

A CRITICAL REALIST EPISTEMOLOGY AND THE CATHOLIC NOTION
OF '*SENSUS FIDEI*' AS KEY TO CRITICAL THINKING IN
CONFESSIONAL CATHOLIC RELIGIOUS EDUCATION
IN THE PHILIPPINES

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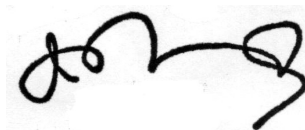
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ABSTRACT

The research question is: 'Is critical thinking compatible with confessional Catholic religious education as practiced in the Philippines? If so, in what way can it be taught to students and promoted in the classroom?' Adopting an epistemological approach to critical thinking, I conducted a survey among 1,068 teachers in our network of fifteen Catholic schools in the Philippines and found that a significant percentage of our teachers—especially those teaching religious education—exhibited a level of epistemic cognition considered incompatible with critical thinking. Drawing from critical realism and the Catholic notion of the believer's 'sense of the faith' (*sensus fidei*), I proposed that critical thinking be understood not only as (a) the expression of one's commitment to judgemental rationality to serve as the basis for one's motivation for critical thinking, but also as (b) the exercise of one's *sensus fidei* to guide the actual practice of Catholic religious critical thinking in particular. Based on these two conceptions, corresponding to the disposition and competence components of critical thinking, respectively, I recommend two initial concrete steps to promote the practice of Catholic religious critical thinking in our confessional religious education classrooms in the Philippines: (a) the inclusion of a staff development programme that promotes epistemic self-awareness especially vis-à-vis a Catholic religious epistemology; and (b) the identification of the development and exercise of *sensus fidei* as an explicit learning objective and its implications on curriculum, pedagogy, and assessment.

DECLARATION

I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

A handwritten signature in black ink, appearing to be 'J. M. G.', written on a light-colored background.

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REFLECTIVE STATEMENT

In the years that I have devoted to the Ed.D. programme, I have experienced a broadening of my research interests and learning. I began the programme with a specific research agenda. As a teacher educator and school head in the Philippines, I encountered various basic challenges facing education in our country that shaped the questions I brought with me into the programme. One interest that I was eager to pursue and study in depth was formative assessment (or 'assessment for learning') based on an appreciation of the importance of assessment in learning—how it is designed, when it is designed, and what it is designed to measure (Black & William, 1998). I hoped to build expertise in assessment—particularly, in formative assessment—because of a desire to make a contribution in improving curriculum planning in the country.

Through the various courses and the assignments, however, I grew acquainted with other issues in education, and I found myself asking new questions not only in direct relation to my professional practice, but also in the general field of education. My original interest in formative assessment eventually evolved into something more basic and concrete—a topic that I decided to pursue in my thesis: the promotion of critical thinking in Catholic religious education through critical realism and the doctrine of the '*sensus fidei*'. The topic is basic because of the fundamental value of critical thinking in education, and it is specific because the critical thinking that I investigate is particular to confessional Catholic religious education.

I have to confess that I was initially wary about tackling such a particularly 'Catholic' subject. One of my main reasons, in fact, for choosing the programme at the Singapore National Institute of Education and the UCL Institute of

Education, University of London was their non-Catholic identities. Not only have I been working in a Catholic K-12 school for over a decade, but I have also studied in Catholic institutions all my life, completing my masters' degrees in philosophy and theology in a Catholic university. If I wanted to be a more effective Catholic educator, I felt that it was important to join other conversations and learn new languages, as it were.

The Ed.D. programme offered me numerous opportunities for such new conversations and languages. The essay I wrote for Foundations of Professionalism in Education was called 'Teaching as goal-less and reflective design: A conversation with Herbert A. Simon and Donald Schön'. In examining the apparently divergent views of Simon and Schön on professional work as design, I learned about their underlying agreement not only on the limits of human reason, but also on what it means to be a professional—i.e., Simon's goal-less designer and Schön's reflective practitioner. The paper gave me an opportunity to pursue my interest in assessment for learning by arguing that Simon's 'goal-less design' and Schön's 'reflective practice' provide a strong rationale for assessment for learning. Simon's 'goal-less design', understood as openness to new emergent learning goals, renders teaching more responsive to student needs. Schön's original notion of reflective practice—particularly, its definition as 'a reflective conversation with the materials of the situation'—spelled out a stance and strategy for the designer-professional to recognize the uniqueness of every practice situation, to employ thoughtful trial-and-error to explore the phenomenon at hand, and to remain constantly open to what Schön calls the 'situation's back-talk' (Schön, 1983). I concluded that a teacher who 'reflects-in-action' in Schön's sense is a teacher who assesses-for-learning.

While my first paper focused on formative assessment, my assignment for the first Educational Research module tackled another form of assessment for

learning: the 'formative use of summative assessments' (Black and William, 1998). I proposed a case study to describe the efforts of teachers in a secondary school in using standardized achievement data for formative purposes. The aim of the study was to generate insights on practical approaches for teachers to analyze such data to improve instruction. Especially given today's increasing calls for accountability, educators and policymakers need to exercise caution in using standardized achievement data as the basis for claims and high-stakes decisions involving students and schools. Correct data interpretation is possible only with an adequate understanding of what achievement testing has been designed to do—and *not* do. Given the risks of misuse of such data, an uncritical acceptance of such claims is increasingly acceptable, hence, strengthening the rationale for using these tests formatively rather than summatively (Leithwood, 2004).

For the specialist course in International Education, our assignment on the impact of globalization on Timor Leste enabled me to use my understanding of the issues discussed in class and apply it to the small post-colonial, post-conflict state of East Timor, and at the same time, to conduct comparative research while avoiding the usual pitfalls in the use of cross-national findings (Le Metais, 2000). This research helped me appreciate the complex effects of globalization and the important role of policies in addressing its adverse consequences. Left to their own devices, the forces of globalization end up victimizing nations either because they are recovering from violent conflicts or undergoing political transitions without adequate preparation—or as in the case of East Timor, both. I also learned how cross-national research should be sensitive to differences in context in order to yield helpful findings (Fairbrother, 2005). As it serendipitously turned out, the insights I gained from this module was a great introduction to my new assignment, which involves assisting our newly opened school in East Timor.

The work I submitted for the last Educational Research module was a pilot study for my Institution Focused Study, which examined the impact of teacher beliefs, including epistemological and religious beliefs, on teaching practices in religious education among Jesuit high schools in the Philippines. Given my growing appreciation of the impact of teacher epistemologies on student learning, I surveyed the epistemological beliefs of teachers in Philippine Catholic schools for my IFS, employed a statistical modeling technique used prevalently in the literature, and identified five distinct dimensions of epistemological beliefs that surfaced from the data.

For several reasons, the IFS represents for me an important academic milestone: First, the actual experience of the research provided me with an opportunity to conduct insider research and to learn how my role as such inevitably affects both the participants and the data generated in my interaction with them—hence, the need for careful ethical considerations.

Secondly, conducting an in-depth empirical study of teacher epistemologies convinced me of the crucial role played by our tacit assumptions about knowledge and justification in education. Teacher epistemology has since then remained a major research and professional interest, as evident in my thesis, where I adopt an epistemological approach to critical thinking.

Finally, what I learned from the IFS, both in terms of the subject matter and the process of the research, prepared me for my thesis work. It had uncovered additional questions about teacher epistemology that I wanted to explore in my thesis. Fascinated by these underlying tacit assumptions that so powerfully shape how teachers learn and teach, I planned to continue my study of teacher epistemologies—this time, in terms of epistemic understandings (Kuhn, et al., 2000)—in the thesis.

In many ways, my thesis work, which has survived a succession of three main supervisors, represents not only the different phases of my growth as a learner, but also a convergence of my research interests that have developed through these years of study: teacher epistemologies, critical realism, Catholic religious education, and critical thinking.

For some reason, it was not easy for IOE to find me a thesis supervisor. It was only on the second research week that I managed to meet with my first one, who, to my disappointment, expressed neither belief in implicit epistemologies nor a desire to supervise an empirical study. Rather than request for another supervisor and fly back to London another time, I opted to change my topic to critical thinking in Catholic religious education, and immediately worked on my thesis proposal for a philosophical paper that was subsequently approved. Upon reflection on this apparent setback, I realized that the change offered an unforeseen—but in retrospect, much-welcomed—broadening of my intellectual horizon. My new thesis topic has provided me with a reason not only to learn how to write a philosophical paper (my IFS having been an empirical study), but also to research a question that I have personally grappled with as a secondary and tertiary level Catholic religious educator. Critical thinking and Catholic religious education seem like strange bedfellows despite the lip service that we religious educators pay to critical thinking. Many practitioners in the Philippines nurse some doubts about the possibility *and* desirability of promoting critical thinking in our confessional Catholic religion classes.

After about a year, when I received an unexpected notification from my first supervisor that he was leaving the IOE, I secured the approval of the programme director to request the late Roy Bhaskar to accept me as his student. I had heard Roy speak at one of the classes during my first Research Week. After all the talk about post-modernism and social constructivism in my

doctoral studies, his was a surprising and welcome voice, and his critical realism appealed to me not only because it was a sound and much-needed meta-theory for research in the social sciences, but also because it seemed so compatible with the Catholic Christian faith.

In critical realism, I have found a way of framing my research on critical thinking in confessional Catholic religious education. Moreover, it allowed me not only to re-incorporate into my thesis my interest in teacher epistemology, but also to include an empirical section in my thesis. Critical realism also enabled me to critique the statistical method that I had used in my IFS: If I want to be consistent as a critical realist, I need to exercise caution about claiming to identify so-called dimensions of epistemological beliefs based solely on factor analysis.

