

2. Furthermore, Augustine (commenting on John 17: "Glorify me, Father...") says that "If human nature is changed into the divine Word, careful thought shows that 'being human' would perish in God.' But what perishes is said to be annihilated. So, if bread is changed into the body of Christ, it seems that it is annihilated.

On the contrary (Sed contra): As Augustine says in his book *Eighty Three Questions*, God is not the Cause of something's tending into non-being [7]. But God is the Cause of the sacrament of the Eucharist. Therefore nothing is annihilated in such a sacrament.

In reply, let it be said that 'annihilation' means some sort of change. But every change is named from its finishing point or term (terminus ad quem). So the finishing point of annihilation is simply *nothing* (nihil). But the consecration of the bread in the sacrament of the Eucharist does not terminate simply in nothing, but in the body of Christ. Apart from this there would be no accounting for how the body of Christ begins to exist under the sacrament: It does not begin to exist there through change of location (per motum localem) - the consequence would be its ceasing to exist in heaven. It remains, then, that, in the consecration of the bread, there is no annihilation, but transubstantiation of the bread into the body of Christ.

So:

To 1. In any natural generation [of a thing] neither form nor matter is produced or destroyed, but the composite whole (totum compositum). Likewise, in the sacrament of the altar there is no call for separate inquiry as to what the form or the matter is changed into. The whole of the bread is changed into the whole body of Christ *qua* body [8]. The pointer to this is, if [at some time] in the three days of Christ's death, the Eucharist had

been consecrated, [Christ's] soul would not have become present, but a body-without-soul, just as it was in the sepulchre.

To 2. A human nature might be said to perish by being changed into the divine Word in that that existence would cease which pertains to the starting point of the change (terminus a quo). It should not be called 'annihilated', however, if the finishing point (terminus ad quem) is taken into account." [9]

1.3 Summa contra Gentiles 4. 63

In the *Summa contra Gentiles* book 4, chapter 63, St Thomas sets out arguments against the position of those who maintain that, at the Eucharistic consecration, the substance of the bread is annihilated, or is reduced to primary matter (qui ponunt substantiam panis in nihilum redigi, vel in primam materiam resolvi). He reflects succinctly that "It follows from both accounts that the body of Christ cannot begin to exist in this sacrament except through local motion - something that is impossible, as has been shown." ("Ad utrumque enim sequitur quod corpus Christi in hoc sacramento esse incipere non possit nisi per motum localem, quod est impossibile, ut ostensum est"). This impossibility was argued to earlier in 4. 63 (cf. chapter 3, pp. 92-93 *supra*), and was, as we have seen, argued to in *Scriptum* 4. 11. 1. 1. (response) to 1, and (more extensively) in the *Summa Theologiae* 3. 75. 2.

Against *annihilation* of the substance of the bread and of the wine, Thomas adds *loc. cit.* an argument *ex convenientia* along the following lines: Given the great number of occasions of the celebration of this sacrament (ex frequentatione huius mysterii) over many centuries, much of the matter initially created by God would by now have been reduced to nothingness. But it is quite inappropriate that, in a sacrament initiated for human salvation, i.e. for the fulfillment of human existence, divine power should be engaged in reducing something to a state of nothingness. (Multum enim de natura corporea primo creata iam in nihilum rediisset...nec est decens ut in sacramento salutis divina virtute aliquid in nihilum redigatur.)

The reduction of the substance of the bread and of the wine to *primary matter*, understood as the intrinsic principle of material substance that is in itself purely potential, is not to be entertained "since primary matter without form cannot possibly exist" (cum materia prima sine forma esse non possit) [10]. On the other hand, were some people (confusingly) to take the phrase "primary matter" to designate the fundamental material elements (air, fire, water, earth) of which physical things are composed [11], their case would not be improved. The resolving of the substance of the bread or of the wine into (some combination of) the elements would be detected by the senses, since the elements are sense-perceptible, and this detection does not happen. There would also be involved local motion and the physical alteration of contrary features - processes that cannot be instantaneous. (The implication, not here spelt out by St Thomas, is that the change effected by the Eucharistic consecration is instantaneous. Cf. Sent. 4. 11. 1. 3. 2, [resp.] to 2, Quodlibet. Quaest. 7, [sub] qu. 4, a. 2, and S. Theol. 3. 75. 7., where Thomas argues for the instantaneous nature of this change.)

1.4 Scriptum super Sententiis 4. 11. 1. 2

The Angelic Doctor's initial probing of the issue of what becomes of the substance or substantial reality of the bread and of the wine at the Eucharistic consecration occurs in his *Scriptum super Sententiis* book 4, distinction 11, question 1, article 2.

Here he argues against the theses of (1) annihilation of the substance of the bread and of the wine, (2) reduction of it to primary matter, (3) reduction to the fundamental physical elements from combinations of which material substances are composed. As we have seen, arguments against these theses are further developed in subsequent writings (Summa contra Gentiles 4. 63; Quaestiones Quodlibetales 5, [sub] question 6, article 1; Summa Theologiae 3. 75. 3).

Thomas's arguments in the *Scriptum* 4. 11. 1. 2 are translated here:

(1). Against the 'annihilation' thesis:

"Every change is named from its finishing point or term (a termino ad quem). For example, a change towards a thing's becoming white is called a *whitening*. So, only a change whose finishing point or term would be nothingness (cuius terminus ad quem esset nihil) should be called *annihilation*. But this cannot be the case for the [Eucharistic] change: this change has to terminate in the body of Christ. The reason is that a thing cannot begin to exist at a place where previously it did not exist except through a movement or change affecting this thing itself, or affecting something else and terminating in the first thing in some way (per motum aut mutationem propriam vel alterius terminatam ad ipsum aliquo modo). If, then, the [Eucharistic] change did not terminate in the body of Christ, it would be necessary that, when the consecration is completed, the body of Christ exist here on the altar where it did not exist before through a movement affecting it - something already ruled out. Therefore it is clear that the opinion asserting that the substance of the bread is annihilated is false." [12]

Thomas's "something already ruled out" refers to *Scriptum* 4. 11. 1. (responsio) to 1 where he had argued that, if there had been no change affecting the bread at the moment of consecration, then the body of Christ would have had to be brought on to the altar through change of location (per motum localiter huc venit). This must be rejected because the sacrament may be consecrated simultaneously in different places. Change of location would, then, require numerically the same body to be moved simultaneously and by one action (simul et semel) to different places: an impossibility since calling for contrary movements to be affecting the same body at the same time (simul contrarios motus inesse eidem) or, at the very least, separate movements of the same kind (saltem diversos eiusdem speciei) at the same time.

(2). Against the 'reduction to primary matter' thesis:

"One way [of removing the substance of the bread] would be [by reducing it] to primary matter without any [substantial] form. But that is something that cannot take place even through a miracle, because what is being posited involves a contradiction (haec positio implicat contradictionem). For matter of its very nature is being-in-potentiality, and form is its actualisation. If, then, it is asserted that matter without form is actual, it is being asserted that matter's actualisation is both instantiated and not instantiated (actum materiae esse et non esse)." [13]

(3). Against the 'reduction to the fundamental physical elements' thesis:

"The other way [of reducing or removing the substance of the bread] can be understood in the sense of its being reduced to [the fundamental] physical elements. But, again, this cannot be what happens. *Either* these physical elements remain where they were (in eodem loco), in which case it would be necessary that other material bodies in addition to the body of Christ be existing under the sacramental species, and that these other material bodies be existing under the dimensions of the bread (and many difficulties of this sort would follow). *Or* [these fundamental physical elements] do not remain where they were and, in that case, there would be a change of location (esset motus localis) of these

elements. But this cannot be so because such a change, were it to take place, would be perceived by the senses.

Moreover, since change of location (motus localis) is necessarily successive [14], it must be the case that these physical elements first relinquish one part of the host before another. But transubstantiation is instantaneous, as will be shown [15]. So one or other of two things would follow: *either* that, at some time under some part of the sacramental species, there would be neither the body of Christ, nor the substance of bread, nor the fundamental physical elements that had already departed from that part; *or* that, at some time under the same part of the host, there would be the body of Christ and the fundamental physical elements - which is impossible [16]. Therefore it cannot be established that [the substance of bread] is reduced to matter-in-an-earlier-state [i.e. some combination of the fundamental physical elements]." [17]

2. The Commentators

2.1 Domingo Banez [18]

In commenting on the *Summa Theologiae* 3. 75. 3, Domingo Banez concerns himself *inter alia* with the view of Duns Scotus [19] that a change of the substance of the bread into the pre-existing body of Christ is impossible - a view totally opposed to the Eucharistic metaphysics of St Thomas [20]. To paraphrase what Banez has to say:

In his discussion of book 4, distinction 11, question 1, article 3, Scotus regards as impossible the change of the substance of the bread at the Eucharistic consecration into the substantially pre-existent body of Christ (in corpus Christi praeexistentis substantialiter). The line of argument adopted by Scotus rests on the proposition that, in relation to the sacrament of the altar, only three kinds of change affecting a substance are possible (distinguit enim ille [Scotus] quod tripliciter potest imaginari fieri conversionem). The first is that proposed by St Thomas, namely that one substance is changed at the 'whole substance' level into another substance, without any change being

made to the substance into which it is changed. The second is when from one substance a different reality is generated *de novo* as, for example, when air is produced from water. The third kind of change is the one that Scotus himself calls 'adductive' (adductiva) because it brings the thing that is the term of the change (terminus ad quem) to the place where the starting point or *terminus a quo* existed. So Scotus is able to claim that God, by reason of His *annihilating* the bread (ratione annihilationis panis) brings it about that the body of Christ becomes present under the sacramental accidents where previously there was the substance of bread. For this reason the change that takes place when the Eucharist is consecrated is to be called *adductive*, and there is not, in fact, any real change of the substance of the bread into something else. Moreover, adductive change is the only change that takes place in this sacrament (haec sola habet locum in hoc sacramento).

St Thomas's statements regarding the kind of change of substance that is brought about by the Eucharistic consecration - statements to be found in all of his philosophicotheological writings about the sacrament of the altar – are rejected by Scotus as unintelligible (inintelligibiles). The second kind of change is regarded by him as simply irrelevant to the requirements of the sacrament of the altar since the body of Christ is not generated from the bread, seeing that Christ's body already exists (utpote vel quia antea praestiterat). On the basis of his rejection of these two kinds of change, Scotus concludes that the body of Christ does not formally terminate the Eucharistic change in respect of the substantial and unqualified reality of this body (secundum suum esse substantiale et absolutum). Christ's body formally terminates the Eucharistic change only insofar as it is constituted as present under the sacramental species, taking the place of the substance of the bread (quatenus constituitur praesens sub speciebus gerens vicem substantiae panis).

This account of Eucharistic change provided by Scotus must be set aside, Banez says. First, becaue it fails to explain how the kind of change endorsed by him can actually be 'adductive' of the body of Christ which, before the change, was existing in heaven. After all, Scotus does not *argue* that it is through change of location that the body of Christ comes to be present on the altar; nor that this body is in some way 'delivered over' afresh

(de novo tradatur) so that it may be present under the sacramental species. Nor can it be claimed that it is simply 'conserved there' anew (do novo conservetur) where previously it did not exist. Therefore this proposal of Scotus is scarcely intelligible. Second, because Scotus, although nominally acknowledging change and transubstantiation, denies such change in reality, declaring that the formal term of this change is not something absolute and substantial but only relative and accidental (respectivum et accidentalem) insofar as the body of Christ simply begins to exist anew under the sacramental species and to be changed with them. According to Scotus, then, there is not strictly speaking (proprie) in the sacrament of the altar that change of one *substance* into another *substance* which is called *transubstantiation* - a question determined by the Councils of Florence and Trent. [21]

Banez's presentation, and criticism, of the position of Scotus regarding the Eucharistic change, and of Scotus's rejection of the account offered by St Thomas, warrants careful noting. A more extensive presentation of the Scotistic metaphysics of the Eucharistic change is to be found in chapter 5, pp. 188-213 *infra*, with critical responses to the teaching of Scotus to be found *passim* in chapter 6 *infra*.

2.2 Thomas de Vio Cajetan [22]

There are two points of particular interest in Thomas de Vio Cajetan's commentary on the *Summa Theologiae* 3. 75. 3 [23]. In connection with the Angelic Doctor's denial of any reduction or resolution of the substance of the bread and of the wine to primary matter (non enim potest esse resolutio in materiam primam) as a possible way in which this substance ceases to exist at the Eucharistic consecration, Cajetan has this to say:

Ista resolutio non fit in materiam primam. Quia materia non potest esse sine forma.

Ubi scito quod, quia opinio ista ponit resolutionem puram, quoniam nullius meminit generationis, cum nullum ponat generans; si ponit resolutionem in materiam primam, ponit consequenter materiam primam sine forma; quod est impossibile secundum causas secundas et potentiam Dei ordinariam, quidquid sit de possibili secundum potentiam Dei absolutam. Quoniam hoc est extra propositum: quia stultum est ponere in hoc sacramento quidquid Deus potest facere.

(No reduction or resolution into primary matter is brought about. This is so since [primary] matter cannot exist without [substantial] form.

Here you should know that this view is considering a total reduction [to primary matter] since it makes no mention of any generation [of another substance], nor proposes any generating or producing agent. If it proposes a reduction [of the substance of the bread] to primary matter, it proposes in consequence primary matter without form - which is impossible in terms of secondary causes and the ordered power of God [24], whatever may be the case regarding what is possible in terms of the absolute power of God. This latter issue lies outside what is being discussed, and it is foolish to consider in relation to this sacrament whatever is [absolutely] possible to the power of God.)

Clearly, Cajetan leaves open (or, at least, does not reject) the possibility that, in terms of God's absolute power (secundum potentiam Dei absolutam) God could cause primary matter to exist, and to remain after the Eucharistic consecration, without any substantial form at all. This is to leave open, or not reject, the possibility that this is how the substance of the bread and of the wine could cease to exist on the altar after the consecration, and not be changed into the body and blood of Christ.

It must, however, be said that what is being suggested by Cajetan does not appear to be in accord with the thinking of St Thomas on this point. Earlier in the *Summa Theologiae* (cf. 1. 25. 3), when dealing with questions about the power of God, Thomas argues that

Esse autem divinum super quod ratio divinae potentiae fun-

datur, est esse infinitum, non limitatum ad aliquod genus entis, sed praehabens in se totius esse perfectionem. Unde quidquid potest habere rationem entis continetur sub possibilibus absolutis, respectu quorum Deus dicitur omnipotens. Nihil autem opponitur rationi entis nisi non ens. Hoc igitur repugnat rationi possibilis absoluti quod subditur divinae omnipotentiae, quod implicat in se esse et non esse simul.

(Divine being, upon which the nature of divine power is based, is infinite, not limited to any category of being but foreshadowing in itself the perfection of the whole of existence. So anything at all that can have the nature of 'being existent' comes under the heading of things-that-are-possible absolutely speaking, and in respect of which God is called *omnipotent*. Nothing, however, is set over against the notion of *being* except *non-being*. So only this is incompatible with the notion of what-is-absolutely-possible (and falls under divine omnipotence) which involves in itself simultaneously existence and non-existence.)

Thomas adds that "Ea vero quae contradictionem implicant sub divina omnipotentia non continentur: quia non possunt habere possibilium rationem. Unde convenientius dicitur quod *non possunt fieri* quam quod *Deus non potest ea facere.*" ("Things that involve a contradiction do not fall under divine omnipotence because they cannot take on the nature of what-is-possible. So it would be better to say that 'they are not able to be brought about' than that 'God is not able to bring them about'.") These passages set out succinctly what is central to St Thomas's idea of divine omnipotence and the *absolute* power of God, as distinguished from the *ordered* power of God (potentia Dei ordinata vel ordinaria) which relates only to what God knows and wills actually to bring about (or permits actually to be brought about) under His infinite wisdom and justice (cf. *Summa Theologiae* 1. 25. 5. [to] 1).

Now it should be recalled that the Angelic Doctor has already made it clear (see 1. 4 *supra*) that the argument about the substance of the bread and of the wine being able to exist after the consecration by being reduced to, or resolved into, primary matter without substantial form is to be rejected. And, for St Thomas, it is to be rejected precisely because "haec positio implicat contradictionem". This is so because "Matter of its very nature is being in potentiality and form is its actualisation. If, then, it is asserted that matter without form is actual, it is being asserted that matter's actualisation both is, and is not, instantiated (actum materiae esse et non esse)." But "things that involve a contradiction do not fall under divine omnipotence because they cannot take on the nature of what-is-possible" (1. 25. 3).

In the thinking of St Thomas, therefore, the substance of the bread and of the wine cannot be reduced to primary matter at the Eucharistic consecration (and, in this way, no longer be present as such on the altar). The existence of primary matter without substantial form involves a contradiction and is, in consequence, something that is not able to be brought about. There is literally nothing for the absolute power of God - for divine omnipotence - to extend to. Cajetan, then, seems not to be of the mind of St Thomas in leaving open, or at least in not rejecting, the possibility of the existence of primary matter without form if the absolute power of God is taken into account. Incidentally, the reluctance shown by Cajetan to examine questions concerning the metaphysics of the Eucharistic presence of Christ in the light of "whatever is [absolutely] possible to the power of God" seems to be at odds with Thomas's own untrammelled approach to these questions. There is nothing at all in what we have already seen in chapters 2 and 3 - nor indeed in what we shall see in later chapters – to suggest that St Thomas would have the slightest reluctance about invoking the concept of 'absolute divine power' when discussing questions concerning the metaphysics of the Eucharistic presence of Christ.

The second point of particular interest in Cajetan's commentary on 3. 75. 3 is his endeavour to restate the meaning of the following two statements of St Thomas

Substantia panis vel vini manet usque ad ultimum instans

consecrationis. In ultimo autem instanti consecrationis iam est ibi substantia vel corporis vel sanguinis Christi: sicut in ultimo instanti generationis iam inest forma.

(Moreover, the substance of the bread or of the wine remains until the ultimate instant of the consecration. But, in the ultimate instant of the consecration, the substance of the body or of the blood of Christ is now present there, just as, in the ultimate instant of the generation [of a new substance], the substantial form is now present.)

St Thomas introduces these two statements in the course of rebutting the claim that the substance of the bread and of the wine can be reduced to matter-in-an-earlier-state (in praeiacentem materiam). On the basis of the two statements just cited he affirms that "Unde non erit dare aliquod instans in quo sit ibi praeiacens materia" ("In consequence, there will not be any instant in which matter-in-an-earlier-state will be present.")

Cajetan has this to say:

Scito quod Auctor, claritati studens, non fuit sollicitus ut loqueretur philosophice, ut ab omnibus intelligeretur. Ex exemplo tamen generationis, ab exercitatis in philosophia rem ipsam intelligi voluit more philosophico: sciebat non dari ultimum instans generationis. Et philosophico more dicendum fuit: In toto tempore consecrationis est ibi substantia panis; et in termino illius est corpus Christi, qui terminus est primum esse corporis Christi in sacramento, et primum non-esse panis; sicut in termino generationis est primum esse rei genitae, et primum non-esse rei corruptae. Et si sic Auctor dixisset, pauci intellexissent ipsum.

(Notice that the author, in giving attention to clarity so that he would be understood by everyone, was not here concerned to speak as a philosopher. However, the example of the generation [of a new substance] shows that he intended the point at issue [the cessation of one substance and the beginning of another] to be understood in a philosophical manner by those versed in the discipline of philosophy: he well knew that there was no 'ultimate instant of generation'. Rather, speaking in philosophical mode this was what needed to be said: During the whole time [of pronouncing the words] of the consecration, the substance of the bread is there present; and, at the term of the [words of] consecration, the body of Christ is present - a term which marks the first existence of Christ's body in the sacrament, and the first nonexistence of the bread; just as, at the term of the generation [of a new substance] there is the first existence of the thing that has been generated, and the first non-existence of the thing that has perished. And, if the author had expressed himself in that way, few would have understood him.)

It is difficult to accept that Cajetan has contributed anything towards a better understanding of the two statements of St Thomas cited above. Moreover, his claim that Thomas "well knew that there was no 'ultimate instant of generation" (sciebat enim non dari ultimum instans generationis), and that, although using language about an 'ultimate instant of generation', he was really looking to the philosophically trained to interpret him (presumably along lines congenial to Cajetan), is a claim that is quite unfounded.

Cajetan might usefully have consulted (amongst other texts) Thomas's *Quaestiones Quodlibetales* 7, (sub) question 4, article 2, where the Angelic Doctor pursues the issue of the substances of bread and the body of Christ being present together under the sacramental species at the same instant (in eodem instanti). In the course of rejecting such co-existence as impossible Thomas gives an analysis of some natural changes that uses

just the sort of language to which Cajetan takes exception, that is. language about an 'ultimate instant' of the change that is the generation of a new substance. What has to be particularly noticed here is that the occasion of Thomas's using this language would have been a public disputation (almost certainly in Paris during his first period as Regent Master in the Faculty of Theology, 1256-59, and most probably in Advent, 1256), conducted in the presence of the professionally skilled from a number of disciplines, including philosophy.

To cite the text of St Thomas:

Cuiuslibet autem motus qui mensuratur aliquo tempore, oportet quod ultimus terminus sit in ultimo instanti temporis. Unde, cum forma substantialis sit quidam terminus alterationis, oportet quod in ultimo instanti illius temporis introducatur forma subtantialis. Corruptio autem et generatio simul currunt, quia generatio unius est corruptio alterius. Oportet ergo quod in ultimo instanti illius temporis sit terminus corruptionis unius, ut aeris, et terminus generationis alterius, ut ignis. Terminus autem corruptionis est non esse. Oportet ergo quod in ultimo instanti illius temporis sit primo non aer, et primo ignis.

(The final term of any change at all that is measured by time must exist in the ultimate instant of that period of time. So, since the substantial form is in a certain sense the term of a process of alteration, it is necessary that the substantial form begin to exist in the ultimate instant of that time. But perishing and generation occur simultaneously, since the generation of one substance is [the moment of] the perishing of another. It must be the case, then, that, in the ultimate instant of a period of time, there should exist the term of the perishing of one substance, e.g. air, and the term of the generation of another, e.g. fire. But the term of a substance's perish-

ing is non-existence. So it is necessary that, in the ultimate instant of that time, there be the first non-existence of air, and the first existence of fire.)

St Thomas concludes later in the body of the article that:

Similiter transubstantiatio est terminus cuiusdam motus qui consistit in prolatione verborum: unde in ultimo instanti temporis mensurantis illam prolationem est primo non panis, et primo corpus Christi.

(In similar fashion transubstantiation is the term of a kind of change which consists in the pronouncing of words [of consecration]. So, in the ultimate instant of the time measuring that pronouncing, there is the first non-existence of the bread, and the first existence of the body of Christ [in the sacrament].) [25]

It is of interest to notice that much of Thomas's argument in 3. 75. 7, where he asks whether the change of the substance of the bread into the body of Christ is an instantaneous change or one that is successive, makes use of the 'ultimum instans' language (cf. especially his replies to the first and third objections). It is, therefore, surprising that Cajetan, committed at least to cautioning about this sort of language as lacking in philosophical rigor in certain contexts, offers no comment whatsoever on 3. 75. 7 in the course of his very extensive commentary on this part of the text of the *Summa Theologiae*.

2.3 Francesco Silvestri of Ferrara (Ferrariensis) [26]

Ferrariensis considers the question whether the substance of the bread is annihilated at the Eucharistic consecration when commenting on a passage from the *Summa contra Gentiles* book 4, chapter 63 [27]. In this chapter of the *Summa contra Gentiles* St Thomas is responding to the first set of difficulties raised against the presence of Christ in the Eucharist set out in the preceding chapter 62 of book 4. The difficulties responded to in chapter 63 are difficulties regarding the change of the bread into the body of Christ ([difficultates] quoad conversionem panis in corpus Christi).

To paraphrase the first paragraphs of the commentary of Ferrariensis:

In the Summa contra Gentiles text (4. 63), St Thomas states that, at the completion of the words of consecration when the sacrament of the altar is being celebrated, the substance of the bread is not annihilated. Note that, from Thomas's teaching found in Quaestiones Quodlibetales 5, (sub) question 6, article 1, the Summa Theologiae 3. 75. 3, and the Scriptum super Sententiis 4. 11. 1. 2, it is clear that any change takes its name from its finishing point (terminus ad quem). Accordingly, in order to know whether a particular change is or is not an instance of annihilation, what has to be determined is whether its term or finishing point is absolutely nothing (nihil omnino), or is in some way something (aliquid modo aliquo). If the finishing point is absolutely nothing, then we have annihilation. On the other hand, if it is in some way something, then annihilation is to be ruled out.

Consider next that, in any naming of a change, we should not be looking at any term or finishing point whatsoever, but at the term or finishing point that is principally intended by the agent bringing about the change. Take, for example, the generation of a human being. The change involved in bringing into existence a human being is called *human* generation because the agents principally intend the existence of a *human being*, alhough there are many other preceding terms both positive and privative [life, sentiency, no malformation, etc.]. In similar fashion, in order to determine whether a certain change

ought to be called an instance of 'annihilation', regard must be had not to any term whatsoever of that change, but to the term or finishing point principally intended by the agent of the change in question. Now, in that change in which the substance of the bread is changed into the body of Christ, there are found to be two terms or finishing points, namely the non-existence of the substance of the bread, and the existence of the body of Christ (duplex invenitur terminus: scilicet non esse panis, et corpus Christi). But the sacramental existence of the body of Christ (esse sacramentale corporis Christi) is the term or finishing point principally intended by God, the principal causal agent in bringing about the Eucharistic change. The non-existence of the substance of the bread is ordered or related to this term. Therefore, since the sacramental existence of the body of Christ is something (aliquid), and not just nothing (non autem nihil), such a change of the substance of the bread simply cannot be called the annihilation of that substance. Nor from the fact of the non-existence of the substance of the bread, at which the change referred to terminates as at a finishing point that is an (ontological) disposition for the principal finishing point or term, can this change be designated as an instance of annihilation. The reason is that such non-existence is not a situation of absolute nothingness, only the negation of any continuing reality of the bread within the sacramental body of Christ into which the substance of the bread has been changed. The point is that it is not sufficient to claim that something has been 'annihilated' only on the ground that the thing itself does not continue to exist in its own right (in se) as this or that specifiable thing, or does not continue to exist in something else (in alio). What is also required is that there be nothing else into which it has been changed (requiritur quod nihil etiam maneat in quod sit conversum).

A Comment on the Commentary of Ferrariensis

Ferrariensis effectively places what he has to say about the Eucharistic change within the setting of *final causality* - within the setting of what Aristotle identifies in *Metaphysics* 1013a 32 as "to telos...d'esti to ou heneka" (the final cause...is that for the sake of which [something takes place]). This is to take a step that accords well with, though is not explicitly mentioned in, St Thomas's own discussion of the Eucharistic change.

Within the setting of final causality, it may be said that the primary intention of God in the Eucharistic change is to bring about the presence of the body of Christ on the altar (the implications of this statement for sacramental theology and praxis, though of great importance, lie outside the scope of this thesis). Given that this presence cannot be brought about by local motion (cf. Scriptum 4. 11. 1. [resp.] to 1; S. Theol. 3. 75. 2), it follows for St Thomas that it is brought about through the substantial reality of the bread being changed into the substantial reality of the body of Christ which is 'localised' on the altar not, as we have seen (cf. chapter 2, pp. 22 seqq. supra), in virtue of the dimensive quantity of Christ's own body, but in virtue of this body's relationship to the abiding accidents of the bread. It then becomes clear how the non-existence of the bread belongs within the context of final causality here being invoked by Ferrariensis: the non-existence of the bread is not a matter of the bread's utterly ceasing to exist, of its collapsing into total non-being; rather, it is a matter of the essential entitas or being of the bread being available to be converted by the First Cause of being into the sacramental entity or being of the body of Christ - into the esse sacramentale corporis Christi. This is a change that extends to all that ontologically distinguishes the bread from the body of Christ (cf. chapter 6, pp. 231-234 infra); it is this that becomes transmuted into the bodily reality of Christ in the Eucharist.

On the other hand, as Thomas argues in the *Quaestiones Disputatae de Potentia* qu. 3, art. 1, and the *Summa Theologiae* 1. 104. 3, annihilation consists in the First Cause of being simply ceasing to impart existence - to impart *esse* - to beings to which, in the normal run of events, existence is continuously being communicated. Joseph Gredt underscores the point lucidly: "Deus potest (potentia absoluta) res annihilare. Annihilatio fit *per subtractionem concursus seu causalitatis*, qua res in esse conservatur; non enim est actio positiva, cuius terminus esset *nihil*" ["God can, by His absolute power, annihilate things. Annihilation is brought about by the *withdrawal of the concurrence or causality* by which a thing is conserved in existence; there is no *positive* action the term of which would be *nothingness*"] (my emphases) [28]. This is precisely what does *not* happen at the Eucharistic consecration. There is, therefore, no question of the bread's

being annihilated. Rather, the non-existence of the bread falls within the setting of final causality inasmuch as the existent bread is ordered or related to *new* existence by being transmuted into the *esse sacramentale corporis Christi* - the reality of the body of Christ in the sacrament of the altar. The non-existence of the substance of the bread is a condition *sine qua non* of this new existence.

It may be added that annihilation of the substance of the bread would not appear *per se* to give rise to more problems regarding the continuing existence of the bread's accidents after the Eucharistic consecration than does the opposing view that what is brought about through this consecration is a *change* affecting the whole substance of the bread by transmuting this substance into the body of Christ. In the case of change, as well as in the case of annihilation, there is no substantial subject in which the accidents of the bread could inhere (cf. *S. c. Gentes* book 4, chaps 63 and 65; *S. Theol.* 3. 77. 1). They cannot, of course, inhere in the body of Christ, since they are the accidents of bread and, as such, are conformed to the nature of bread, and individuated by the instances of bread in which they previously inhered. In terms of sacramental theology and *praxis*, however, change may well be privileged over annihilation but, as was said above, this perspective lies beyond the scope of the thesis.

-Following the first paragraphs of his commentary (paraphrased above my Comment), Ferrariensis goes on to reject as not being "ad mentem Sancti Thomae" ("in accordance with the thinking of St Thomas") the following position of Capreolus [29]: "Capreolus tenet quod scilicet remaneat panis in corpore Christi *in potentia oboedientiali*, ad hoc ut ex ipso redeat panis substantia; et quod propter hoc non dicatur panis annihilari" ("Capreolus holds that the bread remains *in obediential potentiality* in the body of Christ, with this in view, namely that the substance of the bread may be recovered from it [the sacramental body of Christ], and that, for this reason, the bread is not said to be annihilated") [My emphases] [30]. For the concept of 'obediential potency' (potentia oboedientialis), refer *infra* chapter 7, p. 280, with Note 8.

Again to paraphrase Ferrariensis:

St Thomas nowhere expresses himself along those lines. Quite the opposite. In the *Summa Theologiae* 3. 77. 5 he says explicitly that it is impossible for the body and blood of Christ to be changed back into the substance of the bread and of the wine. It may, of course, be argued that this statement is to be construed in connection with the *ordered* power of God - since we say that the body and blood of Christ remain in the sacrament as long as the sacramental species themselves remain, with no possibility of their again becoming bread and wine. It is not to be construed in connection with the *absolute* power of God. This point may certainly be allowed (although there are many who would not allow it). But conceding that the substance of the bread in some way exists in the obediential potentiality of the body of Christ in the sacrament must *not* be what prevents it from being said that the bread has been annihilated. Otherwise, nothing at all could ever be said to be annihilated by God, given the on-going existence of other things. After all, using the same reasoning, *anything* (allegedly) annihilated could be said to continue existing in the obediential potentiality of *any other* actually existing created thing.

A (Second) Comment on the Commentary of Ferrariensis

The situation would be something like this: God could, of His absolute power, change the sacramental body of Christ back into the substance of the bread in virtue of the obediential potentiality of Christ's sacramental body, hence it should not be said that the bread had been annihilated (the argument of Capreolus against annihilation). But, on that showing, God could also of His absolute power change any other substance into something that had been (supposedly) annihilated simply by bringing that thing back into existence from the obediential potentiality of the substance to be changed into it. On this basis, the notion of 'annihilating' any created thing, given the existence of any other created thing, would suffer from 'reference failure', to borrow - anachronistically - a phrase from the British analytical philosopher Peter Strawson. This would be so since the notion of annihilating something, though having sense, would have no situation relative to a thing's non-existence to which it would refer. It should be clear that the concern that Ferrariensis has about this situation is not simply about the possibility or otherwise of

anyone ever being able to *say* correctly that something had been annihilated, given the existence of at least one other thing, that is, the issue is not merely a linguistic one. The central issue for him would appear to be an unjustifiable setting of limits to what God can/cannot do relative to the things that He has created - a metaphysically unacceptable resonance of the linguistic issue. To the objection that the (supposedly) annihilated thing that had been brought back into existence could not be *numerically* the same as the thing that had been "annihilated" (thus undermining the argument of Ferrariensis against the position of Capreolus), Ferrariensis would perhaps reply that God could, in His absolute power, not bring about all that prevented the 'reconstituted' thing from being identical numerically with the thing that previously existed, since no contradiction would be involved in causing such an effect.

This chapter has examined St Thomas's arguments in a number of his works concerned to reject on philosophical grounds the idea that, at the words of Eucharistic consecration, the substance of the bread (and of the wine) is either annihilated or reduced to matter-in-anearlier-state. The views of the Thomistic commentators Banez, Cajetan, and Ferrariensis, on this topic, and on connected topics, were introduced and critically engaged with. Having established at this stage of a systematically progressing discussion that Christ is really, i.e. objectively and substantially, present in the sacrament of the altar (3. 75. 1), that the substance of the bread and of the wine neither remains on the altar *post consecrationem* (3. 75. 2), nor is annihilated or reduced to matter-in-an-earlier-state (3. 75. 3), St Thomas is in a position to raise the question whether bread is *able* to be changed into the body of Christ (and wine into His blood) – "Utrum panis possit converti in corpus Christi". The resolution of this issue will be the concern of the next chapter.

NOTES

- 1. The reference here is to William of Paris (also known as William of Auvergne) (c. 1180-1249), and to Roland Bandinelli (c. 1105-81). William of Paris (or Auvergne) was a noted Scholastic philosopher and theologian whose study *De Sacra Eucharistia* formed part of his treatise *De Sacramentis*, which itself formed part of a kind of philosophico-theological encyclopedia known as the *Magisterium Divinale et Sapientiale*, written 1223-40. Roland Bandinelli (later Pope Alexander 111 from 1159 to 1181) produced a set of treatises, the *Sententiae Rolandi* (although some scholars dispute Roland Bandinelli's authorship), one of which was the *Sententiae de Sacramento Altaris Christi*. William of Paris believed that the substance of the bread and of the wine was annihilated at the moment of Eucharistic consecration. Roland Bandinelli took the view that this substance was reduced to matter in an earlier or more elementary state.
- 2. The doctrine of the four elements or "roots" (rizomata) thought to make up material things goes back to the Greek philosopher Empedocles (c. 495-c. 435 BC) of Akragas in Sicily. Whilst accepting with Parmenides (c. 515-c. 445 BC) that nothing can come into existence, or pass out of existence, absolutely speaking, he accepted, unlike Parmenides, the fact of change throughout the world of our experience, and postulated four elements earth, water, air, fire and two forces, viz. Love and Strife, to account for the pervasive, yet contrasting, features of stability and mutability affecting physical things. All compound bodies, with all their parts, are made up of combinations of two or more of the elements in fixed ratios. Bone, for example, was thought to consist of two parts earth, two parts water, and four parts fire. Love mixed the elements in their due ratios or proportions, and Strife was the force that eventually separated them, thus bringing about change.