Roy Bhaskar's sudden passing last November 2015 was a major personal setback as Roy had by then become my friend. I was fortunate to have been assigned a new supervisor in Andrew Wright, who not only encouraged and supported me, but also challenged me to draw more substantially from Catholic theology. While upon his direction, my thesis took a new direction, this change of supervisor, far from hampering my work, actually enriched it. Apart from just using critical realism to under-labour for my research, I have also now drawn from the relevant, though until recently, underplayed, Catholic notion of the *sensus fidei* to address the issue of Catholic religious critical thinking.

On the one hand, a critical realist epistemology has allowed me to: (a) anchor critical thinking to the primacy of reality, thus, correcting any lingering post-Enlightenment connotations of anthropocentrism; (b) frame critical thinking as the expression of an anti-relativist commitment to judgemental rationality, which, I propose, constitutes an important motivation for critical thinking; and (c) diagnose the problem of critical thinking in Philippine Catholic religious education as epistemological—specifically, an apparent lack of epistemic relativism in its

epistemology that makes Catholic religious critical thinking possible, but unnecessary.

The notion of *sensus fidei*, on the other hand, makes explicit the critical realist character of a Catholic religious epistemology by: (a) affirming the socio-historical and perspectival character of the Church's reception of revelation and thus, uncovering its element of epistemic relativism, (b) recognizing the possibility of legitimate dissent to Church teachings and establishing the 'openness' of doctrine to change, critique, and correction that epistemic relativism entails, and (c) clarifying the Church's capacity for its exercise of judgemental rationality. Moreover, critical thinking understood as the exercise of one's *sensus fidei* clarifies the non-discursive and pre-conceptual—but no less rational and valid—mode of knowing that Catholic religious critical thinking entails.

The Ed.D. programme has been hard work, stretching me both intellectually and personally. In the process, I have learned to be a more reflective and 'scholarly practitioner' (Bentz, 1998). Not only have I been able to join new conversations and learn new languages, as I had hoped for at the beginning of the programme, but I have also begun to find a voice.

As I submit the draft of my thesis, I am grateful for the many opportunities for learning that the programme has offered me, as well as for my mentors especially for the thesis work: the late Roy Bhaskar and Dr. Andrew Wright, as well as Dr. Denise Hawkes, who guided me in the data analysis of the empirical section of my work.

2,005 words

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FRONTISPIECE

The mind is not a vessel to be filled,
but a fire to be ignited.

— Plutarch, c. 46-120 AD

ABBREVIATIONS OF OFTEN-CITED SOURCES

Catholic Church documents

Documents from Vatican II (1963-65)

DH	<i>Dignitatis Humanae</i> (Declaration on religious freedom)
DV	<i>Dei Verbum</i> (Dogmatic constitution on divine revelation)
GE	<i>Gravissimum Educationis</i> (Declaration on Christian education)
GS	<i>Gaudium et Spes</i> (Pastoral constitution on the Church in the modern world)
LG	<i>Lumen Gentium</i> (Dogmatic constitution on the Church)
SC	<i>Sacrosanctum Concilium</i> (Constitution on the sacred liturgy)

Others

ARCIC-II	Second Anglican-Roman Catholic International Commission
CBCP	Catholic Bishops' Conference of the Philippines
CCC	<i>Catechism of the Catholic Church</i>
CCE	Congregation for Catholic Education
CDF	Congregation for the Doctrine of Faith
CCL	<i>The Code of Canon Law</i>
DE	<i>De ente et essentia</i> (<i>On being and essence</i>) by Thomas Aquinas
DF	<i>Dei Filius</i> (Dogmatic constitution on the Catholic faith) from the First Vatican Council
DGC	<i>General Directory for Catechesis</i> from the Congregation for the Clergy
DVer	<i>Donum Veritatis</i> (On the ecclesial vocation of the theologian) from the Congregation for the Doctrine of Faith
DS	<i>Enchiridion symbolorum, definitionum et declarationum de rebus fidei et morum</i> edited by H. J. D. Denzinger & A. Schonmetzer.
ITC	The International Theological Commission
NCDP	<i>National Catechetical Directory for the Philippines</i> (1985) from the Episcopal Commission on Education and Religious Instruction

ND	<i>The Christian faith in the doctrinal documents of the Catholic Church</i> (edited by J. Neuner & J. Dupuis)
SCCE	Sacred Congregation for Catholic Education (later changed to Congregation for Catholic Education)
SCG	<i>Summa contra gentiles (On the truth of the Catholic faith)</i> by Thomas Aquinas
SF	<i>Sensus fidei</i> in the life of the Church (2014) from the International Theological Commission
ST	<i>Summa theologiae</i> by Thomas Aquinas

Books on Critical Realism

Books by Roy Bhaskar

RTS	<i>A realist theory of science</i> (2008) 1975.
DPF	<i>Dialectic: The pulse of freedom</i> (1993)
FEW	<i>From east to west: Odyssey of a soul</i> (2000).
FRE	<i>From science to emancipation: Alienation and the actuality of enlightenment</i> (2002).
PMR	<i>Philosophy of MetaReality: Creativity, love and freedom</i> (2012).
RR	<i>Reclaiming reality: A critical introduction to contemporary philosophy</i> (1989).
RMR	<i>Reflections on MetaReality: Transcendence, emancipation and everyday life</i> (2012).
SRHE	<i>Scientific realism and human emancipation</i> (2009) 1986.
PN	<i>The possibility of naturalism: A philosophical critique of the contemporary human sciences</i> (1998).

Others

DCR	<i>Dictionary of critical realism</i> (2007).
FCR	Bhaskar, R. & Hartwig, M. <i>The formation of critical realism: A personal perspective</i> (2010).

CHAPTER ONE: CRITICAL THINKING IN CATHOLIC RELIGIOUS EDUCATION

Is critical thinking compatible with the confessional Catholic religious education practised in the Philippines? If so, in what way can it be taught to students and promoted in the classroom?

To both friend and foe of Catholic education, these questions sound gratuitous at best. Critics of faith schools dismiss programmes that explicitly teach the doctrines of a particular religion as inherently indoctrinatory and hence incompatible with critical thinking. Advocates and practitioners of Catholic education, on the other hand, may have no doubt that in light of an intellectual tradition that has long held the mutuality of faith and reason,¹ there is no reason why a confessional religious programme cannot promote critical rationality among students.

Given my professional experience, however, I am convinced that these questions are worth asking and that there is a need to problematize the issue of critical thinking in Catholic education—especially in Philippine Catholic schools, where the teaching of Catholic doctrine and the initiation of the student into the faith are identified as explicit goals. This issue of critical thinking needs to be investigated not only to address charges that confessional religious education hampers personal autonomy in general and employs indoctrination in particular,²

¹ The encyclical *Fides et Ratio*, which begins by calling faith and reason the ‘two wings’ that raise the human spirit to the contemplation of truth, contains a concise history of this tradition (John Paul II, 1998, §36-44).

² For some of the discussion, cf. Grace (2003); Groothius (2004); Halstead (2012); Hand (2003; 2004); McKinney (2013); Pring (2005); Short (2003); Siegel (2004).

but also to assess whether or not our programmes are actually fulfilling the goals articulated for Catholic education, which includes fostering ‘a critical sense which examines statements rather than accepting them blindly’ (CCE, 1988, §49).³

The questions become particularly urgent given the challenges and issues faced by Catholic education in the third millennium, such as the marginalization of religion and its confinement to the private sphere (CCE, 2013, §9), students’ lack of religious and moral formation, and their increasing apathy to religion (CCE, 1997, §6; Sullivan & McKinney, 2013).

THE RESEARCH TOPIC AND ITS RATIONALE

The research question emerged from my professional practice as a Catholic educator in the Philippines. As head of a Catholic K-12 school in Manila and a religious educator in the secondary and tertiary levels, I have experienced the tension between the curricular demands of teaching the Catholic faith on the one hand and the pedagogical ideal of promoting critical rationality among our students on the other.

From discussions with colleagues from the network of fifteen schools belonging to our religious congregation⁴, we have observed that: (a) critical thinking is not as purposefully and vigorously promoted in religious education as

³ Nine documents from the Congregation for Catholic Education (formerly, the Sacred Congregation for Catholic Education) are particularly relevant in this study: (1) ‘The Catholic School’ (SCCE 1977), (2) ‘Lay Catholics in Schools: Witness to Faith’ (SCCE 1982), (3) ‘The Religious Dimension of Education in a Catholic School’ (CCE 1988), (4) ‘The Catholic School on the Threshold of the Third Millennium’ (1997), (5) ‘Consecrated Persons and their Mission in Schools: Reflections and Guidelines’ (2002), (6) ‘Educating Together in Catholic Schools: A Shared Mission between Consecrated Persons and the Lay Faithful’ (2007), (7) ‘Circular letter to the Presidents of Bishops Conferences on religious education in schools (CCE, 2009), (8) ‘Education to Intercultural Dialogue in Catholic Schools: Living in Harmony for a Civilization of Love’ (CCE, 2013), and (9) ‘Educating today and tomorrow: A renewing passion’ (*Instrumentum laboris*) (CCE 2014).

⁴ The network is called the Jesuit Basic Education Commission, which I chaired from 2007 to 2013.

it is in the other subjects⁵; (b) religious educators in our schools feel ill-prepared to handle, much less promote, critical thinking in our classrooms, uncertain about how to handle our pupils' questions and especially dissent; and (c) given the confessional approach in our religion curriculum, many more are ambivalent about the value of critical thinking in our classrooms.

Moreover, we share the impression that while most of our students have no difficulty supplying the expected answers in their examination to obtain passing marks, based on anecdotal reports from parents and alumni over the years, many of our high school graduates stop attending religious services, with a growing number professing to be non-believers. These reports have led us to question the effectiveness of our schools' religious education programmes.

A fundamental question that I will address in this study is: 'Is critical thinking even possible or desirable in a confessional Catholic religion class in the first place?' What sort of religious epistemology is compatible with the Catholic doctrines on revelation especially given the central role played by authority in Catholic doctrinal matters? Is there, in other words, such a thing as Catholic religious critical thinking?