The docrine of the four elements was standard in physical theory from the time of Empedocles through to the early modern era. In his book *From Physics to Metaphysics* the British philosopher Francis Selman remarks generously that

The ancient theory of the four elements is not as unscientific as it appears to be, for these elements correspond to the different states of matter in modern chemistry. Air stands for gas, water for liquids and earth for solids. If we were to suggest an equivalent for fire, it would be radiation, since twentieth century physics has shown us that matter can be converted into radiation. The difference between the ancient and modern theories of the elements is that a chemical element today, by definition, does not consist of other elements but, in the ancient theory, one element could change into another. (*Op. cit.* p. 10)

- 3. For the Latin text of 3. 75. 3, see the *Bibliotheca de Autores Cristianos* edition, vol. 4 pp. 612-613 (cf. Note 2 of chapter 1 *supra*).
- 4. 'Quaestiones Quodlibetales' 'Quodlibetal Questions' were a distinctive form of the medieval 'quaestio disputata' or 'disputed question'. In the so-called 'ordinary' (ordinariae) public disputations, which were of reasonably frequent occurrence, the 'magister' or 'master' (in effect, the professor responsible for a particular course within a Faculty of a university, or of a studium [a house of studies conducted by a religious order] would announce that he would be defending in a forthcoming public debate or disputatio a particular thesis or position of his own choosing. The 'magister', and other prospective participants, would then have time to prepare for the disputatio. In the 'solemn' (solemnes) public disputations, which took place only twice a year (once in each of Advent and Lent) the issue to be debated was raised ex tempore on any topic whatsoever, and by any person present (except the 'magister' who had earlier agreed to lead the disputation or debate), It was a disputation 'de quolibet ad voluntatem cuiuslibet' - about anything at anyone's choice. Hence 'quaestiones quodlibetales'. A disputation of this sort obviously had great potential to embarrass the 'magister' who would find himself discussing, and defending, a particular position or thesis 'on the spot', as it were, without time for careful preparation. It is hardly surprising that many of the 'magistri' were not anxious to engage in this sort of academic activity with its attendant risks. In his

impressive *Fra Thomas D'Aquino – His Life, Thought, and Works*, James Weisheipl understandably comments that "One might almost say that only masters of some daring would expose themselves to 'any kind of question' raised from the floor" (*op. cit.*, p. 127).

5. In 3. 75. 6 Thomas includes, and answers, the difficulty that bread is an artificial substance, not a natural one, and therefore does not have a substantial form (see objection 1 and reply to 1). For St Thomas, there is nothing to prevent human skill from producing a non-natural object that is made to be *what it is* by a substantial form, that is, by an intrinsic specifying principle at the level of an object's substantial reality itself, not by a form, such as a quality, that exists only at the level of *accident*.

The discoveries of modern applied science would tend strongly to support this insight of St Thomas at least in the following sense. The whole synthetic materials industry depends on the human capacity to manufacture new *substances*, with distinctive sets of properties - thermoplastic materials, for example, such as polyvinyl chloride, as opposed to thermosetting plastics, for example, bakelite. Within the conceptual framework of hylomorphism (cf. Note 5A of chapter 3 *supra*, and pp. 175-188 of chapter 5 *infra*), the emergence of identifiably new (artificial) substances entails that the *basic materiality* of amounts of physical matter - that is, *materia prima* - is taking on new substantial forms - new intrinsic specifying principles at the level of the substantial reality of objects, new *formae substantiales* - making these new substances *what they are*.

Thomas sees the hylomorphic analysis as being applicable even to so homely an (artificial) substance as bread: the natural power of fire deployed by human skill in the cooking of material prepared from flour and water brings about the emergence of the new substantial reality that is bread, itself a composite of primary matter and substantial form.

6. St Thomas will argue elsewhere (for example, in *Scriptum* 4. 10. 2. (resp.) to [sub] quest. 1 & 2, in *S. c. Gent.* 4. 64, in *Quodl. Quaest.* (sub) quest. 4, art. 1, and in the *S. Theol.* 3. 76. 1) that there are two ways in which what belongs to Christ (that is, His body, blood, soul, natural accidents, divinity) becomes present in the Eucharist: *either* in virtue of the sacramental sign (ex vi sacramenti), that is, in virtue of what is directly brought about by the (instrumental) effectiveness of the sacramental formula ('This is my body', 'This is my blood'); *or* by natural concomitance or accompaniment (ex naturali concomitantia). This issue is considered in chaper 2, pp. 23-27 *supra*.

7. Thomas's version of Augustine's text is "Deus non est causa tendendi in non esse." This conveys the meaning, though in a fairly free rendering of Augustine's text which occurs in question 21 of his *Octaginta Tres Quaestiones* (ML 40, 16): "Ille ad quem non esse non pertinet non est causa tendendi ad non esse [He to Whom non-existence does not pertain is not the cause of (anything's) tending towards non-existence]."

'ML 40, 16' signals that this citation from Augustine is to be found on page 16 of volume 40 of Migne's series of Latin works. Jacques Paul Migne (1800-1875) was a French priest who established a printing and publishing house in Paris in 1834 which produced the massive *Patrologiae Cursus Completus*: *Series Latina*, *Series Graeca*. The *Series Latina* (ML) consisted of 221 volumes (published between 1844 and 1864) of the works of Latin ecclesiastical writers up to Innocent 111 who died in 1216. The *Series Graeca* (MG) contained 162 volumes (published between 1857 and 1866) of the works of Greek ecclesiastical writers up to 1439. Subsequent scholarly work on a number of individual writers has resulted in the availability of better critical editions of certain texts. Overall, however, the *Series Latina* and the *Series Graeca* as published by Migne continue to provide the standard texts for citation and reference.

8. It is interesting to notice that Thomas's "Non est quaerendum seorsum de forma aut de materia in quid convertatur, sed totus panis convertitur in totum corpus Christi in quantum est corpus [There is no call for separate inquiry as to what the form or the matter is changed into: the whole of the bread is changed into the whole body of Christ *qua* body]" reflects an emphasis different from what he has to say in *Scriptum super Sententiis* 4. 11. 3. (resp.) to 1: "Hic et totum convertitur in totum quia panis fit corpus Christi; et partes etiam convertuntur, quia materia panis fit materia corporis Christi, et forma substantialis similiter fit illa forma quae est corporis Christi [(In this sacrament) the whole is changed into the whole because the bread becomes the body of Christ. And the parts are also changed since the (primary) matter of the bread becomes that form which is (the form) of the body of Christ, and the substantial form likewise becomes that form which is (the form) of the body of Christ]." It should be recalled that *Quodlibetal Question* 5

was most probably disputed in Paris in Advent of 1271, and that Book 4 of the *Scriptum* super Sententiis was written (also in Paris) in 1255 or 1256.

St Thomas returns in 3. 75. 6 (to) 2 to this point about what happens to the *form* of the bread when the sacrament is consecrated when he argues as follows:

Dicendum quod anima est forma corporis dans ei totum ordinem esse perfecti, scilicet esse, et esse corporeum, et esse animatum, et sic de aliis. Convertitur igitur forma panis in formam corporis Christi secundum quod dat esse corporeum: non autem secundum quod dat esse animatum tali anima.

(The soul is the form of the body conferring on it the total range of its completed being, namely being, being a body, being alive, and so on for the rest. Accordingly, the form of the bread is changed into the form of Christ's body to the extent of conferring being-a-body, not to the extent of conferring being-alive by a certain sort of soul.)

- 9. For the Latin text of question 5, (sub) question 6, article 1, of the *Quaestiones Quodlibetales*, see volume 5, p. 107, of the Marietti edition of the *Quaestiones Disputatae Sancti Thomae Aquinatis* (for details see the bibliography *infra*).
- 10. St Thomas argues concisely for this proposition in his *Scriptum super Sententiis* 4.11. 1. 2:

Haec positio [materia esse sine forma] implicat contradictionem. Materia enim per essentiam suam est ens in potentia, et forma est actus eius. Si ergo ponatur materia sine forma esse actu, ponetur actum materiae esse et non esse.

(This position [matter existing without form] involves a contradiction: matter of its very nature is being in potentiality, and form is its actualisation. If, then, it is asserted that matter without form is actual, it is being asserted that matter's actualisation is both instantiated and not instantiated.)

I adopt here the textual variant "actum materiae" as found in six of the major codices of Thomas's Scriptum text, in preference to the textual variant "actu materia" used by Fabianus Moos, O.P., in his Lethielleux edition of Thomas's work. It seems to me that the variant used by Moos runs the risk of confusing actualisation through form with actualisation through esse, and thereby introducing an ambiguity into Thomas's argument that weakens it.

I must, however, add that, although I do not accept the textual variant preferred by Moos, it is his scholarly work in editing tome 4 of Thomas's *Scriptum* that has provided through his Notes access to what seems to me to be the philosophically preferable variant, namely "actum materiae".

- 11. See Note 2 supra.
- 12. For the Latin text, see volume 4, p. 441, of the Léthielleux edition of the *Scriptum super Sententiis*.
- 13. Op. cit., p. 440. See Note 10 supra.
- 14. For St Thomas, the local motion of a body is necessarily successive (the necessity is ontological) since it involves the traversing of space a process that introduces a successiveness measured by time. See in connection with this point *S. Theol.* 3. 57. 3. (to) 3, and chapter 3, pp. 90-91, with Note 2 *supra*. It may be noticed that this idea of St Thomas is perfectly compatible with the idea of quantum non-locality, with its

affirmation that, if two sub-atomic particles have earlier interacted (a process often referred to as 'en-tanglement'), and later have become spatially separated, the disturbance of either particle will involve the simultaneous disturbance of the other regardless of how great their spatial separation may be. There is no claim that, in any such situation, some or other material entity - a virtual particle, say - is transferred instantaneously (*in instanti*, as Thomas would put it) to communicate the disturbance from one particle to the other. For a thoughtful, semi-technical, discussion of quantum non-locality, see section 10. 6 (pp. 167-173) of Euan Squires' *Conscious Mind in the Physical World*. (Euan Squires was for many years Professor of Applied Mathematics at the University of Durham, where his special research interest was the foundations of quantum theory.) See also Scholion 3, pp. 53-55, of chapter 2 *supra*.

- 15. As already noted, Thomas argues for the instantaneous nature of transubstantiation in *Scriptum* 4. 11. 1. 3. 2. (resp.) to 2 an extended and carefully nuanced discussion and, more briefly, in the *S. Theol.* 3. 75. 7 (refer chapter 3, pp. 90-91 *supra*).
- 16. Thomas's point would appear to be that the (instrumental) causal efficacy of the words of consecration ("This is my body.") would bring about the presence of the body of Christ in all specifiable parts of the host on the altar but would leave without causal explanation the presence of the "fundamental physical elements" in a particular part of the host.
- 17. The Latin text is on pp. 140-141 of volume 4 of the Lethielleux edition of the *Scriptum super Sententiis*.
- 18. For Domingo Banez, see Note 3 ad finem of chapter 2 supra.
- 19. Duns Scotus (c. 1265-1308) was a Scholastic philosopher and theologian of great power and originality. He commented on works of Aristotle and the third-century AD polymath Porphyry (c.232-305), raised a set of questions arising out of Aristotle's work on metaphysics, and produced three separate commentaries on the *Sententiae* of Peter

Lombard, as well as a number of quodlibetal questions. Scotus developed several arguments for the existence of God that are of remarkable metaphysical depth and rigor. He held that 'being' was a concept that applied univocally to all realities, and that the individuation of each thing was due to each thing's having the form of *thisness* (haecceitas) - a position expressed differently by Scotus in different works. Scotus postulated a direct intellectual intuition of individually existing material things. In theology he stressed the Incarnation as the supreme manifestation of God's love for His creation, and as something that would have taken place even in the absence of human turning away from God through Original Sin.

- 20. For Banez' critical discussion of Scotus, see his *Comentarios Ineditos a la Tercera Parte*, pp. 280-81 (for publishing details, cf. bibliography *infra*).
- 21. For relevant citations from the documents of these Councils, see Note 1.A (2) & (3), chapter 2 *supra*.
- 22. For Cajetan, see Note 12, chapter 3 supra.
- 23. Cf. volume 12, p.166, of the Leonine edition of the Summa Theologiae.
- 24. For the 'ordered power of God' (potentia Dei ordinata vel ordinaria), cf. Note 31, chapter 2 and Note 8, chapter 3, *supra*
- 25. The Latin texts are on p.144 of volume 5 (Quaestiones Quodlibetales) of Marietti's Quaestiones Disputatae Sancti Thomae Aquinatis.
- 26. For Ferrariensis, see Note 17, chapter 2 *supra*.
- 27. Leonine edition of the *Summa contra Gentiles*, volume 15 (book 4 of the *S. c. Gentiles*), with the relevant part of the commentary of Francesco Silvestri of Ferrara (Ferrariensis) on book 4, chapter 63, to be found on p. 205.

- 28. Joseph Gredt *Elementa Philosophiae Aristotelico-Thomisticae*, volume 2, p. 303. For Gredt, cf. Note 19, chapter 2 *supra*.
- 29. For Capreolus, cf. Note 10, chapter 3 supra.
- 30. This idea of Capreolus is proposed in the course of his discussion of what St Thomas has to say on the Sententiae of Peter Lombard, book 4, distinction 11, question 1, article 3. In section 2 of his discussion, Capreolus is responding to arguments of Duns Scotus to the effect that the real presence of Christ in the sacrament of the altar does not require a change of the substance of the bread into the body of Christ. (Cf. 2.1 supra for Banez's rejection of Scotus's account of how Christ becomes present in this sacrament.) For the idea of Capreolus that the bread is not annihilated at the Eucharistic consecration because it continues to exist in obediential potency in the body of Christ in this body's sacramental existence in the Eucharist (so that, through the absolute power of God, the sacramental body of Christ could be changed back into the substance of the bread, just as previously the substance of the bread had been changed into the sacramental body of Christ) see volume 6, p. 240, of the Defensiones Theologiae Divi Thomae Aquinatis of John Capreolus. The argument of Ferrariensis against Capreolus may be located by consulting the reference in Note 27 supra. For Thomas's concept of 'obediential potency' (potentia oboedientialis), cf. chapter 7, p. 280, and Note 8 of the same chapter infra.

Chapter 5. The Substance of Bread after the Eucharistic Consecration (Third Issue) [3. 75. 4]

1. The Position of St Thomas

It will be recalled that St Thomas has already argued in Question 75 that Christ is present in His full reality in the sacrament of the altar (article 1), that the substance of the bread and of the wine does not remain after the consecration (article 2), and that this substance has neither been annihilated nor reduced to matter-in-an-earlier-state (article 3). Article 2 was St Thomas's first discussion of *what happens* to the substance of the bread and of the wine at the Eucharistic consecration: it does not remain on the altar. Article 3 was his second discussion of what happens at the Eucharistic consecration and, as already stated, argues against the substance of the bread and of the wine being annihilated or reduced to matter-in-an-earlier-state. His third discussion of this issue takes place in article 4 where, assuming the conclusions reached in the preceding three articles, he asks whether it is *possible* for bread to be changed into the body of Christ at the celebration of the Eucharist. This is to address in a direct way the issue of *transubstantiation* which is both the overarching and the central theme of Question 75.

St Thomas poses the question of transubstantiation in the following way: "Is bread able to be changed into the body of Christ?" (Utrum panis possit converti in corpus Christi?). He introduces what he has to say in answer to this question by setting out three arguments designed to reject the possibility of transubstantiation. Each argument draws on a different principle related to the nature of change as interpreted within the framework of Aristotelian philosophy. The arguments are succinct and clear, and can be effectively offered in a direct translation of Thomas's own words [1]:

"1. The conversion [of bread into the body of Christ] would be an instance of change. But in every instance of change there must be a subject which is first in potentiality and afterwards in actuality. Aristotle notes this in book 3 of the *Physics* [210a10]: "Change is the actualising of what exists in potentiality [to further actualising]" (motus est actus existentis in

potentia). However, there is no subject underlying the substance of the bread and the substance of Christ's body:

it is of the nature of a substance that it does not exist in a subject (quod non sit in subject) as Aristotle points out in the *Categories* [2a 13; 3a 7]. It cannot be the case, therefore, that the whole substance of the bread is changed into the body of Christ.

- 2. Furthermore, when something is changed into something else, the substantial form of that into which it is changed begins to exist *de novo* in the primary matter of that which has been changed into this 'something else'. For example, when air is changed into fire that did not exist before, the form of fire begins to exist *de novo* in the matter of what had been air; similarly, when food is changed into human flesh not previously existing, the form of the human being begins to exist *de novo* in the matter of what had been food. So, if bread is changed into the body of Christ, it will be necessary that the form of Christ's body begins to exist in the matter of the bread a proposition to be rejected as false. Therefore bread is not changed into the substance of Christ's body.
- 3. When two things are in natural opposition (secundum se divisa) one of them never becomes the other whiteness, say, never becomes blackness, though the subject of the whiteness may become the subject of the blackness, as Aristotle points out in book 1 of the *Physics* [188a31].

Now, just as two contrary forms are in natural opposition, existing as sources of formal difference (principia formalis differentiae), so also are two designated quantities of matter in natural opposition, existing as sources of distinction based on matter (principia materialis divisionis). In consequence, it cannot be the case that *this* matter [by which the bread is individuated] may become *this* matter by which the body of Christ is individuated. And so it also cannot be the case that the substance of this bread may be changed into the substance of Christ's body."

In the body of the article St Thomas develops an argument concerned (1) to establish that the substance of the bread must be changed into the body of Christ in order to secure the substantial reality of Christ's presence in the sacrament of the altar, and (2) to establish what the nature of this change must involve, and the scope of the causal agency required to bring about such a change.

I shall set out the argument of St Thomas in 3. 75. 4 by identifying in it the paragraphs that constitute the argument, with each paragraph flagged by a paragraph-letter. Each paragraph will, as required, be followed by commentary, drawn in the main from Thomas's own texts, with critical reflection on aspects of the argument of the Angelic Doctor being reserved for Section 2 *infra*:

- (a) "[The] change [of the substance of bread into the body of Christ] does not resemble any natural change but is altogether beyond the powers of nature, and brought about by God's power only." ("Haec...conversion non est similis conversionibus naturalibus, sed est omnino supernaturalis, sola Dei virtute effecta.")
- St Thomas initially supports this claim by introducing relevant citations from St Ambrose [2] and St John Chrysostom [3]. It is an argument *ex auctoritate*. He then goes on to develop an argument from reason *ex ratione* that consists of propositions articulating part of a metaphysic of 'action'.
- (b). "It is evident that every agent or cause acts to the extent to which it is in actuality." ("Manifestum est enim quod omne agens agit in quantum est actu.")
- -St Thomas's point is that a thing can be an agent or cause only to the extent to which it is already actualised or in actuality (a) with respect to existing, (b) with respect to its possessing powers or capacities for operating causally, (c) with respect to the actual exercise of such powers.

In a lucid statement about causal activity (1.115.1), Thomas affirms that "Agere autem, quod nihil est aliud quam facere aliquid actu, est per se proprium actus in quantum est actus." ("To be causally active, however, which is nothing else than to bring something into actuality, is itself an essential property of being-actual *qua* being-actual.")

It should perhaps be added that, underlying what St Thomas has to say about 'actio' and 'agere', is his conviction that the *esse*, that is, the *being in be-ing* of any reality at all is itself the intrinsic ontological dynamism or energy of each thing, and is also the ground or source of each thing's being causally active *ad extra* [4]. Put differently, the good that is being in be-ing (ens et bonum convertuntur) is 'sui diffusivum', that is, suited to engendering being in be-ing in things outside itself [5].

- (c) "Every created agent or cause is limited in its actuality since it is of a definite genus and species." ("Quodlibet autem agens creatum est determinatum in suo actu: cum sit determinati generis et speciei.")
- -St Thomas is taking the concepts 'genus' and 'species' to designate classes of objects, such that 'genus' designates a class divisible in principle into subordinate classes, and 'species' designates any subordinate class into which a genus is divisible. The idea here for Thomas is that the inclusion of every created agent or cause in a definite genus and species, that is, in a particular descriptive category, is an indication of, or pointer to, a significant ontological fact, namely that every created agent or cause is determinate or limited in respect of its very being or real existence.
- (d) "It follows that the action of any created agent or cause at all is restricted to bringing about some determinate or limited actualising of a thing." ("Ideo cuiuslibet agentis creati actio fertur super aliquem determinatum actum.")

It should be noted that, for the Angelic Doctor, the *esse* or actual *being in be-ing* of things is not an effect that falls within the causal scope of created, that is, of finite, agents left to themselves:

Oportet enim universaliores effectus in universaliores et priores causas reducere. Inter omnes autem effectus, universalissimus est ipsum esse. Unde oportet quod sit proprius effectus primae et universalissimae causae, quae est Deus. Unde etiam dicitur libro *De causis* [6] quod neque intelligentia vel nobilis anima dat esse, nisi inquantum operatur operatione divina.

(It is necessary that more universal effects be ascribed to more universal and prior causes. But, amongst all effects, the most universal is being in be-ing itself. So it is necessary that it be the distinctive effect of the first and most universal Cause which is God. Accordingly, it is stated in the book *Concerning Causes* that neither a [separated] intelligence nor the highest order of soul imparts being in be-ing except to the extent that it acts by sharing in God's activity.) [1. 45. 5c. Cf. also *Comp. Theol.* chs 68 &70]

For St Thomas, finite causes, when "sharing in God's activity", bring about *esse* - being in be-ing - in bringing about "aliquem determinatum actum" ("some determinate or limited actualising of a thing"), whether in the order of substance or in that of accident.

(It may perhaps be noted in passing - though not without indirect relevance to the overall argument being undertaken - that the cited passage from 1. 45. 5c of the *Summa Theologiae* dealing with *esse* as the 'most universal effect' in things brought into actual existence has the capacity to be developed into a strong metaphysical argument for the existence of a 'first and most universal Cause'. Thomas himself briefly develops the insight contained in 1. 45. 5c into an argument for the existence of "unum essendi principium" ["one principle of being"] in 1. 65. 1c when he asks whether the material creation [creatura corporalis] is from God.)

- (e) "The determinate actualising of anything at all in actual reality is through any form that it has." ("Determinatio autem cuiuslibet rei in esse actuali est per eius formam.")
- -Within the philosophy of Aristotle and St Thomas (and within Scholastic philosophy in general) by "form" is meant any component of a thing that determines the kind of thing that it is, whether in the line of substance substantial form or in the line of accident accidental form, thus making it *actual* or *actualised* in a particular way. St Thomas captures this idea neatly in a passage of his *De principiis naturae*:

Sicut autem omne quod est in potentia potest dici materia, ita omne a quo habet aliquid esse, quodcumque esse sit illud, sive substantiale sive accidentale, potest dici forma; sicut homo cum sit potentia albus fit per albedinem actu albus; et sperma cum sit potentia homo fit actu homo per animam. Et quia forma facit esse in actu, ideo dicitur quod forma est actus; quod autem facit actu esse substantiale, dicitur forma substantialis, et quod facit actu esse accidentale dicitur forma accidentalis. [7]

(Just as everything that is in potentiality can be called *matter*, so can every component by which a being has actuality - whatever sort of actuality it is, substantial or accidental - be called *form*. For example, through whiteness a person potentially white becomes actually white; and, through a soul, a spermatozoon that was potentially a human being becomes one actually. And, since a form makes something actual, a form is said to be an *actualisation* or *actualising principle*: what makes something actually a substance is called a *substantial* form, and what imparts actual, though non-substantial, existence is called an *accidental* form.)

- (f) "So no natural or created agent can act except with reference to change involving form. For this reason every change that takes place in accordance with the laws of nature is a change in respect of form." ("Unde nullum agens naturale vel creatum potest agere nisi ad immutationem formae. Et propter hoc omnis conversio quae fit secundum leges naturae est formalis.")
- (g) "On the other hand, God's actuality is infinite, as was shown in the First Part (qu.7, a.1; qu.25, a.2)." ("Sed Deus est infinitus actus, ut in Prima Parte habitum est.")

-The centre of Thomas's argument for the infinite actuality of God is to be found in his affirmation of the identity of essence (essentia) and being in be-ing (esse) in God (1. 3. 4). God is *ipsum esse subsistens* - the subsistent activity of being in be-ing - that has no trace of limiting potentiality in it (1. 3. 1). God is "maxime ens inquantum est non habens aliquod esse determinatum per aliquam naturam cui adveniat, sed est ipsum esse subsistens, omnibus modis indeterminatum." ("God is being taken to its highest strength, insofar as God has no be-ing limited through any nature to which it is related. [God] is the subsistent activity of being in be-ing, unlimited in every way.") (1. 11. 4)

It should be recalled that, for St Thomas, "Ipsum esse est perfectissimum omnium: comparatur enim ad omnia ut actus. Nihil enim habet actualitatem nisi in quantum est. Unde ipsum esse est actualitas omnium rerum, et etiam ipsarum formarum." ("Being in be-ing is itself the most ontologically excellent feature in the whole of reality: it is compared to everything else as actualising principle. For nothing has actuality except to the extent to which it *is*. So being in be-ing is itself the very actuality of all things, even of forms themselves.") (1. 4. 1 [to] 3)

Readers of Thomas would also be aware that, for him, "Esse est illud quod est magis intimum cuilibet, et quod profundius omnibus inest, cum sit formale respectu omnium quae in re sunt." ("Being in be-ing is what is innermost for every single reality, and what is most deeply present in everything, since it is form-like or actualising in respect of everything that is in something real.") (1. 8. 1c.)

So Thomas concludes that "Cum Deus sit ipsum esse subsistens, nihil de perfectione essendi potest ei deesse. Omnium autem perfectiones pertinent ad perfectionem essendi: secundum hoc enim aliqua perfecta sunt quod aliquo modo esse habent. Unde sequitur quod nullius rei perfectio Deo desit." ("Since God is subsistent being in be-ing, nothing of the ontological excellence of being can be wanting to God. For the ontological excellences or perfections of all things relate to the perfection of be-ing, since it is in terms of their having be-ing in some or other way that things are perfect or have

ontological excellence. It follows, then, that the perfection or ontological excellence of nothing whatsoever is wanting to God.") (1. 4. 2)

The final paragraph of the Angelic Doctor's explicit treatment of the question of God's infinity reads as follows:

Illud autem quod est maxime formale omnium est ipsum esse, ut ex superioribus [qu.4, a.1 (to) 3] patet. Cum igitur esse divinum non sit esse receptum in aliquo, sed ipse sit suum esse subsistens, ut supra ostensum est [qu.3, a.4], manifestum est quod ipse Deus sit infinitus et perfectus.

(That which is highest in respect of actualising is being in be-ing itself, as is clear from what has already been said [qu.4, a.1. (to) 3]. So, since divine being in be-ing is not received into anything, but God is subsistent being in be-ing, as was shown above [qu.3, a.4], it is evident that God is infinite and perfect.) [8]

(h) "Accordingly, divine action extends to the total nature of a being. Not only, then, can it bring about a change of form...it can bring about the change of a whole being, so that the whole substance of *this* being is changed into the whole substance of *that* being." ("Unde [Dei] actio se extendit ad totam naturam entis. Non igitur solum potest perficere conversionem formalem...sed conversionem totius entis, ut scilicet tota substantia huius convertatur in totam substantiam illius.")

-To exercise the activity of being in be-ing involves the total nature of a thing. As the transcendent, as well as immanent, Source of the being in be-ing of things, empowering finite things (things in which essence or nature, and being in be-ing, are distinct *in re*) to exercise this most basic of activities, God's causal power extends to "the total nature of a being". It can, then, change this nature to the extent of changing the whole substance of a

material thing - primary matter and substantial form - not only the substantial form of a material thing.

(i) "This is what is done by divine power in this sacrament. For the whole substance of the bread is changed into the whole substance of the body of Christ, and the whole substance of the blood of Christ. It follows that this is not a change of form (non est formalis) but a change of substance (substantialis). It is not contained within the kinds of natural change there are, and can be given its own distinctive name and called *transubstantiation*." ("Hoc agitur divina potentia in hoc sacramento. Nam tota substantia panis convertitur in totam substantiam corporis Christi, et tota substantia vini in totam substantiam sanguinis Christi. Unde haec conversio non est formalis, sed substantialis. Nec continetur inter species motus naturalis, sed proprio nomine potest dici *transubstantiatio*.") [The italics are to be found in the Latin edition being used.]

What is being claimed in saying that "the whole substance of the bread" and "the whole substance of the wine" are changed into the body and blood of Christ is that the whole reality of the bread and the whole reality of the wine in respect of their capacity for separate (distinct) existence - a capacity that is structured in terms of unity-identity-wholeness - are changed into the whole reality of the body and blood of Christ in respect of the capacity of this body and blood for separate (distinct) existence. Those features of the bread and of the wine - the 'accidents' of the bread and of the wine - that have no such capacity for separate existence, for example, their colours, shapes, surface textures, etc., remain unchanged when transubstantiation takes place. (Cf. the earlier discussion of the notion of 'substance' in chapter 3, pp. 105-114.)

The point of the concluding paragraph is to apply the argument of (a) to (h) to the change that takes place at the moment of Eucharistic consecration, with the coda that this change, being a change of the 'whole substance' of the bread (and of the whole substance of the wine), can attract a distinctive name - that of "transubstantiation".

-Thomas's replies to the first two of the three objections put forward above against the possibility of the change of the *whole* substance of the bread and of the wine into the body and blood of Christ involve his drawing attention to the failure of these two objections to distinguish satisfactorily between *conversio formalis* – change directly focused on the [substantial] *form* of a material thing - and *conversio substantialis seu totius substantiae* - change directly focused on the *whole substance* of a material thing. This failure on the part of these two objections results in the drawing of false conclusions regarding the indispensable need for a *subject* of change in absolutely every instance of change - a need that, in the nature of the case, is not to be met when there is question of transubstantiation.

Thomas's reply to the third objection (the objection is set out on p. 166 *supra*) contains in brief compass an exceptionally powerful piece of metaphysical analysis which the reply brings to bear on the concept of *conversio substantialis*. I give this succinct reply in Thomas's own Latin, followed by its translation:

Dicendum quod virtute agentis finiti non potest forma in formam mutari, nec materia in materiam. Sed virtute agentis infiniti, quod habet actionem in totum ens, potest talis conversio fieri: quia utrique formae et utrique materiae est communis natura entis; et id quod entitatis est in una, potest auctor entis convertere ad id quod est entitatis in altera, sublato eo per quod ab illa distinguebatur.

(It must be said that the power of any finite agent falls short of being able to change form into form, or matter into matter. But the power of an infinite agent - one whose action extends to the whole of being - is able to bring about such a change. This is so because the nature of *being* is common to each of the two instances of form, and to each of the two instances of matter; and the Author of being is able to change that which is *being* in

one instance [of each pair] into that which is *being* in the other instance [of the same pair], with all that distinguishes one from the other being removed.) [9]

-Were someone to ask why no finite agent can change form into form or matter into matter, a Thomistic reply would be along the lines that form has no natural potentiality to be changed into form, nor matter any natural potentiality to be changed into matter. However, both form and matter have *potentia oboedientialis* - obediential potentiality - based on their relation of total ontological dependence upon the Author of being and, for that reason, have a *preternatural* capacity for change of form into form and matter into matter. (For the notion of 'obediential potentiality', see chapter 7, p. 280 and Note 8 of the same chapter *infra*.)

2. Some Reflections on the Position of St Thomas

2. 1 A Further Consideration of Hylomorphism (Cf. Note 5A, chapter 3 *supra*)

2. 1. 1. St Thomas concludes his argument in 1.75.4 by speaking of the "whole substance" (tota substantia) of the bread and of the wine being changed into the body and the blood of Christ. On the basis of his hylomorphic account of material substance, this implies for Thomas that the primary matter (materia prima) and substantial form (forma substantialis) of the bread and of the wine used in the celebration of the Eucharist are both of them entirely changed or 'transubstantiated' into the body and blood of Christ by the words of consecration, with the accidents or 'species' of the bread and of the wine remaining. And it should be noted again at this point that, for the Angelic Doctor, it is hylomorphism that offers the best possible understanding of the substantial unity-identity-wholeness of material realities, of the capacity of these realities for change at a level affecting the very nature of what they are, of the species-specific distinctions to be found amongst them (carbon, say, is not gold), of their possession of dimensive quantity, and of the active tendencies in them towards the full realisation of what-it-is-to-be an instance of this or that sort of thing - of what-it-is-to-be a horse, say, as distinct from being a gum tree or one of the hydrocarbons.

The resources drawn on here by St Thomas in the doctrinal context of the Eucharist are those of philosophy. He offers an interpretation of what takes place when the Eucharist is celebrated that rests on an acceptance of the concepts of 'matter' (*hule*) and 'form' (*morphe*) developed by Aristotle in books 1 and 2 of the *Physics*, books 7 and 8 of the *Metaphysics*, and book 1, chapters 3 and 4, and book 2, chapters 7-9, of the *On generation and perishing (Peri geneseos kai phthoras)*. Thomas's commentaries on these texts give his own analyses and arguments supporting, extending, and occasionally correcting, Aristotle. (For a correction see, for example, section 1423, lectio 7, of the commentary on the *Metaphysics* [book 7, 1033a24 – 1034a8] where Thomas rebuts as incorrect Aristotle's statement that "form comes to be in matter" ["licet in litera dicatur quod *forma fit in materia*, non tamen proprie dicitur"] in favour of "the composite comes

to be from matter taking on such and such a form" ["proprius modus loquendi est ut dicamus compositum generari ex materia in talem formam"].)

Since St Thomas's day, however, major developments in the study of the nature and properties of material realities have taken place within the perspective not of philosophy but of the physical sciences. In particular, the sciences of physics and chemistry have been engaged (especially in the latter part of the 19th, throughout the 20th, and into the 21st, centuries) in ever more sophisticated explorations of the structure and workings of physical objects at smaller and smaller scales of existence. This experimentally grounded research into the nature and properties of material realities has yielded an ever growing body of knowledge that deepens our understanding of 'Nature', that is, of material objects as empirically accessible to refined exploratory techniques, and where results are routinely articulated in mathematical terms [10].

It must, then, be acknowledged that the natural sciences make available important knowledge of material things, whereas knowledge grounded in distinctions such as those between substance and accident, primary matter and substantial form (as intrinsic coprinciples of identity and change), material substance and dimensive quantity, the four types of causes, contingency and necessity, teleology and chance, is knowledge conceptualised by the reflective intellect on the basis of ordinary or everyday experience experience that may be broadened to include the results of experimental work in the physical sciences - and which pertains to philosophy, not to 'empiriological' science as such (to borrow Maritain's neologism; cf. Note 10 *infra*.)

When what is being accomplished in science, particularly in experimental and theoretical physics and chemistry, is brought to bear on what takes place when the 'whole substance' of the bread and wine is changed into the body and blood of Christ, the philosophy of Christian doctrine (cf. page 8 of chapter 1 *supra*) finds itself having to confront a challenging situation not confronted in earlier times. The broad parameters of this situation were brought into view quite sharply some time ago (1949) when Filippo Selvaggi, then Professor of Cosmology at the Gregorian University, Rome, published a long and searching article in the journal *Gregorianum* [11] under the title "Il concetto di

sostanza nel Dogma Eucaristico in relazione alla fisica moderna" ("The concept of substance in the dogma of the Eucharist in relation to modern physics"). His conclusion merits careful attention in the new situation that the philosophy of Christian doctrine has to face when it proposes to undertake an examination of the metaphysics of the Eucharist:

Applicando questi concetti [della fisica moderna] al dogma eucaristico, dobbiamo affermare che quando nella transustanziazione, per le parole di Cristo, tutta la sostanza del pane e del vino si converte nel suo Corpo e nel suo Sangue divino, allora i protoni, neutroni ed elettroni in atto, che appartengono alla massa della materia consecrata, gli atomi, le molecule, gli ioni, i complessi moleculari, i microcristalli, insomma tutto l'insieme delle sostanze che costituiscono il pane e il vino, cessano di essere e si convertono nel corpo e nel sangue di Cristo. Rimangono invece gli accidenti appartenenti a tutte quelle sostanze, l'estensione, la massa, le cariche elettriche, con tutte le energie, potenziali e attuali, magnetiche, elettriche, cinetiche, che ne derivano, e quindi tutti gli effetti ottici, acustici, termodinamici, elettromagnetici,, che quelle forze possono produrre; et tutti questi insieme costituiscono le specie cioè eucaristiche. l'insieme dei fenomeni direttamente sperimentabili. [The italics are Selvaggi's.]

(In applying these concepts [of modern physics] to the dogma of the Eucharist, we have to affirm that when, at the transubstantiation, through the words of Christ the whole substance of the bread and of the wine is changed into his divine Body and Blood, at that moment the actual protons, neutrons, and electrons, that belong to the amount of matter that is consecrated, the atoms, the molecules, the ions, the molecular groups, the microcrystals (in sum, the whole ensemble of substances that make up the bread and the wine) cease to exist

and are changed into the body and blood of Christ. However, the accidents that belong to all these substances remain: the extension, the mass, the electric charges, with all the potential and actual energies - magnetic, electrical, kinetic - that derive from them and, therefore, all the optical, acoustic, thermodynamic, and electromagnetic, effects that these agencies are able to produce. And all these together constitute the eucharistic species, that is, the ensemble of phenomena able to be directly experienced.)

Not surprisingly, much has gone on in modern physics and chemistry since the publication of Selvaggi's article in 1949, and the subsequent decade or so of lively debate the article provoked [12]. Whilst talk about atoms, molecules, protons, neutrons, etc., remains perfectly valid, more recent experimental and theoretical work (particularly in physics) has made it clear that the ultimate constituents of matter, that is, of material substances, do not lie at the level of these entities. Particles such as protons and neutrons are themselves composed of yet smaller particles called *quarks*. Electrons have so far resisted resolution into yet smaller entities, but the hypothesis of *preons*, that is, of constituents of electrons themselves (as well as of quarks) puts a question mark after the ultimacy even of electrons (and of quarks). Moreover, *string theory*, endevouring to interpret elementary particles in terms of unimaginably minute one-dimensional 'strings', with states and standing waves associated with these strings corresponding to the distinctive energies, and therefore masses, of elementary particles, takes us yet deeper into material substances. [13]

According to philosophers and theologians who think broadly along the lines of someone such as Selvaggi, what this implies for the doctrine of transubstantiation is that, at the words of Eucharistic consecration, when the substance of the bread and of the wine is changed into the body and blood of Christ, all the substantial physical constituents of the bread and of the wine, that is, all the quarks and leptons (electrons and their neutrinos) - or the 'strings' (and other extended objects identified in string theory) if such there be - become the quarks and leptons - or the 'strings' - that are the substantial physical

constituents of the body and blood of Christ. It is these physical entities that become the substantial reality of Christ's bodily presence in the sacrament of the altar and, in so doing, become the reality of His body that is also in heaven. The complex of accidental modes of being connected with these entities (refer Selvaggi *supra*) continues to exist, and to give rise to the sacramental species or appearances that remain on the altar and 'contain' the body and blood of Christ.

But the requirement that exploration of the nature of the Eucharistic change should take into account the results of both experimental and theoretical work in recent physics and chemistry surely moves us in the direction of a further consideration of the philosophical account of this change - a change affecting the "whole substance" of the bread and of the wine - in terms of hylomorphism, since these are the terms in which the received account of this change has been traditionally expressed. Indeed, it must always be kept in mind that Thomas's own account of this "whole substance" change that is transubstantiation the account that is of particular concern in this thesis - is invariably articulated in, and understood through, the conceptual resources gathered up in the philosophical thesis that is hylomorphism - a thesis that forms a central part of what the British analytical philosopher David Oderberg calls "the philosophy of the School". Of this School, that is, of Thomism, he writes "Nothing in philosophy approaches in precision, refinement, and fecundity, the philosophy of the School. Philosophy would do well to return to it." Oderberg made this statement at the outset of his own discussion of hylomorphism and individuation, notable for its skilled employment of conceptual analysis, and for its author's wide-ranging knowledge of the philosophical terrain of the School that is Thomism [14]. Accordingly, another look at the hylomorphism that is used by St Thomas in framing his metaphysics of the Eucharist, and given the background of considerable recent advances in physics and chemistry, seems altogether warranted.

What is actually involved in the Eucharistic change is the nature or essential constitution of *matter itself*: What exactly *is* the physical matter which is realised in all material substances including those that make up bread and wine? As we have seen, the answer of St Thomas is perfectly clear: any instance of physical matter or substance is an essential

composite of the intrinsically related substantial co-principles of *primary matter* (*materia prima*), in itself a purely potential principle, and *substantial form* (*forma substantialis*), the actualising and specifying principle which brings about, with primary matter, a complete material substance of this or that kind, for example, an atom of iron or a cat.

2. 1. 2 A contrast

In order to deepen our understanding of the nature of substantial material realities, with a view to having at our disposal conceptual schemata able to assist us in the interpretation of the change in material substances (in the components of the bread and of the wine) that takes place on the altar when the Eucharist is duly celebrated, it is of great value to contrast the *hylomorphic* account of the nature of physical substance, adopted by St Thomas and by the overwhelming majority of philosophers and theologians within the several modalities of Scholastic thought, with the *hylomeric* (from the Greek 'hule' matter, and 'meros' part/particle) account of the nature of physical substances. This account is offered both within modern physics and chemistry, and also within the influential cosmology of the German neo-Scholastic philosopher Albert Mitterer (1887-1966), who put this account forward under the title of *hylosystemism* (from the Greek 'hule' matter, and 'systema' complex whole) because it deals with the organisation or structuring of matter-particles into complex wholes or systems [15]

For Mitterer, physical substances are natural bodies that occur in the Universe in consequence of natural processes involving an array of heterogeneous particles that combine in virtue of their intrinsic properties to form stable, abruptly distinct, chemical elements such as helium, lead, platinum, radium, and so on. These particles - neutrons, protons, electrons - Mitterer called *hylons* (from the Greek 'hule' matter, and 'on' being). These particles are intrinsically integrated into a natural or essential unit - an 'unum per se' - by reason of fundamental interactions grounded in *what these particles are* that bind them into energy systems at the level of the atom and, in so doing, set up the essential structure ("Wesensstruktur" was Mitterer's word) of each elemental atom. The specific nature or essence of each element, that is, of each category or kind of atom - of carbon,

say, or mercury - is the resultant of the hylomeric constitution of the element. What is being claimed here is that the ultimate intrinsic ground of the kind of element one is dealing with, and of the element's specific properties, is to be located in this (heterogeneous) hylomeric constitution. In this way are such features of the element as atomic number, mass number, position in the periodic table, atomic absorption spectrum, ionisation potential, valence, and so on, to be explained.

Elements, that is, atoms having the same atomic number (the same number of protons in the nucleus), may themselves be combined by natural processes, or by technically controlled processes in a laboratory or a factory, into compounds in which they are chemically united in definite proportions by weight. Each kind of compound is itself a distinct species of material substance - iron sulphate (involving the elements iron and sulphur) is a species of material substance distinct from, say, potassium nitrate (involving the elements potassium, nitrogen, and oxygen). A *hylomeric* account of the formation of a compound through a chemical reaction makes such phenomena as isomerism (the existence of two or more chemical compounds of the same molecular formula, but with differing properties due to different configurations of atoms within the molecule of the compound) readily explicable.

Unsurprisingly, Mitterer's hylosystemism draws on its hylomeric construal of the essential constitution of material substances to attempt to explain how changes affecting the very nature or essence of material substances take place. Whereas, within hylomorphism, a change affecting the substantial nature of a thing involves primary matter's losing one substantial form, for example, the form of radium, and taking on a new substantial form, for example, the form of radon, under the influence of an external cause, the approach of hylosystemism is entirely different. The claim of the hylosystemist is that more remains throughout such a change than 'primary matter' (materia prima), and more changes than 'substantial form' (forma substantialis).

In terms of hylosystemism, the sub-atomic particles that composed an atom, and the elemental atoms that had entered into molecules, retain their identity throughout the change, although there will be an increase or decrease of sub-atomic particles in the atom, and/or a re-arrangement of the atomic configuration within a molecule (with concomitant changes to chemical, electric, kinetic, and potential energies). To give an example of what is meant: A sodium atom has one electron in its outer electronic shell. When this electron is taken up by a chlorine atom into its outer shell, this outer shell of seven electrons assumes the stable eight-electron pattern of a rare or inert gas. But, with the loss of its electron, the sodium atom has become a positively charged ion and, by taking up this electron, the chlorine atom has become a negatively charged ion. The resultant attractive electrostatic force between these ions binds them together into a stable molecule of *sodium chloride* (which may, in turn, form part of a physical lattice of sodium chloride if many such molecules are present).

What has to be particularly noted is that the nature, and arrangement (or rearrangement) of sub-atomic particles - each of which is a complete substantial unit within the atom and the molecule, are, according to hylosystemism, all that is required to give rise to a set of properties characteristic of, for example, sodium chloride, and quite distinct from the properties of sodium and chlorine (themselves sharply distinct from each other). The hylomeric description of change affecting the subtantial nature of a thing put forward by hylosystemism is, of course, one that would be endorsed in the sort of inquiry that is characteristic of modern physics and chemistry. Hylosystemism at least attempts to accommodate within its conceptual framework the fruitfulness and 'plasticity' of matter at its deepest level. (It should be added that theoretical and experimental work in particle physics from the early 1960s that has led to acceptance of the quark model of neutrons and protons, and to expanded knowledge of the family of leptons - by adding muons, tauons, and their corresponding neutrinos - would also be grist for the hylosystemic mill). According to hylosystemism, there is simply no call for a purely potential, substantially constitutive, principle - primary matter (materia prima) to abide throughout substantial change and underpin the radical mutability of physical realities.

Moreover, it is the coming about of a new 'Wesensstruktur' or essential structure, that is, the coming about of a different number and arrangement of heterogeneous material particles in an atomic or molecular system, and of a different level of chemical, electric, kinetic, and potential, energies in a new atomic or molecular system, that actually *is* the change of a thing/s into an instance of a new kind of thing/s, for example of calcium and carbon into something radically different: calcium dicarbide. In this sense there is for hylosystemists more to change affecting the substantial identity of a material thing than a new, substantially constitutive, 'actualising' principle called 'substantial form' (forma substantialis) that has been 'educed' from the potentiality of primary matter.

Followers of Mitterer such as Franz Unterkircher in Austria, and Celestine Bittle in the United States [16] drew attention to several difficulties that, as they saw it, faced the hylomorphic attempt to explain the nature of material substances. For example, they drew attention to the fact that, within atoms and, consequently, molecules, there was an openness of structure indicated by the (relatively) large interstices existing between central nuclei and their sets of surrounding electrons. Since substantial form is able to exist only in primary matter, are there as many substantial forms in an atom as there are separate sub-atomic particles? But this is to destroy the essential unity - the *unum per se* character - of the atom, and of the molecular compound as well. Or can *one* substantial form be somehow existing in a constellation of sub-atomic particles, with the extranuclear particles (the electrons) found in atomic orbitals separated from the nucleus? On hylomorphism's own premises, this would seem impossible.

Again, as Celestine Bittle has claimed [17], there are phenomena associated with radioactivity which appear to give an indication of being incompatible with hylomorphism's approach to the nature of material substances. Radioactivity is the property of spontaneous disintegration characteristic of certain unstable types of atomic nuclei from which alpha or beta particles are emitted. This emission of alpha or beta particles changes the chemical or substantial nature of the atoms involved because of change to the number of protons in the nuclei of the atoms concerned, with accompanying energy changes. Radioactive changes give rise to three naturally

occurring series: the thorium series, actinium series, and uranium series. Each member of each series, except the first, is the *decay product* of the immediately preceding member. What must be noticed is that, for example, part of the radioactive element radium, whilst actually combined with chlorine to form the compound radium chloride, or with sulphur to form radium sulphate, spontaneously changes into the decay product radon, a naturally occurring radioactive gas. What comes about in this case is a change affecting the substantial nature of part of a material substance - of the radium chloride or the radium sulphate - that is actually existing within the compound, the rest of which remains substantially unchanged in the process. On the hylomorphic account of material substance, the whole of the radium and the chlorine or sulphur ceased to exist, being replaced by the essentially distinct compounds radium chloride or radium sulphate, each of which is uniformly or homogeneously made up only of primary matter and substantial form. (The relevant chemical elements are conjectured to be only 'virtually' present in the sense that their properties are said to remain in a weakened and moderated state -"formaliter sed remissae et temperatae" [18].) On this hylomorphic account, it is impossible, according to Bittle, to explain the fact that radium atoms remain as identifiably effective systems, with some of them spontaneously decaying into the element radon. What has happened is that the nuclei of some atoms of a radioactive element - radium - which are complex in terms of the number of protons and neutrons they contain, emit alpha particles and thereby become instances of a new substance with its own distinctive properties, namely radon. It is hylosystemism, then, with its hylomeric approach to the nature of material substances, that is said to offer an objectively (scientifically) well-grounded explanation of the substantial changes that may affect physical substances. Hylomorphism is declared to lack explanatory power vis-àvis such changes, although the phrases "primary matter" ("materia prima") and "substantial form" ("forma substantialis") succeed in drawing attention to the capacity or pliancy for radical change of material substances, and to their determinate nature or structure, respectively. [19]

2.1.3. Hylomorphism and hylosystemism: a brief critical comparison

Ultimately there is a deep mystery attaching to the nature of matter, of material substances. One is driven, in the final analysis, to accepting the pervasive fact that the very nature of physical matter is such that it possesses the opposed capacities for ongoing substantial identity and for deep-seated or substantial, as well as for accidental, change - for internal coherence and for fruitful mutability. The upshot is that matter remains open, physically, to the process that is cosmogenesis, whilst remaining open, heuristically, to being related to an intelligent Cause that is transcendent of, though immanent in, the whole cosmos. What is critically at issue here, however, is whether what I have called "the deep mystery attaching to the nature of matter, of material substances" is best approached in terms of the substantively constitutive bi-polar principles of *primary matter* and *substantial form*, or in terms of *multi-polar particle systems*, each held together in electromagnetic saturation and equilibrium.

It is important here again to make the point that all of the Angelic Doctor's accounts of the change or *conversio* that is transubstantiation (for example, *Script. de Sent.* 4. 11. 1. 3. 1. [to] 1; *Summa c. Gent.* 4. 63; *Quaest. Quodl.* 5. q. 6. a. 1; *Summa Theol.* 3. 75. 4) rely explicitly on a philosophy of nature - a philosophical cosmology - that assigns a central position to the doctrine of primary matter - 'materia prima' - and substantial form - 'forma substantialis'; that is, to the (basically Aristotelian) doctrine of hylomorphism. The attack on hylomorphism coming in particular from the neo-Scholastic hylosystemists (Albert Mitterer, Hans Meyer, Franz Unterkircher, Celestine Bittle, *et al.*) would, if successful, damage irremediably the Thomistic interpretation of what takes place on the altar when bread and wine are changed into the body and blood of Christ.

But was this attack successful? I do not believe this to have been the case:

(a). Hylosystemism, drawing on the findings of modern physics and chemistry, correctly identifies such entities as neutrons, protons, and electrons, as sub-atomic particles each of which has its own identifiable properties (distinctive mass, spin, electric charge [or lack thereof], etc.). What hylosystemism fails to see, however, is that these sub-atomic particles, when existing not in isolation but as *components of particular chemical*

elements do not function as separate protons, neutrons, and electrons. They function as, and therefore are existing as, parts (of instances) of this or that particular kind of chemical element - as parts of sodium, say, or of strontium - with the distinctive properties of these elements. Taken simply as electrons, protons, and neutrons, and apart from any presence in different kinds of atoms, they are always the same and function in an identical or homogeneous way as electrons, protons, and neutrons, etc. When, however, they become components of this or that sort of chemical element, of this or that sort of atom, they function - and therefore exist - as parts of the chemical element in which they are found: they are involved in a dynamic unity-identity-wholeness that brngs it about that each particle functions not as an independent unit but determinately as a part of, for example, carbon or mercury or copper, and contributing to giving rise to properties characteristic of each of these elements. What this state of affairs calls for ontologically is a naturally unifying formal principle or form that merges or brings these components together and confers the character of being-a-part-within-a-whole on each one of these sub-atomic components: a principle of specific determinateness that gives rise to their being parts of, say, silver as opposed to their being parts of thorium. It is a unifying and stabilizing form that 'overrides', as it were, the separateness and independent nature of each particle to make of it an intrinsic contributor to something - a chemical element - that is a natural substance with a specific unity-identity-wholeness in its own right. It confers on each electron, proton, and neutron, its substantial identity as a part of nitrogen, for example, or of magnesium.

(b) Hylosystemism fails to notice that there are two perspectives from which sub-atomic entities may be considered. The first is what may be called the *homogeneity* of such entities - of protons, say, or neutrons when they exist as separate entities not having any presence within the atoms of a chemical element, that is, when they have a status of their own in terms of which they retain their independent identity. The second perspective may be called that of the *heterogeneity* of sub-atomic entities (of protons, neutrons, electrons) which is the (changed) status they have as intrinsic *parts* of different kinds of chemical elements, of different kinds of atoms: as parts they function or behave not independently but as components of a larger whole, for example, of atoms of phosphorus

or atoms of neon, with the sharply distinct sets of properties that each kind of element has. The demand for a naturally unifying and stabilizing formal principle or form that now gives rise to the substantial identity of the sub-atomic entities as *parts* of *this* specific kind of atom as opposed to *that* specific kind of atom - of sodium, say, as opposed to nitrogen - with their opposed properties, is simply not met within hylosystemism.

- (c). Again, hylosystemism adopts the view that changes affecting material substances at their most radical, their deepest, level, that is, at the level of their substantial unity-identity-wholeness, can be readily accommodated within a framework that includes no more than alterations to the numbers of sub-atomic particles involved and/or their arrangement within an atom. This view is promoted with great confidence, though evidence supporting its adequacy is not forthcoming. In the light of what has been said above about the failure of hylosystemists to notice the difference between the homogeneity and the heterogeneity of sub-atomic entities, that is, to notice the marked difference in status between these particles being autonomous units in a 'free' state, and their being *parts* of different kinds of chemical elements that have abruptly different properties, it is hardly surprising that followers of hylosystemism, when theorising about change at the level of substance, remain *de facto* only on the level of *accidental* change, that is, on a level of change that does not really call for an ontology of *substance*.
- (d) Unlike hylosystemism, Aristotelian-Thomistic hylomorphism fully acknowledges the *ontological depth* of change that may affect the unity-identity-wholeness of a material thing or substance: it acknowledges change that reaches to the very substance to the *substantial* reality of a material being. For example, the change that affects atoms of sodium and chlorine when they combine to form sodium chloride, the change that affects atoms of sulphur and oxygen when they combine to form sulphur dioxide, the change that affects atoms of magnesium, carbon, and oxygen, when they combine to form magnesium carbonate, are changes that reach to the *substantial* reality of all of the atoms involved, as is made clear from the new sets of properties that emerge in such changes properties irreducible to those of the combining atoms.

Yet the cessation of the substantial reality of the atoms in any of these cases is not the *total annihilation* of these atoms. Nor is the generation of new material substances the *creation* of these substances from nothing. What is implied in this (ontological) scenario is that, in addition to a principle of specific determinateness, unity, and stability, bringing it about that a 'parcel' of matter exists as something of a determinate nature (as hydrogen, say, or radium, or potassium carbonate), material substances also include or involve an intrinsic principle - a principle of *conservation* - that abides throughout change as a principle of 'basic materiality' (cf. Note 5A, chapter 3, p. 117-120 *supra*) at the level of substance, a principle that is indeterminate in itself but determinable by whatever substantial form it takes on to bring about a material thing that is composite in the line of nature or essence. This transition from potentiality to actuality that brings about an essentially composite material thing takes place under the action of an external cause (or causes) - of fire, say, or electrolysis or some or other chemical reagent.

This purely potential or determinable intrinsic principle at the level of substance in material things - this principle of conservation within material things, marking off substantial change in these things from the dyad of *annihilation/creation* - is what Aristotle called (for example, in book 1 of the *Physics*, and book 7 of the *Metaphysics*) hule prote - and sometimes also called hypokeimene phusis [substratum of nature] (cf. *Physics* 191a 7) -and what St Thomas called in his concise 13th century Latin materia prima: primary or proto-matter. [20]

(e). Individual material substances, then, at every level (micro- [sub-atomic, atomic, molecular] and macro- [cats, for example, or cabbages]) are essential composites of primary matter and substantial form. Put differently, they are hylomorphic in their essential structure, with identifying properties resulting from, and distinctive of, this or that structural combination *in actu* - the structural combination that gives rise to an emu, say, or to an atom of iodine. Thomism's endorsement of hylomorphism as the objectively grounded conceptual framework for its philosophical interpretation of the Eucharistic change that is transubstantiation provides for this part of Thomistic thought a

conceptual schema, and lines of argument, of impressively cogent explanatory power, whilst this endorsement respects the mystery with which, in the final resolve, any serious study of the Eucharist has to be dealing.

2. 2 The Scotistic Metaphysics of the Eucharist as Opposed to Those of St Thomas

Through the above (1) further considering of the philosophical doctrine of hylomorphism, (2) indicating of the implications for hylomorphism of modern explorations in physics and chemistry into the nature and properties of matter, and (3) describing and evaluating the opposed philosophical doctrine of hylosystemism, the way has been prepared for a broadening of the critical perspective on the Thomistic metaphysics of the Eucharistic change. This broadening of critical perspective will be brought about by introducing a strikingly different metaphysics of Eucharistic change and presence in which the genius of the Subtle Doctor, Duns Scotus, engages with, and systematically opposes with analyses and arguments of great dialectical power, the corresponding Eucharistic metaphysics of the Angelic Doctor. (As is stated at the end of the chapter, an evaluative response to Scotus from a Thomistic point of view will be the concern of the next chapter.)

2. 2. 1 Scotus and the Notion of 'Presence'

St Thomas had argued in article 2 of question 75 (as preliminary to establishing that the substance of the bread and of the wine does not remain in the sacrament of the altar after the consecration) that something can begin to exist where previously it did not exist only in one of two ways: by change of location, or by the change of something else into it. After setting out reasons (*loc. cit.*) for excluding local motion to account for the real presence of the body of Christ on the altar, Thomas concluded that only by the change of the substance of the bread into the body of Christ (and of the substance of the wine into His blood) could the real presence of Christ on the altar be accounted for. In article 4 of question 75 St Thomas introduces his argument in favour of the bread's being able to be changed – transubstantiated - into the body of Christ by reminding his readers of what

had been said in article 2 of the same question, and repeating his claim that "It is necessary to say that [the body of Christ] begins to exist there [on the altar] through a conversion of the substance of the bread into it" (Necesse est dicere quod ibi incipiat esse per conversionem substantiae panis in ipsum) (3. 75. 4c).

Duns Scotus was not persuaded by this argument of St Thomas that it was the change of the substance of the bread and of the wine that brought about the presence of the body and of the blood of Christ on the altar, that is, at a location where they did not previously exist. Scotus accepted that transubstantiation was, as the term indicated, a change involving the whole substance of the object being changed (although precisely how this change would be interpreted by Scotus will be explained later). For him, however, a change affecting the whole substance of a thing has as its terminus ad quem (its end term or completion - the term or completion in which it essentially results) a (new) substance. For Scotus, transubstantiation is a change that affects one substance by terminating in another, totally different, substance. A change of this kind leaves out of account per se all that lies outside the category of 'substance'. But Scotus is operating within the framework of Aristotle's ten categories, the (ontologically) *first* of which is 'substance', with the remaining nine categories (quantity, quality, relation, possession, whereabouts, when, arrangement, action, reception) being understood as dependent in one or another way on substance. In the Aristotelian scheme of things, substance is primordial, accidents are consequential. To have said what has happened to a substance per se is not to have said anything at all about its accidental modalities that are, after all, objectively distinct from it. It follows, for Scotus, that talk about a substance being 'transubstantiated' into another substance (the substance of bread, say, into the substance of the body of Christ) leaves totally untouched the issue of the accidental modality that is the whereabouts (ubi) of that substance, that is, the issue of its presence somewhere or other. For Scotus, the presence of something is always a relational feature affecting that thing in connection with what lies outside it, that is, to what is extrinsic to it. Scotus's preferred Latin descriptor is respectus extrinsecus adveniens, which may be translated into English as 'extrinsic relational property', where "extrinsic" is used to pick out the fact that what lies outside the thing related (the *relatum*) is something having quantity,

that is, extended parts-outside-parts. The *respectus* is, of course, an accident belonging to the substance or thing that is the *relatum*, but is really distinct from it in the way in which any *accidental* mode of being is really distinct from the substance to which it belongs. The position of Scotus is put very clearly by him: "The presence of the body of Christ is not had *per se* through that change which is conversion or transubstantiation, but only the substance of Christ's body, which is not [identical with] its presence." (Praesentia corporis Christi non habetur per se per illam mutationem quae est conversio vel transubstantiatio, sed solum substantia corporis Christi, quae non est sua praesentia.)

The Scotistic scholar David Burr makes the point neatly: "Scotus' understanding of presence as a *respectus extrinsecus adveniens* and his view of substance as prior to any such *respectus* are absolutely central for an understanding of his eucharistic theology." [22] Another scholar of Scotus, Richard Cross, has this to say: "[Scotus] argues that transubstantiation, as understood by Aquinas, is in fact no help in explaining how Christ's body begins to be present in the Eucharist. Transubstantiation is a doctrine about *substances*, not about the *places* they occupy; and to explain the presence of a material substance, we need to be able to talk about the place it occupies...In order to explain how Christ's body begins to be present in the Eucharist, we need to appeal to something like local motion. Christ's body begins to be present in the Eucharist because it has in some sense *moved*." [Cross's emphases] [23]

What precisely is meant, then, by saying that Christ's body has "in some sense moved" so as to become present where it was not present before, namely, on the altar following the words of Eucharistic consecration (remembering that St Thomas had rejected the idea of any local motion of Christ's body on to the altar)? As though in anticipation of this sort of question, Scotus responds by providing an analysis of the changes (mutationes) and terms (termini) that may be involved in some changes of location. He considers, first, the situation of a body being moved from one place to another and expelling something else through this movement. Such an event involves four mutationes and eight termini: there are two mutationes in the expelling body (duae...in corpore expellente),

one (a) from being present in its current location (ab *ubi* suo) to (b) loss of presence in that location (ad privationem eius) (so one *mutatio* and two *termini*); a second *mutatio* in the same body from (c) lack of presence in the new location (a carentia secundi *ubi*) to (d) the acquisition of presence in this new location (acquisitiva *ubi*) - again, a *mutatio* (the second) and two *termini*. Similarly, there are two *mutationes* in the expelled body (duae mutationes...circa corpus quod expellitur), one from (e) presence in its current location to (f) loss of that presence - so one *mutatio* and another two *termini*; and a second *mutatio* in the same body from (g) lack of presence in a new location to (h) the taking on of presence in a new location - again, a *mutatio* (the second) and two further *termini*. So four *mutationes* and eight *termini* in all.

Scotus next envisages the situation of a body being moved from one place to another without expelling something else from the latter place (Si autem moveretur aliquod corpus, et non expelleret aliud corpus de loco suo...). In that case, there are two *mutationes* and four *termini* involved, namely. one *mutatio* from (a) being present in its current location to (b) loss of presence in that location (deperditiva prioris *ubi*), and a second *mutatio* from (c) lack of presence in its new location to (d) the acquisition of presence in this new location (acquisitiva novi *ubi*).

Finally, Scotus addresses the situation in which a body, whilst not departing from its first location (non recedens a priori *ubi*) takes on a new location. In such a case there would be only one *mutatio* (with two *termini*) from (a) lack of presence in the new location to (b) the acquisition of presence in the new location (esset tantum una mutatio, scilicet a privatione novi *ubi* ad illud novum *ubi*, et haec acquisitiva). This change would not be 'deperditiva' since it would not involve a body's loss of its current location, only its taking on an additional location. It would be the minimum of *mutationes* available for the acquisition of any new location at all. [24]

2.2.2 Using the Notion of 'Respectus Extrinsecus Adveniens' (Extrinsic Relational Property)

But, then, it might be objected that, in postulating that a body could take on a new location without leaving its current location, Scotus is postulating an obvious (ontological) impossibility. The Doctor Subtilis would, however, regard such an objection as being far from insurmountable.

He would, I think, commence by noting that, when he spoke of the same body being present at the same time in different places (idem corpus simul esse localiter in diversis locis), he was ascribing to this body no more than an extrinsic relational property in respect of each place, grounded in one quantitative reality's being referred to, and defined or circumscribed by, another quantitative reality (respectum extrinsecus advenientem fundatum in uno quanto ad aliud quantum circumscribens). Scotus would then say that there is nothing opposed to reason in claiming that *respectus*, in the sense of extrinsic relational properties, of this kind are able to be multiplied (plurificari) on the same foundation of a substance's actual extension or quantity, any more than there is in the case of *respectus* that are *intrinsic* relational properties, for example, the intrinsic relational properties one white cat has to other white cats (one relation to each cat) on the basis of whiteness. In Scotus's own words:

Respectum autem talem plurificari super idem fundamentum ad diversos terminos non apparet contra aliquid notum secundum rationem, quia respectus intrinsecus advenientes, de qubus minus videtur, possunt plurificari fundamento eodem manente ad diversos terminos, ut super eamdem albedinem possunt duae similitudines fundari ad duos terminos. [25]

(That this sort of relation may be multiplied on the same foundation with respect to different terms does not appear to be opposed to anything endorsed by reason. This is so since intrinsic relational properties - which seem even less likely [to be capable of multiplication] – are in fact able to be multiplied on the same abiding foundation with respect to different terms, as is the case when, on [the foundation of]

the same whiteness, two [intrinsic] relations of 'likeness' are founded with respect to two [different] terms.)

Given the further use that will be made below of Scotus's notion of *respectus extrinsecus* adveniens in contrast to his notion of *respectus intrinsecus* adveniens, it is probably worthwhile at this point to set out the distinction as it is understood by Scotus himself. He puts it this way:

Respectus extrinsecus et intrinsecus adveniens...ille dicatur intrinsecus adveniens qui necessario consequitur ambo extrema in actu posita vel, quod idem est, necessario consequitur suum fundamentum, termino non excluso sed posito. Extrinsecus autem est qui non consequitur necessario extrema etiam ambo simul in actu posita. [26]

(Extrinsic and intrinsic relational properties...that [relation] is an *intrinsic* relation which necessarily follows upon the positing in actuality of both 'extremes' [the terms of the relation] or, what is the same thing, which necessarily follows upon the foundation [of the relation], with its term not excluded but posited. An *extrinsic* [relation], however, is one that does not necessarily follow upon the 'extremes', even though both are simultaneously posited in actuality.)

In his *The Physics of Duns Scotus* Richard Cross comments as follows on the above distinction drawn by Scotus:

Scotus holds that the existence of the *relata* is necessary for the existence of their relation. So the characteristic feature of an intrinsic relation is that the *relata* are necessary and sufficient for the existence of their relation. One of Scotus's favourite examples

of such a relation is the property of similarity. It is impossible for two white things to exist and for them not to be similar. An extrinsic relation, on the other hand, is one for which the existence of the *relata* is a necessary but not sufficient condition. [27]

The claim that Scotus is making is the following: Some relations (relational properties) are such that the positing of the terms, of the 'extremes', of the relation necessarily (necessario) entails that the relation obtains between the terms. These are intrinsic relations or relational properties. For example, the positing of two roses of the same red hue necessarily entails that a relation of similarity obtains between them on the basis of their colour; or the positing of two people each exactly one hundred and seventy centimetres tall necessarily entails a relation of similarity between them on the basis of their height. Yet, for Scotus, there are other relations (relational properties) that are such that the positing of the terms of the relation does *not* necessarily (non...necessario) entail that the relation or relational property obtains between the terms. These are extrinsic relations or relational properties. (It may be noted that neither Scotus, nor Cross in the wake of Scotus, offers any ready-to-hand examples of such extrinsic relations, the only instance ever given being that of being-in-a-place - the actual topic of the present discussion.) For Scotus (following Aristotle; cf. Physics book 4, chapter 2 [209a 31- b 1]), place (Gk 'topos') is the set of immediate surroundings of a body, situating that body within the Universe. Being-in-a-place is the relation affecting the body that is situated or 'contained' by that place, and is objectively distinct from the place itself. For Scotus, it is logically possible for a body to be actually 'contained' by a set of immediate surroundings without that body necessarily having the relation of being-in-a-place in connection with that set of surroundings. The Scotistic claim is that, in the case of the extrinsic relational property, the relata or 'things (to be) related' can be posited without the relation itself having to obtain - a claim that implies a 'looseness of fit', so to speak, as far as this sort of relation is concerned. The other side of the picture is that more than one such extrinsic relation of one and the same (actually extended) body to other (actually extended) surrounding or 'locating' bodies may obtain simultaneously. In this scenario, one and the same body may be present in more than one location, that is, have

more than one *ubi* or 'whereabouts' at the same time. (What one has to keep clearly in mind here is that at all times there is *only one body*, and that it is merely the *extrinsic relational properties* of that body that are being multiplied. What has also to be kept clearly in mind is that, on the Scotistic account (in accord with the thinking of Aristotle; cf. *Physics*, bk 4, ch. 4 [212a 14; 212a 20], bk 3, ch. 5 [205b 31], *Meta-physics*, bk 11, ch. 10 [1067a 28]) *place* (topos; locus) is something external to a body, whilst the relation or relational property of *being-in-a-place* (Gk pou; Lat. ubi) is something additional and 'accidental' that *belongs to* a body.)

At this stage of the discussion Scotus warns against allowing the imagination to come into play and to displace the working of reason, given that the imagination "does not separate place from body, and the other way round, and does not perceive that one thing can be multiplied without the other [being multiplied as well]" (Imaginatio non separat locum a corpore, nec e converso, nec percipit unum plurificari sine alio) [28]. He then goes on to argue that, when something that is (ontologically) subsequent to something else (as dependent upon it) is multiplied (plurificato posteriori), it is not necessary that what is (ontologically) prior to it (prius) be multiplied as well. But being-in-a-place (ubi) is clearly a feature that is (ontologically) subsequent to being-an-actually-extended-thing or substance (ens quantum), and which can, therefore, be multiplied without any multiplication of the relevant substance or ens quantum. Those actualisations that are instances of being-in-a-place (ubi) are, after all, only "accidentaliter et contingenter advenientia" (accidentally and contingently coming about) as far as the substance or ens quantum is concerned.

In spite of Scotus's important warning about not allowing the imagination to distort the working of reason regarding the issue of one and the same body being simultaneously present in more than one place, and his affirming that reason finds no affront in this notion, one is still bound to acknowledge the powerfully counter-intuitive character of what Scotus is saying. However, in anticipation as it were of this sort of objection, Scotus deflects it by, in effect, arguing as follows:

(1) It would be expected that a relation (relational property) that necessarily arises when the terms of the relation exist would not be able to be multiplied; for example, a relation of similarity between one gum tree and another gum tree (based on manifold features of each tree). Yet this is manifestly not the case: one gum tree will have as many relations of similarity to other gum trees as there are gum trees to which it is similar (relations of similarity that may, of course, vary systematically with degrees of likeness between one gum tree and other gum trees). These are, in the terminology of Scotus, respectus intrinsecus advenientes - intrinsic relational properties. (2) It would be reasonable to expect that, in a case in which the positing of the terms or relata did not necessarily require that a particular relation should obtain ([respectus] qui non consequitur neceessario extrema), such positing of the terms would also not require that such a relation should obtain or be instantiated only once in connection with one and the same object at one and the same time, given that it is instantiated at all. Scotus held that terms or relata such as place (meaning by this a set of immediate surroundings 'locating' a thing) and body or ens quantum were of this kind - a view that left open the possibility of one and the same body having more than one relation of being-in-a-place at one and the same time. In the language of Scotus, such relations were instances of respectus extrinsecus advenientes - extrinsic relational properties. That cases of this sort were in principle possible follows, Scotus would wish to say, from the fact that they are not in breach of the principle of non-contradiction and could, therefore, be brought about through the power and intention of that cause often designated by Scotus as the Primum Principium rerum - the First Principle of things, that is, God. There would be an onus of proof resting on anyone who took the opposite view.