Secondly, if it is the case that religious critical thinking is possible and legitimate, what initial steps can be taken so that we can promote it in religious education in our network of schools?

In this primarily philosophical investigation, I will examine the possibility and legitimacy of critical thinking in confessional Catholic religious education and

⁵ A recent study of Canadian Catholic schools observed the same discrepancy between the pedagogy employed in religious education and those in other subjects. Whereas they are taught to apply a critical method in the other disciplines, they are expected in their religious education classes merely to receive 'factual knowledge' about Church teaching and are offered little academic guidance, if any, on how to think critically about Church positions on such controversial issues as female ordination and same-sex marriage (McDonough, 2009, p. 189).

explore how critical thinking can best be practised and taught in light of the goals of Catholic religious education as articulated in official Church documents. I will use the findings of an empirical study conducted in our network of Catholic schools to frame the problem of Catholic religious critical thinking in our classrooms, drawing from Roy Bhaskar's philosophy of critical realism to interpret its findings. I will then argue that a religious epistemology based on Catholic doctrine is critical realist, and propose a form of critical thinking that is grounded on the Catholic doctrine of '*sensus fidei*' and thus warranted in a confessional Catholic religious education classroom.

CRITICAL REALISM AS UNDER-LABOURING PHILOSOPHY

Roy Bhaskar's critical realism will be used in this study as an 'under-labouring' philosophical framework⁶ for analyzing critical thinking in general and Catholic religious critical thinking in particular. This choice has been largely shaped by my personal context, especially my Catholic faith. As discussed in a later chapter, I consider the central insights of critical realism compatible with the Catholic Christian faith, especially in comparison to alternative philosophies. More specifically, a critical realist epistemology can help elucidate the features of Catholic religious epistemology, an epistemology based on the doctrines of revelation and *sensus fidei*, every baptized Christian's 'sense of faith' which is believed to be necessary in the reception of revelation, and which, I will argue, provides the basis for Catholic religious critical thinking.

Critical realism, as the philosophical movement initiated by Bhaskar, refers to three distinct, interrelated stages: basic/original critical realism (a philosophy of

⁶ Bhaskar's well-known reference is from John Locke's (1689) 'Epistle to the Reader' in *Essay concerning human understanding*, where he writes that it is 'ambition enough to be employed as an under-labourer in clearing the ground a little, and removing some of the rubbish that lies in the way to knowledge'.

natural science known as transcendental realism, a philosophy of the social sciences called critical naturalism, and explanatory critique), dialectical critical realism, and the philosophy of metaReality. For this paper, I will be drawing primarily from original critical realism.⁷

Critical realism as transcendental and immanent critique

‘What must the world be like for science to be possible?’ In posing this deceptively simple and innocuous question, Roy Bhaskar builds a case for a revolutionary philosophy of science that forms the first stage of a philosophical movement that has eventually come to be known as critical realism. A powerful and searing critique of the prevailing philosophies of science at the time, transcendental realism exposes classical empiricism and transcendental idealism—exemplified in Hume and Kant, respectively—as deficient and flawed in their accounts of the practice of science (RTS).

Transcendental critique

Applying his own brand of the Kantian method, Bhaskar interrogates science by inquiring into the conditions necessary for its possibility and intelligibility. However, he subverts the Kantian method by refusing to restrict his conclusions to properties deduced about the human mind, as Kant has done, but as pertaining to the world. While Kant’s arguments in ‘Transcendental Aesthetic’ led him to identify space, time, and causality as human-created conditions for the possibility for empirical knowledge, Bhaskar draws conclusions about the transcendently necessary attributes of the world presupposed by the practice of science (RTS).

⁷ For the development of critical realism, see especially the following by Bhaskar: *A realist theory of science* (1975), *The possibility of naturalism* (1978), *Scientific realism and human emancipation* (1986); *Dialectic: The pulse of freedom* (1993), and *Philosophy of metaReality* (2012).

Immanent critique

Bhaskar's transcendental analysis also cuts to the chase by focusing on two basic activities of science given its empirical and experimental character: Observation and experimental activity. Bhaskar employs these two activities of science as the very means of his critique of empirical realism. As a philosophy that defines the world exclusively in terms of the empirical, empirical realism reserves a privileged status for experience and consequently accepts the indispensable value of these two fundamental scientific activities. Through them Bhaskar undertakes an 'Achilles' heel critique'—a form of immanent critique which uses what is strongest and most valued by the rival position to expose the inconsistencies and contradictions internal to it (FCR, pp. 78-79). In this case, to refute both empiricists and idealists, Bhaskar leaves at their doorstep the irresistible Trojan horse of experience, and through it, conducts his immanent critique.

Bhaskar's transcendental and immanent critique not only exposes the shortcomings of the prevailing accounts of science, but also demonstrates that an adequate theory of science will, contrary to empiricist and idealist claims alike, require nothing less than an ontology of depth realism. This unapologetic restoration of ontology in Bhaskar's philosophy of science has led to a vision of the world that is far more complex, mysterious, and fascinating than the virtual flatland suggested by empirical realism (RTS). Moreover, critical realism offers a more comprehensive and realistic account of the scientific enterprise, one that illumines its essential features as a discipline, its inherent fallibility and its legitimate goals and processes. This account also uncovers an ordering among its branches and fields that corresponds to the very structure of the world that science studies (RTS).

Implications for methodology

This study, though primarily theoretical, will have an empirical component. Since the methodology used for the empirical investigation needs to be consistent with the meta-theory that underpins this work, some critical realist caution ought to be taken in particular with regard to the use of quantitative and statistical tools (Scott, 2005; 2007).

Critical realism is averse to any form of reductionism—including the reduction of causation to mere correlation and more generally, the reduction of complex phenomena into what can be measured. An adequate and accurate explanation must take pains to account for the multiplicity of factors that shape phenomena, especially psychological and social phenomena (Bhaskar, 2014). Failing to account for the complexity of phenomena will amount at best to a superficial explanation of the object it investigates, or worse, a distorted one (Price, 2014). The fact that social phenomena are complex, however, does not eliminate the usefulness of quantitative models as long as they are used with caution and one avoids statistical positivism, which mistakes what legitimately serves as evidence as already constituting adequate explanation (Bhaskar, 1998a; Lawson, 1997; Nash, 2005).

To avoid using a methodology inconsistent with the work's underlying meta-theory, the purpose of the empirical study has been limited to the diagnosis of the problem of critical thinking rather than a comprehensive explanation of it. The findings are used as evidence to support a hypothesis that requires further analysis and explanation.

OUTLINE OF THE STUDY

In this chapter, I will argue that the practice of critical thinking in Catholic

religious education needs to be problematized not only in spite of, but also precisely on account of the premium reserved for critical rationality in Catholic education.

Having presented the research topic and its rationale, I will describe the context of Catholic religious education in the Philippines, followed by a discussion of Catholic education in general and religious education in particular as envisioned in key documents of the Catholic Church. I will argue that while its value is repeatedly affirmed in the Church documents, critical thinking becomes problematic in actual practice. The issue is particularly thorny due to three inherent tensions experienced by Catholic schools in the Philippines: (a) their twin goals of education and evangelization; (b) a precarious distinction between catechesis and religious education, particularly in the case of the confessional religious approach employed by Catholic schools in the Philippines; and (c) the dual nature of Catholic schools as academic and ecclesial institutions, which subjects them—at least officially—to direct Church supervision particularly in their religious education programme.

In the next chapter, I will argue for an epistemological approach to critical thinking as a way of addressing the problem of critical thinking in confessional religious education. A review of the research literature on critical thinking will be provided before focusing on the epistemological underpinnings that make critical thinking possible. An empirical study conducted among teachers in our network of Catholic schools suggests the prevalence of a religious epistemology that is incompatible with critical thinking. Based on these findings, I hypothesize that the problem of critical thinking in our religious education classrooms may be partly, if not chiefly epistemological.

The third chapter begins with a summary of the central tenets of critical realism, and proposes a specifically critical realist account of critical thinking, which is framed as the expression of one's commitment to judgemental rationality. Such a conception facilitates the analysis of critical thinking into the underlying principles of ontological realism and epistemic relativism. Judgemental rationality, which provides motivation for critical thinking, is possible only given an ontological realism and rendered necessary only with epistemic relativism. This critical realist account of critical thinking as the expression of judgemental rationality not only corrects rationalistic misconceptions about critical thinking, but also guides us in diagnosing the problem of Catholic religious critical thinking in our schools.

In the fourth and final chapter, I will draw from the Catholic notion of a '*sensus fidei*'—believed to be given to both the Church and the individual believer for the reception of revelation—to argue that a Catholic religious epistemology, based on its theology of revelation, is essentially critical realist, characterized by a commitment to judgemental rationality made possible not only by an ontological realism, but also—contrary to the prevailing religious epistemologies among our teachers—made necessary by an epistemic relativism. Such a Catholic religious epistemology not only makes religious critical thinking possible, but also mandates it, and in the process, supplies the needed motivation for critical thinking. Furthermore, I argue for an understanding of Catholic religious critical thinking as the authentic exercise of the believer's *sensus fidei*.

CONTRIBUTIONS AND LIMITATIONS OF THE STUDY

The contributions that the present study hopes to make, both professional and academic, are a function of its focus and limitations. First of all, this paper

has an unapologetically practical purpose: To offer the religious educators in our network of schools guidance in promoting the practice of Catholic religious critical thinking in the classroom. The critical thinking that I examine is, therefore, limited to the particular genre of religious critical thinking that would be considered legitimate and valuable in a confessional Catholic religious education classroom. Moreover, this study will investigate Catholic religious education as contextualized in its Philippine setting, and more specifically, as offered in the network of schools that I work with.