This discussion of the Scotistic notion of *respectus extrinsecus adveniens* - extrinsic relational property - may be concluded by recalling Scotus's central point: that the *presence* (or *being-in-a-place*) of the body of Christ on the altar is not brought about through the change that is *transubstantiation* - a change that concerns only *substance*, not *presence* - but through the body of Christ acquiring a new *respectus extrinsecus* adveniens to the species or appearances of the bread (with the blood of Christ acquiring a

new *respectus extrinsecus adveniens* to the species or appearances of the wine) on the altar at the celebration of the Eucharist.

2.2.3 Does Christ's body 'move' on to the altar?

To return to the issue of what is meant by saying that Christ's body has "in some sense moved" so as to have become present on the altar where it was not present before: For Scotus, "If none of those changes [the seven mutationes identified supra] is posited, it is absolutely unintelligible that a body exist where it did not exist before." (Si nulla istarum mutationum ponatur, omnino non est intelligibile quod corpus sit ubi non fuit prius.) [29]. There is, of course, no question of Christ's becoming present on the altar in such a way as to involve the loss of His bodily presence in heaven; the required change is not to be deperditiva of the ubi or location in heaven. What is called for in order to safeguard the reality of Christ's presence in the Eucharist is that this be an objective presence with respect to the appearances of the bread and of the wine (ad speciem panis [et vini]) - a presence that did not obtain before the words of Eucharistic consecration had been pronounced. The change that has taken place relative to the Eucharistic species or appearances themselves, namely, that they first existed in the bread and the wine and now exist without being in any material subject at all (quod prius erant in subjecto, nunc autem non sunt in sublecto...), does not of itself bring it about that the body and blood of Christ, previously not present to the species or appearances, are now really present to them (...nihil facit ad hoc quod corpus Christi de non praesente istis fiat realiter praesens istis). The per se term of the change affecting the species is quite other than the per se term of the change by which the body and blood of Christ, previously not present to the species or appearances, are now present to them (illa [mutatio, sc. specierum] habet alios terminos per se ab illa [mutatione, sc. corporis et sanguinis Christi] qua non praesens fit praesens). Therefore, concludes Scotus, "It is necessary to affirm some change in the body of Christ involving the acquisition of that new presence." (Necesse est ponere aliquam mutationem in corpore Christi acquisitivam illius praesentiae novae) [30].

To sum up: There is a sharp difference between the approach of Thomas Aquinas and the approach of Duns Scotus to the problem of the real presence of the body and blood of Christ on the altar following pronouncement of the words of consecration. For Thomas it is unacceptable (and unnecessary) that any change should affect the (glorified) body and blood of Christ whose presence on the altar is brought about simply by conversion transubstantiation - of the substances of the bread and of the wine into the body and blood of Christ, with the species or appearances of what had been bread and wine now 'containing' the body and the blood of Christ, and remaining on the altar as the mode and sign of Christ's sacramental presence. For Scotus, in contrast, the change that is transubstantiation is a change whose positive per se term is the substance of the body and the blood of Christ, not the actual presence of this body and blood. This presence is an accidental mode of being (ubi) ontologically subsequent (posterius) to the substantial reality of Christ's body and blood themselves. Put differently, to have accounted for the substance of the body and blood of Christ in the Eucharist is not to have accounted for the presence of this substance in any particular location. The presence of this substance on the altar involves a new extrinsic relational property - a new respectus extrinsecus adveniens - in virtue of which the body and blood of Christ are present to the species or appearances of the bread and of the wine on the altar - in fact, to the species on as many altars as there are celebrations of the sacrament.

In oppostion to Aquinas, then, Scotus argues for a real change affecting the body and blood of Christ, such that the body and the blood of Christ take on new presences - through new *respectus extrinsecus advenientes* to the species - on however many altars may be involved. For Scotus, "The term [of such a change] is a sort of simple presence to the species, but objective and real." (Terminus [mutationis huiusmodi] est quaedam praesentia simplex ipsi speciei, vera tamen et realis.) [31] Each change is 'acquisitiva' of a new presence without being 'deperditiva' of Christ's bodily presence in heaven.

Scotus importantly adds that the change affecting the body and blood of Christ and making them present on the altar - in each case through the acquisition of a new respectus extrinsecus adveniens relative to the Eucharistic species - differs in two ways

from change of location (motus localis) as normally understood: 1. There is no loss to the body and blood of Christ of their prior presence in a particular location when their presence in a new location is taken on. 2. The term of this change - "quaedam praesentia simplex ipsi speciei" - does not involve the sort of order or arrangement of the parts of a thing *in a place* (ordo partium in loco) that is distinctive of 'location' or 'position' (*ubi*) in the standard sense of the term, that is, when the term is used to pick out the relevant one of the seven 'relational' categories identified by Aristotle - the category that Aristotle calls 'to pou' (cf. *Kategoriai*, 1b 25). That the "quaedam praesentia simplex ipsi speciei" necessarily involves an order or arrangement of the parts of a thing [of the body and of the blood of Christ in the Eucharist] *in the whole* (ordo partium in toto) is an issue that is taken up by Scotus elsewhere in connection with the manner of Christ's existence in the sacrament of the altar (see, for example, his discussions in book 4, distinction 10. question 1, no.13, and distinction 12, question 1, no.15, of his *Opus Oxoniense*.)

Clearly, Scotus's notion of respectus extrinsecus adveniens, of 'extrinsic relational property', and his notion of 'material substance' as being ontologically prior to any respectus extrinsecus adveniens, are crucial to an understanding of his account of the real presence ("praesentia...vera tamen et realis") of the body and blood of Christ in the Eucharist. Equally clear is the strongly realistic interpretation he gives to the idea of presence as a respectus extrinsecus adveniens ontologically distinct from a thing that is present (since it is an accident, not a substance), but establishing the reality of a thing's being in a particular location. One could draw attention to the strong realism of Scotus's doctrine of respectus extrinsecus adveniens by pointing out that, within the perspective of his philosophical thought, the Melbourne Town Hall, say, is present on one corner of the intersection of Collins and Swanston Streets in virtue of a respectus extrinsecus adveniens locating it there rather than locating it, say, on one corner of the intersection of Bourke and King Streets. It is not the cluster of material substances used to construct the Town Hall that per se brings about where the building is actually located. We must, according to Scotus, look to a respectus extrinsecus adveniens - an 'extrinsic relational property' - to account for that. And, for Scotus, one and the same Melbourne Town Hall could be located *in more than one place* if it were the case that more than one extrinsic relational property - more than one *respectus extrinsecus adveniens* - actually affected it. And there would not then - literally in spite of appearances - be *two or more* Melbourne Town Halls: just *one* Town Hall in *two or more* places.

2.2.4 Scotistic Replies to "a certain Doctor" (St Thomas)

Scotus's discussion so far has been primarily concerned with what makes the body and blood of Christ present on the altar at the Eucharistic consecration, that is, the focus has been on *presence* rather than on *substance*, and my account of this discussion has been drawn from what Scotus has to say in book 4, distinction 10, questions 1, 2, and 3, of the *Opus Oxoniense* (pp. 152-221 of volume 17 of the Vives edition of the *Opera Omnia* of Scotus). This work - the *Opus Oxoniense* - contains Scotus's definitive treatment of the metaphysics of the sacrament of the altar. [32] In distinction 11 of book 4 the Doctor Subtilis concerns himself principally with the concept of Eucharistic conversion or transubstantiation, that is, with what is involved in the fact that the very *substance* of the body and blood of Christ is now upon the altar under the appearances or species of bread and of wine where previously there were only the bread and the wine themselves.

Scotus situates his discussion of transubstantiation by repeating the neat articulation of three possibilities regarding what happens to the bread (and to the wine) at the Eucharistic consecration, offered by Pope Innocent 111 in his *De Sacro Altaris Mysterio* [33]: 1. The bread remains, but the body of Christ is present with it. 2. The bread neither remains nor is changed into the body of Christ, but ceases to exist because it is either annihilated, or resolved into primary matter, or changed into something else (per...corruptionem in aliud).

3. The bread is transubstantiated into Christ's body and the wine into His blood. These three possibilities are at one, however, in affirming the real presence of the body and blood of Christ in the Eucharist.

It would lie outside the scope of the present examination (which is to bring out, and to evaluate, the differences between the positions of Thomas Aquinas and Duns Scotus concerning transubstantiation) to work through all that Scotus has to say about the first two possibilities listed by Innocent 111. But it should be said that Scotus's presentation of arguments *for* the first two possibilities (cf. *Opera Omnia*, vol. 17, pp. 352=355), and *against* them (*op. cit.*, pp. 372; 375-376), reveals something of the dialectical sharpness of the Doctor Subtilis.

However, it does seem relevant to consider briefly Scotus's responses to the objections brought against the first two possibilities by someone he refers to as "quidam Doctor" (contra istas [duas] opiniones arguit quidam Doctor...) - the "certain Doctor" being, in fact, Thomas Aquinas [34]. In response to Thomas's objection to the first possibility that the continuing presence of the bread and of the wine on the altar after the consecration would be the occasion for idolatrous behaviour, Scotus states that someone now adoring Christ in the Eucharist is not behaving in idolatrous fashion even though the accidents of the bread and of the wine remain there: "What is to be adored is not the perceptible 'container', but Christ there contained." (Non est adorandum sensibile continens, sed Christus contentus). And this would also be the case if Christ were contained under the bread: the bread would not be adored but Christ contained within it as within a sign (eodem modo tunc dicetur Christum contineri sub pane...et ita non panem adorari sed Christum contentum in pane ut in signo).

In response to Thomas's objection that "It would be against the meaning or signification of the sacrament (esset... contra significationem sacramenti) [cf. *In Sent.* 4, 11,1, resp.] if the substance of the bread remained, Scotus says that the continuing existence of the bread in the sacrament would safeguard the two-fold signification or meaning of the accidents: their natural signification (signification naturalis) of the substance of bread, and their signification "ex institutione divina" - "from divine institution" - by which something sense-perceptible signifies the body of Christ (qua [institutione] sensibile significat corpus Christi). The continuance of the bread in the sacrament would preclude any 'false signification' of bread by the accidents, whilst leaving unaffected the fact that,

by divine institution, the reality primarily signified - the "primum significatum" - is the body of Christ.

In response to Thomas's objection that due use of the sacrament as spiritual food rules out its use as bodily food, which would occur were the substance of bread to remain (iam cibus iste non esset pure spiritualis sed etiam corporalis [In Sent., ibid.]),Scotus affirms that, as things actually are, the accidents of the bread (and of the wine) provide bodily sustenance and change. Moreover, the substances of the bread and wine, were they to remain, would provide bodily nourishment, but in such a way that, contained within them, would be "tantum nutrimentum animae" - "such great food for the soul".

To both the first and the second of the possibilities identified by Innocent 111 St Thomas objected that, with local motion bringing Christ on to the altar an impossibility (cf. *S. Theol.* 3. 75. 2), only by conversion or transubstantiation of the bread and of the wine (the substances of which must neither remain nor be annihilated nor reduced to something else) into Christ's body and blood, could He be present on the altar. In opposing this objection Scotus confines himself to referring to what he had said in distinction 10, question 1, about the insufficiency of this conversion *per se* to make Christ *present* in the Eucharist, and the need for a *mutatio* involving a new *respectus extrinsecus adveniens* - a new extrinsic relational property - to make the body and blood of Christ present to the species on the altar.

To both the first and the second of the possibilities recognised by Innocent 111 St Thomas also objected that, if the substance of the bread either remained, or was annihilated, and therefore not changed into the body of Christ, the relevant biblical text (Matthew 26:26) should read "Here is my body" (Hic est corpus meum) not "This is my body" (Hoc est corpus meum), since there is no 'This' (Hoc) that will, on completion of the words of consecration, become Christ's body. Scotus rejects the objection by pointing out that, whether both the substance and the accidents of the bread remain, or only the accidents (with the substance of the bread annihilated), what is contained under whatever it is that remains is the body of Christ. So "This (hoc) is my body"

appropriately expresses the reality of the sacrament, whilst "Here (hic) is my body" is true as well (utrumque dictum esset verum).

To the second possibility (annihilation of the bread, or the bread's being resolved into matter without form, or into matter under some other form), St Thomas objects that, with local motion already ruled out, annihilation would make it impossible for the body of Christ to begin to exist on the altar since there would be nothing to be changed transubstantiated - into it; that matter cannot exist without form (it would be both actualised and not actualised at the same time), so the substance of the bread cannot be resolved into it; that matter under a new form would either remain in the same place with the unacceptable consequence of a new composite substance co-existing with the body of Christ in the sacrament - or be moved away, yet no such movement is ever perceived. Scotus replies that annihilation of the substance of the bread avoids the serious problems raised by the claim that one substance can be changed into another substance that already exists: "Transubstantiation...cannot take place into a substance that already exists, since it does not appear possible for something to be actualised into a substance that continues [i.e. is already actualised] in terms of its original existence." (Transubstantiatio...non potest esse ad substantiam quae praefuit, quia non videtur posse poni in substantiam manentem secundum esse suum antiquum.) [35]. Scotus comments that Thomas's strictures on matter existing without form come down to an equivocal use of the notion of 'being actual': "Being actual" may mean being in actual existence or it may mean being actualised by form. 'Being actual' in the first sense does not call for form since matter is an entity or mode of being in its own right. It is an ens absolutum, with the consequence that it could exist without form through the sustaining causality of God. It follows that, contrary to the view of St Thomas, the substance of the bread could be resolved into matter without form at the Eucharistic consecration, and not be changed into the body of Christ. Finally, the co-existence with the body of Christ of matter under a new form in the Eucharist would be something open to divine power since it involves no contradiction. Nor is any contradiction involved in the idea of God imperceptibly moving the new composite substance from being on the altar on completion of the words

of consecration when the body of Christ becomes present. These latter two outcomes for the bread remain inherently possible. [36]

I said above that it seemed relevant to consider briefly the responses of Duns Scotus to the objections brought by St Thomas against the first two possibilities (of the three set out by Innocent 111) regarding what happens to the substances of the bread and of the wine at the Eucharistic consecration. This relevance resides in the fact that Scotus, by drawing attention to what he takes to be shortcomings in Thomas's objections to the first and second possibilities, proleptically (albeit indirectly) begins to call in question the overall value of Thomas's approach to the concept of *transubstantiation* - the third of the possibilities identified by Innocent 111.

Scotus cannot, of course, be content merely with criticising Thomas's arguments against the first two of the possibilities in the Innocentian schema of three regarding how the bread and the wine are affected by the Eucharistic consecration. Like Thomas, he accepts transubstantiation [37], the third of the possibilities listed by Innocent 111; but, as we have seen, he remains unpersuaded by Thomas's argument that it is the *conversio* or *transubstantiatio* itself (as these terms are understood by St Thomas) of the bread and the wine into the body and blood of Christ that brings about the *presence* of Christ on the altar at the celebration of the Eucharist. This presence calls for a change involving a new *respectus extrinsecus adveniens* that makes Christ present on the altar without His ceasing to be present in heaven. Accordingly, after earlier rejecting the position of St Thomas, and after proposing his own arguments against the first two possibilities (that the substance of the bread co-exists on the altar with the body of Christ; that the bread neither remains nor is changed into the body of Christ) Scotus puts forward his own account of transubstantiation.

2.2.5 Scotus on Transubstantiation

In book 4, distinction 11, question 1 of the *Opus Oxoniense* Scotus asks "Utrum transubstantiatio sit possibilis?" ("Is transubstantiation possible?). It should be noticed

that, in question 1, Scotus provides a general philosophical discussion of the nature and possibility of transubstantiation, prescinding altogether from the application of the concept of 'transubstantiation' to the situation of the Eucharist. It is indeed remarkable that, in eight large, double-column, pages of Latin text in the Wadding-Vives edition, this central theological issue goes unmentioned by Scotus.

Scotus begins his discussion by stating that "An appropriate definition of the term "transubstantiation" is this: the total transition of substance into substance" (transitio totalis substantiae in substantiam) [38]. That this transition is total (totalis) at once distinguishes transubstantiation from other kinds of change at the level of substance (generatio/corruptio) where there is always an abiding subject of the change - that which undergoes the change and remains throughout, that is, which is a component of the terminus a quo of the change, and also a component of the terminus ad quem of the same change. Hence Scotus adds that "It is well put in the definition of 'transubstantiation' - in distinguishing it from just change - that it is not the transition of a [composite] whole into a [composite] whole, since the term 'whole' is equivocal here, but is the total transition [of substance into substance] (bene dictum est in definitione transubstantiationis, eam distinguendo contra transmutationem, quod non est transitus totius in totum, quia ibi posset esse aequivocatio de ly totius, sed quod est totalis transitio) [39]. Scotus's point is that when, in the normal course of events, changes take place affecting things at the level of substance (for example, when potassium, nitrogen, and oxygen, change to become potassium nitrate), there is a change that affects, that is, makes different, the whole substance involved, without all that composes the whole substance being changed into something else. The substantial matter or 'stuff' that is the subject of the change remains throughout the change (being first under the forms of potassium, nitrogen, and oxygen, then under the form of potassium nitrate). In transubstantiation it is all that composes the whole substance that is totally changed totum totaliter - into the new substance, with no substantial component remaining the same throughout: "...ergo est hic [in transubstantiatione] tantum transitio substantiae in substantiam, sicut termini totaliter desinentis esse in terminum, sicut in substantiam, totaliter incipientem esse" ("...therefore here [in transubstantiation] there is only a

transition of substance into substance, as of a term totally ceasing to exist into a term, namely into a substance, totally beginning to exist") [40].

Scotus then goes on to affirm that "There is no inconsistency in what is totally new succeeding what is able to cease existing totally...and, consequently, *this* [substance] is able to be changed totally into *that* and, therefore, to be transubstantiated" (Quidquid potest esse totaliter novum non repugnat sibi succedere alii quod potest totaliter desinere esse...et per consequens haec [substantia] potest converti totaliter in illam, et ita transubstantiari) [41]. With this as his premise, the Doctor Subtilis concludes that: "What has been stated is clear: neither the total beginning [of existence] of a substance nor the total ceasing [of existence of a substance] involves a contradiction; nor, consequently, the [total] beginning of *this* relative to the total ceasing of *that* - a transition that takes in transubstantiation. Therefore, the first conclusion is true, namely that transubstantiation is possible" (Assumpta patent, quia nec totalis inceptio substantiae, nec totalis desitio, includit contradictionem, nec per consequens inceptio huius ad totalem desitionem illius, quae transitio includit transubstantiationem; ergo vera est prima conclusio, scilicet quod possibilis est transubstantiatio) [42]

The second point to be concluded to is that the change (conversio) that is transubstantiation can be brought about by divine power only: "Secundo, quod [transubstantiatio] non est possible alicui virtuti activae nisi divinae immediate" (Secondly, that [transubstantiation] is not possible to any active power except – and immediately – that of God) [43]. Scotus establishes this point by arguing that each of the two 'extremes' of transubstantiation - the substance to be changed and the substance to be brought about - lies in the active power of God, of the 'primum principium rerum' [44], relative both to the *whole being* (totum ens), and to the *whole non-being* (totum non ens) of the substances involved. In the case of all agents other than the 'primum principium rerum', causal activity can be exercised only on a pre-existent thing (quaelibet alia [virtus] requirit subiectum in quod agat), and does not extend to the *total* being or non-being of that upon which it acts. In hylomorphic terms, the power of non-divine agents to change things at the level of substance extends only to changes of the

(substantial) forms of things (virtus... potens super *non esse* formae praecedentis, et *esse* formae consequentis), not to the (primary) matter of things (manente illa parte compositi communi, scilicet materia). In contrast, "causal power extending to the very *being* and *non-being* of both of the 'extremes' is totally potent relative to the total transition of one 'extreme' into the other 'extreme' (virtus potens super *esse* et *non-esse* utriusque extremi totaliter potest super transitionem totalem extremi in extremum)" [45].

But a special difficulty arises at once for the Scotistic account of transubstantiation when this general philosophical account is applied to the case of Eucharistic transubstantiation. It will be recalled that, towards the end of his general argument for the possibility of transubstantiation, Scotus stated that "Quidquid potest esse totaliter novum non repugnat sibi succedere alii quod potest totaliter desinere esse...et per consequens haec [substantia] potest converti in illam, et ita transubstantiari" (There is no inconsistency in what is totally new succeeding what is able to cease existing totally...and, consequently, this [substance] is able to be changed totally into that and, therefore, to be transubstantiated) [46] The special difficulty faced by Scotus is that (numerically) one thing cannot be changed into (numerically) another thing that is not "totally new" but already exists: "Sed est dubium speciale hic propter terminum ad quem praeexistentem, quia non videtur quod in praeexistens, et secundum esse pristinum manens, possit aliquid converti" ("But there is a special difficulty here due to the fact that the terminus ad quem [in this case the body of Christ] already exists; since it does not seem possible for something to be changed into something else that already exists, and that continues in terms of its original existence") [47]. This point is restated by Scotus when he writes: "Transubstantiatio non potest esse ad substantiam quae praefuit, quia non videtur posse poni in substantiam manentem secundum esse suum antiquum" ("Transubstantiation... cannot take place into a substance that already exists, since it does not appear possible [for something] to be actualised into a substance that continues in terms of its original existence") [48].

The resolution by Scotus of this "special difficulty" is achieved by his introduction of the theory of *adduction* (from the Latin "ad" to, and "ducere" to bring). Scotus distinguishes

two forms of transubstantiation ([transubstantiatio] potest ..duobus modis intelligi). The first form brings about the *being* (esse) of a substance (ut per ipsam accipientem *esse*); the second form brings about the *being here* (esse hic) of a substance (ut per ipsam accipientem *esse hic*). The first form of transubstantiation is *productive* (productiva) of its *terminus ad quem* in the sense of bringing it about absolutely (simpliciter esse); the second form is *adductive* (adductiva) of its *terminus ad quem* in the sense of *bringing something to exist here* (esse hic). Scotus carefully brings the relevant ideas together in his statement that: "In other words, [transubstantiation] can take place either relative to the *being* of its term, or relative to [this term's] *being present* somewhere" (Sub aliis verbis, [transubstantiatio] potest esse vel ad entitatem sui termini, vel ad praesentialitatem eius alicubi) [49]

In the light of his argument against the possibility of what already exists being brought into existence by something else being changed into it, Scotus concludes that the first form of transubstantiation cannot be drawn upon to establish the existence of the body and blood of Christ as the terminus ad quem of the Eucharistic conversion, given that the body and blood of Christ pre-exist this conversion of the bread and of the wine. On the other hand, since the terminus ad quem of the second form of transubstantiation is a new presence - a new esse hic in virtue of a new respectus extrinsecus adveniens with regard to the species or appearances of the bread and of the wine - of what already exists (not a new existence simpliciter), it is by transubstantiation of this sort that the body and blood of Christ become present on the altar - on however many separate altars that may be involved - as often as the Eucharist is duly celebrated.

Scotus at once confronts, and responds to, the objection that this second form of transubstantiation is not really transubstantiation at all, since its *terminus ad quem* is not substance as such but *presence* which is, as we have seen, an *accident* of substance (belonging to the Aristotelian category of *ubi* or 'whereabouts' [to pou]) ("...obiciatur quod ista secunda non est transubstantiatio, quia terminus eius non est substantia ut substantia, sed est ista praesentia quae accidit substantiae; sola enim illa acquiritur per istam actionem") [50] The reply of Scotus is directly to the point: "Substance is the term

of transubstantiation taken in the second sense, because it is a substance itself succeeding a substance; not, however, as having new substantial being but only new presence" (Substantia est terminus ipsius transubstantiationis secundo modo dictae, quia ipsa substantia succedit substantiae, non tamen habet *esse* substantiale novum, sed tantum praesentiam novam) [51].

2.2.6 A Comparison

At this point it becomes quite clear that there is a fundamental disagreement between Duns Scotus and Thomas Aquinas as far as the nature of Eucharistic transubstantiation is concerned. For the Angelic Doctor, the terms "conversio" and "transubstantiatio" refer to an intrinsic or 'inner' change to the substance of the bread and of the wine when the words of consecration are pronounced. What was the substance, the essential unityidentity-wholeness, of the bread and of the wine is now the substance, the essential unityidentity-wholeness, of the body and of the blood of Christ, with only the accidents, the non-essential features, of the bread and of the wine remaining as the sign of the presence of Christ in the sacrament. In Thomas's words: "Tota substantia panis convertitur in totam substantiam corporis Christi, et tota substantia vini in totam substantiam sanguinis Christi. Unde haec conversio non est formalis sed substantialis. Nec continetur inter species motus naturalis, sed proprio nomine potest dici transubstantiatio" ("The whole substance of the bread is changed into the whole substance of the body of Christ, and the whole substance of the wine into the whole substance of the blood of Christ. It follows that this is not a change of form [non est formalis] but a change of substance [sed substantialis]. It is not contained within the kinds of natural change there are, and can be given its own distinctive name and called transubstantiation" [52].

Thomas proposes a commendably literal understanding of the terms "conversio" and "transubstantiatio". This understanding of St Thomas includes, but goes beyond, what Duns Scotus means by the *first* form of transubstantiation - the form that brings about the *being* (esse) of a new substance, that is, which is *productive* (productiva) of this being. Put in general terms, this is an understanding that commits the Angelic Doctor to an

acceptance of the *intrinsic* change of something A into something else B at the level of substance, such that all of A that was in the domain of substance (so primary matter as well as substantial form) becomes, and is, the substance of B. Unlike Scotus, Thomas does not see this sort of intrinsic transubstantiation as being restricted in its possibility only to the case of what is being *newly* brought into existence. In the *Summa Theologiae* 3. 75. 4, for example, he has extended the notion of transubstantiation to cover the case of something already existent - the substance of the bread and of the wine - being changed (in the sense of 'transubstantiated') into something else already existent, namely the living body and blood of Christ. (This point will be considered at some length in the following chapter.)

For Scotus, transubstantiation as productive of the substantial being of a thing may be invoked only when there is question of bringing into existence a substantial reality that is 'totaliter novum' - 'totally new'. It follows at once for Scotus that, contrary to the view of St Thomas, transubstantiation in this sense cannot be invoked to explain a total change of substance from bread and wine to the body and blood of Christ: it cannot be invoked because the body and blood of Christ are already in existence, that is, they pre-exist the change on the altar, which cannot, therefore, be productive of them. There can be no question, then, of an intrinsic or 'inner' conversion or transubstantiation of the substance of the bread and of the wine that would be *productive* of the substance of the body and blood of Christ whenever (and wherever) the Eucharist is celebrated. Scotus might well attempt to argue in support of this position that it is (ontologically) impossible to bring into existence something that already exists. The truth of this proposition, he might wish to claim, is entailed by the principle of identity, namely that each thing is what it is, and cannot at the same time be some other thing [53]. What is brought into existence may resemble in every conceivable way something that already exists, but it cannot thereby be that thing which already exists. [54]

It needs to be stated that St Thomas reveals a clear awareness of this major difficulty confronting a literal or 'strong' interpretation of the change that is transubstantiation as applied to the situation of the Eucharist. For example, in his *Scriptum super Sententiis* 4.

11. 1. 3. 1. (resp.) to 1 (ad primum) Thomas indicates that the change that is transubstantiation, although differing from all kinds of natural change, nonetheless "has some symmetry with the change involved in the ingesting of food in that each of these changes takes place *in relation to something already existing*; it differs from this [change], however, in that [transubstantiation] does not involve *adding* to what already exists." [55]

In book 4, chapter 62, of the *Summa contra Gentiles* Thomas poses the difficulty quite explicitly: "It seems impossible to claim that [in the Eucharist] something is changed anew into the body of Christ. For nothing at all seems to be changed into what is already in existence, since that into which something is changed *begins* to exist through such a change. Now it is obvious that the body of Christ is already in existence, as having been conceived in the womb of the Virgin. It does not seem possible, therefore, that it begins to exist anew on the altar through the change of something else into it." [56] (As noted above, the Thomistic response to this difficulty will be considered in the next chapter of the thesis.)

In contrast to Thomas, Scotus sees transubstantiation in the context of the Eucharist not as *producing* the body of Christ *from* the substance of the bread that is on the altar, but as *ad-ducing* the body of Christ on to the altar, without any local motion being involved. That is to say, there is a *mutatio* that is *acquisitiva* of a new presence [on the altar] without its being *deperditiva* of the presence the body of Christ has elsewhere [in heaven]. Bread is not *changed into* the body of Christ; rather, it is (*ex-)changed for* the body of Christ, with its accidents remaining by divine power to be the mode and sign of Christ's presence on the altar. In virtue, then, of the second form of transubstantiation, the body of Christ is not *brought into existence* anew on the altar, but only begins to exist *where previously it did not exist*; it takes on a new *hic esse* or *presence* independently of any local motion. To use the language of Scotus, the body of Christ in the Eucharist (that is, on each altar) has a new *respectus extrinsecus adveniens* - a new extrinsic relational property - that is 'extrinsic' in the sense of connecting the body of Christ to the surrounding or 'localising' accidents of the substance of the bread (itself no longer

present) on the altar (a notion that applies also to the accidents of the wine and the blood of Christ). To put the point differently, the substance of the bread *ceases* to be present in the same way that the body of Christ *becomes* present. In virtue of the second form of transubstantiation - transubstantiatio *adductiva* - the body of Christ is not (and cannot be) brought into existence on the altar *simpliciter*, that is, absolutely, but only in terms of a new *presence* or *esse hic*. Accordingly, *in virtue of this change or transubstantiation* the substance of the bread does not cease to exist *simpliciter*, that is, absolutely, but only in terms of its *presence* or *esse hic* on the altar. It is not, therefore, changed into the substance of Christ's body, but simply ceases to be present here, that is, loses its *esse hic*, in order that the body of Christ may begin to exist on the altar instead of it. As Scotus puts it:

Eo modo terminus prior convertitur in terminum posteriorem, quomodo terminus posterior succedit termino priori; sed terminus posterior non succedit secundum *esse* simpliciter sed secundum *esse* hic praesens panis praeexistentis: ergo nec panis convertitur, nec transit in corpus Christi, nisi secundum *esse* hic praesens panis praeexistentis.

(The prior term is changed into the later term in the same way that the later term *succeeds* the prior term. But [in the case of Eucharistic transubstantiation] the later term does not succeed [the prior term] with regard to *being* absolutely speaking, but with regard to the *being-here-present* of the pre-existent bread. Therefore the bread is neither changed into, nor becomes, the body of Christ, except with reference to the *being-here-present* of the pre-existent bread) [57]

It is central, then, to the thought of Duns Scotus on Eucharistic transubstantiation that, in the relevant sense of the term, "transubstantiation" is not taken to mean anything more than the successio - *successio* - of one substance (the body of Christ) to another

substance (the bread), with the accidents of the bread remaining to 'localise', and signify, the presence of the body of Christ. For St Thomas, on the other hand, the term refers to the bread's being *intrinsically* changed to become the body of Christ and, on this basis, to its ceasing to exist as the substance that is bread.

It is important to notice that, for St Thomas, the substance of the bread is not *annihilated* at the moment of Eucharistic consecration. Were annihilation to take place, there would not be anything at the level of substance to be changed - *converti* - into the body of Christ: "...quae quidem conversio tollitur, posita...annihilatione panis" ("...which change is done away with when annihilation of the bread is posited" [58]. Without such a change or conversion (of substance), and with local motion of the body of Christ on to the altar already ruled out [59], the body of Christ could not, according to St Thomas, become really present in the sacrament.

The account of Duns Scotus dealing with *conversio* and *annihilatio* - *change* and *annihilation* - as affecting the bread (and the wine) is paraphrased below. The paraphrase is based on what Scotus has to say on this two-fold issue of change and annihilation in book 4, distinction 11, question 4, of the *ordinatio* that is his *Opus Oxoniense*:

-It is appropriate to say that the conversion we are talking about is one of substance into substance but it is not one that bears on the *being* (esse) of substance absolutely speaking (simpliciter). Rather, it is a *conversio* that bears on the *being here* (esse hic) of substance. So it is that, as the body [of Christ] as present succeeds the bread as present, so also in that sense is the bread as present converted (convertitur) into the body as present. Now, although these changes take place between substances, they do not take place between substances as between the *terms* (ut inter terminos) of these changes. The reason is that the terms are only *being present* (praesentialitas) and *not-being-present* (non praesentialitas) - terms that can be reduced to the category *ubi* – 'location' (as was said in question 1 of distinction 10). Accordingly, just as *being* (esse) absolutely speaking is not acquired by the body [of Christ] through a positive change, only *being present* (esse

hic), so also, by a corresponding change involving loss (mutatione dependitiva correspondente), the bread is not deprived of being (esse) absolutely speaking, only of being present (hic esse). This approach discloses the following attractive symmetry (patet satis pulchra correspondentia): just as the body of Christ takes on a new presence [on the altar] without losing its earlier presence [in heaven], by undergoing a change that acquires something without losing anything (mutationem acquisitivam sine dependitiva), so does the bread undergo a change that loses something without acquiring anything (deperditivam sine acquisitiva), since it ceases to be present here [on the altar] (desinit hic esse) but does not acquire a new presence somewhere else (non acquirit aliam praesentiam alibi). Through this conversion as 'translative' nothing is lost, just as nothing is acquired, except being-present-here (esse hic) and not-being-present-here (non esse hic). It follows that, through this conversio as such, there is no loss of substantial being (esse substantiale) so that, as a consequence, the bread is not annihilated, nor in any sense destroyed, by this conversio (non annihilatur, immo non destruitur panis hac conversione). However, because the bread does not remain substantially existent (non manet in esse substantiali), and is not destroyed by this conversio, it must be the case that it ceases to be by some other mode of cessation (alia desitione) by which it passes from existence (esse) absolutely speaking, to non-existence (non esse) absolutely speaking. Although the bread's non-existence accompanies, as it were, the presence of the body of Christ [on the altar] (illud autem non esse eius [panis], licet quasi concomitetur praesentiam corporis ut hic...) it is not a terminus ad quem of the change or conversion of the same kind as the presence of the body of Christ (it is a negative, not a positive, term). It follows that, even if the bread's ceasing to be is considered as in itself an instance of annihilation, it is still not the case that this is in any way due to that *conversio* (...nullo modo ista conversio est annihilatio). [60]

2.2.7 Conclusion

It should by now be evident that there is quite fundamental opposition between Thomas Aquinas and Duns Scotus with respect to 'transubstantiation' as applicable to the Eucharistic change. For St Thomas, it is sufficient to bring about the *presence* of the

body and blood of Christ on the altar that (a) the bread and the wine be intrinsically changed into them by the words of consecration whenever - and wherever - the sacrament is duly celebrated; (b) the body and blood of Christ take on the new relationship of *being-contained-by* the dimensive quantity and other accidents of the bread and of the wine remaining on the altar (without becoming the subject of these accidents) (cf. chapter 2, pp. 39-41 *supra*).

For Duns Scotus, on the other hand, the presence of the body and blood of Christ on the altar is not due to any intrinsic change (at the level of substance) of the bread and of the wine into them by the words of Eucharistic consecration. Rather, this presence is due to the body and blood of Christ *succeeding* the bread and the wine on the altar in virtue of their - the body and blood of Christ - taking on new *respectus extrinsecus advenientes* (extrinsic relational properties) to the species or appearances of the bread and the wine on the altar. By divine intention and power these species remain (after the substances of the bread and the wine have ceased to be present) to 'localise', and signify, the presence of Christ's body and blood. Moreover, since, according to Scotus, it is impossible for something to be changed into something else that already exists, the bread and the wine cannot be changed intrinsically into the body and blood of Christ, since these already exist. Eucharistic transubstantiation, then, cannot be *productive* of the body and blood of Christ, only *adductive* of them relative to the species or appearances on the altar of what was, prior to the words of consecration, bread and wine.

The next chapter will explore, and to some extent develop, the responses to Scotus's criticism of Thomas's metaphysics of transubstantiation as articulated by two of the major commentators on the work of the Angelic Doctor - Thomas de Vio Cajetan and Silvester of Ferrara (Ferrariensis).

NOTES

- 1. For the Latin text, see vol.iv, pp. 613-614, of the Biblioteca de Autores Cristianos edition of the *Summa Theologicae*.
- 2. St Ambrose (c. 339-397) was Bishop of Milan from c. 374 and, with Saints Jerome, Augustine, and Gregory the Great, one of the four traditional Doctors of the Latin Church (although the number of Doctors of the Church has now grown to over thirty). His *De Sacramentis* (established definitively in 1942 by the work of the Australian patristic scholar R. H. Connolly to be Ambrosian in authorship) was a short treatise on the sacraments of baptism, confirmation, and the Eucharist. Ambrose's extensive knowledge of Greek assisted him in introducing much of the work of theologians of the Eastern Church into the Latin West.
- 3. St John Chrysostom (c.347-407), Bishop/Patriarch of Constantinople from 398; Doctor of the Church. "Chrysostom" (from the Greek "chrusoun" golden, and "stoma" mouth) was a soubriquet signalling John's reputation for brilliant preaching directed to the doctrinal instruction, and moral improvement, of Christian communities in the Greek-speaking eastern part of the Roman empire. His writings taken collectively reveal Chrysostom to be one of the greatest interpreters of both Old and New Testament texts that the Church has known.
- 4. Whenever the Latin infinitive "esse" is translated by the English phrase "being in being", the word "being" first occurring is the present participle of the verb "to be". The word "being" second occurring is the gerund or verbal noun of the verb "to be", with a hyphen placed between "be-" and "-ing" to emphasise that what the word "esse" designates for St Thomas is to be construed on the model of an *activity* that "profundius omnibus inest" an activity that is "most deeply present in everything" (cf. *S. Theol.*, 1. 8. 1)

5. Etienne Gilson notes in his *The Christian Philosophy of St Thomas Aquinas* that "If we can say, as it is often said, that a being's acting proceeds from its act-of-being - *operatio sequitur esse* - it is not merely in the sense of 'like being, like operation', but also, and especially, because the acting of a being is only the unfolding in time of the first act-of-being which makes it to be. It is in this way that we get a notion of the efficient cause which is in agreement with the immediate certitudes of common sense, and confers on them that metaphysical profundity which they lack by nature." (*op. cit.*, p. 371)

For a development of what Gilson has to say, reference may be made to the Jesuit transcendental Thomist philosopher Emerich Coreth's remarkable 584 page study *Metaphysik. Eine methodisch-systematische Grundlegung*, in the course of which what Coreth calls the 'Dialektik' of being (esse or *Sein*), essence, and activity, is reflected upon at some length. This idea of Coreth regarding such a 'dialectic' may perhaps be more readily consulted on pages 90-95 of Joseph Donceel's condensed version (of 200 pages, and approved by the original author) of Coreth's book, published in English simply as *Metaphysics*. (For publication details of both books, see the Bibliography *infra*.)

- 6. The *Liber de causis* was first regarded by St Thomas (and by other writers) as a text of Aristotle. It was only following the translation of the *Elementatio theologica* of Proclus (c.411-485) from Greek into Latin by William of Moerbeke (completed in 1268) that it was realised by Thomas and by others that the *Liber de causis* was a collection of excerpts from the *Elementatio theologica* of Proclus, and a text more within the tradition of Neoplatonism.
- 7. St Thomas, Opera Philosophica (Marietti, Turino, 1954), p.117.
- 8. For a valuable study of the Thomistic axiom that unreceived act, above all the unreceived activity of *being actual*, is unlimited, see John F. Wippel's 'Thomas Aquinas and the Axiom that Unreceived Act is Unlimited' (*The Review of Metaphysics* 51 [March

1998], pp. 533-564). Further discussion of this axiom is to be found on pages 128 (note 92), 153, 171-175, and 589, of Wippel's monumental study *The Metaphysical Thought of Thomas Aquinas*, published in 2000.

- 9. For further reference to this reply of St Thomas, cf. pp.231-234 of chapter 6 infra.
- 10. In connection with the sort of knowledge that modern science provides, Jacques Maritain usefully comments that

Because in physics, which is modern science in its purest form, all these data [of experiment and measurement] are translated into mathematical symbols; and because in microphysics such data escape the perception of our human sense organs; and because the world built by theoretical physics escapes all possible representation offered to our imagination, we may say, in another sense, that science goes beyond sense, and imagination. Its realm is a paradoxical realm of the supra-imaginable. For all that, it does not tend to *being* in itself, but to a symbolical meta-morphic or meta-sensory grasping of the observable and measurable. That is why I think that a neologism like "empiriological" is the most appropriate word to designate this kind of knowledge.

(*The Range of Reason*, pp.5-6)

- 11. Volume XXX, pp.7-45. The pages of the journal are sequentially numbered over the four issues published each year. The citation included in the text is to be found on page 43 of Selvaggi's article.
- 12. For an outline of this debate, cf. Note 21, chapter 3 *supra*. The debate is covered in a magisterial summary by an American theologian, Cyril Vollert, S.J., in the journal *Theological Studies* 22 (1961), pp. 391-425. With the wider post-Vatican 11 commitment of theologians to biblical and historical theology, there has been in recent decades a noticeable decline of interest by them in questions of speculative or

metaphysical theology of the sort found in the Selvaggi-provoked debate on transubstantiation. I mean here, of course, questions that call for a strong background in Aristotelico-Thomistic philosophy and an informed awareness of recent and current work in the empiriological disciplines.

- 13. Theoretical developments in physics are now often conceptualised in terms of *branes*, that is, of objects that can have a range of spatial dimensions (a one-brane is a string, a two-brane is a surface or membrane, a three-brane is an object having three dimensions, etc.) and of *M-theory* which unites existing string theories and supergravity within a single theoretical framework. M-theory apparently involves eleven spacetime dimensions, although many of its details are yet to be fully understood. It holds out some promise of being a unified theory of the Universe that harmoniously merges quantum theory and general relativity which have so far proved conceptually incompatible.
- 14. See page 125 of Oderberg's contribution to the volume *Mind, Metaphysics, and Value in the Thomistic and Analytic Traditions*, edited by John Haldane. (Cf. the Bibliography *infra* for further details.)
- 15. Albert Mitterer first proposed his alternative to hylomorphism hylosystemism in his book *Einfuhrung in die Philosophie* (Introduction to Philosophy) published in 1929. Six years later there appeared Mitterer's major study *Das Ringen der alten Stoff-Form-Metaphysik mit der heutigen Stoff-Physik* (The Confrontation of the old Matter-Form Metaphysics with the modern Physics of Matter), to be followed in 1936 by his *Wesensartwandel und Artenssystem der physikalischen Korperwelt* (Natural Change and Pattern of Kinds in the World of Physical Bodies). (Curiously, in his article "A New Ontology: Incarnation, Eucharist, Resurrection, and Physics" [*Pacifica*, 1991, pp.15-50], John Honner, S.J., mistakenly merges the titles of Mitterer's first two books to give rise to *Einfuhrung*: *Das Ringen der alten Stoff-Form-Metaphysik mit der heutigen Stoff-Physik* [sic]. See note 37, p.29, of Honner's article.)

16. Francis Unterkircher published in Innsbruck in 1938 his controversial *Zu einigen Problemen der Eucharistielehre* (On Several Problems relating to Teaching about the Eucharist), whilst Celestine Bittle's book *From Aether to Cosmos* first appeared in 1941, to be subsequently reprinted in 1950.

17. Bittle *From Aether to Cosmos*, pp.333-334.

18. Joseph Gredt *Elementa Philosophiae Aristotelico-Thomisticae*, vol.1, pp.338. For an extended presentation of a Thomistic account of the way in which elements remain in a compound, see Gredt *op. cit.*, pp. 338-344.

19. Those arguing in support of hylomorphism as well as those arguing in support of hylosystemism are confident about the explanatory value of their accounts when it comes to understanding the primordial emergence of matter at the very outset of the Universe. Physicists and cosmologists are in agreement in identifying a number of stages in the development of the Universe after its inception in a so-called "Big Bang" some 13 to 15 billion years ago. In the first nano-second of the Universe there existed only quarks - the fundamental building blocks of matter (string theory may be set aside for the moment) and gluons, which were particles carrying the force (eventually to be recognised as the 'strong nuclear force') that would shortly bind quarks together to form baryons. Quarks and gluons were followed immediately by particles known collectively as leptons (from the Greek "leptos" meaning light or small): electrons, positrons, and neutrinos. With the expansion and cooling of the Universe, quarks began combining to form protons and neutrons (baryons), and their anti-particles. This stage of nucleon and anti-nucleon formation occurred from roughly a nano-second after the 'Big Bang' to about one hundredth of a second after it. Mutual annihilation between nucleons and anti-nucleons left a nucleon residue that would eventually make up the central component of baryonic matter as it subsequently evolved. When the Universe was about 100 seconds old the nucleons began to be structured in terms of unitary protons (that is, of hydrogen nuclei) making up some 74% of non-leptonic matter, helium nuclei (with each nucleus containing two protons and two neutrons) comprising some 25% of this matter, with heavier nuclei, for example, lithium (three protons and three neutrons in each nucleus) accounting for the remaining 1% of non-leptonic matter. This development was completed by the time the Universe was approximately 1,000 seconds old. It was the age of 'ions', that is, of positively and negatively charged particles (the former principally protons, the latter principally electrons) that formed a hot, opaque, plasma. With further expansion and cooling the stage was reched when electrons were able to combine by electromagnetic interaction with the positively charged hydrogen, helium, and lithium, nuclei, and the age of *atoms* had begun. Put differently, *chemical elements* had made their first appearance in the evolving Universe.

The above sketch of the emergence of the first chemical elements or substances leaves untouched questions about a primordial origin of matter (of virtual particles and antiparticles) by way of a quantum vacuum fluctuation. Nor does it go on to consider the gravitational collapse of clouds of hydrogen and helium gas into proto-stars and galaxies, and the eventual synthesising of heavier chemical elements or substances in the interior of stars (and their dispersal in space by supernova explosions).

As indicated at the outset, both philosophers arguing in support of hylomorphism and philosophers arguing in support of hylosystemism are confident in the capacity of their opposed philosophical cosmologies to accommodate the scenario of cosmogenesis outlined above.

20. One of the greatest physicists of the 20th century (and arguably of all time), Werner Heisenberg, wrote in his *Physics and Philosophy: The Revolution in Modern Science* (English edition published in 1958) that "The matter of Aristotle is certainly not a specific matter like water or air, nor is it simply empty space; it is a kind of indefinite corporeal substratum, embodying the possibility of passing over into actuality by means of the form" (*op. cit.* p.148). Heisenberg went on to add the interesting suggestion that "the matter of Aristotle, which is mere 'potentia', should be compared to our concept of energy" (*op. cit.* p. 160). (I owe this reference to William A Wallace's *The Modeling of Nature*, p. 9, note 5.) It is also of interest to note that a theoretician steeped in 20th century

physics, as most surely was Heisenberg, handles adroitly and accurately a notion of 'matter' - Aristotle's *hule prote* (primary matter) - that was put forward at a time, and in a culture, quite unlike the time and culture of Heisenberg himself which were those of 20th century Western Europe.

- 21. Ioannis Duns Scoti *Opera Omnia*, vol.17 (Paris 1894), p.173, col.1. All Scotistic citations and references to follow are taken from this volume of the revised Wadding-Vives edition of the works of Scotus (Paris, 1891-95, 26 volumes).
- 22. David Burr, "Scotus and Transubstantiation" Medieval Studies, 34 [1972], p.346.
- 23. Richard Cross, Duns Scotus (Oxford, 1999), pp.140-141.
- 24. For the above analysis of the *mutationes* and *termini* involved in change relating to 'location', cf. Scotus, *Opera Omnia*, vol.17, p.177, col.2; 178, col.1.
- 25. Op. cit., p.197, col.2.
- 26. Op. cit., p.668, col.2.
- 27. Cross, *op. cit.* p.113. Marilyn McCord Adams sets out the distinction of Scotus as follows in the first volume of her study *William Ockham* (Ockham himself had commented on the distinction):

A relation is said to be intrinsic, if it is logically impossible for the extremes to exist and the relation and/or its co-relation not to obtain. But a relation is extrinsic, if it is logically possible for the extremes to exist and the relation and its co-relation not to obtain.

(*Op. cit.*, p. 217)

Richard Cross cites this passage from Adams's work, with a citation that includes two inaccuracies. The first sentence of Cross's citation reads: "A relation is said to be intrinsic, if it is logically possible for the extremes not to exist and the relation and/or its co-relation not to obtain." (Cf. Cross, *The Physics of Duns Scotus*, p.113.) The two inaccuracies in the transcribed sentence ("possible" instead of "impossible", and a "not" preceding "to exist") trivialize the meaning, and seriously weaken the Scotistic contrast between *intrinsic* and *extrinsic* relations.

- 28. Scotus, *Opera Omnia*, vol. 17, p.198, col.1.
- 29. Op. cit., p.178, col.1.
- 30. All citations following the citation referred to in Note 29. relate either to the first or to the second column of p.178 of the work being cited.
- 31. Op. cit., p.178, col.2.
- 32. Scotus also discusses philosophical questions relating to the Eucharist in the tenth of his *Quaestiones Quodlibetales* and in the *Reportata Parisiensia* (his second 'commentary' on the *Sentences* of Peter Lombard) book 4, distinctions 10-13. However, there would be general scholarly agreement that Scotus's definitive discussion of such questions is to be found in his *Opus Oxoniense*, the original text of which is an *ordinatio*, that is, a work prepared by Scotus himself (*reportata* are based on notes taken by students at Scotus's lectures), with amendments and additions by Scotus dating to at least 1304.
- 33. Innocent 111 (1160/1-1216), Pope from 1198. A powerful defender of the 'plenitudo potestatis' of the Roman see a power which Innocent 111 saw extending into such areas as the election of emperors. Innocent 111 convoked the Fourth Lateran Council, which met in 1215 and was the high point of his pontificate. He was particularly concerned to oppose the Albigensian heresy raging in the south of France, and engaged the Council to

that end, amongst others. The Fourth Lateran Council issued a formal statement of belief concerning the Eucharist which, for the first time in an official document, used the term "transubstan-tiate" ("transubstantiatis pane in corpus et vino in sanguinem [Christi] potestate divina"). Innocent 111 wrote a number of ascetical and theological treatises, including the *De Sacro Altaris Mysterio*, referred to by Duns Scotus under the title *De Officio Missae*.

- 34. Scotus, *Opera Omnia*, vol.17, p.355, col.2. Scotus had in mind what St Thomas had said in his *Scriptum super libris Sententiarum* of Peter Lombard, book 4, distinction 11, question 1, article 1, *responsio...ad prim. quaest.*, and in his *Summa Theologiae*, 3. 75. 2.
- 35. Scotus, *Opera Omnia*, vol.17, p.389, col.1.
- 36. Apart from the citation referred to in Note 35 *supra*, brief citations from, or references to, Scotus included at this place in the text are taken from pp.356-357 of vol.17 of the *Opera Omnia*.
- 37. At the end of the day Scotus has only one reason for accepting transubstantiation, in spite of the many *inconvenientia* he acknowledges as attaching to it, namely it is the teaching of the *Ecclesia Catholica* formally declared in the symbol or creed *Firmiter credimus* of the Fourth Lateran Council (see Note 33 *supra*).
- 38. Scotus, *Opera Omnia*, vol.17, p.319, col.2.
- 39. Op. cit., p.320, col.1.
- 40. Loc. cit., col.2.
- 41. *Op. cit.*, p.321, col.1.
- 42. Loc. cit., col.2.

- 43. Loc. cit., col.1.
- 44. Cf. *passim* the monograph of Scotus on natural theology entitled *De Primo Principio*, much of which is taken *verbatim* from book 1 of the *Opus Oxoniense*.
- 45. Scotus *Opera Omnia*, vol.17, p.321, col.2, for citations in this paragraph after the reference to the 'primum principium rerum' [Note 44].
- 46. Cf. Note 41 *supra*.
- 47. Op. cit., p.388, col.1.
- 48. Op. cit., p.389, col.1.
- 49. Ibid.
- 50. Ibid.
- 51. *Loc. cit.*, col.2.
- 52. St Thomas, Summa Theologiae, 3. 75. 4.
- 53. For the principle of identity, see Jacques Maritain's *A Preface to Metaphysics*, pp.91-97.
- 54. In section 5 of his Fourth Paper to (Samuel) Clarke (1716) Leibniz introduced the expression "the identity of indiscernibles" to refer to a principle (known subsequently as Leibniz's Law) which may be formulated as follows: If an object A has every feature and only those features that an object B has, and an object B has every feature and only those features that an object A has, then objects A and B are in fact (ontologically)

identical, that is, they are one thing, not two things. Using Leibniz's Law, it would follow that any thing X that is (here and now) brought into existence could not be (ontologically) identical with any thing Y that already existed, since no thing X could, as a matter of logical/ontological possibility, have every feature that any thing Y, which already exists, has, since any thing Y has the feature of pre-existence relative to any thing X - a feature that any thing X (logically) must lack as always being subsequent to any thing Y. Applied to Eucharistic conversion or transubstantiation, it might be claimed that, if any thing X were (here and now) brought into existence through change of the bread and the wine on the altar, it could not become, and be, identical with the body and blood of Christ, since the body and blood of Christ already existed and, therefore, had the feature of *pre-existence* relative to the thing X - a feature that the thing X could not (logically) have, and the absence of which precluded the thing X from being identical with the body and blood of Christ. (To anticipate what will be developed more at length in chapter 6: It should be stated that this argument fails to notice the distinction to be drawn between a thing X being brought into existence absolutely [and so could not already be in existence], and a thing Y being brought into existence in a qualified or relative way in that Y's coming into existence is connected with something else's ceasing to be what it was in order to become, and to be, identical with the pre-existent thing that is Y. In the case of the Eucharist, the substances of the bread and of the wine cease to be what they were and become, and are, the body and blood of Christ.)

55. The relevant Latin text from the *Scriptum super Sententiis* 4. 11. 1. 3. 1. (resp.) to 1. (ad primum) is the following:

Ad primum dicendum quod haec conversio [transubstantiatio] sub nulla naturalium mutationum continetur sed ab omnibus differt, ut ex praedictis patet; habet tamen aliquam convenientiam cum transmutatione nutrimenti, inquantum utraque conversio fit in aliquid praeexistens; differt tamen ab ea inquantum hic non fit aliqua additio sicut ibi.

56. The relevant Latin text from the *Summa contra Gentiles* book 4, chapter 62, is the following:

Videtur impossibile dici quod aliquid hic de novo convertatur in corpus Christi. Nihil enim videtur converti in praeexistens: cum id in quod aliquid convertitur per huiusmodi conversionem esse incipiat. Manifestum est autem corpus Christi praeexstitisse, utpote in utero virginali conceptum. Non igitur videtur esse possible quod in altari de novo esse incipiat per conversionem alterius in ipsum.

- 57. Scotus, Opera Omnia, vol.17, p.389, col.2.
- 58. St Thomas, Summa Theologiae, 3. 75. 3.
- 59. Op. cit., 3. 75. 2.
- 60. For the Latin text that has been paraphrased, cf. Scotus, *Opera Omnia*, vol.17, pp.457-458.

Chapter 6 - "Respondeo dicendum quod...": Some Thomistic Responses to Scotus

In the previous chapter we saw that Duns Scotus, working within a broad Aristotelico-Scholastic perspective, had produced a sustained critical analysis of the Angelic Doctor's position on transubstantiation that was remarkable for the depth and sophistication of the lines of argument that it presented. Of particular note were Scotus's approach to the notion of 'presence' in terms of what he called respectus extrinsecus adveniens (extrinsic relational property); his use of this approach to attempt to justify the multiplication of the presence of a thing or substance - presences as opposed to merely one presence - without any multiplication of the thing or substance concerned; the idea of a change that can acquire a new presence somewhere for a thing or substance (mutatio acquisitiva) without involving the loss of this thing's prior presence somewhere else (without being deperditiva of this prior presence); the distinction between adductive or 'translative' transubstantiation (transubstantiatio adductiva) and productive transubstantiation (transubstantiatio productiva), with the related claim that it is the former, not the latter, mode of transubstantiation that is applicable to the Eucharistic change of bread and wine into the body and blood of Christ, since it is impossible to produce, that is, bring into existence, what already exists (in this case the body and blood of Christ).

If the *reflective rationality* and *reasonable explanatory power* (cf. chapter 1, page 8 *supra*) of St Thomas's metaphysics of the Eucharist are to be accepted as cogently defensible, I regard it as a matter of crucial importance that an effective rejoinder be made to the Scotistic critique that was presented at some length (pp. 188-213) in chapter 5 *supra*. Accordingly, I propose in this chapter to set out, and to some extent elaborate on, the replies that two major Thomistic thinkers, Thomas de Vio Cajetan [1] and Francesco Silvestri of Ferrara (Ferrariensis) [2], make to the central objections of Duns Scotus to the position of St Thomas on the Eucharistic conversion and presence, that is, to the Thomistic concept of intrinsic change or transubstantiation and to the manner of Christ's becoming really present on the altar. As far as I am aware, no attempt has previously been made to consider at length, and in their bearing on each other, the objections of Scotus and the explicit responses to them of these two great Dominican

doctors as far as this concerns Eucharistic transubstantiation and presence. This chapter will, then, endeavour to fill a noticeable gap in the relevant speculative literature by engaging in a systematically dialectical way with essentially opposed Scotistic and Thomistic ideas (these latter as presented by Cajetan and Ferrariensis) concerned with the metaphysics of Eucharistic conversion and presence. It will also be an instance of the sort of conceptual and argumentative 'sculpturing' that tends to reveal Thomistic approaches to the ontological constants of what takes place on the altar as approaches to what might be called (in the language of Heidegger) 'being-as-event' (Anwesen).

1. Cajetan and Scotus

In the course of commenting on question 75, article 4, of the third part of the *Summa Theologiae* ('Utrum panis potest converti in corpus Christi?' [Can bread be changed into the body of Christ?], Cajetan explicitly addresses the argument of Duns Scotus in book 4, distinction 11, question 3, of Scotus's commentary on the *Sentences* of Peter Lombard designed to show that it is impossible for bread to be changed intrinsically into the body of Christ since this latter is "praeexistens et manens secundum suum esse antiquum" (pre-existent, and abiding in terms of its original existence) [3].

Cajetan draws together the essential elements of the argument of Scotus by first introducing the Scotistic distinction between productive transubstantiation (transubstantiatio productiva) and adductive transubstantiation (transubstantiatio adductiva). As will be recalled from the previous chapter (pp. 203-213), productive transubstantiation brings about the being (esse) of a substance, whereas adductive transubstantiation brings about the being here (esse hic) of a substance. Now, for Scotus, it is impossible for a thing to be changed substantially into something else that already exists, and that continues in terms of its original existence ("Transubstantiatio non potest esse ad substantiam quae praefuit, quia non videtur posse poni in substantiam manentem secundum esse suum antiquum" [4]). It follows that productive transubstantiation cannot be invoked in the context of Eucharistic conversion to account for the bread and wine becoming the body and blood of Christ since the body and blood of Christ already exist,

and no action changing a substance can be productive of what already exists. As Cajetan puts it on behalf of Scotus: "Sed corpus Christi praeexistens [et manens secundum suum esse antiquum] nullum esse accipit in sua substantia per huiusmodi transubstantiationem" (But the body of Christ - pre-existent [and continuing in terms of its original existence] - takes on no substantial reality or existence through transubstantiation of this productive] kind) [5]. Cajetan then concludes the Scotistic argument: "Ergo corpus Christi secundum suam substantiam non est terminus novae actionis transubstantiativae panis in ipsum" (Therefore the body of Christ in respect of its substantial reality is not the term of a new action transubstantiating the bread into it) [6]. Cajetan then repeats almost verbatim the argument of Scotus for adductive transubstantiation

Eo modo terminus prior convertitur in terminum posteriorem quo terminus posterior succedit termino priori. Sed terminus posterior, idest Christi corpus, non succedit secundum esse simpliciter, sed secundum esse praesens hic, termino priori, id est pani praeexistenti. Ergo nec panis convertitur nec transit in corpus Christi, nisi secundum esse hic praesens panis praeexistentis.

(A prior term is changed into a later term in the same way that the later term succeeds the prior term. But the later term, i.e.the body of Christ [in this case], does not succeed [the prior term] with regard to *being* absolutely speaking but with regard to the *being-here-present* of the prior term, i.e. of the pre-existing bread. So the bread is neither changed into, nor becomes, the body of Christ, except with regard to the *being-here-present* of the pre-existing bread.) [7]

Cajetan begins his reply to Scotus's rejection of the intrinsic change or conversion of the bread and of the wine into the body and blood of Christ - a change which, as he puts it, "credimus vere in hoc sacramento salvari" ([a change] which we believe to be

safeguarded truly in this sacrament") [8] - by inviting his readers to "experience the flavour" of two things (duo praelibanda), one from philosophical cosmology and the other from the writings of St Ambrose [9].

From philosophical cosmology we have the idea that, when there is question of change between positive terms at the level of substance, that is, at the level of the capacity of a thing for separate (distinct, stand-alone) existence structured in terms of unity-identity-wholeness, the very instant in which the change takes place - the instant in which the change of substance both comes about and has come about (simul fit et facta est) - is the first instant of existence of the entity that the change produces (primum esse termini ad quem), and the first instant of the non-existence of the entity that has been changed substantially (primum non-esse termini a quo). For example, when atoms of potassium, oxygen, and hydrogen, are changed substantially into potassium hydroxide, the instant in which potassium hydroxide both comes about and has come about (simul fit et factum est) is the first instant of existence of the potassium hydroxide, given that the potassium hydroxide first exists at that instant, and immediately before that instant did not exist. It is also the first instant of the non-existence of the atoms of potassium, oxygen, and hydrogen, as stand-alone entities, since these entities cease to exist at that instant, although they existed in the time immediately before it.

From St Ambrose (chapter 4, book 4, of his treatise *De Sacramentis*) we have the proposition that "Quod erat panis iam corpus Christi est, quia sermo Christi creaturam mutat" (What was bread is now the body of Christ, because the word of Christ changes something created). Cajetan expands this proposition as follows: "Quod erat panis *ante consecrationem* iam corpus Christi est *post consecrationem*, quia sermo Christi creaturam mutat" (What was bread *before* [the words of] consecration is now the body of Christ after [the words of] consecration because the word of Christ changes something created) [10].

Cajetan then indicates that the idea we have taken from philosophical cosmology and the proposition we have excerpted from the *De Sacramentis* of St Ambrose, when brought

together and considered clear-sightedly (simul iunctis et perspicaciter consideratis), disclose to us a transubstantiating action (actionem transubstantiativam) that is directed towards the bread, and terminated within the bread, in a particular way that he goes on to examine.

Cajetan argues that, at the instant in which the conversion or change of the bread into the body of Christ occurs, what was bread as such, that is, with respect to its reality as bread (secundum esse panis), has the nature or character of the *terminus a quo* - the term-from-which. Moreover, what was bread and is now the body of Christ (as having begun to be the

body of Christ [ut incipiens esse corpus Christi]) has the nature or character of the terminus ad quem - the term or completion of the change. It follows from this that the term or completion of the change - the terminus ad quem - is not the body of Christ taken absolutely (corpus Christi absolute), but what-was-bread-now-being-the-body-of-Christ (hoc quod erat panis esse corpus Christi). This is clear from considering what is involved in that instant in which the conversion or change both comes about and has come about (simul fit et facta est): From the fact that the proposition "The body of Christ now exists and, immediately before this, it did not exist" is false (because the body of Christ already existed in heaven), we can derive the (true) proposition that the body of Christ, taken absolutely, that is, as a reality in its own right, is not the term or completion of the Eucha- ristic conversion - the terminus ad quem of this change. Moreover, given that the following proposition is true, namely "What was bread is now the body of Christ and, immediately before this, what was bread was not the body of Christ", we can derive the (true) proposition that the term or completion (terminus ad quem) of the transubstantiating action, and of the change itself, is what-was-bread [becoming and]being-newly-the-body-of-Christ (hoc quod erat panis esse de novo corpus Christi). This is analogous to our deriving from the proposition that "What was bread is now not bread and, immediately before this, was bread [hoc quod erat panis nunc non est panis, et immediate ante erat panis]" the following (true) proposition: the terminus a quo - the term-from-which - of this action and change is what-was-bread-under-the-aspect-ofbeing-bread (hoc quod erat panis sub esse panis).

From the reasoning that has just been set out Cajetan is well positioned to conclude against Scotus's rejection of the possibility of productive transubstantiation in the Eucharistic change or conversion, that is, transubstantiation that intrinsically changes the substance of the bread and of the wine into the substance of the body and blood of Christ. Cajetan shows that the argument of Scotus assumes what is not the case, namely that the body of Christ taken absolutely is the term or completion of the action and the change involved when the Eucharist is celebrated (...argumentum [Scoti] supponere falsum, scilicet corpus Christi absolute esse terminum actionis et mutationis huius). For Cajetan, as we have seen, both the action and the change are concerned to bring about what-was-bread [becoming and]-being-the-body-of-Christ. This is the reality that newly comes about and has existence (de novo fit et est) through the action changing bread into the body of Christ. What Cajetan does is draw attention to the 'relativity' of the body of Christ to the *bread*, which forms (with the wine) the *matter* of the sacrament of the altar. What he is underscoring is that, though the body of Christ is really and substantially present in the sacrament (cf. Summa Theologiae, 3. 75. 1, and Note 1A-C of chapter 2 supra), this presence is to be understood in terms of what-was-bread-becoming-andbeing through the 'actio conversiva' of the words of consecration the body of Christ. That this 'relativity' claim does not result in an indefensible multiplication of entities an 'absolute' body of Christ and a 'relative' body of Christ - will be made clear in the development of Cajetan's claim below in section 2 of this chapter entitled An Elaboration.

Almost as an aside, Cajetan adds: "There can be no objection [to what he, Cajetan, has argued] due to what is most often said, and repeated endlessly, namely that this change has *bread* as its *terminus a quo* and *the body of Christ* as its *terminus ad quem* [thus undermining his 'relativity' thesis, and leaving the way open for Scotus's objection]. It is for the sake of brevity that we use these terms without qualification: they are to be taken *with a grain of salt* by the well-educated, and used with the meaning that I have given them" (Nec obstat quod saepissime dicitur, et repetitur infinities, quod haec conversio habet panem pro termino a quo, et corpus Christi pro termino ad quem: quoniam

brevitatis causa hos terminos absolute proferimus, *cum grano tamen salis* ab eruditis intelligendos, ut exposuimus) [Cajetan's italics] [11].

Cajetan goes on to rebut the reasoning of Scotus in support of adductive transubstantiation (cf. chapter 5, pp. 206-207 and this chapter, p. 236 seqq. infra). He does this by denying the minor premise of Scotus's reasoning (facile respondetur negando minorem), namely "But the later term, that is, the body of Christ, does not succeed [the prior term] with regard to being absolutely speaking but with regard to the being-here-present of the prior term, that is, of the pre-existing bread": The body of Christ succeeds the bread both in terms of *substantial* being (secundum esse simpliciter, idest substantiale) and in terms of being-here-present, that is, under the accidents of (what was) bread (secundum esse hic, idest sub accidentibus panis). For Cajetan, as against Scotus, the point is that, in reality (secundum veritatem), the substance of Christ's body in the Eucharist is that-which-was-bread (id quod erat panis) and, in virtue of this, exists where the bread had existed (per hoc sit ubi erat panis); therefore being contained under - though not actualised by - the accidents (dimensive quantity, shape, size, colour, etc.), and at the 'location' (ubi), which had previously affected or actualised the bread. In consequence, Cajetan would see no need at all to introduce the Scotistic notion of respectus extrinsecus adveniens (extrinsic relational property) as a means of explaining the presence of the body and of the blood of Christ where previously there had been the substances of bread and of wine.

The upshot of what has been put forward by Cajetan in his argument against Scotus is that intrinsic conversion or transubstantiation, that is, *productive* transubstantiation (to use the Scotistic descriptor), is able to be invoked to give an account of the change of bread and wine at the level of substance into the body and blood of Christ in the celebration of the Eucharist, notwithstanding the (absolute) preexistence of Christ's body and blood in heaven. For Cajetan, there is no question of Christ's body and blood being brought into existence *ex abrupto* as it were, that is, absolutely speaking. They are brought into existence only in the sense that *what previously was bread and what previously was wine* become, and are, the body and blood of Christ in the Eucharist. Put

differently, the body and blood of Christ are pre-existent in their *natural* mode of being, but not in their *sacramental* mode of being, that is, in their mode of being that is relative to the accidents of (what were) bread and wine.

2. An Elaboration

I propose to elaborate on the argument of Cajetan as follows: In opposition to what Duns Scotus has said, it should be affirmed that, in the conversion or change of bread and wine into the body and blood of Christ, there is no question of this change or conversion being a case of God's proposing, as it were, to 'bring into existence' what already existed, namely the body and blood of Christ. What happens in the Eucharistic change - the transubstantiation - is that, by divine intention and power (virtute divina), all that prevents the bread and the wine from actually becoming and being the (pre-existent) body and blood of Christ made present on the altar, is removed from the bread and the wine. This occurs through God's taking away from the bread and the wine at the level of substance all that *ontologically* distinguishes them from, that is, makes them other than, the (preexistent) body and blood of Christ. God simply ceases to conserve in being these ontologically distinguishing factors - all that makes certain individual instances of bread and wine be substantially what they are, and eo ipso be other than anything else. Clearly, this is not to seek to bring into existence through the Eucharistic change what already exists, but only to remove from something else that already exists - the bread and the wine - all that prevents the bread and the wine from becoming and being at the level of substance the (pre-existent) body and blood of Christ.

Underlying this capacity for the radical intrinsic change of one whole thing into another whole thing - for change that extends to the *substantial* wholeness of a being - is what St Thomas calls the "communis natura entis" (the common nature of being), meaning by this (as I interpret him) something along the lines of being as being in its concrete actualisation as a Universe, and in its potentiality (its 'potentia oboedientialis') as endlessly 'shareable' within, and between, the realities that *coniunctim* make up the Universe. As Thomas indicates: "Id quod entitatis est in una [re] potest auctor entis

convertere ad id quod est entitatis in altera, sublato eo per quod ab illa distinguebatur" (The Author of being is able to change that which is *being* in one thing into that which is *being* in another by taking away that by reason of which the first thing was kept from being the second) [12]. It is not surprising that the noted twentieth-century French theologian M.-T. Penido, O.P., should be moved to remark that these words of St Thomas are "les paroles les plus profondes jamais dites sur la possibilite et la nature de la conversion Eucharistique" (the most profound words ever said on the possibility and nature of the Eucharistic conversion) [13].