Its professional focus and limitations notwithstanding, I hope to make important professional and academic contributions in the fields of critical thinking, Catholic religious education, critical realism, and teacher epistemology. First of all, the concrete recommendations for promoting Catholic religious critical thinking in the classroom may be helpful for other Catholic schools in the Philippines, as well as schools elsewhere with similar contexts and needs.

Secondly, the empirical investigation featured in this research hopes to contribute to the study of teacher epistemologies by addressing gaps in the research through the investigation of: (a) Filipino teachers for their level of epistemological development; and (b) practitioners rather than student teachers, which most similar research has focused on. Only a handful of epistemological research studies have been conducted among Filipino teachers, all of which were focused on dimensions of epistemological beliefs rather than epistemic development (Bernardo, 2008, 2009; Magno, 2010). Epistemological research elsewhere in Asia (e.g., China, Hong Kong, Singapore, Korea, and Taiwan), albeit on the rise, has likewise concentrated on pre-service teachers and their epistemological beliefs (Chai, 2006; Chai et al., 2008a, 2008b 2009, 2010a,

2010b; Chan, 2010; Chan & Elliott, 2000, 2002, 2004a, 2004b; Hofer, 2010; Hong & Lin, 2010; So, Lee, Roh, & Lee, 2010).

There are two important theoretical contributions that I hope to make in this thesis. The first is the proposed critical realist conception of critical thinking as the expression of one's commitment to judgemental rationality. This commitment to judgemental rationality constitutes one's disposition for critical thinking, but framing critical thinking in terms of judgemental rationality also enables us to analyze it in terms of its two conditions: ontological realism for its possibility and epistemic relativism for its necessity. Such an account of critical thinking, in true critical realist fashion, insists on the primacy of reality and serves as a corrective to any post-Enlightenment connotation of pure objectivity and universal rationality.

Secondly, this study establishes the legitimacy and value of Catholic religious critical thinking in light of a religious epistemology articulated from Church doctrines on revelation, reception, and the *sensus fidei*. The Catholic religious epistemology that emerges is identified as explicitly critical realist and demonstrated as compatible with critical thinking. Moreover, the proposed conception of Catholic religious critical thinking as the exercise of one's *sensus fidei* serves as the basis for the recommendations offered at the end of the study on the problem of critical thinking in confessional Catholic religious education.

THE PHILIPPINE CONTEXT

The context in which Philippine Catholic schools operate may be unique in Asia. Of the estimated population of 92,337,852 million, 81% of its population consider themselves Roman Catholic (NSO, 2012). Moreover, according to a 2012 study conducted by the National Opinion Research Center at University of

Chicago, the Philippines ranked first among over 30 countries surveyed in Europe, US, and Asia in terms of ‘belief in God’: Of all the respondents, 94% ‘believe in God now and...always have’. Compared to 38% in Israel and 35% in the United States—second and third placers, respectively—60% in the Philippines are ‘certain that God exists’, ‘always believed in God’ and strongly agree that ‘there is a personal God’ (Smith, 2012).

Catholic schools in the Philippines

This Filipino religiosity in general and its Catholicism in particular are reflected in the number of Catholic schools and universities in the country: For academic year 2013-14, the Catholic Educational Association of the Philippines (CEAP) reported a total of 1,342 Catholic institutions nationwide, with 708 pre-schools, 688 primary schools, 990 high schools, 236 colleges, 93 graduate schools, and 57 technical-vocational schools (CEAP, 2014).

Table 1: Registered Catholic schools in the Philippines⁸

	Pre-school	Primary School	Secondary School	College	Graduate School	Technical-Vocational	TOTAL
Schools*	708	688	990	236	93	57	1,342**
Students	63,654	326,442	559,701	506,019	28,028	8,214	1,492,058

CEAP unpublished raw data (2014)

** With the ongoing transition to a K-12 system in the Philippines, primary schooling has six grade levels (for children from 6 to 12 years old) and secondary school has six grade levels (for students from 12 to 17 years old).*

*** This figure refers to the total number of Catholic educational institutions registered with the CEAP, some of which offer several levels of education.*

Primary and secondary education in state or public schools is fully funded by the government. Catholic schools, on the other hand, are either run by Catholic dioceses or privately owned by religious congregations. Two challenges faced by Philippine Catholic schools are decreasing student enrolment due to growing costs, as well as increasing teacher migration to state-run schools that offer higher salaries (CBCP, 2011). In addition, although 70% of the 1,342 CEAP

⁸ Excluded from the report are a handful of Catholic institutions not registered with the CEAP.

schools are small, struggling mission schools serving remote areas of the country, Catholic education has acquired an exaggerated elitist image because of the fees charged by a few prominent schools (Gutierrez, 2007).

Noting what Pope Benedict XVI (2007) has called ‘the great educational emergency’, the Philippine bishops in their pastoral letter on 400 years of Catholic education in the country have observed that in addition to economic challenges, Catholic schools in the country are confronted with increasing secularism and relativism, leading not only to an apparent decrease in the appeal of Catholic education, but even more fundamentally, a diminishing regard from Catholic families for the Gospel and its values (CBCP, 2011).

Based on data for the two recent academic years, all the schools belonging to our religious congregation’s network of K-12 schools have predominantly Roman Catholic student populations of at least 85%—with the exception of two that are located in a city with a predominantly Muslim population in the southern island of Mindanao, where 65%-71% are Catholic. Given the aims of these schools, priority is also explicitly given to Catholics in the hiring of staff.

Philippine Catholic religious education

Religious education programmes in Philippine Catholic schools are explicitly confessional by nature. Its goal is the socialization of students, the vast majority of whom, as mentioned, are Catholic, into the Church. Religious education is considered by John Paul II as the defining character of Catholic schools (John Paul II, 1979, §69) and identified as a central dimension in the holistic development of students (CCE, 1977, §19). In the Philippines, RE is named ‘Christian Living’, a core subject offered from primary to secondary schools. As implied by its name, it is not limited to the intellectual dimension

(defined operationally as ‘doctrinal’), but includes the interpersonal (moral), the contemplative (sacramental/worship), and the social (service to society). With content drawn from the *Catechism for Filipino Catholics* (CBCP, 1997), the programme is largely based on Scripture and Church teachings, and contextualized within the students’ life (NCDP, 1985).

Table 2: Student population and percentage of Catholics in JBEC schools

Schools/Units (Primary/Secondary)	Academic Year 2014-15		Academic Year 2013-14	
	Total Number	% Catholic	Total Number	% Catholic
Ateneo de Manila Primary	4,262	95%	4,226	95%
Ateneo de Manila Secondary	2,371	90%	2,427	94%
Xavier School Primary	2,385	91%	2,401	91%
Xavier School Secondary	1,953	91%	1,839	89%
Ateneo de Naga Secondary	1,421	94%	1,544	97%
Ateneo de Cebu Primary	1,543	90%	1,571	89%
Ateneo de Cebu Secondary	1,253	90%	1,301	90%
Ateneo de Iloilo Primary	848	97%	863	97%
Ateneo de Iloilo Secondary	787	93%	700	93%
Ateneo de Davao Primary	3,043	86%	3,086	86%
Ateneo de Davao Secondary	1,882	85%	2,016	89%
Xavier University Primary	2,544	88%	2,587	89%
Xavier University Secondary	1,792	92%	1,864	88%
Ateneo de Zamboanga Primary	1,349	68%	1,408	71%
Ateneo de Zamboanga Secondary	1,087	68%	1,107	65%

JBEC unpublished raw data (Academic Years 2013-14 and 2014-15)

Given its specific context, therefore, Catholic religious education in the Philippines retains a confessional character in a way neither possible nor desirable in most other contexts. ‘Gospel-teaching as transmitted through the Catholic Church’, therefore, remains a fundamental element in the educative process of Philippine Catholic schools (CCE, 1977, §49).

THE NATURE OF CATHOLIC EDUCATION

The principal references for Catholic education and religious education in particular are the Catholic Church’s official documents that include papal encyclicals on Christian education—from Pope Leo XIII in 1885 and Pius XI in 1929, the conciliar document *Gravissimum Educationis* (henceforth, GE), and

documents from the pontifical congregation responsible for Catholic educational institutions called the Congregation for Catholic Education (Fleming, 2006).

A constant theme in the official pronouncements issued by the Catholic Church in this last century has been the beneficial work of Catholic schools for both the Church and society, as well as the rights of parents to school choice and the state's duty to guarantee this right.⁹ Of particular relevance here is the pastoral letter from the Catholic Bishops' Conference of the Philippines (CBCP) celebrating 400 years of Catholic education, which states that 'it is not an exaggeration to say that the establishment of schools in [the] country has laid the foundations of education in [the Philippines]' (CBCP, 2011).

Critical openness to the world

Among the Church documents on education, *Gravissimum educationis* (1965) is considered the most foundational and authoritative, having been promulgated by the Second Vatican Council. Vatican II called for a new way of being Church, shifting from a hierarchical ecclesiology to an ecclesiology of communion that depicted the entire Church as the People of God (LG §9ff). Vatican II likewise signaled a new mode of Catholic schooling that would enable the school to face contemporary challenges and to respond to the needs of the youth. It encouraged schools to be critically open to society, while nurturing an atmosphere animated by a spirit of liberty and charity (GE).

In what Grace (2002, p. 7) called the 'dialectic of retreat and mission', Catholic schools were now expected to change their previously dominant stance of a retreat from the world to one best described as an 'openness with roots' (Bryk et al., 1993, p. 334): a critical engagement with the world in order to be of

⁹ Cf. Leo XIII (1885), Pius IX (1929), GE (1965), and documents from the Congregation on Catholic Education (CCE) from 1977 to 2014.

service to it while simultaneously preserving the integrity of its own culture (CCE, 1997, §43-46).