There is perhaps a further word to be added to the above interpretation of Thomas's notion of 'communis natura entis' (3. 75. 4. [to] 3) in terms of being as being in its concrete actualisation as a Universe, and in its potentiality as endlessly 'shareable' within, and between, realities jointly making up the Universe. The 'communis natura entis' understood in this way presupposes one of the central theses of Thomistic metaphysics, namely the thesis concerning the real or objective distinction between the nature or essence of an individual finite being - what the individual thing is - and the activity of being in be-ing - the esse - in virtue of which this nature or essence is actualised in reality as this or that individual finite being [14] (It should be recalled that, for St Thomas, the paradigm case of 'essence' is substance. This is clear from what he has to say when commenting on book five of the *Metaphysics* of Aristotle [In Metaph. 5, lectio 1, no. 1247]: "Substantia est ens simpliciter et per seipsam: omnia autem alia genera a substantia sunt entia secundum quid et per substantiam: ergo substantia est prima inter alia entia" (Substance is being absolutely speaking and of itself; all genera [of beings] other than substance are beings in a restricted sense and through substance. Therefore substance has the primacy over all other beings). It is also clear from what he has to say in the rich piece of metaphysical analysis bearing on the topic "quomodo essentia in diversis invenitur" (how 'essence' is found in various kinds of things) in chapter four of his De ente et essentia: "Invenitur enim triplex modus habendi essentiam in substantiis. Aliquid enim est, sicut Deus, cuius essentia est ipsummet suum esse...Secundo modo invenitur essentia in substantiis creatis intellectualibus, in quibus est aliud esse quam essentia earum, quamvis essentia sit sine materia...Tertio modo

invenitur essentia in substantiis compositis ex materia et forma, in quibus et esse est receptum et finitum...et natura vel quidditas earum est recepta in materia signata" (There are three ways in which (the notion of) 'essence' is verified of substances. For there is a reality - God - whose essence just is his being in be-ing... A second way is the verification of 'essence' in the case of created intellectual substances in which being in be-ing is other than essence, even though [in this case] essence does not involve matter...A third way is the verification of 'essence' in the case of substances composed of matter and form, and in which being in be-ing is received and limited...and their nature or quiddity is taken on in designated [amounts of] matter). Thomas goes on to add [op. cit. ch. 5]: "Substantia, quae est primum in genere entis, verissime et maxime essentiam habens, oportet quod sit causa accidentium, quae secundario et quasi secundum quid rationem entis participant" (Substance, which is first amongst beings, as having essence in the most real and important way, is of necessity the cause of accidental modes of being, since these latter share in the nature of being only in a secondary and qualified way). It is because of this distinction between essence and esse that radical ontological contingency is a property of finite beings, with the consequence that no finite being is such that it engages with ontological necessity in the activity of being in be-ing (of esse) through which it has actual reality. It is this radical ontological contingency that precludes finite entities from being ontologically encapsulated or 'sealed up' in themselves: they are at every moment being empowered ab extra to exercise that most profound of all activities - the activity of being in be-ing - that cannot be accounted for in terms of what they are as beings in which esse is really distinct from nature or essence. It is this ontological status inherently affecting finite beings that gives rise to the equally radical 'openness' of finite beings as such to whatever changes the Author of being (to use an English version of St Thomas's phrase) may propose to bring about in them. Clearly, these changes could extend to God's removing from bread and wine all that prevents them from becoming and being the body and blood of Christ, so that the total essence-esse relation constitutive of actual instances of bread and wine becomes, and is, the essence-esse relation that is constitutive of the actual body and blood of Christ. The Benedictine philosopher Joseph Gredt makes the revelant point succinctly when he writes that "Mutabilitas ad aliud esse simpliciter (transubstantiabilitas) super hanc

contingentiam seu super compositionem ex essentia et esse fundatur, quatenus res non habet necessario illud esse quod habet, sed potest amittere totum hoc esse acquirendo aliud" (Changeableness with respect to *different* being absolutely speaking [capacity for being transubstantiated], is grounded in this contingency or, rather, in essence-*esse* composition, inasmuch as a thing does not have necessarily that being in be-ing or *esse* it does have, but can lose this altogether by taking on different being in be-ing) [15].

3. Ferrariensis and Scotus

In his Summa Theologiae 3. 75. 2 St Thomas had asked "Whether, in this sacrament, the substance of the bread and of the wine remains after the [words of] consecration" (Utrum in hoc sacramento remaneat substantia panis et vini post consecrationem) [16]. He had replied that this was not the case, and had offered four reasons against the view that the substance(s) of the bread and of the wine did remain after the consecration, with priority being given to the argument that this position compromised the reality (veritas) of Christ's presence in the sacrament. Thomas had noted that the body and blood of Christ were not present on the altar before the words of consecration had been pronounced (ante consecrationem), and had adopted the position that there were only two ways in which something could begin to exist where it did not previously exist: either through a change of location bringing it to the relevant place, or through the change into it of something else already there. (Creation of something de novo in a place, though clearly possible, is not here taken into account by St Thomas, since the body and blood of Christ already existed.). Thomas argued in the Summa Theologiae 3. 75. 2, as well as in the Scriptum super Sententiis 4. 11. 1. 1. (resp. to) 1, and in the Summa Contra Gentiles book 4, chapter 63, that it was impossible for Christ to begin to exist under the appearances of bread and wine on the altar through local motion (for the arguments of Thomas in English translation, cf. chapter 3, pp. 87-88, 92-93 supra). Accordingly, with local motion excluded as impossible for reasons drawn from philosophy (and the co-existence on the altar of the bread and wine with the body and blood of Christ excluded for reasons of doctrine and theology) [17], Thomas concluded that the only way for Christ to begin to exist in the Eucharist was through the intrinsic conversion or change of the substance

of the bread and of the wine into His body and blood (...nec possit aliter...incipere esse de novo in hoc sacramento nisi per conversionem substantiae panis [et vini] in ipsum) [18].

Now Duns Scotus, it will be recalled, also rejected the idea that local motion was involved in Christ's becoming present in the Eucharist. The change bringing about Christ's presence under the species of bread and wine was not an instance of "propria mutatio localis" - of local motion in the strict sense (cf. chapter 5, p. 198 *supra*). This was so because there was no loss by Christ of His previous location (non...dependitiva prioris *ubi*), whereas a thing's loss of its previous location is what generally occurs in local motion. Moreover, the term of the change bringing about Christ's presence in the sacrament was not, strictly speaking, an instance of (circumscriptive) location, of exclusive *ubi* or 'whereabouts', since Christ could be simultaneously present on more than one altar. It was a "simple presence to the [Eucharistic] species themselves (quaedam praesentia simplex ipsi speciei)" (cf. chapter 5, p.198 *supra*) [19].

As we have seen, Scotus argued against the Thomistic position that the substance of the bread and of the wine was intrinsically changed or transubstantiated into the body and blood of Christ. The Scotistic counter-argument proceeded on the ground that it was impossible for something to be changed substantially into something else that already existed ("Transubstantiatio non potest esse ad substantiam quae praefuit, quia non videtur posse poni in substantiam manentem secundum esse suum antiquum") [20]. For Scotus the presence of Christ in the Eucharist was to be accounted for by a 'respectus extrinsecus adveniens' – an extrinsic relational property (cf. chapter 5, pp. 188-196 supra) - that brought about de novo the presence of Christ under the Eucharistic accidents when, at the consecration, the body and blood of Christ succeeded, that is, replaced, the substance of the bread and of the wine [21]. Intrinsic conversion or transubstantiation of the substance of the bread and of the wine in the Thomistic sense was ruled out altogether as the means through which Christ was made present in the sacrament of the altar.

-In the course of his commentary on book 4, chapter 63 of the *Summa contra Gentiles* of St Thomas, Ferrariensis set out with scrupulous care seven arguments drawn from distinction 10, questions 1, 2, and 3, of the commentary of Duns Scotus on book 4 of the *Sententiae* of Peter Lombard (cf. volume 17 of the *Opera Omnia* of Scotus in the Wadding-Vives edition), designed to show that 'conversio' in the sense understood by St Thomas is not uniquely required to account for the presence of Christ's body on the altar (...non est necesse dicere per solam conversionem huiusmodi posse esse corpus Christi, sine sui mutatione locali, in altari) [22].

I propose repeating in English translation these arguments drawn from Scotus (with page references to the text of Scotus added), then setting out after each argument a reply that is based on the reply of Ferrariensis himself, though elaborated as seems appropriate [23].

i.) "It is not more contradictory for the body of Christ to exist together with the substance of the bread than with the dimensive quantity of the bread, since substance no more repudiates substance than it does quantity as far as co-existence is concerned. But, although the body of Christ exists in heaven, God can make the same body co-exist with the dimensive quantity of the bread. Therefore also with the substance of the bread; in consequence of which, no conversion [of the bread's substance] is required [for the presence on the altar of the body of Christ]." (Cf. Scotus, *Opera Omnia*, vol. 17, p.223)

-The major premise of Scotus's argument is false, since clearly it *is* more contradictory for the body of Christ to exist together with the substance of the bread than with its quantity, if the body of Christ remains in heaven - as it does - and the bread is existing elsewhere, namely on some or other altar. With regard to the proof offered for the major premise, what is being assumed (the possibility of the co-existence of the substance of the bread and the substance of Christ's body) is to be rejected on the same basis. This is so since contradiction is involved in the idea of a substance (the body of Christ) remaining in heaven, but beginning to co-exist with another substance (the bread) on some or other altar on earth, with no change taking place in either of them: Not in the

substance that is Christ's body *ex hypothesi*; not in the substance that is the (instance of) bread, since the position of Scotus excludes 'conversio' in the sense of intrinsic change affecting the bread. St Thomas, on the other hand, had established in his commentary on the *Sententiae* 4. 11. 1. 1a. (resp. to) 1, and in the *Summa Theologiae* 3. 75. 2, that it was impossible for something to begin to exist where previously it did not exist unless it was itself changed by being moved there, or something else already there was changed into it. Ferrariensis adds the sharp observation that Thomas's line of reasoning is to be understood in relation to place or location that already exists (de loco existente), not in relation to place or location that is produced *de novo* (de loco noviter producto). For example, if only one extended thing existed it would *not* be in an already existing place it would literally be *nowhere*, i.e. lacking 'whereabouts'. But, if it were suddenly to be surrounded by another (newly existent) extended thing (or other newly existent extended things), it would *eo ipso* begin to exist in a place or location *without* itself being changed by being moved there, or by anything else being changed into it.

Ferrariensis also usefully observes that no contradiction is involved in the idea of a substance co-existing with the dimensive quantity of another substance that has been changed into it (non repugnat autem tali substantiae ut simul sit cum quantitate substantiae quae in ipsam est conversa). This is so since a change to one thing can result in a new relation between it and something else, even though this second thing remains unchanged (relatio innasci potest ex mutatione unius extremi tantum, etiam altero extremo non mutato). This is a proposition with no end of applications. For example, Smith's observing the Sydney Opera House after previously not observing it results in a new real relation between Smith and the Opera House, with the Opera House itself remaining unchanged by the change in Smith. (There is, of course, in this situation what British philosopher Peter Geach would refer to as a "Cambridge change": the Opera House's change of status from first being unobserved, then being observed, by Smith, which manifestly involves no change in the Opera House - what Geach would call a mere Cambridge change as distinct from a genuine or real change.) It remains to be noted that nothing that Ferrariensis has said precludes the possibility that the 'corpus Christi sacramentale' - the sacramental body of Christ - could, by special divine

intervention, co-exist with some *further* substance on the basis of the dimensions of the bread that has been changed into the sacramental body of Christ (...simul esse per divinum miraculum cum alia substantia ratione dimensionum panis in ipsum conversi). Ferrariensis was concerned to avoid setting limits to the 'potentia Dei absoluta' - the absolute power of God - as conceptually distinguished from the 'potentia Dei ordinaria [seu 'ordinata']', that is, the ordered power of God, meaning by that God's power considered in relation to divine foreknowledge and will. This foreknowledge and will clearly extend to the sacrament of the Eucharist which thereby becomes one of those realities that are "contained under the order of things which [God] has instituted" (...continetur sub ordine quem [Deus] statuit rebus) [24].

- ii) "Wherever God can produce a natural substance not existing in its natural manner (that is, [existing] in a manner directly opposite to that), God can also produce it existing in its natural manner. But God can indeed does produce the body of Christ in its sacramental existence, that is, not existing in its natural manner, and simultaneously existing in different places. Therefore God can produce the body of Christ existing simultaneously in these same places in its natural manner, namely as related to place and dimensions (localiter et dimensive). Therefore [intrinsic substantial] conversion [of the bread and of the wine] is not necessary to bring about Christ's presence." (Cf. Scotus, *Opera Omnia*, vol. 17, p.196)
- In the first premise of this argument Scotus appears to be using the notion of 'existing in a place' *distributively* to refer to each instance of existing in a place taken separately (Ferrariensis calls it "singillatim pro uno determinato"). In the second premise he seems to be using the notion of 'existing in a place' *collectively* to refer to the simultaneous coexistence of the one sacramental body of Christ in many places ("pro pluribus locis coniunctim", as Ferrariensis puts it). On the basis of premises that are (logically) flawed by an ambiguity Scotus argues in effect as follows:

If God can make a substance exist in a place in a non-natural way, God can make it exist in that place in a natural way.

But God can - indeed does - make the body of Christ exist in

many places simultaneously in a non-natural way (sacramentally).

Therefore God can make the body of Christ exist in these same places (potest idem facere in eisdem) in a natural way, viz. as related to place and dimensions (localiter et dimensive). *Conclusion*: Intrinsic change (conversio) of the bread and of the wine is not necessary to account for the presence of Christ in the Eucharist ("Ergo non est necessaria huiusmodi conversio", in Ferrariensis' terms), just as this sort of change would not be required to account for the presence of Christ in many places in a natural way. [25]

Thomists resist the inference ("Therefore God can make...), and reject the *conclusion*, seeing both of these as resting on premises flawed by an ambiguous use of the notion of 'existing in a place'. Moreover, for Thomists there is contradiction involved in the idea that one and the same extended thing might exist in more than one place 'localiter et dimensive' at the same time, and they remain unpersuaded by Scotistic talk of multiplying instances of 'respectus extrinsecus adveniens' as a formula for bringing this about [26]. For the Thomistic school the following precise line of argument of Thomas in his *Quaestiones Quodlibetales*, question 3, article 2 [27] is compelling:

Aliquod corpus esse localiter in aliquo loco, nihil est aliud quam corpus circumscribi et comprehendi a loco secundum commensurationem propriarum dimensionum. Quod autem comprehenditur a loco aliquo, ita est in ipso loco quod nihil eius est extra locum illum: unde ponere quod sit localiter in hoc loco, et tamen sit in alio loco, est ponere contradictoria esse simul. Unde...hoc a Deo fieri non potest.

(A body's existing locally in some or other place is nothing else than for that body to be circumscribed and encompassed by a place, as having its dimensions commensurate [with the dimensions of the place]. Now a body that is encompassed by a place is in that place in such a way that nothing of it is outside that place. In consequence, to maintain that a body is present locally in *this* place, but nonetheless is in *another* place, is to maintain contradictories to be simultaneously the case. So...this situation could not be brought about even by God.) [28]

In the argument of St Thomas there is a robust acceptance of the reality of the limitations placed upon a body by reason of its having dimensive quantity or extended parts-outsideparts. The primary effect of dimensive quantity is the distinction and order of extended parts in relation to the body as a whole (ordo partium in toto). The secondary effect of dimensive quantity is to situate a body (extended by reason of its having parts-outsideparts) in relation to other bodies, themselves extended by reason of their having partsoutside-parts. Each body is in immediate (dimensive) contact with another body or other bodies, or is at a greater or less distance from another body or other bodies: there is presence or distance as between bodies. For St Thomas, following Aristotle (cf. Physica, book 3; 205b 31), this secondary effect of quantity gives rise to the *ubi* of a body - its 'whereabouts' or 'being located' - in the Universe, and to the arrangement or order of its parts relative to what is extrinsic to this body (ordo partium in loco), such that individual parts of the body correspond dimensively to the individual parts of a surrounding body or surrounding bodies. The notion that there could be multiple 'whereabouts', and multiple dimensive correspondences of one and the same body to the different sets of dimensions of bodies extrinsic to it simultaneously would involve, as the argument of Quodlibetal question 3 article 2, makes clear, a contradiction.

It is, of course, likely that were St Thomas to be made aware of the Scotistic notion of *respectus extrinsecus adveniens*, he would be disposed to regard it as a very *ad hoc* conceptual invention - even a desperate *deus ex machina* - designed to make provision for the possibility of one and the same body being locally, that is, dimensively or circumscriptively, in more than one place at the same time. He would also, one imagines, be disposed to question Scotus about his failure to supply a careful analysis of the notion

of *respectus extrinsecus adveniens*, and evidence justifying the uses to which Scotus puts the notion.

- iii) "No change directly and of itself (per se) brings about what is subsequent (posterius) to its direct and essential term. But the *presence* of the body of Christ in the sacrament is something that is altogether subsequent (quid posterius simpliciter) to the *substance* of the body of Christ, which is the direct and essential term of the [Eucharistic] conversion. Therefore this *presence* is not brought about directly and of itself through the change that is [Eucharistic] conversion or transubstantiation." (Cf. Scotus, *op. cit.*, p. 173)
- Scotus leads into this argument with the following supposition: "It seems evident that that-into-which-something-is-changed exists through this change precisely where what-is-changed-into-it previously existed; not through any change of place on the part of the term-to-which of the change the only change called for is of the term-from-which [into the term-to-which]" (Videtur quod illud in quod conversum est aliquid, per conversionem sit ubi conversum prius fuit, non per mutationem loci propriam ipsius termini *ad quem* conversionis, sed solum termini *a quo*) [loc. cit.; italics in Wadding-Vives text]. Scotus then goes on to set out the above argument (in iii), concerned to show that, even assuming conversion or transubstantiation along Thomistic lines, ("...suppono secundum eos [sc. Thomistas]..."), the *presence* of Christ in the Eucharist is not thereby explained. At most one could account for there being a new *substance* that of the body and blood of Christ succeeding the substances that were bread and wine, with the issue of the actual *presence* of the body and blood of Christ remaining unresolved, as it were.

This argument of Scotus against the intrinsic change or transubstantiation of the bread and of the wine being sufficient to account for the *presence* of the body and blood of Christ to the species or appearances of the bread and of the wine in the Eucharist (and not just to account for the *substance* of the body and blood of Christ) begs an important question. The question being begged concerns the possibility that one and the same change may have more than one *terminus ad quem*, with a particular order or relation between the terms. This is the view that St Thomas proposes in question 9, article 3, of

his Quaestiones Disputatae de Veritate [29] when he affirms that "Non...inconvenit unius mutationis esse duos terminos ordinem quemdam inter se habentes" (It is not unacceptable that the one change should have two terms with some sort of order between them). Ferrariensis offers the example of a change that consists in something that was previously a certain colour becoming white: the change that is something becoming white terminates simultaneously in (1) the quality of whiteness, and (2) a relation of likeness with anything else that is white (videmus dealbationem simul terminari ad albedinem, et ad similitudinem supposito albo). Qualities and relations are ontologically distinct modes of being (cf. Aristotle, Kategoriai, 8b 25 for 'poion' [quality], and 6a 36 for 'pros ti' [relation].) And it would be perfectly open to anyone to extend the logic of Ferrariensis' argument and talk about, for example, new relations of unlikeness coming about between what has just become white and non-white things: there can be any number of termini ad quos in this sort of situation.

Applying this idea to the change that is the Eucharistic conversion or transubstantiation, it should be said that the primary *per se*, that is, direct and essential, term of this change is the substances that were previously bread and wine becoming the substance(s) that are the body and blood of Christ; the secondary *per se* term is the *presence* of these substances to the species or accidents of what was previously bread and wine. Ferrariensis laconically articulates the point this way: "Neque praesentia corporis Christi ad species est posterius omni termino per se, cum ipsa sit secundario per se terminus; neque substantia corporis Christi sola est terminus per se talis transubstantiationis" (The *presence* of Christ's body to the species is not subsequent to every *per se* term, since it is itself a *per se* term, albeit secondary; nor is the substance of Christ's body the only *per se* term of such transubstantiation) [30]

iv) "God can make the body of Christ present [on the altar] with the bread, that is, with the substance that is the bread continuing in existence, given that this presence would be subsequent to the substance of the bread (posterior substantia panis). So, without any change to the substance of the bread, there can be a new presence of the body [of Christ] with the bread. There must, then, be a different sort of change (aliam mutationem) - one

not at the level of substance - to bring about a presence of this kind. So it is not through a change at the level of substance (per transmutationem substantialem) that this presence is essentially (per se) brought about: the term [of the change] and the presence are of the same nature, and the presence [of something] cannot be, strictly and essentially (proprie et per se), the term of two changes distinct in kind."

(Cf. Scotus, op. cit., pp. 173-4)

- Because of the analytical and metaphysical complexity of the reply of Ferrariensis to this argument of Duns Scotus, a paraphrase of this reply is perhaps the most effective way of presenting it. I paraphrase the reply as follows (but using one or two illustrations from modern science):

With the exception of the final consequence that he draws ("So it is not..."), all that Scotus puts forward in his argument against the requirement of intrinsic conversion or transubstantiation to bring about the presence of Christ on the altar may be conceded. There is, after all, no question that an omnipotent God could cause the body of Christ to exist on the altar at the same time as the bread, in the sense that the substance that is the bread itself would remain in existence on the altar, together with the substance that is Christ's body. Put differently, God could make the body of Christ begin to exist as present to the bread (praesens pani) without the need for any intrinsic change of the substance that is the bread into Christ's body. [31]

Scotus's consequence ("So it is not...") must be denied, if it is taken as a general truth about change at the level of substance and the causing of the presence of something. And the reasoning adduced in support of the consequence ("the term [of the change] and the presence are of the same nature") must also be rejected as a general truth about change that brings about the *presence* of something. Take, for example, the following: the presence that molecules of iron sulphate have in the place where they are produced in a chemical reaction involving iron and sulphuric acid, and the presence already existing molecules of iron sulphate have when they are transported locally to a place is a presence "eiusdem naturae" - "of the same nature". But one presence is acquired through a

chemical reaction, that is, a change at the level of substance, and the other through a change of location. There is no inconsistency involved in something that is *extrinsic* to a thing (e.g. presence in a place) being the term of different sorts of changes. Nor is any inconsistency involved when something is the intrinsic and primary term of one sort of change ('presence in a place' as the term of local motion), and is also the extrinsic and secondary term of a different sort of change ('presence in a place' as the term of change at the level of substance).

Now, if there were added to the antecedent ("God can make...") the phrase "with neither [the bread nor the body of Christ] moved locally to the other, nor either changed into the substance of the other", the antecedent would have to be denied: No change in the relation of presence of one thing to another can occur unless what-is-in-a-place is changed, or the place itself that is 'locating' it is changed ("...nisi aut ipsa re locata mutata, aut mutato loco circum ipsam"). Scotists may, of course, wish at this stage to invoke the principle that "ad novitatem posterioris non sequitur novitas prioris" (something new affecting a later state of affairs does not presuppose something new affecting what is prior to that state), for example, a new piece of architecture does not presuppose a new architect, or even a new architectural thought. In the case under discussion, the *presence* of something in a place is a 'later state of affairs', that is, it is (ontologically) subsequent, to the thing or substance that is present, so that change relating to the thing or substance as what is *prior* is not required.

Thomists, however, would take the view that the above principle (ad novitatem posterioris non sequitur novitas prioris) has no application when the 'later state of affairs' has a relation of natural concomitance to what is prior to it, that is, when it results through natural concomitance (per naturalem concomitantiam) from what is (ontologically) prior to it. For example, a new negative electric charge begins to exist because a new electron begins to exist, or a new positive electric charge because a new positron begins to exist (occurrences that take place in different sorts of beta decay). Or, in the example used by Ferrariensis, a new instance of 'capacity to laugh' begins to exist because a new instance of 'being human' does so (non est nova risibilitas nisi propter

hominis novitatem). The Thomist position is that a *new* real relation involving place and presence results through *natural concomitance* from change affecting what-is-in-a-place, or through the place that 'localises' something being itself changed. In more general terms (I cite Ferrariensis): "Non est novitas in relatione reali nisi per aliquam novitatem fundamenti aut termini" (No new real relation comes about [including a relation of place and presence] except through something new affecting the foundation or term [of the relation]) [32]. For Thomists, the change of the bread into the body of Christ, *with the dimensive quantity and position-in-place (spatial relationships) of what-had-been-bread remaining unchanged*, is sufficient to ensure the *presence* of the body of Christ on the altar precisely where the bread had existed (cf. section 8 of chapter 2, pp. 38-43 *supra* for relevant refinements of this statement).

v) "When something is changed into something else that is pre-existent, it more truly takes on the conditions of the latter than the other way round (magis acquirit conditiones eius quam e converso), as is clear from the case of food that is consumed. It follows that, solely from the conversion of bread into the pre-existent body of Christ, the changed bread more truly takes on that condition that is the presence of Christ *in heaven* than the body of Christ takes on a presence to the species of bread *on the altar*." (Cf. Scotus, *op. cit.*, p. 174)

The major premise of the argument does not hold when (a) something belonging to what has been changed (aliquid conversi) continues to occupy the *place* previously occupied by what has been changed, and (b) nothing of what has been changed goes on existing as *added to* what it has been changed into (as the matter of food is added to the organism that ingests the food) - in which case there is nothing remaining to take on the conditions of what it has been changed into.

This is the situation in connection with the Eucharistic change, where the dimensive quantity of the bread remains (after the consecration) to occupy the place previously occupied (through this same dimensive quantity) by the substance that was bread. Moreover, nothing of the *substance* that was bread remains as simply *added to* the body

of Christ, since the whole substance of the bread (tota substantia panis), both primary matter and substantial form (et materia et forma), is changed intrinsically into the body of Christ, so that there is nothing of the bread remaining to take on the conditions of the body of the pre-existent Christ. All the conditions of the body of the pre-existent Christ are now also localised on the altar through the dimensive quantity (and spatial relationships) of (what was) bread, under which the substance of Christ's body is contained, with the substance of the bread having been totally changed into it, that is, having ceased to have all of the factors that made it other than the body of Christ (cf section 2 of this chapter *supra*).

Nor does this state of affairs - the Eucharistic 'Sachverhalt' - involve any alteration to, or in, the body of Christ, since none of the accidents of (what was) bread - not excluding the dimensive quantity of (what was) bread - inhere in the body of Christ on the altar as in their (sustaining) subject. As St Thomas puts it:

Manifestum est enim quod huiusmodi accidentia non sunt in substantia corporis et sanguinis Christi sicut in subiecto: quia substantia humani corporis nullo modo potest his accidentibus affici; neque etiam est possibile quod corpus Christi, gloriosum et impassibile existens, alteretur ad suscipiendas huiusmodi qualitates.

(It is obvious that accidents of this sort [i.e. proper to bread and wine] do not exist in the substance of Christ's body and blood as in their subject. This is so because the substance of a human body can in no way be actualised by these sorts of accidents. Nor is it possible for the glorified and impassible body of Christ to be changed by taking on features of this kind.) [33]

Nor is the argument helped by the case of food that is consumed. If anything, this case tells against the Scotistic argument: In informing or actualising the (primary) matter of

the food, the substantial form or soul of the organism being nourished in some sense 'reaches to' (accedit ad) the *place of the food* - in particular when the organism being nourished grows through the food that is being substantially changed (praesertim quando per mutationem augetur alitum). What is being claimed here is simply that, when food is being intussuscepted within an organism in order to build up, or restore, cellular cytoplasm and nuclei, and thus tissues and organs, the vivifying principle of the whole organism - the substantial form or soul - in some sense 'reaches to' the *places* where the nutrients in the new ingested material are being dispersed and absorbed by the organism. This case offers no assistance to the Scotistic argument since what-is-being-nourished is adjusting to the spatial or 'local' conditions of the material that is doing the nourishing, not the other way round.

- vi) "God could change bread into the body of Christ in its actual existence in heaven (ut habens esse in caelo). But, in that case, the body of Christ would not be contained under the species of bread simply in virtue of the conversion itself (ex ipsa conversione). So it is not contained under the species of bread *now* in virtue of the conversion itself." (Scotus, *op. cit.*, p.174)
- The major premise of the argument of Scotus ("God could change bread...") is to be rejected if it is understood in the following sense: God could change the substance that is the bread into the body of Christ in its actual existence in heaven, that is, as it is contained locally or dimensively in heaven [the body of Christ exists in heaven in its full dimensive reality] without there being any local motion of the bread with its dimensions (nullo modo localiter moto pane et eius dimensionibus) dimensions which, when the (Eucharistic) change or conversion has taken place, remain to 'localise' the body of Christ (remanent ad locum corporis Christi). The reason for rejecting the major premise of the Scotistic argument understood in this sense is this: In the sort of change or conversion the argument envisages, the body of Christ must succeed the substance that is the bread under the dimensions of the bread (otherwise the body of Christ has not really succeeded the substance of *this* or *that* instance of bread the substance *marked off* by these dimensions). Accordingly, for the body of Christ existing under the dimensions of

the bread to avoid having a different *ubi* or location from the *ubi* or location the body of Christ actually has in heaven, the dimensions of the bread must have this same *ubi* or location. But - against the major premise understood in the above sense – this requires that the dimensions of (what was) the bread be moved to the location Christ's body actually has in heaven (ut localiter in caelo continetur). Otherwise, of course, one and the same extended reality - the locally or dimensively present body of Christ - would be circumscriptively present in more than one place simultaneously (idem esset simul in pluribus locis circumscriptive) - something previously ruled out as impossible (cf. pp. 239-240 *supra*).

The major premise of the argument may be accepted if it is taken in the following sense: "God can change bread into the body of Christ in its actual existence in heaven when the bread with its dimensions is moved to where the body of Christ is located (moto pane et dimensionibus eius ad locum corporis Christi)." But then the argument's minor premise ("But, in that case, the body of Christ would not be contained under the species of the bread simply in virtue of the conversion itself") is false: It is precisely this change or conversion that brings about the presence of the body of Christ under the species of the bread, with the species themselves being moved to the place of Christ's body in heaven.

vii) "If the bread as extended were changed into the body of Christ as extended, that is, quantity into quantity and substance into substance, the body of Christ as extended would not have the circumscriptive location (non haberet *ubi* circumscriptive) that the bread itself had. Therefore, from the conversion or change just of substance into substance, the body of Christ does not have the sort of definitive location (non habet *ubi* definitive) that the substance of the bread had. Therefore [the presence of the body of Christ on the altar is not due to this conversion]." (Cf. Scotus, *op. cit.*, p. 174)

Scotus supports the major premise or antecedent of his argument ("If the bread as extended...") with the statement that "The antecedent is clear since it would not be possible for the extended entity that is the body of Christ to exist circumscriptively [i.e. to occupy the same amount of space] in the place where the bread had been, since it is

much larger than the bread" (Antecedens est manifestum, quia non posset illud quantum, scilicet corpus Christi, esse circumscriptive in loco panis, cum sit maius pane)" [loc. cit.]

The central objection to be made to the argument of Scotus is that the situation postulated by him in the antecedent (conversion of the quantity of the bread into the quantity of the body of Christ, as well as conversion of the substance that is bread into the substance that is Christ's body) would result in there being nothing of the bread remaining relative to which the body of Christ would (sacramentally) succeed the bread in a particular location. There would be nothing that would be for the body of Christ its *ratio essendi* or 'reason for being' in what was previously the place of the bread. Contrary to the Scotistic postulate, the dimensions of the bread must always be affirmed to remain in order to be the reason for the body of Christ's existing sacramentally in the place that was previously that of the bread. There is no factor responsible for the body of Christ being *sacramentally located where the bread had been* other than its relation to the continuing species or accidents of the bread that occupy this place after the (Eucharistic) conversion or change has occurred, as they did before this change.

The situation postulated or envisaged by Scotus in the antecedent of his argument is, therefore, to be discounted. The conclusions that he draws from this antecedent, namely that the body of Christ would be without definitive location sacramentally after the substance that was bread had been changed into the substance that is Christ's body, and (hence) that the sacramental presence of Christ's body on the altar is not due to this change, may equally be disregarded.

4. A Footnote to the Above

As a footnote to the above seven arguments and the responses to them of Ferrariensis - re-

sponses that have been developed/modified to some degree - the point may perhaps be made (as it is by Ferrariensis himself) that a twofold presence belongs to the body of

Christ when sacramentally present on the altar. One is a presence to the *dimensions* of (what was) bread, under which the body of Christ is concealed (ad dimensiones panis sub quibus occultatur); the other is a presence of Christ's body to the *place* of (what was) the bread (ad locum panis). The first mode of presence endorses our use of language about the body of Christ being 'under the dimensions' of the bread, whilst the second mode of presence endorses our language about the body of Christ being 'in the place' that was the bread's (albeit "*quodammodo*" - in a "special sense", as Thomas puts it [cf. *infra*], since the one sacramental body of Christ, unlike any one instance of bread, may be present at the same time on more than one altar).

Each of these two modes of presence belongs to the body of Christ through the intrinsic change of the substance of the bread into the body of Christ. It is, however, the first mode of presence that *immediately* results from this conversion or change. From the fact that the substance of the bread is changed into the body of Christ in such a way that the actual dimensions of the bread remain, it is immediately consequential that the body of Christ succeeds the substance of the bread under these dimensions - which is for the body of Christ actually to become present to these dimensions. The second mode of presence belongs to the body of Christ by way of the first (mediante primo): Because the body of Christ is present to the dimensions of (what was) bread, it follows that it is present to the *place* encompassing these dimensions that was previously the place of the bread.

St Thomas draws these ideas together towards the end of chapter 63 of book 4 of his *Summa contra Gentiles* when he remarks that

Si enim substantia panis in corpus Christi converteretur et panis accidentia transirent, ex tali conversione non sequeretur quod corpus Christi, secundum suam substantiam, esset ubi prius fuit panis: nulla enim relinqueretur habitudo corporis Christi ad locum praedictum. Sed cum quantitas dimensiva panis remanet post conversionem, per quam panis hunc locum sortiebatur, substantia

panis in corpus Christi mutata fit corpus Christi sub quantitate dimensiva panis; et per consequens locum panis quodammodo sortitur, mediantibus tamen dimensionibus panis.

(If the substance of the bread were changed into the body of Christ, and the accidents of the bread ceased to exist, it would not follow from such a change that the body of Christ in its substantial reality existed where the bread previously existed. This would be so since there would remain no connection of the body of Christ to this place. But, since the dimensive quantity of the bread through which the bread possessed this particular location remains after the [Eucharistic] conversion, the substance that was bread now changed into the body of Christ becomes the body of Christ under the dimensive quantity of the bread. In consequence, the body of Christ possesses in a special sense [quodammodo] the place of the bread, but by means of the dimensions of the bread.) [34]

5. Conclusion

4.1 Thomas and Scotus: the Outcome

From the arguments presented above by Cajetan and Ferrariensis, which set out with great care the position of Duns Scotus, and in particular from what was said at some length in chapter 5, pp. 188-213 *supra*, it will be clear that the teaching of Duns Scotus on the nature of Eucharistic transubstantiation, and on the way in which Christ becomes present in the sacrament of the altar, offers a major challenge to the position of Thomas Aquinas and the Thomistic School on these issues.

It seems to me, however, reasonable to affirm on the basis of critical reflection that the re-sponses to the arguments of Scotus made by Cajetan and Ferrariensis in defence of - and, to some extent, in development of - the position of St Thomas, produce a successful

outcome for the Thomistic side of the discussion regarding transubstantiation and the manner of Christ's becoming present in the Eucharist.