Lack of a contemporary Catholic philosophy of education

The conciliar document, *Gravissimum educationis*, has been criticized for lacking philosophical base and failing to spell out the educational implications of the changes initiated by Vatican II (Joseph, 2001; McDonough, 2012). In focusing primarily on the role and characteristics of Catholic schools, the document does not tackle educational goals and pedagogical approaches and does not advance Catholic educational theory and practice.

Contrary to expectation, a comprehensive post-Vatican II philosophy of Catholic education, which would have provided a defense of Catholic schooling against secularist attacks, has not developed (Grace, 2002). The lack of such a fully articulated contemporary educational theory has been attributed largely to the absence of competing claims regarding the nature and goals of Catholic education, with the scholastic theology exemplified by Thomism enduring as its default philosophy (Beck, 1964; Meehan, 2002).¹⁰

In the absence of a contemporary Catholic philosophy of education, the Church's declarations on Catholic education have served as the primary source for providing educators with theological, philosophical, and educational guidance (Grace, 2002). But they have also generated what McLaughlin (1996, p. 137) has called 'platitudinous rhetoric and edubabble'—i.e., facile, shallow, and distorted interpretations of the documents, resulting in ambiguities about the nature and purpose of Catholic religious education (Halstead & McLaughlin, 2005).

¹⁰ For examples of proposed contemporary theories of Catholic education, see Carmody (2011) and Whittle (2014).

TENSIONS IN THE MISSION OF CATHOLIC SCHOOLS

The ambiguities and tensions experienced by Catholic schools as they carry out their mission have three related sources: (a) the complementary—but occasionally contradictory—roles of the Catholic school as educator and evangelizer, (b) the inadequate distinction between catechetical instruction and religious education, especially in the case of confessional religious education, and (c) the dual nature of the Catholic school as an academic and ecclesial institution.

Tension 1: The mission of education and evangelization

Two distinct but interconnected roles are envisioned for the Catholic school: education and evangelization. Tension inherent in this two-fold mission, however, raises some fundamental questions on how the school can concretely fulfill these roles—specifically in relation to the development of critical rationality and confessional religious teaching. Church pronouncements on this matter tend to be general, ambiguous, and sometimes misconstrued as inconsistent, hence, offering little assistance to practitioners who seek greater clarity and guidance.

Education

The Catholic school aims to form its students into rational and responsible citizens who are expected eventually to make a contribution to the world. This holistic formation of students, which aims to 'develop harmoniously their physical, moral, and intellectual and spiritual gifts', is a defining feature of Catholic education (GE; CCL §795). The formation of the human person 'in its totality' includes particular regard for the religious and spiritual dimension (CCE, 2009).

Promoting the student's intellectual growth is given special mention in the documents: To 'stimulate the pupil to exercise his intelligence through the

dynamics of understanding to attain clarity and inventiveness' (SCCE, 1977, §27). The purpose of nursing the intellectual faculties goes beyond preparing students for professional life, but includes fostering a sense of values and developing a critical sense, so that students can judge rightly and become free and fully integrated human beings. The school must be a place where students learn culture not only systematically and rigorously, but also critically, where the autonomy of human knowledge and the rules and methods proper to each discipline are respected (GE; SCCE, 1977; CCE, 1988).

However, this critical sense can only be nursed within the context of faith and its development as guided by the Christian vision of reality (SCCE, 1977, §36). Faith breeds our desire to know the created universe and stimulates a critical sense. Moreover, it is faith that stimulates a critical sense that is dissatisfied with superficial knowledge and judgements (CCE, 1988, §49).

Evangelization

The Catholic school's work of education is, however, explicitly contextualized in the saving mission of the Church (SCCE, 1977, §13). The Catholic school is distinctly identified as an apostolic instrument of the Church. More than just technical and scientific education, it imparts a sound Christian formation (CCE, 1997, §8): 'that the baptized, while they are gradually introduced to the knowledge of the mystery of salvation, become ever more aware of the gift of faith they have received' (GE).

The school's mission of evangelization should penetrate and inform every moment of its educational activity (CCE, 1988, §11). The fundamental identity of the Catholic school derives from its participation in the Church's mission of evangelization; and as such, it is part of the local Church (CCE, 1988). This ecclesial nature of the Catholic school is not a mere adjunct, but a distinctive and

defining element of its identity and mission (CCE, 1997). Contemporary Catholic schooling cannot be fully appreciated apart from this theological-social rationale for its existence (Grace, 2002).

Difficulties, however, surface as the Catholic school carries out its role as both educator and evangelizer. The school's aim of education, which explicitly includes the development of intellectual enquiry and critical judgement, is complicated by the school's more fundamental mandate to transmit the Christian message and its identification as an arm of the magisterium (CCE, 2007, §26). On the one hand, the Catholic school seeks the holistic development of the person, preparing students to be rational and responsible citizens in society. But on the other hand, what it offers is a distinctly Christian formation, with an essential religious dimension and confessional purpose. This tension becomes clearer in the discussion of the religious education programme of the Catholic school.

Tension 2: Religious formation as catechetical instruction and religious education

What distinguishes a school as Catholic is its mission of education in the faith. Religious education is considered an 'inalienable characteristic of [the] educational goal [of Catholic schools]' (CCE, 2009, §10, 18). It is so important, in fact, that to marginalize the moral and religious dimension in Catholic education is considered a hindrance to full education (CCE, 2009, §1), and its neglect would provide sufficient reason to strip the Catholic school of its title regardless of its reputation (CCE, 1988, §66).

The Catholic school is expected to transmit the faith primarily—but not exclusively—through its religious programme. Just as crucial is the school's religious culture and ethos, 'a special atmosphere animated by the Gospel spirit

of freedom and charity' (GE §8). Essential in the overall religious education of the students is a strong and distinct religious dimension in the life of the school (CCE, 1988). Religious education, both inside the classroom and beyond, therefore, is a principal element in the integral formation of the student of a Catholic school.

Religious education has a special place in the school's programme. Its integration into the students' general education is a directive from the Church (John Paul II, 2009). Like other academic subjects, it is expected to have a syllabus, a regular place in the weekly order, and even required examinations. At the same time, however, its distinctive characteristics also need to be respected—including the required approval of its content by Church authorities (SCCE, 1977 §52; CCE, 1988, §70).

Catholic religious education is also intended to be an instrument for interdisciplinary dialogue to achieve the integration of faith and culture (SCCE, 1982, §56; CCE, 2009, §17). Its aim includes the 'enlargement of rationality', which entails the task 'to reopen [rationality] to the larger questions of the truth and the good, to link theology, philosophy and science between them in full respect for the methods proper to them and for their reciprocal autonomy, but also in the awareness of the intrinsic unity that holds them together' (Benedict XVI, 2009, §3).

Distinction between religious education and catechesis

The often-reiterated difference between religious education and catechetical instruction lies in their setting and purpose. While it is to the school that religious education has been entrusted, the responsibility for catechesis belongs primarily to the family with assistance from the parish. However, while the family and the local parish have been identified as the proper locus for it, the

Catholic school is nevertheless expected to offer catechetical instruction to its students (SCCE, 1977, §51; DGC, 1997, §260).

The goal of catechesis is to teach the Christian message and doctrine and to initiate an individual into the Church. It is designed chiefly to promote a personal relationship with Christ and to foster maturity in the faith, as manifested in one's liturgical and sacramental participation as well as apostolic involvement. Through catechetical instruction, new members are formed as they are taught the practices, conduct, and ritual in the Church (CCE, 1988, §68; DGC, 1997, §74; GE).

The purpose of religious education, on the other hand, is to provide knowledge about the nature of the Christian faith, identity, and the living out of this faith (CCE, 1988, §68; CCE, 2009, §17). It must, first of all, be treated as 'a scholastic discipline with the same systematic demands and the same rigour as other disciplines. It must present the Christian message and the Christian event with the same seriousness and the same depth with which other disciplines present their knowledge' (DGC, 1997, §73; CCE, 2009).

While differing in their primary aims, religious education and catechesis are complementary since one without the other renders the faith immature. Practice without understanding is blind, while understanding without practice lacks seriousness. Knowledge about the faith can itself promote spiritual maturity just as growth in one's faith can generate a deeper understanding of the faith (CCE, 1988, §68; CCE, 2009, §17). In fact, the aim of religious education goes beyond mere intellectual assent to truths, but includes 'a total commitment of one's whole being to the Person of Christ' (SCCE, 1977, §50).

Whatever distinction is attempted between religious education and catechesis is blurred by the qualifications that create overlaps between the two in terms of both their settings and goals. For this reason, Scott (2001) refers to the 'Janus face' of religious education, one side facing the practice of faith, the other one its understanding, representing the two general—sharply contrasting, but interrelated—goals of religious education. These two ingredients of religious education are: (a) teaching a way of being religious in a particular religious tradition (i.e., the living out of faith and the set of practices in a given faith community), and (b) teaching about religion (religion as an object of scholarly investigation). While the first goal, strictly speaking, belongs to the work of catechesis, Catholic religious education aims to do both: As catechesis, it inducts students into the practices and mission of the Church. As an academic subject, it invites students to step back from the practices of their faith to understand it and even compare it to other religious traditions (Scott, 2001).

The weak distinction between catechesis and religious education is already problematic in Catholic schools where a significant percentage of the students are not Catholic (Meehan, 2006). But the challenge grows more serious for schools such as those in the Philippines, where the majority of the students are Catholic and the religious education programme is confessional.

Confessional religious education

While a Catholic school is the Church's instrument of evangelization and the education it offers is incomplete without a religious dimension, its purpose is not to proselytize or convert non-Catholic pupils, whose religious freedom ought to be respected (SCCE, 1977). The Church, however, is quick to assert its right 'in spreading religious faith and in introducing religious practices' as long as it refrains from coercive forms of persuasion (CCE, 2009, §16; DH, 1965, §2).

Hence, while respect for the religious freedom of non-Catholic students is conceded, the role of the Catholic school as an evangelizing instrument of the Church is nevertheless asserted (CCE, 1988).

Due to the rise of religious pluralism and cultural diversity both in society and in schools themselves, many schools, especially in compliance with government prescriptions, have adopted a more anthropological and interreligious approach in religious education—concerned with educating students about religious phenomena through a number of religious traditions and fostering tolerance and respect for diversity. In principle, however, the Church remains opposed to the reduction of Catholic religious education to a ‘neutral and comparative’ study of different religions because of the confusion or religious indifference that such an approach may generate (CCE, 2009, §12). Given its goals, Catholic religious education is, ideally and whenever possible, confessional. The confessional character of religious education in Catholic schools is considered ‘an indispensable guarantee offered to families and students who choose such an education’ (John Paul II, 1991). Religious freedom is defined precisely as the freedom to receive confessional religious education (CCE, 2009, §19)—i.e., ‘the right to learn with truth and certainty the religion to which [students] belong’.

Due to their conceptual overlaps in Church documents, catechesis and religious education—especially in confessional Catholic religious education—end up being used interchangeably. The goals of Catholic religious education understandably become ambiguous and contested especially in Philippine Catholic schools, whose context—specifically, their predominantly Catholic student populations—warrants a confessional approach. In the Philippines, where 81% of the population are Roman Catholic, primary and secondary Catholic

religious education is inherently confessional in nature and goal: Its primary aim is to induct students into the Catholic Church, teaching them what McDonough (2009) calls 'ecclesial facts' and preparing them for participation in the sacraments, such as the Eucharist and Confirmation.

A much-needed conceptual clarification is essential if a clearly defined purpose for Catholic religious education is desired (Scott, 1982). Bewailing its longstanding depiction as an education in faith and the need for an independent theory for Catholic religious education, Rossiter (1982) has called for a 'creative divorce' of religious education from catechesis.

The distinction between catechesis and religious education may be refined in terms of (a) the tradition of religious education being followed (Scott, 1984), and (b) the predominant language being used (Moran, 1997).

Models of religious education

A framework for theorizing religious education suggests three approaches to religious education classified in terms of their goals: (a) ecclesial enculturation tradition, (b) revisionist tradition, and (c) reconceptualist tradition (Scott 1984).

The ecclesial enculturation tradition refers to the traditional form of religious education as the transmission of faith. Given its confessional approach, it aims to develop personal belief, to hand on tradition, to build religious identity, and to build up the Church. It is called ecclesial enculturation precisely because its goal is the enculturation of students into the faith community, so that they identify themselves as members of the Church and adopt its values and meaning system (Scott, 1980).

Catechesis clearly belongs to this model of religious education. With its explicit goal of religious nurture and socialization, catechesis and its principles

are generally considered incompatible with openness, inquiry, and critical spirit, as well as modernity in general (Scott, 1984).

The second tradition of religious education is often referred to as 'Christian religious education'. This revisionist model retains the ecclesial nature of religious education: As the Church's educational ministry, its aim is to 'inform, form, and transform people in Christian identity and agency'. But its Christian particularity is by no means considered mutually exclusive with the educational aim of promoting students' personal and critical appropriation of their Christian heritage so that they may engage in intelligent participation in the Church (Groome, 1991). Its starting point is the intersection of the religious tradition with contemporary human experience and culture, and its goal is a deeper appreciation of the Christian tradition, which involves: (a) reflective knowledge and understanding of the tradition, (b) the recreation of personal beliefs, values, and actions, and (c) the transformation of the social and public world.

What distinguishes the revisionist tradition from the ecclesial enculturation model is that it is both confessional and critical. Students are encouraged to apply critical reason to the beliefs, symbols, texts, and the lived life of the Christian tradition, examining even the historical and conditioning forces in the Church, interpreting the meaning of their experience, and growing open to the possibility of transforming themselves, the tradition, and the community. Christian religious education is the 'Christian tradition becoming self conscious' (Scott, 1984, p. 330).

However, catechesis remains an explicit goal of Christian religious education (Groome, 1996). Hence, for Scott (1984), the revisionist approach is still inadequately educative, criticizing it as 'a delivery system for the prevailing theology' (p. 331). Students remain bound to confessional and denominational

interests; they can at best assume a stance of critical affirmation towards Christian tradition.

A third 'reconceptualist model' is proposed, one that is stripped of any form of proselytizing or evangelizing. Under this model, the religious education class becomes the venue for examining the meaning of one's religious life vis-à-vis both those who share it and those who do not. One achieves both a critical appreciation of one's religious tradition, as well as an empathetic understanding of other traditions (Scott, 1984).

Only this reconceptualized religious education, according to Scott (1984), succeeds in reversing the traditional form of Church education, about which Miller (1980, p. 279) writes: 'No church ever teaches in a completely open-minded manner, and its educational theory has been mixed with indoctrination so that the desired result is predetermined'.¹¹

Teaching discourses

While the three models of religious education are helpful, analyzing the program in terms of its teaching discourse can also shed light on the nature of the program. Moran (1989) speaks of three languages used in teaching, each with its own purpose and proper setting: (a) homiletic, (b) therapeutic, and (c) academic. The homiletic discourse reminds the community of the convictions and texts that it has accepted and aims to persuade the listeners to believe and act upon these convictions and texts. Homiletic speech is necessary in education, but as a stand alone, it leaves little room for critical thinking. An example of a suitable venue for homiletic speech is the pulpit.

The second language is therapeutic, which, far from reinforcing what a community has agreed on, attempts to subvert it in order to liberate the listeners

¹¹ Miller's (1980) underlying—but questionable—assumption in making such a claim, however, is that *complete* open-mindedness is a condition for critical rationality.

from what has been imposed upon them and may be dominating them against their will. The clinic is clearly a proper locus of therapeutic language.

The third type of discourse is academic, which one expects in the classroom. Unlike the previous two languages, its purpose is neither the reinforcement nor the subversion of a text, but its critical examination. The message of the teacher is: 'Accept no text uncritically; it might be false. Reject no text uncritically; it might be true' (Moran, 1989, p. 78).

Teaching academically does not aim at student assent to—or dissent from—the text *per se*; rather, its goal is the critical understanding of the text and its discourse. It presupposes homiletic and therapeutic discourse, but goes on to ask: 'What is the nature and meaning of texts?' As the discourse for critical understanding, its form is chiefly interrogative. It questions the adequacy of every form of expression so that new meanings may emerge. The students' words, the words of the text, and even the teacher's words are all subject to public scrutiny. As academic criticism, it keeps the meaning of words open. The purpose is to move closer to the truth but 'without fixity, finality or absolutizing'. The assumption is every statement can be critiqued and improved on, which ought to be its own guarantee against authoritarianism and indoctrination (Scott, 2001).

Philippine confessional Catholic religious education

The confessional religious education in our schools would properly be classified under the revisionist tradition (or Christian religious education). The program is still fundamentally designed for ecclesial aims—but at the same time, recognizes critical rationality as a constitutive dimension. This conforms to the espoused mission of Catholic education as clearly to 'foster a religious conversion through schools that are inclusive but are also distinctive, where faith,

reason and life are brought into an integrated relationship as a holistic education experience' (Carmody 2011, p. 113).

The language in our religious education classrooms, however, can be characterized as primarily a homiletic one with only occasional attempts at academic discourse. For this reason, the programme falls short of the ideal of critical interrogation that academic language facilitates. One wonders as a result whether sufficient room is created for critical thinking in such a programme, which purports to promote a stance of critical affirmation, but remains tied to a largely homiletic teaching discourse.

It is significant that the 2011 pastoral letter on education issued by the Philippine bishops summarizes the mission of the Catholic schools in the country with Jesus' command to 'go...and make disciples of all the nations' (Matthew 28:19). This mandate to 'preach and teach' sums up what the bishops consider the primary aim of Philippine Catholic schools: the confessional teaching of religion, which consists of instruction in matters of faith and morals, as well as socialization into its liturgical and sacramental practices for eventual participation in the Church's mission of evangelization.

Tension 3: The Catholic school as an academic and ecclesial institution

Another complicating factor in the educational work of the Catholic school is its dual nature as academic and ecclesial institution. As 'a place of evangelization', the Catholic school does not only represent the Church in society, but more importantly, acts as its instrument of evangelization in its very work of educating the Christian person (CCE, 1988, §33). More importantly, as an ecclesial institution, the Catholic school acts as the arm of the hierarchical magisterium, and is therefore, placed directly under the supervision of the local

bishop (CCE, 1988, §70). The bishop is 'the main teacher of the local Church' who determines the content and pedagogy in the school's religious education program (Pilarczyk, 1998, p. 408).

Recognizing the decline in religious vocations and in the involvement of religious men and women in Catholic schools, the Congregation on Catholic Education released a document in recognition of the increasingly important role played by lay people in Catholic religious education. Yet these educators are reminded that in carrying out their role, they are expected not only to learn from theological research, but also to make sure to rely on the magisterium for 'the proper fulfillment of their role' (SCCE, 1982, §59).

Hence, students are expected to learn 'not opinion, speculation, not the teacher's private insights or preferences, but all and only that which is guaranteed by the Church to be sound doctrine' (Pilarczyk, 1998, p. 407). Such hierarchical control over content raises questions about both the possibility and necessity of critical thinking in the classroom because such dependence on the ecclesial and epistemic authority of the bishop reveals the inferior ecclesial status and agency of lay people vis-à-vis the ordained, casting doubt on the laity's capacity for autonomous thought in matters of faith and morals (McDonough, 2011).

McDonough (2011) draws our attention to the use of 'transmission' to refer to the method of religious education particularly in the 2007 CCE document, 'Educating Together in Catholic Schools', noting that such language is incongruent with contemporary progressive teaching methods such as the 'discovery' method. The term 'transmission' also implies that students are at best passive recipients with no reference at all to any capacity for critical reception.