With that said, what has become evident from contributions to both sides of the discussion is the crucial importance of what Hans-Georg Gadamer often calls "the logic of question and answer" as an instrument of intellectual exploration and discovery. In the present case, it is intellectual exploration and discovery bearing on certain problems in one area of what was referred to above (chapter 1, p. 8) as "the philosophy of Christian doctrine". This area is one of concern with problems about conversion or change at the level of *the whole substance*, in respect of the transubstantiation of bread and of wine and the real presence of Christ in the sacrament of the altar; that is, in the area of traditional Christian doctrine about the Eucharist.

Historical and Cultural 'Distance': Fusing the Horizons

It may be remarked here that it has been culturally appropriate, and in a quite literal sense *meaningful*, to be engaging seriously in the twenty-first century with the concepts, analyses, and arguments, of people - Cajetan and Ferrariensis - who were thinking and writing five hundred years ago in a social and cultural context strikingly different from that of the twenty-first century. They, in their turn, had engaged with people - Thomas Aquinas and Duns Scotus - who had done their thinking and writing more than two hundred years before them, and also in a social and cultural context much different from that of Cajetan and Ferrariensis. We have, then, an engagement spanning an historical, social, and cultural 'distance' of something over seven hundred years.

It will be recalled that, in part 2 of his major work *Truth and Method* (*Wahrheit und Methode*), Gadamer had spoken about what he called the "fusion of horizons" that may take place across an historical and cultural 'distance'. An instance of this "fusion of horizons" can, I believe, be seen to occur when twenty-first century people systematically engage with the concepts, analyses, and arguments, of Thomas, Scotus, Cajetan, and Ferrariensis, concerning the nature of Eucharistic change, and the manner of Christ's beoming sacramentally present on the altar. People thinking and writing today

are well able to bring their own sets of understandings and questions - understandings and questions that owe much to the historical and cultural 'situatedness' of their lives as twenty-first century people - to bear on the metaphysical issues involved in the interpretations of Eucharistic change, and of the sacramental presence of Christ, advanced by Thomas, Scotus, Cajetan, and Ferrariensis. There is no impenetrable wall of historico-cultural relativism or 'incommensurability' to block contemporary *Verstandnis* when people today consider traditional Thomistic, and other Scholastic, accounts concerning the metaphysics of the Eucharist.

Strong evidence favouring this claim may be garnered from, for example, recent work in the philosophy of Christian doctrine by writers such as Catherine Pickstock in her *After Writing: On the Liturgical Consummation of Philosophy*, John Milbank and Catherine Pickstock in their *Truth in Aquinas*, and Jean-Luc Marion in his *God Without Being (Dieu sans l'etre: Hors-texte)*. Issues to do with transubstantiation and the presence of Christ in the Eucharist are explicitly examined in their work in a way that reveals (at least in the cases of Pickstock and Milbank) a considerable understanding of Scholastic - in particular of Thomistic - thought. And this is an understanding that is confidently connected with their understanding of the philosophical trend that is linguistic analysis (Pickstock, Milbank), phenomenology (Marion, Pickstock), and the post-modern thought of writers such as Foucault and Derrida (Marion, Milbank, Pickstock). [35]

The 'fusing of horizons' across historical, social, and cultural, distance may also be seen in the collection of essays recently edited by John Haldane and published under the title *Mind, Metaphysics, and Value, in the Thomistic and Analytic Traditions*. This collection is an extremely good example of the way in which conceptual schemata and modes of argument of manifestly differing times and traditions may intelligibly and fruitfully 'converse' with one another.

Against this positive background, Richard Rorty's proposed pragmatic strategy of simply "nudging old problems aside" (cf. his *Contingency, Irony and Solidarity*, p. 264) - a strategy that would, presumably, extend to problems relating to transubstantiation - as

being "incommensurable" with modern conceptual paradigms, seems depressingly arbitrary, and unserious to the point of being frivolous.

Behind this capacity of the human mind to traverse historical 'distance', and to accommodate (to 'fuse') the content of no end of sharply different socio-cultural situations and particularities, there lies the unavoidable psychological fact pointed to by Thomas Aquinas:

Illud autem, quod primo intellectus concipit quasi notissimum et in quo omnes conceptiones resolvit, est ens (ut Avicenna dicit in principio *Met.* 1, c.9). Unde oportet quod omnes aliae conceptiones intellectus accipiantur ex additione ad ens.

(That which the intellect conceives first of all as what is best known, and into which all its conceptions of things are resolved, is *being* (as Avicenna remarks at the outset of chapter 9, book1, of his *Metaphysics*). So it is necessary for all other conceptions of the intellect to be acquired by unfolding the conception of *being*.)

(Quaestiones Disputatae de Veritate, qu. 1, a. 1)

This is to state in its most fundamental terms what-it-is-to-be-human, since it is the human *intellect* or *mind*, with its spontaneous grasp of *being* (id cui competit esse - that to which existence belongs), that is the shared, species-wide, way in which human beings basically 'fit into' the Universe. And, just as the concept of *being* is the most basic and universal of all human conceptions, unimprisoned by any local socio-cultural 'situatedness', so also is the *principle of non-contradiction* - formulated as 'being is not non-being (ens non est non-ens), or as 'the same thing cannot exist and not exist at the same time and under the same aspect' (idem sub eodem respectu non potest simul esse et non esse) - the most basic and universal of all intellectual principles. It is the principle that is *psychologically* first as immediately following the concept of *being*, and *logically*

first as the ground of every truth (true proposition) about that-which-is-the-case, regardless of when or where or how something or other is the case. Resting on the concept of *being* (ens), it is *eo ipso* the principle that surpasses local cultural 'situatedness' as being the conceptual ground and pre-condition of every foray into hermeneutics, whether in the narrow sense of 'rules for the interpretation of texts', or in the wider sense of an interpretative inquiry into *the nature of things*. This principle has a conceptual content that, to borrow language that Bernard Lonergan uses in a different context, "stand(s) beyond the status of the products of human history" (cf. Lonergan's *Method in Theology*, p. 323).

In virtue, then, of the shared, species-wide, way in which human beings *onto-logically* 'fit into' the Universe, it is possible for people in the 21st century to be at one transculturally with such great thinkers and writers of the past as Thomas Aquinas, Duns Scotus, Thomas de Vio Cajetan, and Silvester of Ferrara.

NOTES

- 1. For Cajetan, cf. Note 12, chapter 3 supra.
- 2. For Ferrariensis, cf. Note 17, chapter 2 supra.
- 3. References to Cajetan will be to his commentary on question 75 of the third part of the *Summa Theologiae*, contained in tome 12 of the *Opera Omnia Sancti Thomae Aquinatis* a tome published in 1906 by the Leonine Commission (for which, cf. Note 2, chapter 1 *supra*), and containing questions 60-90 of the third part of the *Summa Theologiae*. All tomes of the critical edition of this work published in Rome by the Leonine Commission include the commentary of Cajetan.
- 4. Joannes Duns Scotus, *Opera Omnia*, volume 17, p. 389 (Wadding-Vives edition).

- 5. Cajetan, Opera Omnia S. Thomae, tome 12, p. 168.
- 6. Ibid.
- 7. Op. cit., p. 169.
- 8. Ibid.
- 9. For St Ambrose, cf. Note 2, chapter 5 supra.
- 10. Cajetan, *Opera Omnia S. Thomae*, tome 12, p. 169. The italics in the citation are found in Cajetan's text.
- 11.*Ibid*.
- 12. St Thomas, Summa Theologiae, 3. 75. 4. (to) 3.
- 13. M.-T. Penido, *Le rôle de l'analogie en thèologie dogmatique* (Paris, 1931), p. 437. I owe this reference to William Barden, O.P. It is to be found on p.73 of Barden's translation of, and notes on, *Summa Theologiae* 3. 75–78, volume 58 of the Blackfriars edition of this work.
- 14. For three recent, and important, discussions of the real distinction between essence and *esse* in finite realities, cf. John Wippel *The Metaphysical Thought of Thomas Aquinas* (2000), pp.132-176; W. Norris Clarke *The One and the Many: A Contemporary Thomistic Metaphysics* (2001), pp. 72-91, and 150-160; Oliva Blanchette, *Philosophy of Being: A Reconstructive Essay in Metaphysics* (2003), pp. 334-364 (especially pp. 354-364). Joseph Gredt's tightly argued presentation of a Thomistic account of the real distinction between essence and *esse* in finite beings, pp.118-127 of volume 2 of his *Elementa Philosophiae Aristotelico-Thomisticae* (13th edition, 1961) may also profitably be consulted. The value of this presentation is enhanced by Gredt's citations from, and

references to, a considerable number of relevant texts of the Angelic Doctor (cf. op. cit., pp.128-129).

- 15. For Joseph Gredt, see Note 19 of chapter 2 supra.
- 16. Cf. chapter 3 supra, passim.
- 17. Cf. Summa Theologiae 3. 75. 2c; Scriptum super Sententiis 4. 11. 1. 1. 1. (resp. to) 1; Summa contra Gentiles 4. 63 (and commentary of Ferrariensis, p. 204 [col. 2] of the edition of this Summa referred to in Note 22 infra.
- 18. Summa Theologiae 3. 75. 2c.
- 19. J. D. Scotus, *Opera Omnia*, vol. 17, p. 178.
- 20. Op. cit., p. 389.
- 21. Cf. chapter 5, pp. 209-212 supra.
- 22. Cf. the commentary by Ferrariensis on book 4 of the *Summa contra Gentiles*, p.203 of tome 15 of the *Opera Omnia Sancti Thomae Aquinatis* a tome published in Rome in 1930 by the Leonine Commission (cf. Note 2, chapter 1 *supra*). All tomes of the critical edition of the *Summa contra Gentiles* published in Rome by the Leonine Commission include the commentary by Ferrariensis. All subsequent references in this chapter will be to tome 15 of the Leonine edition of 1930.
- 23. Cf. Ferrariensis, op. cit., p. 203 (col. 2) for the Latin text of the arguments.
- 24. St Thomas Aquinas, Summa Theologiae, 1. 25. 5. (to) 1, and Note 31, chapter 2 supra.

- 25. Hugh MacCaughwell, a 17th century Irish Franciscan scholar who added scholia and margin notes to Luke Wadding's 1639 Lyon edition of the *Opera* of Duns Scotus, provides here a hopeful note regarding the argument of the Subtle Doctor: "Ratio efficacissima contra D. Thom. Et alios. Facilius corpus esse in pluribus locis quantitative quam sacramentaliter" (This is the most effective argument against the exceptional Thomas and others: It is easier for a body to exist in several places quantitatively than sacramentally). Cf. p. 196 of vol. 17 of Wadding-Vives edition of the *Opera Omnia* of Scotus.
- 26. Scotus's own discussion of issues relating to multilocation (with extensive commentary by another 17th century Franciscan scholar, Anthony Hickey) is to be found in his *Opera Omnia*, volume 17 (Wadding-Vives edition), pp. 190-221, where he asks (question 2): "Utrum idem corpus possit esse localiter simul in diversis locis?" (Can the same body be locally present in different places at the same time?) a question to which Scotus replies in the affirmative.
- 27. Thomistic scholars agree that this Quodlibetal question was disputed in Lent 1270, during Thomas's second period in Paris as regent master in theology (a regency extending from January 1269 until April 1272). See James Weisheipl, O.P., *Friar Thomas D'Aquino: His Life, Thought, and Works*, pp. 126-127, 255, 367-368; Jean-Pierre Torrell, O.P., *Saint Thomas Aquinas*, vol.1:*The Person and His Work (L'Initiation a Saint Thomas d'Aquin: Sa Personne et son Oeuvre*), pp. 207-212, 337.
- 28. It is interesting to notice that Thomas's way of expressing himself here "Unde...hoc [contradictoria esse simul] a Deo fieri non potest" (This situation [contradictories to be simultaneously the case] could not be brought about even by God) is amended in the *Summa Theologiae* 1. 25. 3 (where he is asking about divine omnipotence). In the *Summa* 1. 25. 3 in connection with what involves contradiction, Thomas says that "convenientius dicitur quod *non possunt fieri* quam quod *Deus non potest ea facere* (It is more correct to say that *such things are not able to be brought about* than to say that *God cannot bring them about*).

- 29. The twenty nine questions of the *Quaestiones Disputatae de Veritate* were disputed by Thomas in Paris between 1256 and 1259 during his first Parisian regency in theology. Scholars agree that questions 8 to 20 were disputed during the second year of this regency (1257-1258), so that the public disputations associated with question 9 (on communication between angels) would probably have taken place reasonably early in the academic year 1257-1258. For the *Quaestiones Disputatae de Veritate* see Weisheipl *op. cit.* (Note 27), pp. 126, 362-363, and Torrell *op. cit.* (Note 27), pp. 63-67, 334-335.
- 30. Ferrariensis, op. cit., p. 204 (Cf. Note 22 supra).
- 31. The deliberations both of Scotus and of Ferrariensis open up issues about a "metaphysics of presence" (to borrow an expression of Jacques Derrida, though not Derrida's use of the phrase to refer to what he took to be - mistakenly, I think - the assumption of Western metaphysics that reality is to be interpreted as a unitary totality, relative to which differences between things are ultimately unreal) - a metaphysics of 'presence' that perhaps still remains to be fully worked out. Scotus's unanalysed, and unargued for, notion of 'respectus extrinsecus adveniens' (extrinsic relational property) introduced to explain the Eucharistic presence of Christ (as distinct from the substance of the body and blood of Christ in the Eucharist) seems altogether too ad hoc, too designedly 'got up', to be convincing. Moreover, one might reasonably argue that this Scotistic innovation would lead to an unnecessary multiplication of entities, namely (1) substance, (2) presence, (3) cause of substance, (4) cause of presence. The Thomistic analysis is more economical from an ontological point of view: (1) substance present to X; (2) cause of substance-present-to X. Accordingly, the Scotistic privileging of 'presence' as calling for more than the transubstantiation of the bread and of the wine where the bread and the wine actually were may reasonably be viewed with some scepticism.

Although Thomists have not developed in any comprehensive way a "metaphysics of pre-sence", nonetheless it is very clear that all the components necessary to develop such

a part of a wider metaphysics or ontology are available to Thomists. These components include the following:

iv. The concept of *esse* (the activity of being in be-ing [cf. Note 4, chapter 5 *supra*] through which a being - a reality or Seiende - is "extra nihilum et extra causas", that is, outside (distinct from) nothingness and causes. A being is *present* within the total spectrum of real existents in virtue of *ex-sistentia*, that is, in virtue of this being's *standing* (*sistentia*) *outside* (*ex*) nothingness and causes. This is its *presence* taken ontologically as that of a being belonging to the totality of real entities

ii. The concept of *essence* or *nature* through which a being is of this or that identifiable

kind - an emu, say, or a molecule of mercury oxide - since only what is determinate is

able to exist, that is, to be *present* within the total spectrum of real existents (an implication of the principle of identity).

iii. The concept of *duration* which denotes the continuous existence of one and the same thing (existentia continuata unius et eiusdem rei). The notion of 'continuous existence' gathers together what has just been said in i. and ii. above, with connotations of existence as being uninteruptedly 'added to' existence relative to one and the same thing. Whether a particular entity is perishable (corruptibile) or imperishable (incorruptibile), it will be its continuous *existence* that immediately brings about its *presence* as something belonging to the total spectrum of reality. If this entity is perishable, that is, subject to the change or loss of its substantial exsistence, then its presence is measured by *time*. If this entity is imperishable, that is, not subject to the change or loss of its substantial ex-sistence, its presence as belonging to the overall domain of reality will be measured by *absolute eternity* (aeternitas absoluta), as in the unique case of God, or by *modal eternity* (aeternitas modalis seu aeviternitas), as in the case of pure spirits or 'angels'.

iv..The concept of physical *quantity* (extension) refers to the status of a material thing as having *parts outside parts* (partes extra partes). It is the distinctive ground of the *presence* to each other of the parts of one and the same extended material thing or substance (continuity), and of the *presence* of one extended material thing to another material thing (or other material things). This may be a presence of *actual contact* (contactus actualis), or a presence in terms only of *location* or 'whereabouts' (ubi) in the Universe, when two (or more) extended material things are spatially situated relative to - and therefore *present* relative to - each other.

Much more could - and needs to – be said in the direction of developing a Thomistic ontology of *presence*, and it should be a desideratum of Thomistic philosophy that such an ontology be developed. Thomists should, however, recognise that the eminent twentieth-century German philosopher Martin Heidegger made some useful forays into the field of an ontology of presence in his major work *Sein und Zeit* (8th edition 1957).

Heidegger carefully distinguishes between (1) what he calls the "ontologico-Temporal" term *Anwesenheit* (presence), drawn etymologically from the classical Greek term *parousia* [Greek *para* and *ousia*] with its sense of 'being at' or 'presence' relative to [the right] time (Sein und Zeit [8th edition], pp. 25-26); (2) Vorhandenheit – a term conveying the notion of presence-at-hand of some or other object that "lies before us and calls for our attending to it" (op. cit., p. 74); (3) Zuhandenheit when presence-at-hand becomes readiness-to-hand, e.g. when (to use one of Heidegger's examples) the south wind ceases to be just a flow of air in a particular direction and becomes for a farmer the warning signal of rain to come (op. cit., pp 80-83); (4) Zugegensein - a term used to denote the everyday presence of something which is noticed only when, as something ready-to-hand (zuhanden) it goes missing ("Our looking around comes up against emptiness, and now sees for the first time what the missing article was ready-to-hand with, and what it was ready-to-hand for.") (op. cit., pp. 75-76). Heidegger notes that "Beings are grasped in their Being as 'presence'; this means that they are understood with regard to a definite mode of time - the 'Present' [die 'Gegenwart']" (op. cit., p. 25).

Citations from *Sein und Zeit* in English use the translation of this work made by John Macquarrie and Edward Robinson, though I have made several slight amendments.

Within these Heideggerian distinctions lies a considerable doctrine of 'presence'. However, it seems to me that the conceptual resources identified above, and available to Thomist philosophers (and more such resources could be identified, for example, the presence of *causes* to, and in, their *effects*), have the potential to be articulated into a cogent and valuable contribution to a "metaphysics of presence" - to return to Derrida's useful term.

To come back for a moment to Heidegger: Heidegger's account of 'presence', with its valuable conceptual nuances, may well be of importance in considering the real presence of Christ in the sacrament of the altar. One must, however, question the use to which some of the features of this account (for example, what Heidegger has to say about the term Anwesenheit) have been put by Jean-Luc Marion in his God Without Being (Dieu sans l'etre: Hors-texte) - a use that leads Marion to speak of the real presence of Christ in the Eucharist as "this 'God' made thing" of which "one would expect precisely nothing but real presence: presence reduced to the dimensions of a thing..." (op. cit. p. 164). Before this Marion had spoken about "an idolatry that imagines itself to honor 'God' when it heaps praises on his pathetic 'canned' substitute', namely the "substantial presence" that "fixes and freezes the person in an available, permanent, handy, and delimited thing" (ibid.). With a notable lack of critical assessment and careful argument Robyn Horner endorses these remarks of Marion in her monograph 'The Eucharist and the Postmodern' (published in the collection Eucharist: Experience and Testimony [cf. bibliography]), and goes on to insist that "a metaphysical approach to the eucharist is now less than helpful...because it can lead to a thinking of person as substance or object; and because it can lead to thinking of eucharistic presence as a thing..." (op. cit. p. 19).

It is surely unfortunate that neither Marion nor Horner bothered to consult the definition of 'person' advanced by the great sixth century philosopher and theologian (Anicius Manlius Severinus) Boethius in chapter three of his work *De persona et duabus naturis contra Eutychen et Nestorium* (Concerning the person and two natures [of Christ]

against Eutyches and Nestorius), namely "rationalis naturae individua substantia" - "an individual substance of a rational nature". Unlike Marion and Horner in the twenty-first century, Boethius in the sixth century was well aware that not only was the notion of 'substance' (understood in the sense of a being's capacity for separate, that is, distinct or stand-alone, existence) not inimical to the notion of 'person', but that it lay at the very core of this notion as the ontological ground and reason for the distinctive autonomy and independence of the individual reality that is a person. (It is worth noting that the Angelic Doctor understood this point very clearly, and never hesitated to make use of the Boethian definition of 'person' in order to understand the concept of personality in terms of [intellective] substance and to use it both to explore the doctrine of the divine Trinity [Summa Theologiae 1. 29. 1] and to interpret the doctrine of the Incarnation, which latter application involves accepting that two natures - one divine, one human – are united in the one person of the divine Word [cf. Summa Theologiae 3. 2. 2; Summa contra Gentiles 4. 41; Quaestio Disputata de Unione Verbi Incarnati a.1].)

Moreover, Horner plainly has some difficulty with what she sees as the reduction of the person to the status of an *object* if the 'substance' account of the Eucharistic presence of Christ is accepted. In reply one is bound to say that, apart from privileged conscious first-person access to oneself - to one's own subjectivity and interiority as a person - one cannot but encounter persons as *objects*, albeit objects of a uniquely precious kind because of their 'lived' subjectivity and capacity for happiness/fulfillment. Put differently, amongst *objects* there are (a) those that are objects pure and simple, lacking any trace of conscious inner life or subjectivity, for example, a piece of rock or an amoeba; (b) those that have some measure of conscious inner life or subjectivity, for example, a cat; and (c) those that have conscious inner life or subjectivity at a level that constitutes them as selves, with a capacity for inter-subjective relations and their ensuing responsibility/accountability. It is to be regretted that Horner has not noticed the semantic point that "object" has an analogical range of reference that extends from a proton, say, to a *person* and, in consequence, she resiles unreasonably from thinking of a person as substance or object.

It follows - unremarkably - that Christ in His presence in the Eucharist is always an *object* for believers concerning themselves (in whatever way) with the Eucharistic presence. It also follows that, since this presence is the (sacramental) presence under the appearances of bread and wine of a *person* who is both God and man, Christ's existence as *substance* in the Eucharist involves human consciousness, divine consciousness, human subjectivity, divine subjectivity, and Christ's two-fold existence or presence (Anwesenheit) *in a substantial way* in the Eucharist is the ground or reason for these attributions.

- 32. Ferrariensis, op. cit., p.204 (Cf Note 22 supra).
- 33. Cf. Summa Theologiae 3. 77. 1c.
- 34. Cf. Opera Omnia Sancti Thomae Aquinatis tome 15, p. 202 (cols 1 and 2).
- 35. Particular attention may be paid to chapter 6 of Catherine Pickstock's *After Writing*: *On the Liturgical Consummation of Philosophy* where Pickstock deals with 'Transubstantiation: Beyond Presence and Absence', 'Eucharistic Scepticism', 'Transubstantiation in Aquinas: A Defence', 'Transubstantiation as Ground of Possibility for all Meaning' (her section titles); to chapter 4, 'Truth and Language', of Milbank and Pickstock's *Truth in Aquinas*, a chapter in which transubstantiation is of special concern; and to sections 1, 3, and 7, of chapter 6 of Marion's *God Without Being*.

Chapter 7 - Some Distinctions and Contrasts: Transubstantiation,

Creation, Natural Change (3. 75. 8)

1. Introduction

1.1 In the previous chapter an attempt was made to bring into systematic 'confrontation' the arguments of Duns Scotus against the interpretation of transubstantiation offered, and defended, by St Thomas, and the replies to these arguments put forward by Thomas de Vio Cajetan and Sylvester of Ferrara (Ferrariensis), two major commentators on the work of the Angelic Doctor, with some elaboration of these replies as the case appeared to me to warrant.

This chapter had been preceded by four chapters concerned to examine at some length what St Thomas had to say in the *Summa Theologiae*, third part, question 75, articles one to four. These articles dealt successively with (1) a defence of the notion of the *real presence* of the body and blood of Christ in the Eucharist, (2) the rejection of any continued existence of the substance of the bread and of the wine on the altar after the words of Eucharistic consecration had been pronounced over the bread and the wine, (3) the idea that the bread and the wine had neither been annihilated nor reduced to matter-in-an-earlier state but had become at the level of substance the body and blood of Christ through Eucharistic consecration, (4) the conclusion that the Author of being (Auctor entis), whose causal activity extends to the "whole nature of being" (ad totam naturam entis), is able to change the substance of the bread and of the wine into the substance of the body and blood of Christ, and actually does so when the Eucharist is duly celebrated.

The overall perspective of this four-chapter examination of these articles was that of the philosophy of Christian doctrine (cf. chapter 1, page 8 *supra*).

1.2 The concern of this final chapter of the thesis is simply St Thomas's discussion in 3. 75. 8 of the distinctions to be drawn, and contrasts to be made, between *transubstantiation* (transubstantiatio), *creation* (creatio), and *natural change*

(transmutatio naturalis). The importance of this discussion arises out of the further light that it throws upon the idea of 'transubstantiation' as this idea is understood by the Angelic Doctor and employed by him in his interpretation of the Eucharistic change. Thomas draws attention to the issues involved by asking the question "Is this proposition true: 'The body of Christ comes from the bread'?" (Utrum haec sit vera "Ex pane fit corpus Christi").

- 1.3. Prior to his discussion of these modes of emergence of new being (transubstantiation, creation, natural change), Thomas had proceeded as follows in the three articles of question 75 consequent upon article four:
- a). In article five the Angelic Doctor had given reasons for affirming the on-going reality of the accidents of bread and of wine in the Eucharist *post consecrationem*. The issue of accidents continuing to exist *without their connatural subjects* is pursued by St Thomas in question 77 of the third part of the *Summa Theologiae*. Central to this discussion is that (1) effects depend more upon the First Cause than upon any secondary cause, so that the normal dependence of accidents upon substance for their existence may be replaced by dependence upon God who is the "prima causa substantiae et accidentis" (the First Cause of substance and accident) (3. 77. 1), when substance is withdrawn; (2) the dimensive quantity of the bread and of the wine functions as the quasi-subject of all the other accidents of the bread and of the wine when the substance of the bread and wine is withdrawn, just as previously it was the accident by means of which these other accidents existed in the substance of the bread and wine (3. 77. 2).
- (b). In article six Thomas had asked whether the substantial form of the bread remained after the consecration, and had answered his own question in the negative. Such a question might well appear unnecessary given that it had been established earlier (article four) that the *whole* substance (*tota* substantia) of the bread, that is, form as well as matter, had been changed into the body of Christ. However, in Thomas's day there were theologians of a philosophical bent ready to claim that, since bread is an artifact, its form is in the order of *accident*, and therefore remains after the consecration; or that,

since the substantial form of Christ's body is a human soul imparting life at all levels to this body, the (lifeless) substantial form of bread cannot be changed into it, and so remains after the consecration; or that, since the accidents of the bread function in their normal way *post consecrationem*, and such functioning requires the substantial form to sustain it, this form continues in existence on the altar. These arguments are set out in 3. 75. 6 as objections to the thesis Thomas will defend.

In the body of the article Thomas contends that, were the substantial form of the bread to remain, only the primary matter - the *materia prima* - of the bread would have been changed, and changed into the *primary matter* of Christ's body, not into the *whole body* of Christ (in *totum corpus* Christi). Thomas's argument is theological here: this situation would run counter to the meaning of the (consecrating) sacramental formula "This is *my body*" (not "This is *the matter* of my body").

Thomas also draws on philosophical cosmology and philosophy of mind to support his case: "If the substantial form of the bread remained, either it would remain in primary matter, or separate from primary matter. Not the first, however, because, if it remained in the primary matter of the bread, then the whole substance of the bread would remain - a position already ruled out (article two). Nor could it remain in different primary matter, since each form is uniquely adapted to its own 'parcel' of primary matter [propria forma non est nisi in propria materia]. If, however, it were to remain as separate from matter, it would be an actually intelligible form and also an intelligence, since this is the nature of forms separated from matter" (Si forma substantialis panis remaneret, aut remaneret in materia, aut a materia separata. Primum autem esse non potest. Quia, si remaneret in materia panis, tunc tota substantia panis remaneret: quod est contra praedicta (a. 2). In alia autem materia remanere non posset: quia propria forma non est nisi in propria materia. Si autem remaneret a materia separata, iam esset forma intelligibilis in actu, et etiam intellectus: nam omnes formae a materia separatae sunt tales). [1]

Thomas replies as follows to the three objections to his position:

(i). Nothing prevents human skill from being employed to produce new types of substances actuated by new types of *substantial* forms. (Whilst interpretation of results in *hylomorphic* terms would not be a feature of what they are doing, nonetheless those engaged in the synthetic materials industry seven centuries after Thomas's time - making, for example, polyacrylic plastics such as perspex, or fibres such as nylon-66 - would be in no doubt at all that they were producing genuinely new substances.) Thomas believed that this was the case when flour and water were cooked to become bread. As he put it in 3. 75. 6. (to) 1:

Nothing prevents human skill from bringing about something whose form is not an accidental form but one that is substantial...Human skill does not produce a form of this kind by its own power but by drawing on the powers of nature. This is the way in which human skill produces the substantial form of bread, namely by drawing on the power of fire to cook material composed of flour and water.

(Nihil prohibet arte fieri aliquid cuius forma non est accidens sed forma substantialis...Talem enim formam non producit ars virtute propria, sed virtute naturalium principiorum. Et hoc modo producit formam substantialem panis, virtute ignis decoquentis materiam ex farina et aqua confectam.)

Filippo Selvaggi in his challenging - indeed 'era-opening' – article "Il concetto di sostanza nel Dogma Eucaristico in relatione all fisica moderna" (cf. chapter 5, pp. 176-178 *supra*) felt compelled to comment that

S. Tommaso, fondandosi sui dati della scienza dei suoi tempi riteneva que il pane, come anche il vino, fossa una sostanza naturale e non un semplice aggregato di sostanze diverse; giacchè nella confezione del pane si produce la forma sostanziale del pane "virtute ignis decoquentis materiam ex farina et aqua confectam" (*Op. cit.*, p. 36)

[In a footnote, Selvaggi gives 3. 76. 6. (to) 1 as his reference to the Latin citation from Thomas. The reference should be to 3. 75. 6. (to) 1.]

(St Thomas, basing himself on the data of the science of his time, held that the bread, as well as the wine, was a natural substance and not a simple aggregate of diverse substances since, in the production of bread, there is produced a substantial form of bread "by drawing on the power of fire to cook material composed of flour and water".)

Selvaggi went on to indicate that

Nè chimicamente, nè filosoficamente, si può parlare propriamente di sostanza del pane, ma si deve invece parlare di sostanze diverse che, mescolate in una determinata maniera, danno ciò, che secondo l'uso generalè e chiamato pane.

(*Op. cit.*, p. 41)

(Neither as a matter of chemistry nor as a matter of philosophy can one speak strictly of *the substance of bread*: rather, one ought to speak of *diverse substances* that, mixed together in a determinate way, give rise to what is, in ordinary usage, called *bread* [my emphases]).

Selvaggi concluded that

La scienza moderna, in conclusione, non permette più di parlare, come faceva S. Tommaso, di una forma sostanziale del pane, che informa e dà unità a tutta una massa od anche ad un frammento di essa; e neppure di una forma sostanziale di vino. La forma del pane in quanto tale è quindi una forma accidentale nel senso della filosofia scolastica, la quale informa non già la materia prima, ma la materia seconda; cioè la forma del pane è quella determinata mescolanza di sostanze, ottenuta in quel determinato modo; ed altrettanto dicasi del vino. (*Op. cit.* p. 42)

(In conclusion, modern science no longer permits one to speak, as St Thomas did, of a substantial form of bread that informs and imparts unity to the whole mass, or even to a fragment of it; nor even of a substantial form of wine. The form of bread as bread is, then, an accidental form in Scholastic philosophy's sense, which does not inform primary matter but secondary matter; that is, the form of bread is that determinate mixture of substances, obtained in that determinate way; and the same thing should be said about wine.) [my emphases]

Although St Thomas requires that each wafer of bread used in the celebration of the Eucharist have a unique, unifying, substantial form that, with the primary matter of the wafer of bread, is changed at the consecration into the body of Christ, what he has to say about *change at the level of the whole substance* may be readily accommodated within an account of the Eucharistic change that requires that the *diverse substances* (water, carbohydrates [especially starch], proteins, fat, etc.) that make up the artifact that is a wafer of bread cease to be what they are and change, with respect to both matter and form, to become the body of Christ in the sacrament of the altar.

(ii). The second objection was to the effect that there can be no question of the lifeless form of bread being changed into the living form of Christ's body which, in fact, is His soul (the objection as presented in 3. 75. 6 invoked Aristotle's definition of 'soul'as

'what makes a physical body be what it is as something fundamentally alive' [actus corporis physici potentia vitam habentis], cf. *Peri psyches* 412a 27).

In reply, Thomas points out that the soul is to be understood as the form of the body imparting to it the full range of its completed reality, namely its being, its being a body, its being alive with such-and-such kind of life. The form of the bread is changed into the form of Christ's body, then, only with reference to imparting *being a body*, not with reference to imparting *being alive in the way that Christ's body is alive* (Convertitur igitur forma panis in formam corporis Christi secundum quod dat esse corporeum: non autem secundum quod dat esse animatum tali anima).

It is perhaps permissible to ask whether St Thomas was a little too cautious here regarding the role he assigns to the form of the bread when, and as, transubstantiated into the form of Christ's body. According to the Angelic Doctor this conversio or change has reference only to bringing about being a body, not to bringing about being alive in the way that Christ's body is alive. It would have been equally open to St Thomas to have contended (along the lines employed by him in 3. 75. 4. [to] 3) that, since we are dealing here with the unrestricted causal activity of the "Auctor entis" - the "Author of being" - what is of being in the form of the bread can be changed into what is of being in the form/soul of Christ, by the Author of being taking away all that prevents the former from becoming and being the latter (sublato eo per quod ab illa distinguebatur, loc. cit.); cf supra chapter 6, section 2 An elaboration. The (conceptually distinct, though cum fundamento in re) functions of the soul in actuating and animating primary matter to give rise to an organic body - namely the functions of imparting being, imparting being a body, imparting being alive with such-and-such kind of life - as marked off from the function of a substantial form merely in actuating primary matter to give rise to an inorganic, that is, a non-living, body, need not, within the "Author of being" context, have occasioned any special problem when the conversio or change from form of bread to human soul was being postulated in the case of the body of Christ.

(iii). The third objection to be faced by Thomas was that the normal mode of functioning of the *accidents* of the bread (and of the wine) after the Eucharistic consecration required that the sustaining and empowering functions of the substantial form of the bread (and of the wine) continue (propria operatio rei sequitur formam substantialem eius), so this form itself must continue *post consecrationem*.

Thomas was content to reply at this point that the sustaining and empowering roles of the substantial form in connection with the normal functioning of the accidents of (what had been) bread and wine - their continuing to affect the senses of sight, touch, taste, their providing nourishment, their changing other things, etc. - were imparted miraculously to the accidents themselves (miraculose conferuntur ipsis accidentibus) by divine intention and power. Thomas was, of course, well aware that so bland a statement was unsatisfactory on its own: it was intended by him as little more than a pointer to arguments regarding this multi-faceted issue that were to be developed later in his discussion. Hence his "...ut infra dicetur" - "...as will be considered below" - with the Latin text in use adding "q. 77 a.3. ad 2. 3; a. 5. 6" to make the point perfectly clear.

- c). In article seven of 3. 75 Thomas asks whether the change that is transubstantiation is *instantaneous* or *successive*. The claim that it is *instantaneous* has three reasons in its favour:
 - i). The substance of Christ's body in which this change is completed does not admit of degrees: something either is or is not substantially a human body. The change from bread to this body at the consecration is, therefore, instantaneous.
 - ii). In this change there is no substance/subject that is being successively, that is, gradually, disposed or prepared for the taking on of a new form or nature. The change, then, from bread to the body of Christ is instantaneous.

iii). This change is brought about by the infinite power of the First Cause of being to which belongs the property of being able to produce its effects instantaneously. (Haec conversio perficitur virtute infinita, cuius est subito operari.)