Another term that occurs a lot more frequently than 'transmission' in Church education documents is 'formation', which Scott (2001) identifies as the

chief Catholic metaphor for education. Like ‘transmission’, ‘formation’ is telling because it also attributes agency not to the learner, but to the teacher. The learner is portrayed as a passive recipient who is formed by the teacher. This unequal relationship between the student and teacher is reflective of the unbalanced relationship between the lay and the ordained—especially the bishop. This inequality generates a dependence on authority that does not tend to foster critical thinking.

Although Vatican II explicitly includes the laity in a revised ecclesiology that understands the Church as fundamentally the People of God, the hierarchical system of governance in the Church has persisted, and the lay faithful have largely remained confined to a passively dependent role in the doctrinal expression of the faith (Duquoc, 1985).

My hypothesis is that this passivity has bred a religious epistemology that tends to be incompatible with critical thinking. Hence, the problem of Catholic religious critical thinking in the context of our schools is fundamentally epistemological, and to move forward, we need to look at Catholic believers’ tacit assumptions about knowledge about God and the ultimate nature of reality—its possibility and limits. This hypothesis is confirmed by the findings of a survey conducted among teachers belonging to our network of Philippine Catholic primary and secondary schools. The survey and its results will be discussed in the next chapter after a review of the literature on critical thinking.

CHAPTER TWO: AN EPISTEMOLOGICAL APPROACH TO CRITICAL THINKING

In the previous chapter, I have argued that precisely on account of its value in Catholic education, critical thinking in Catholic religious education cannot be presumed, but ought to be problematized, given the tensions inherent in a Catholic school's identity and mission, especially in its religious formation of students. In this chapter, I define that problem as partly—if not fundamentally—epistemological in nature.

In lieu of the prevalent descriptive conceptions of critical thinking, I adopt a more adequately normative approach. As recommended by Bailin and colleagues (1999a), a normative account focuses on the standards that distinguish genuine critical thinking from alleged thinking skills, processes, and procedures that do not assure the attainment of critical thinking standards. Moreover, I propose a specifically epistemological approach to link the disposition for critical thinking to our often-tacit assumptions about knowledge and its justification, which, depending on the level of epistemic development, may facilitate or inhibit critical thinking in a given domain (Kuhn, 1999; Moshman, 2015).

An empirical study conducted to diagnose our teachers' epistemic development reveals a pervasiveness—especially among religious educators—of an epistemic level in the domain of religious beliefs that impedes critical thinking. The findings support the hypothesis that the problem of Catholic religious critical thinking may be epistemological and raise questions about the prevailing

religious epistemology among religious educators in our network of Catholic schools.

TOWARDS A NORMATIVE ACCOUNT OF CRITICAL THINKING

If the primary goal of education is, as John Dewey (1986, p. 181) suggests, the fostering of 'attitudes of alert, cautious, and thorough inquiry', then given its numerous laudatory definitions in the literature, there ought to be no doubt about the fundamental place of critical thinking in the heart of education (Scheffler, 1973). However, the worth and feasibility of critical thinking as an educational goal suffers from its contested and confusing conceptualizations.

The two-components conception of critical thinking

Critical thinking has been defined as simply as the correct assessment of statements and reasons (Ennis, 1962) or as 'reasonable reflective thinking that is focused on deciding what to believe or do'—i.e., whether beliefs, actions, and their underlying assumptions warrant justification and acceptance (Ennis, 1993, p. 180; Paul, 1990). Critical thinking has also been defined in terms of a commitment to rationality that serves as the basis for independent thought, reasoned judgement, and responsible action (Siegel, 1988).

One way of extending these definitions is through the generally accepted conception of critical thinking as having the two components of competence and disposition. Critical thinking requires the ability to evaluate reasons and to justify claims and actions, employing such skills as questioning, clarification, citation of sources and evidences, as well as proficiency in such types of reasoning as induction and deduction (Bailin et al., 1999b).

However, competence at critical thinking, albeit necessary, requires the disposition to put it into habitual practice. Critical thinking also demands what

Siegel (1988) calls the ‘critical spirit’: a premium on rationality that leads to a basic commitment to evaluate reasons and to base one’s decisions and actions on them (Bailin & Siegel, 2007; Passmore, 1967). This disposition for critical thinking includes attitudes, habits of mind, dispositions, and character traits—e.g., desire for truth, respect for reason, appreciation of high-quality products and performance, an inquiring attitude, open-mindedness, independent-mindedness, respect for others and especially for legitimate intellectual authority (Bailin et al., 1999b; Bailin & Siegel, 2007; Hare, 1979, 1985). Ennis’ (1985) list goes beyond dispositions to include the discipline related to orderliness, precision, and sensitivity to the feelings and knowledge of others.

Just as essential, therefore, as the ‘how’ of critical thinking (the abilities component), is its ‘why’ (the disposition component). This conventional two-components conception of critical thinking, however, tends to remain merely descriptive and neglects the essentially normative character of critical thinking. What defines critical thinking, after all, is its actual attainment of the standards of rationality.

Two misconceptions about critical thinking

Two misconceptions about critical thinking have resulted from its merely descriptive accounts: (a) a rigid dichotomy between critical thinking and creative thinking; and (b) the ambiguous operationalization of critical thinking as a set of generic thinking skills or discrete mental operations and procedures.

Critical thinking as dichotomous from creative thinking

A common stereotype of critical thinking sets it in sharp contrast to creative thinking, overemphasizing their difference as different forms of thinking

that are at best complementary (Glaser, 1984) or worse, opposed to each other (de Bono, 1976). According to this stereotype, critical thinking is a highly disciplined, rule-bound, and almost algorithmic reasoning process reserved exclusively for the tasks of analysis and evaluation. Creative thinking, on the other hand, refers to a more intuitive, imaginative, or even irrational process used for 'an unconstrained generation of ideas' (Bailin & Siegel, 2007, p. 186).

The distinction between critical thinking and creative thinking is further exaggerated by their identification with separate hemispheres of the brain: Critical thinking has been labeled 'left-brain thinking' and creative thinking 'right-brain'. Such a dichotomy results in the reduction of critical thinking into purely linear and deductive thought stripped of the inductive, analogical, and abductive processes more conventionally associated with creative thinking (Bailin, 1995).

Table 3: Critical thinking and creative thinking

Critical Thinking	Creative Thinking
left-brain rational, deductive, linear, analytic thinking	right-brain intuitive thinking
thinking	emotion
aggressiveness and confrontation	collegiality and collaboration
personal autonomy and individualism	community and relationship
abstraction	concrete lived experience
objectivity	context

Based on Bailin, 1995

This reductionist conception, which depicts critical thinking and creative thinking as mutually exclusive, is far from accurate. Creativity and imagination are valuable in critical thinking just as logical and analytic assessment is useful in creative thinking. The 'left-brain thinking' used for analysis, argument, and problem-solving also involves creativity; critical thinking needs to anticipate consequences, imagine innovative solutions, explore creative alternatives, and even frame a problem in the first place. Likewise, creative thinking requires the logic and evaluation more typically identified with critical thinking, particularly in

terms of generating ideas that are valuable and feasible (Bailin, 1987; Bailin et al., 1999b; Bailin & Siegel, 2007).

While critical thinking and creative thinking are distinct, this binary opposition leads to a parallel dichotomy in education: Critical thinking is taught exclusively for the tasks of analysis, argument, and problem solving without providing opportunities to nurture the creativity that is also required by such tasks. Creative thinking, on the other hand, is reduced to mere intuition, neglecting the essential skills and knowledge that are also valuable in creativity. The result is an impoverishment of the conception of knowledge as merely a disciplined and critical process when it is, in fact, also a dynamic and creative one (Bailin, 1987). A reductionist notion of rationality is likewise unwittingly generated when it is pigeonholed to the type of rationality used in analysis and argument.¹²

Critical thinking as generalizable thinking skills

A second misconception about critical thinking exaggerates its generalizability across contexts and domains. This misapprehension, which is understandably appealing because of its implied cross-disciplinary transferability of critical thinking, can be classified into three groups: (a) the 'generic skills' concept, (b) the 'process' concept, and (c) the 'procedures' concept (Bailin, et al. 1999a).

Generic skills

Critical thinking is defined as a set of identifiable domain-independent thinking skills such as analysis, prediction, and interpretation. In the traditional division of learning goals into knowledge, skills, and attitudes, critical thinking

¹² The critical realist account of critical thinking that I will propose later will precisely prevent such a reductionist notion of rationality.

would be classified as skills that are distinct from knowledge and attitudes, and can be learned and applied across any knowledge domain (Bailin, et al. 1999a).

The problem with this conception is that these thinking skills are separated from the knowledge and attitude necessary for their successful practice. Critical thinking is inherently context-bound, requiring the background content knowledge and understanding pertinent to a discipline. 'What is clear, what is contradictory, what is logical, and so forth depends upon the particular context' (Barrow, 1991, p.12). Such allegedly generic thinking skills as analysis, interpretation, and prediction, therefore, cannot be performed correctly without the domain-specific knowledge and conventions they require. (Facione, 1990).

This 'generic skills' conceptualization of critical thinking fails to account not only for its reliance on domain-specific knowledge, but also for the equally essential motivating disposition for critical thinking in the first place (Bailin et al., 1999a).

Discrete processes or procedures

Critical thinking has also been misconstrued either as mental processes or a set of procedures required for the practice of critical thinking. Critical thinking has been inadequately defined as proficiency at a repertoire of discrete mental operations that includes observation, inference, evaluation, synthesis, and hypothesis. This 'process' conception of critical thinking is misleading because processes refer not so much to actual mental operations, but merely to tasks from which these so-called thinking processes have been gratuitously inferred. Performing these mental processes does not guarantee that the thinking they lead to qualifies as critical (Bailin et al., 1999a).