<u>Note</u>: Reference may be made to the discussion of 'ultimum instans' as applicable to the Eucharistic consecration (as well as to the generation of a natural substance) in chapter 4, pp. 146-149 *supra* - a reference that introduces some implied criticism of Thomas made by Cajetan (criticism to which I endeavoured to respond).

2. Distinctions and Contrasts

As was said earlier (cf. p. 263 *supra*), this final chapter is centrally concerned with Thomas's discussion of the distinctions to be made, and the contrasts to be drawn, between transubstantiation (transubstantiatio), creation (creatio), and natural change (transmutatio naturalis) - a discussion introduced by the Angelic Doctor with the question "Is this proposition true: 'The body of Christ comes from the bread'?" (Utrum haec sit vera: "Ex pane fit corpus Christi") [3. 75. 8].

In accordance with his customary practice of structuring an article in the *Summa Theologiae* along the lines of a disputed question - a *quaestio disputata* (cf. Note 4, chapter 4 *supra*) - St Thomas begins 3. 75. 8 with a set of arguments or objections opposed to the position he will defend in the body of the article. I shall leave consideration of these arguments, and of Thomas's replies to them, until after working systematically through the body of the article - the *corpus articuli* - itself.

(i). Initiating the discussion

Thomas initiates his discussion of transubstantiation, creation, and natural change, by making the point that, common to these three events, are two features: an order of terms in the sense that *this* is always *after* this (est enim commune his tribus ordo terminorum, scilicet ut post hoc sit hoc), and the non-simultaneity of the related terms (...praedicti

termini non sint simul). What Thomas is saying is that, in creation, being is *after* non-being; in transubstantiation, the body of Christ *after* the substance of the bread; and, in natural change, something red, for example, *after* something green (a change at the level of accidental form), or nitric acid *after* hydrogen, nitrogen, and oxygen (a change at the level of substantial form). And the terms of each of the three kinds of events are never synchronic.

(ii). Transubstantiation and creation

Thomas affirms that there is a resemblance between transubstantiation and creation due to there being in neither of these cases an underlying subject common to the terms of each event: there is no common, that is, abiding, subject connecting the substance of the bread and the substance of Christ's body (or the substance of the wine and the substance of Christ's blood), or connecting non-being and being when something is created *simpliciter*. This absence of an underlying subject common to the terms or 'extremes' (extrema) in each of the two cases is contrary to what is involved in every natural change (cuius contrarium apparet in omni transmutatione naturali). In every natural change there is an abiding subject: the thing or substance itself when the change is at the level of an accidental or non-essential feature, for example, from being green to being red, from being here to being there; and primary (proto-) matter when the change is at the level of substance, that is, at the level of a thing's self-identity, for example, when uranium 238 decays into technetium, or carbon and sulphuric acid combine chemically into carbon disulphide.

(iii). Transubstantiation and natural change

Thomas identifies two ways in which there is a measure of resemblance between transubstantiation and natural change. The first consists in the fact that, in each of these cases, something changes to become something else: the bread changes to become the body of Christ in transubstantiation and, to use St Thomas's example of natural change, air changes to become fire - or, say, mercury and sulphur change to become mercury sulphide. Non-being, however, does not change to become being in the case of creation.

There is, of course, a difference to be noticed between transubstantiation and natural change. In the sacrament of the altar the whole substance (tota substantia) of the bread, that is, all of the substances making up the bread - their primary matter as well as their substantial forms - are changed into the substance of the body of Christ (in totum corpus Christi), that is, matter into matter and form into form *qua* (at least) principle of Christ's body's being a body (secundum quod dat esse corporeum) [2]. In natural change at the level of substance the primary matter of one thing takes on a new substantial form, that is, the substantial form of some new thing - the primary matter of sodium, say, takes on the substantial form of magnesium - with the first form simply 'returning' to the potentiality of primary matter, with the primary matter itself abiding throughout the change (the primary matter that was under the form of sodium is the same primary matter that takes on the form of magnesium). [3]

The second way in which there is a measure of resemblance between transubstantiation and natural change lies in the fact that, in both cases (utrobique) there is something the same that abides throughout the change - a feature that does not occur in the case of creation. This abiding factor differs in the two cases: in natural change, the same primary matter or subject remains, as already indicated; in the sacrament of the altar, there remain the same accidents, that is, the same set of non-substantial attributes (size, shape weight, colour, flavour, texture, electrical charges, magnetic and kinetic energies, etc.)

(iv). How to talk about these changes

a. In none of the three cases do the 'extremes' or terms co-exist (in nullo praedictorum trium extrema sunt simul); hence in none of them can one 'extreme' be predicated of the other by using part of the verb "to be" in the present tense. We do not say that 'non-being is being', or that 'bread is the body of Christ', or that 'what is white is black' or that 'iron and chlorine are iron chloride'.

b. Because there is *an order* between the 'extremes' or terms, the preposition "from" (ex) may be used simply to denote this order. It is a correct and appropriate use of language (possumus vere et proprie dicere quod...) to say that 'from non-being comes being', and 'from bread comes the body of Christ', and 'from what is white comes what is black', and 'from iron and chlorine comes iron chloride' [4]

c. Since, in the case of creation, one of the 'extremes' or terms does not pass into the other, the word "change" (mutatio) or "conversion" (conversio) should not be used in talking about 'creation'; that is, we should not say that 'non-being is changed/converted into being.' But the words "change" or "conversion" may be used in talking about change relating to the sacrament of the altar, as well as being used in talking about natural change. However, because in this sacrament the *whole substance* (that is, all of the *substances*) of the bread is changed into the *whole substance* of the body of Christ (and the *whole substance* [substances] of the wine is changed into the substance of the blood of Christ), this change or *conversion* has the distinctive name of *transubstantiation* (proprie *transubstantiatio* vocatur). [5]

d. Because, in the case of the Eucharistic change or *conversio*, there is no abiding subject of the change, the kinds of propositions that are shown to be true for natural changes by reason of there being a subject abiding throughout the change are not to be allowed in the case of the Eucharistic change or *conversio*. In this connection it is evident, first of all, that the potentiality or capacity of a thing to change in some way - even to the point of becoming the opposite of what it was - is due to there being an *abiding subject* of any

such change (potentia ad oppositum consequitur subjectum) in relation to which, and on the (intrinsic) basis of which, any change takes place. And there being an abiding subject enables us to say correctly that 'what is white is able to become black', or that 'sulphur and oxygen are able to become sulphur dioxide'. Still, even here there are degrees of linguistic correctness. The subject of 'being white', in which there is potentiality for 'being black', is the whole substance of the thing that is white, of which the whiteness itself is not a part and has, as such, no potentiality for becoming black. Over against that, the subject of the (substantial) forms of sulphur and oxygen is a part of each of these substances, namely their primary matter. So, when it is said that 'sulphur and oxygen are able to become sulphur dioxide', this is true only in virtue of a part of the sulphur and oxygen (in virtue of the primary matter of each of them), and it is only by synecdoche by taking the whole for the part, in this case - that we can correctly say that sulphur and oxygen can become sulphur dioxide. But, in the Eucharistic change or conversion, and similarly in creation, there is no underlying or abiding subject of change. So, in these cases, one ought not to speak of one 'extreme' or term being able to be the other: one ought not to say that 'non-being is able to be being', or that 'bread is able to be the body of Christ', since there is no subject or material cause *common to* non-being and being, or common to the bread and the body of Christ, that provides the enduring intrinsic basis or ground of the change.

e. Nor, for the same reason, can it be correctly said that 'from (de) non-being comes being', or 'from (de) bread comes the body of Christ', when the preposition "from" is taken not simply (as in b. above) to denote an order between the 'extremes', but to imply a *material cause* or *subject* that is common to the 'extremes' in each of the two cases, that is, when the preposition "from" is used in a way that is equivalent in meaning to the phrase "out of". In the case of natural changes, however, the presence of a material cause common to both of the 'extremes' or terms (the *terminus a quo* and the *terminus ad quem*) is understood as the *subject* common to both terms and *out of which* the *terminus ad quem* comes.

f. On similar grounds, the propositions 'the bread will be the body of Christ', and 'the bread becomes the body of Christ', cannot be allowed, just as the propositions 'nonbeing will be being' or 'non-being becomes being' cannot be allowed in the case of creation. Propositions of this kind suggest that there is something belonging to non-being that 'continues into' being, or something belonging to the bread that 'continues into' the body of Christ (as there is something belonging to what-is-white that 'continues into' what-is-black, namely the *substance* of what-is-white, or something belonging to iron and sulphuric acid that 'continues into' iron sulphate, namely the *primary matter* [materia prima] of the iron and the sulphuric acid). This way of speaking holds good only for natural changes because each one of these changes involves an abiding subject - a *causa materialis* - that takes on some or other new mode of being; so, for example, we say correctly that 'what is cold will be hot' or 'what is cold becomes hot', or that 'uranium will be lead' or that 'uranium becomes lead'. St Thomas himself made the point laconically (in 3. 75. 8c): "Potentia ad oppositum consequitur subiectum" (Potentiality or capacity for something else is consequent on there being a subject).

g. However, certain restrictions that have been placed upon the use of language in talking about the Eucharistic change or *conversio* (a. to f. above) may to some extent be relaxed if recognition is given to a sort of analogy (Thomas says "secundum quandam similitudinem") existing between natural changes and the Eucharistic change. In both types of change (and, in this, both differ from creation) there is something the same that abides throughout. As has already been said (cf. iii. above), this is the *subject* of the change in the case of natural changes (whether non-essential changes, or changes affecting the basic identity or substance of a thing), and the *accidents* or *species* of the bread and of the wine in the case of the Eucharistic change. On the basis of recognizing this analogy or 'similitudo' one may say, for example, that 'the bread becomes the body of Christ', or that 'the bread will be the body of Christ', or that 'from (out of) bread comes the body of Christ'.

But these ways of speaking may be allowed only with the following proviso: that the word "bread" is being taken in an indefinite sense (in universali) to refer in an indermi-

nate way to whatever it is that may be contained under the appearances of the bread (hoc quod sub speciebus panis continetur), not determinately to the substance of the bread (ut nomine 'panis' non intelligatur substantia panis) given that, under these appearances, first there is contained the substance of the bread, then the substance of the body of Christ (sub quibus [speciebus] prius continetur substantia panis, et postea corpus Christi). The use of the word "bread" in this indeterminate sense enables someone to oscillate between these two referents without any implication of an abiding *subject* as is the case in natural changes. The ontological implication here is that all that made bread and wine *different* at the level of substance from the body and blood of Christ is no longer conserved in being by the First Cause of all being, that is, by God, so that what was bread and wine (in terms of substantial identity) now is the body and blood of Christ (cf. chapter six, pp. 231-234)

Objections and replies

1. The first objection to Thomas's position in 3. 75. 8c on what can be said about Eucharistic change or *conversio* - that there is a sense in which one can say correctly that "from the bread comes the body of Christ" - is the following:

Everything from which something comes is that which becomes this 'something'...If it is true that *from* bread comes the body of Christ, it will also be true that *bread becomes the body of Christ*. But this appears to be false, since bread is not the subject of this change but one of its 'extremes' or terms [its *terminus a quo*]. So it is not true to say that *from* bread comes the body of Christ.

(Omne id ex quo fit aliquid, est id quod fit illud...Si ergo verum est quod ex pane fiat corpus Christi, verum erit

dicere quod panis fiat corpus Christi. Quod videtur esse falsum: quia panis non est subiectum factionis, sed magis est terminus. Ergo non vere dicitur quod ex pane fiat corpus Christi.)

Thomas replies to this objection by indicating an ambiguity in its formulation: Sometimes the phrase "that from which something comes" points both to the subject of a change and to the 'term to which' (terminus ad quem) of the change, for example, 'from something white comes something black'. Sometimes, however, the phrase "that from which something comes" points only to one of the terms of the change, namely the 'term from which' (terminus a quo) of the change, not to the subject of the change. To use Thomas's own example: "From early morning comes the day" (Ex mane fit dies). There is no implication here that early morning is in any sense the subject of a change that results in day, that is, that early morning is the abiding subject that becomes day. (In the light of the distinction that Thomas has drawn, it would be of some interest - though not here relevant - to pursue the notion of *numerals* being multiplied to give rise to a new, and greater, numeral.) It is this latter situation that reflects how it is in the case of the Eucharistic change: It is correct to say that 'from bread comes the body of Christ', so drawing attention to an order between the two terms (and where "from" is virtually equivalent in meaning to "after"). It is not correct to say that 'the bread becomes the body of Christ', when understood in the sense that there is something of the bread that continues as the subject or material cause of the change into the body of Christ (or something of the wine that continues as the subject or material cause of the change into the blood of Christ) and which is present before, and after, the change. It is the whole substance of the bread (tota substantia panis) that is changed into the whole substance of Christ's body (in totam substantiam corporis Christi), and the whole substance of the wine into the whole substance of Christ's blood (tota substantia vini in totam substantiam sanguinis Christi), as Thomas puts it in 3. 75. 4c. However, as noted above in iv. g, this rule of linguistic usage may be relaxed to some extent on the basis of recognising a degree of analogy (secundum quandam similitudinem) between natural changes involving an abiding subject, and the Eucharistic change involving not an

abiding subject but an abiding ensemble of accidents or species of (what was) bread or wine.

2. The objection was raised that becoming (fieri) terminates in being or in having-been-made (fieri terminatur ad esse vel ad factum esse). But these propositions are never true: "Bread is the body of Christ", or "Bread has been made the body of Christ", or even "Bread will be the body of Christ." So this proposition is not true either: "From bread comes the body of Christ."

In effect, the reply of Thomas is the following: the first three propositions are false because the implication in each case is that an abiding subject - something of the bread - is involved. There need be no such implication with the fourth proposition: an order of the terms need be all that is involved. So there is no relevant parity between the first three propositions and the fourth proposition.

3. The third line of objection to what St Thomas has said in distinguishing the Eucharistic change - transubstantiation - from creation and natural change is this: The proposition "bread is changed into the body of Christ" must be regarded as false since what it is claiming is a change more wonderful (miraculosior) than creation itself, regarding which we do not say that "non-being is changed into being" (quod non ens convertitur in ens). So it seems that the proposition "from bread comes the body of Christ" is false as well (given that everything from which something comes is changed into what comes from it).

St Thomas responds to this objection by pointing out that there are more difficulties (plura difficilia) involved in the Eucharistic conversion, that is, in transubstantiation - more obstacles to be overcome, as it were - than in creation. In the case of creation, the one difficulty is that something ontologically real is produced where, previously, there was sheer nothingness (in creatione...hoc solum difficile est, quod aliquid fit ex nihilo). But present in the case of creation is the characteristic mode of operation of the First Cause - a Cause that, being 'ipsum esse subsistens' (the subsistent activity of being-in-be-ing), is able, as Thomas says earlier in the *Summa Theologiae* (1. 45. 5c) "producere

ens absolute, non in quantum est hoc vel tale" (to produce being absolutely speaking, not just as *this* or *of this kind*). From this point of view, there is nothing surprising, so to speak, in the case of creation - which is not to deny the transcendent mystery of being's being produced after (ex) sheer nothingness.

In transubstantiation, however, there is not just the difficulty of *this* whole substance being changed into *that* whole (pre-existing) substance - the bread and the wine being changed into the (pre-existing) body and blood of Christ - with nothing at all of the first substance remaining at the level of substance; there is also the special mode of causal activity involved (ita quod nihil prioris remaneat, quod non pertinet ad communem modum productionis alicuius causae). There is also the nagging difficulty posed by the claim that the accidents, that is, the perceptible features, of the bread and of the wine (their colour, shape, size, flavour, aroma, weight, location, electrical and kinetic properties, etc.) remain after their sustaining and individuating substances have ceased to exist (accidentia remanent corrupta substantia), with many other difficulties arising from this claim (cf. question 77), and from what is to be said about the unique mode of Christ's existence *per modum substantiae* in the sacrament of the altar (cf. question 76, and chapter 2 *supra*).

Thomas implicitly draws the conclusion that transubstantiation should be regarded by us as more wonderful (miraculosior) than creation and, drawing on the discussion in the body of article eight, explicitly comments that the word "change" (conversio) is appropriately applied to the event that takes place in this sacrament - to transubstantiation - though not to the event that takes place when, after (ex) non-being absolutely speaking, being is produced, absolutely speaking.

Addendum: It is of interest to notice that Thomas's commitment in 3. 75. 8. (to) 3 to the view that transubstantiation is a more wonderful event (miraculosior) than creation varies from what he had to say in his commentary on the *Sentences* of Peter Lombard (4. 11. 1. 3. 3). There he introduces sub-question three with the words "Videtur quod haec conversio [transubstantiatio] sit miraculosior omni alia mutatione" (It seems that

this change [transubstantiation] is more wonderful than any other change). On this occasion placing 'creation' under the rubric of 'change' (something he later contended against), Thomas went on to argue against this view by saying that, although both creation and transubstantiation reach to the very essence of matter (pertingunt usque ad essentiam materiae), absolutely speaking (simpliciter loquendo) creation must be regarded as surpassing transubstantiation (videtur creatio praecellere) because "through it [creation] the essence of matter is *brought into being*" (my italics) (per ipsam [creationem] materiae essentia producitur). [6]

Thomas extends the argument against transubstantiation's being more wonderful (miraculosior) than every other change by indicating that, relative to what a change results in, the change that takes place in the union of a human nature to a divine person surpasses both creation and transubstantiation "in difficultate" - in "what has to be overcome". Therefore, Thomas concludes, the hypostatic union of human nature and divine person in Christ is the "miraculum miraculorum omnium" (the miracle of all miracles). [7]

4. The final objection that Thomas considers is this: That from which something comes is able to be that thing (for example, sodium and sulphur are that from which sodium sulphide comes, and so are able to be sodium sulphide). But this proposition is false: "The bread is able to be the body of Christ." So this proposition is false as well: "From the bread comes the body of Christ."

St Thomas's response to the objection begins by noting that the capacity-to-become - something, that is, potentiality, ordinarily has to do with the *subject* of a change - a notion that is not applicable to the Eucharistic change or conversion, since there is no abiding subject or material cause common to both terms or 'extremes' of this change. Thomas then makes the point that transubstantiation is brought about only through the active power of the Creator (per solam potentiam activam Creatoris), with the passive potentiality of the creature - of the bread and the wine - in no way contributing towards the change (non enim haec conversio fit per potentiam passivam creaturae). However, implicit in what St Thomas is saying is his awareness that the active power of the

Creator is being brought to bear on what he elsewhere calls the *obediential potentiality* (potentia obedientialis) of created things [8]. This is the capacity of created things to respond to the action of the First Cause of being when this Cause intends to bring about an effect totally transcending the scope of any finite cause at all. This does not require on the part of the thing to be changed any positive contribution to what is to be brought about, only that no inherent contradiction be involved in what the First Cause intends to bring about in and through the thing to be changed. In the case of the Eucharistic change, what is involved is the obediential potentiality of the substance of the bread and of the wine to become the substance of the body and the blood of Christ. As should be clear, the obediential potentiality of the created thing presupposes that the action of the First Cause - of God - "extends to the whole nature of being" (eius actio se extendit ad totam naturam entis), as Thomas puts it in 3. 75. 4c. [9]

NOTES

1. Thomas's point in the final sentence is that forms existing separately from matter are actually intelligible, that is, 'thinkable', forms with no conceptual abstracting required to make them 'thinkable', and are also intelligent, that is, possessing intellect (cf *Summa contra Gentiles* bk 2, chaps 49-51; 66-67; *Summa Theologiae* 1. 14. 1c, 1. 75. 2c). Thomas is here using a *reductio ad absurdum* to exclude the proposed possibility of the form of the bread existing in separation from primary matter.

In the course of an extended essay on St Thomas (under the title 'Aquinas') in the book *Three Philosophers* (the three philosophers were Aristotle, Aquinas, and Frege) - a book he co-authored with E. M Anscombe - the prominent British philosopher Peter Geach offered the following commentary on the final sentence of the passage from 3. 75. 6 cited above in the text:

[Aquinas] tells us that if there could be the substantial form of a loaf of bread existing apart from the bread, it would exist as a form that was *thought of*, and that (since this thought would occur apart from anything else in which it inhered) this individualized form would exist in *its own thought of itself*. The *esse* of the form would thus be *naturale* and *intentionale* at once. (*Op. cit.*, p. 99. Geach's italics)

Geach quite plainly gets things wrong way round in saying that the separately existing individualised form of the bread would "exist in its own thought of itself". Rather, this actual 'thinking of itself' would exist in the individualised form of the bread, with the esse of this form being naturale only, and not, as Geach claims, "naturale and intentionale at once". The presence of esse intentionale is to be connected to the activity of the intellectus that, according to Thomas, loc. cit., would be a property of a substantial form that could exist in separation from matter.

Geach does not appear to have grasped that, in the metaphysics of the Angelic Doctor, a form existing in its own thought of itself, and whose esse would, then, of necessity be at once both naturale and intentionale, would be a form in which the activity of thinking of intelligere - would be identical with the activity of being-in-be-ing - of esse. (It could not, in fact, be anything else). But such a form would be, in the language of Thomas, actus purus, that is, actuality only, with no hint of potentiality about it. But, in that case, on the Thomistic principle that actuality left to itself is unlimited (actus de se est illimitatus) (cf. Wippel's "Thomas Aquinas and the Axiom that Unreceived Act is Unlimited" [refer Bibliography]), this form would be infinite *simpliciter*, that is, in terms of esse itself, and therefore identical with the ipsum esse subsistens and the ipsum intelligere subsistens that is God. (In this connection the arguments developed by St Thomas in the Summa Theologiae 1. 14. 4, and in the Compendium Theologiae chap. 31 [to show that the activity of thinking - intelligere - in God is one with the divine substance], and 1. 54. 2 [to show that an angel's thinking - intelligere - cannot be one with an angel's esse] could profitably be consulted.) Geach's (mis)interpretation of what Thomas is saying in the final sentence of the passage from 3. 75. 6c cited above in the text leads to conclusions that, one must hope, would be unacceptable to Geach himself.

It is also interesting to notice that, for Aristotle as for St Thomas, one, and only one, being could exist in its own thought of itself, namely the absolutely First Mover (God) whose "thinking is the thinking of thinking" (estin he noesis noeseos noesis), as Aristotle contends in his *Metaphysics*, book 12 (1074 b 34).

2. Cf. 3. 75. 4. (to) 3: "Form cannot be changed into form, nor matter into matter, by the power of a finite agent. But such a change can be brought about by the power of an infinite Agent whose action bears on the whole gamut of being" (Virtute agentis finiti non potest forma in formam mutari, nec materia in materiam. Sed virtute agentis infiniti quod habet actionem in totum ens, potest talis conversio fieri).

Cf. also 3. 75. 6. (to) 2: "The soul is the form of the body imparting to it the complete range of its actualised reality, namely being, being a body, being alive, and so on. So the form of the bread is changed into the form of Christ's body *qua* form imparting being-abody, not *qua* form imparting being alive in the way Christ's body is alive" (Convertitur...forma panis in formam corporis Christi secundum quod dat esse corporeum: non autem secundum quod dat esse animatum tali anima). But see p. 268-269 *supra*.

3. It may be noted that, in volume one, pp. 236-237, of Joseph Gredt's *Elementa Philosophiae Aristotelico-Thomisticae*, there is included a valuable scholion arguing that modern physical sciences, having set aside classical or 'mechanical' accounts of material reality and change, tend to illustrate and confirm Aristotelian-Thomistic teaching about matter and form, not undermine it - an important point given the discussion *supra* in chapter five (cf. section 2. 1. 2) supporting the truth of hylomorphism, which is used unwaveringly by St Thomas in his interpretation of the Eucharistic change The argument is to the effect that modern physics points towards a teleological principle operative at the micro-structural level of inorganic material realities and changes as an explanatory principle of the unity and regularity within the system or structure of the atom. The neo-Thomistic Latin of the *Elementa* is an excellent instrument for the lucid, succinct, expression of concepts that have a bearing on both science and philosophy. An example of this is the following:

Quaelibet particula atomi, e.g. electron vel aliquod elementum nuclei, non iam actualiter sed virtualiter tantum invenitur in systemate atomi, quod habet unitatem intrinsecam et stabilem. Particula enim proprietates, quas habet in statu separationis extra systema atomi, perdit et novas proprietates stabiles acquirit. Totum igitur a principio altiore, cui partes in sua activitate subordinantur, dirigitur. (*Op. cit.*, p. 236)

(Any atomic particle at all, e.g. the electron or any component of the

nucleus, is found not actually but virtually in the system or structure of the atom - a system having intrinsic and stable unity. This is so since the particle loses the properties it has in a state of separation outside the system of the atom, and takes on new, stable, properties. This implies that the whole [atomic system] is directed or ordered by a higher and overarching principle to which the parts and their activity are subsubordinated.)

The scholion goes on to affirm that

Inveniuntur ubique certae leges et relationes stabiles, secundum quas diversa elementa intra atomum cohaerent et moventur. Haec stabilitas non explicatur ex principiis mere mechanicis vel ex attractione corporum sed postulat principium activitatis altioris quod, sicut per se tendit ad ordinem totius conservandum, ita etiam ex toto qua tali explicatur. Hoc principium *teleologicum* intelligitur ut principium formale totius seu ut *forma substantialis*. (*Op. cit.*, pp. 236-237; emphases in Gredt's text)

(Fixed laws and stable connections are found everywhere, in terms of which the diverse components within the atom hold together and are moved. This stability is not explained by merely mechanical principles or the attraction of bodies but requires a principle of higher activity which, just as it tends essentially to conserving the order of the whole [atomic system], so also is it to be understood in terms of the whole [atomic system] as such. This *teleological* principle is to be understood as a structuring principle of the whole [atomic system], that is, as a *substantial form*.)

The concept of *primary matter* (materia prima) is introduced by noting that recent work in physics and chemistry reveals genuine changes at the level of substance in the atomic nucleus, for example, a change resulting in sodium becoming magnesium. Potentiality is

detected in the components of the atom, that is, in the *subatomic* particles, in that both the electron and the nuclear particles are changeable in various ways, and many other particles, for example, mesons, have only a fleeting existence (valde mutabiles et labiles sunt vel per brevissimum tantum tempus existunt). The intrinsic principle of this pervasive mutability is a completely potential *substratum* from which sub-atomic particles arise, and into the potentiality of which they return, that is, *primary matter* (materia prima).

A footnote (p. 237) cites Werner Heisenberg, the great 20th century German theoretical physicist, in support of claims about the pervasive mutability of the components or parts of the atom: "Vielmehr ist die Verwandelbarkeit geradezu ein charakteristisches Merkmal eines Elementarteilchens" (Indeed, changeableness is virtually a characteristic feature of an elementary particle) [Werner Heisenberg, *Die Physik der Atomkerne*, Die Wissenschaft Band 100, Braunschweig, 1947; *op. cit.*, p.45].

As indicated above, it is of great importance to provide confirmatory evidence of the reasonableness of the Aristotelian-Thomistic doctrine of hylomorphism, given the Angelic Doctor's use of it throughout his exploration of what takes place in the Eucharistic change - in transubstantiation – where the hylomorphic doctrine is central to the reflective rationality he brings to bear on the Eucharistic change, and to the reasonable explanatory power of the metaphysical synthesis he arrives at regarding this change.

4. The only concern here is with the *order* of the 'extremes' or terms in each of the three cases of creation, transubstantiation, and natural change (at both the accidental and the substantial levels). For this reason "from" as denoting something more than order - "from" as equivalent in meaning to "out of", say - is not relevant at this point. "From" as being used here is closer in meaning to "after".

5. Cf. 3. 75. 4c (ad finem), and chapter 5 *supra*, pp. 172-173.

6. Scriptum super Sententiis Magistri Petri Lombardi, book 4, distinction 11, question 1, article 3, (sub-) question 3, (reply to) 3. (Léthielleux edition, tome 4, p. 452). In the published proceedings of a symposium on the Eucharist (Eucharist: Experience and Testimony, Melbourne 2001), Australian theologian Frank O'Loughlin stated in his paper "Eucharist, Transubstantiation, Symbol" (op. cit., p. 64) that "Thomas considers transubstantiation as more miraculous than the creation! (ST, 111, q. 75, art. 8, ad 3)." Whilst correct as it stands, this statement might well have been importantly tempered by reference to other writings in which Thomas took a different view. Whilst the view that he took in 3. 75. 8. (to) 3 is subsequent to the view that he took in the Scriptum 4. 11. 1. 3. 3. 4, the shift reveals an engaging tentativeness about the issue. Thomas also nicely notes (loc. cit.; p. 453) that "Maioris virtutis ostensiva est creatio, in qua nulla potentia obedientiae praeexistit, quam haec conversio [in Eucharistia]" (The creation [of something] - a situation in which no obediential potency exists - reveals greater power than this [Eucharistic] change). For references to 'obediential potency', cf. Note 8 infra. 7. Ibid. (Léthielleux, p. 452) The Latin text reads: "Ex parte eius ad quod est mutatio, mutatio quae est in unione humanae naturae ad divinam personam praecellit has et omnes alias mutationes in difficultate. Unde ipsa est miraculum miraculorum omnium." (Emphasis in Léthielleux edition Latin text)

8. Two citations from St Thomas dealing with 'potentia obedientialis' are the following:

Est autem considerandum quod in anima humana, sicut in qualibet creatura, consideratur duplex potentia passiva: una quidem per comparationem ad agens naturale; alia vero per comparationem ad agens primum, qui potest quamlibet creaturam reducere in actum aliquem altiorem. In quem non reducitur per agens naturale; et haec consuevit vocari *potentia obedientiae* in creatura. (Summa Theologiae 3. 11. 1c) (Emphasis in the BAC edition Latin text)

(It should be noted that, in the human mind as in any created thing

at all, a two-fold receptive potentiality is to be recognised: one in relation to natural agents, the other in relation to the First Agent. The First Agent is able to transpose any created thing at all on to some or other higher level of actualisation above and beyond what any natural agent brings about. This potentiality is usually called *obediential potentiality* in the created thing.)

Dicendum quod, sicut se habet potentia naturalis ad mutationes naturales, ita se habet potentia obedientiae ad conversiones miraculosas. Unde secundum modum miraculosae conversionis est etiam *modus obedientialis potentiae* in creatura ad aliud convertenda. (*Scriptum super Sententiis* 4. 11. 1. 3. 3. (reply to) 3. ad tertium) [Emphasis in the Lethielleux edition Latin text]

(It has to be said that, just as natural potentiality is related to natural changes, so also is obediential potentiality related to trans-natural or miraculous changes. Accordingly, the extent of a trans-natural or miraculous change is also the *extent of the obediential potentiality* of a created thing that is to be changed into something else.)

It should again be noted that Thomas's idea of *potentia obedientialis* implies the notion of (ontological) non-contradiction affecting what the First Agent intends to bring about (cf. p. 280 *supra*).

9. Text without Comment

St Thomas's *Scriptum super Sententiis* 4. 11. 1. 3. 1. (reply to) 1 provides a further fine-meshed account of the distinction and contrast to be drawn between natural changes and the Eucharistic change, that is, transubstantiation. The passage below from the *Scriptum super Sententiis* is offered without comment:

Ista conversio differt ab omnibus naturalibus conversionibus in quatuor.

Primo in hoc quod usque ad materiam pertingit, quod in illis non invenitur.

Et quia materia est primum subiectum, et ipsius non est aliud subiectum, ideo *secundo* differt *in hoc quod haec conversio non habet subiectum* sicut illae habent.

Tertio, quod in naturalibus conversionibus convertitur totum, non autem partes essentiales in partes: totus enim aer convertitur in aquam, sed materia aeris non convertitur in aliquid, quia est eadem; forma autem non convertitur quia abscedit alia, et alia introducitur. Sed hic et totum convertitur in totum quia panis fit corpus Christi; et partes etiam convertuntur, quia materia panis fit materia corporis Christi; et forma substantialis fit illa forma quae est corporis Christi.

Quarto, quia in naturalibus conversionibus transmutantur et id quod convertitur et illud in quod convertitur. Illud quidem quod in alterum convertitur, semper transmutatur corruptione; sed illud in quod aliquid naturaliter convertitur, si quidem sit simplex conversio, transmutatur per generationem, sicut cum aqua generatur ex aere. Si autem sit conversio cum additione ad alterum praeexistens, illud cui additur transmutatur secundum augmentum, vel saltem per restaurationem deperditi, sicut accidit in nutrimento.

Sed hic, illud in quod fuit conversio erat praeexistens, et non ei additur, quia, ut dictum est, illud quod convertitur, convertitur in ipsum, et secundum totum et secundum omnes partes eius. *Unde hoc in quod terminatur conversio, nullo modo* transmutatur, scilicet corpus Christi, sed solum panis qui convertitur.

[Emphases as found in the Léthielleux edition, pp. 445-446\

(The Eucharistic change differs from all natural changes in four

respects:

First, it differs in this: that it extends to changing primary matter itself - something not found in natural changes.

And, because primary matter is the basic subject that does not itself have any other subject, Eucharistic change differs *secondly* from natural changes in this: it does not have an abiding subject as natural changes do.

Third, it differs because, in natural changes, the whole thing is changed,

but the essential parts are not themselves changed into new essential parts: the whole portion of air is changed into water, but the primary matter of the air is not changed into anything, because it remains the same. The substantial form also is not changed into anything, because one form ceases and another is taken on by the matter. But, in the Eucharistic change, both the whole thing is changed into another whole because the bread becomes the body of Christ - and the parts also are changed, since the primary matter of the bread becomes the primary matter of Christ's body and, similarly, the substantial form of the bread becomes the substantial form that is the form of Christ's body. Fourth, the two differ because, in natural changes, the change affects both what is changed and that into which it is changed: what is changed into something else is always changed by separation of its essential parts [matter and form], whilst that into which something is changed by natural change is changed simply in virtue of its being generated [in virtue of its coming into being], as when water is generated from air. If the change involves an addition to something else already in existence, that to which this addition accrues is changed in terms of the increase or, in the case of the ingestion of food, through restoration of what has been lost [in an organism].

But, in the Eucharistic change, that into which there was change was already in existence, and nothing was added to it by the change because, as was said above, what was changed was changed into it in respect of both the whole and of the essential parts [the matter and form] of it.

Consequently, that in which the change terminates - the body of Christ – is itself in no way changed, only the bread which is changed into it.)

I have translated the citation from the *Scriptum super Sententiis* reasonably freely by making explicit in the English some meanings that are implicit in the laconic Latin of the Angelic Doctor; for example 'primary matter' for 'materia', when clearly required by the sense of the passage, or 'changed by separation of its essential parts [matter and form]' to translate 'transmutatur corruptione'. This use of reasonable freedom in translating is called for, I believe, when a literal or word-for-word translation would produce an English version of a passage that would run the risk of failing to express the full meaning of the Latin as intended by St Thomas. In doing this I am responding to the Angelic Doctor's own directive regarding the work of translating:

Ad officium boni translatoris pertinet ut...serviat sententiam, mutet autem modum loquendi secundum proprietatem linguae in quam transfert. Apparet enim quod si ea quae litteraliter in latino dicuntur vulgariter exponuntur indecens erit expostio si semper verbum ex verbo sumatur; multo igitur magis quando ea quae in una lingua dicuntur transferuntur in aliam ita quod verbum sumatur ex verbo, non est mirum si aliqua dubietas relinquatur.

(Contra Errores Graecorum, pars prima, prologus)

(It belongs to the task of a competent translator to retain the meaning [intended by the author] whilst changing the manner of expression to accord with the character of the language into which he or she is translating. It is quite plain that, if what is written in Latin is put into the vernacular word-for-word, an inappropriate version is the result. So, when what is expressed in one language is translated word-for-word into another, much

less is it to be wondered at if there remains some uncertainty about meaning.)

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