Critical thinking has also been miscast as a general procedure consisting of concrete steps prescribed for critical thinking. Various sets of procedures have been proposed, from a set of three steps (inquiry, problem solving, and decision making) (Wright, 1993) to as many as eight (concept formation, principle formation, comprehension, problem solving, decision making, research, composition, and oral discourse). Most advocates of this 'procedures' concept like Marzano and colleagues (1988, p. 34) prefer the less stringent heuristic interpretation to the strict algorithmic step-by-step interpretation: The procedures are to be taught as 'arrays of alternatives' to be used flexibly by teachers and students. Nevertheless, whether the focus is on general procedures and heuristics or rules for reasoning and problem solving, this conception also loses sight of the contextual factors that shape critical thinking and the standards of good thinking that define it (Bailin et al., 1999a; Glaser, 1984).

Furthermore, the effectiveness of such generic procedures is bound to be limited: The more general the procedures are claimed to be, the more vague they tend to be, and the more specific they are, the less useful they become. What is essential to learning critical thinking is not proficiency at pre-programmed thinking procedures with at best questionable applicability, but the mastery of the standards that will guide the solution of a given problem (Bailin et al., 1999a).

Descriptive approaches to critical thinking typically neglect both the contextual and normative quality of critical thinking. First of all, these alleged discipline-independent critical thinking skills, processes, and procedures are, contrary to their labels, not generalizable because of the far-ranging problems and contexts that both determine the standards of critical thinking and define its practice. Secondly, these skills, processes, and procedures fail to consider what

is actually required to fulfill the criteria that distinguish thinking as critical—so their employment does not necessarily lead to critical thinking.

The contextual nature of critical thinking

An important feature of critical thinking that emerges from the literature is its inherently contextual character. There are two opposing views: (a) the generalist view, which considers critical thinking abilities as applicable across contexts; and (b) the specificist view, which insists on the domain-dependence of critical thinking (Bailin & Siegel, 2007).

According to the generalist view, abilities such as detecting a fallacy, basing a generalization on a sample, or appealing to a legitimate authority are equally applicable and useful in different disciplines (Paul, 1990). The specificist school of thought, on the other hand, rejects the use of 'minimal, arbitrary, and even meaningless content' in learning research because it recognizes the intrinsic role played by discipline-specific content knowledge in critical thinking (McPeck, 1981, p. 3; Perkins & Salomon, 1989; Kuhn, 1999).

Critical thinking is always contextual, but it is neither unconditionally generalizable nor completely discipline-specific. While critical thinking necessarily entails discipline-specific content knowledge, some general thinking skills or abilities are also, to some extent, applicable to a range of domains (Bailin & Siegel, 2007). The intellectual resources identified by Bailin and colleagues (1999b) as essential for the aspiring critical thinker range from the domain-specific to the partially and completely generalizable: (a) domain-specific background content knowledge, (b) knowledge of relevant domain-specific strategies and heuristics, (c) partially generalizable operational knowledge of the principles and standards of argumentation and inquiry, (d) knowledge of general

key critical concepts (e.g., literal vs. metaphorical language, necessary and sufficient conditions, etc.), and (e) generalizable dispositions and habits of mind.

Hence, background content knowledge and certain criteria for reason-assessment are also peculiar to a domain, while others remain generalizable (e.g., what constitutes a valid or fallacious form of reasoning). On the other hand, some epistemological assumptions underlying critical thinking are fully generalizable—e.g., the distinction between truth and rational justification and the recognition that rational justification is a fallible indicator of truth. The disposition component of critical thinking—i.e., the habits of mind that underlie a commitment to critical thinking—is also fully generalizable (Bailin & Siegel, 2007).

The normative nature of critical thinking

Aside from due consideration of its contextuality, a proper conception of critical thinking ought to focus on its normative nature, shifting the talk from ‘critical thinking skills’ to ‘skilled thinking’. Proposed in place of the prevailing misleading conceptions of critical thinking is a stronger normative account with an emphasis on the standards of good thinking as demanded in a given context (Bailin et al., 1999b). As Bailin and colleagues (1999a) write: ‘[The] educational goal must be to teach [students] to do such tasks well by increasing their capacity and inclination to make judgements by reference to criteria and standards that distinguish thoughtful evaluations from sloppy ones, fruitful classification schemes from trivial ones, and so on’ (p. 279).

Critical thinking is primarily a normative enterprise, defined by both general and context-specific criteria and standards that qualify it precisely as critical. This normative conception of critical thinking is more useful in understanding and teaching critical thinking than the more problematic accounts of it as a set of

psychological skills, processes, or procedures. These alleged critical thinking skills and prescribed mental operations or procedures do not necessarily enable one to meet the standards that define critical thinking (Bailin et al., 1999b; Bailin & Siegel, 2007). Critical thinking should instead serve as an umbrella normative term that refers to a variety of kinds of thinking that involve judgement and fulfills particular standards of rationality.

AN EPISTEMOLOGICAL APPROACH TO CRITICAL THINKING

The normative character of critical thinking is foregrounded by an epistemological approach. According to this approach, it is our underlying assumptions about knowledge and its justification that facilitate or impede the exercise of critical thinking.

In her study, Bailin (1999) diagnosed the problem of critical thinking most common among students as not so much a question of competence, but as one of disposition. The observed lack of a critical spirit, however, is due neither to self-interest nor prejudice, but to the students' failure to grasp the critical role of reason in the enterprise of knowledge. Critical thinking presupposes a sufficient understanding of such interrelated concepts as reason, evidence, opinion, and argument. Without an appreciation of the 'evolution and evaluation of knowledge', critical thinking will not be valued, much less put into practice (Bailin, 1999, p. 167).

This access to the 'larger epistemological picture'—so crucial in the exercise of critical thinking—is a matter of an individual's level of epistemic cognition (King & Kitchener, 2002; Kuhn, 2000). Epistemic cognition refers to our

beliefs about the nature of knowledge, especially the justification and truth of beliefs, and provides the basis for critical thinking (Moshman, 2015).

Epistemic cognition

A helpful way of clarifying the normative conception of critical thinking is by distinguishing three levels of cognitive activities: inferences, thinking, and reasoning, where reasoning corresponds to critical thinking (Moshman, 2015). 'Inferences' is the most generic of the three terms, referring to all cognitive processes such as perception, interpretation, explanation, including thinking and reasoning. To qualify as thinking, however, inferences must be applied and coordinated in order to achieve a purpose—e.g., problem solving, decision making, planning. However, for thinking to qualify as critical thinking—i.e., reasoning—it requires epistemological self-regulation so that it is aimed at true or justifiable reason (Moshman, 1995). In other words, while thinking is defined by its purpose, reasoning—or critical thinking—is distinguished by the success with which it meets the standards of rationality.

Inferences, thinking, and reasoning correspond to the levels of cognition, metacognition, and epistemic cognition, respectively, first proposed in a model by Kitchener¹³ (1983). Cognition refers to activities such as perceiving, computing, and memorizing. Once we consciously monitor our progress while engaged in such cognitive tasks, we reach the metacognitive level, 'thinking about our thinking'. When we begin to consider our underlying assumptions about knowing (its limits, certainty, and criteria), we have attained the level of epistemic cognition

¹³ Kuhn (2000) has a similar tripartite model of cognitive processing—later synthesized by Hofer (2001, 364) with Kitchener's—which identifies what she calls 'epistemic meta-knowing' as providing the rationale for the practice and valuing of critical thinking. She also distinguishes two types of metacognition: (a) metacognitive knowing (pertaining to declarative knowing), which refers to the executive management of one's base of declarative knowledge (one's ability to monitor what one knows and how one knows it), (b) metastrategic knowing (pertaining to procedural knowing), which refers to one's management of available strategies applied in knowing (Kuhn, 1999).

(Kitchener, 1983, p. 222). It is epistemic cognition, therefore, that serves as the basis for reasoning; it is what transforms thinking into critical thinking.¹⁴ It is not simply ‘thinking about thinking’ (metacognition). Rather, epistemic cognition is knowledge about the normative nature of knowledge, particularly, issues of justification and truth (Moshman, 2015).

A similar epistemological approach to critical thinking has been adopted by Kuhn (1999), who defines the dispositional component of critical thinking not in its conventional sense of habits of mind, but in the more fundamental sense of epistemological assumptions and intellectual values. Our ‘epistemological understanding’—i.e., our beliefs about knowledge and knowing, and the possibility or necessity of justification—provides the reason for valuing intellectual endeavors. Our intellectual values, in turn, predispose us whether or not to exert the required effort to engage in the intellectual enterprise. Hence, Kuhn (2001) traces a ‘path from epistemological conceptions to intellectual values to disposition’: It is our epistemological understanding that nurtures our intellectual values that serve to motivate us to practice critical thinking.

Hence, epistemic cognition, regardless of label,¹⁵ plays a pivotal role in critical thinking. The only way to understand epistemic cognition, however, is developmentally (Moshman, 2015).

¹⁴ King and Kitchener (2002) identified epistemic cognition as the foundation of critical thinking although the term in their research is restricted to refer to the self-monitoring process involved in the solution of ill-structured problems (‘problems that reasonable people can reasonably disagree about’).

¹⁵ Other terms used for epistemic cognition are: epistemic understanding (Kuhn et. al., 2000), epistemic reflection (Baxter Magolda, 2004), epistemic postures (Chandler, Boyes, & Ball, 1990), epistemological worldviews (Schraw & Olafson, 2002), epistemological positions (Mansfield & Clinchy, 2002), and epistemic orientations (Gottlieb, 2007). I have selected ‘epistemic cognition’ because the label clarifies that epistemic cognition is a subset of metacognition.

Epistemic development

The development of critical thinking is tied to the development of one's epistemic cognition, on which there has been a wealth of research. In his review of the literature, Moshman (2015) identifies five major studies and research programmes devoted to epistemic development, starting with the pioneering and seminal work of Perry and his colleagues (1968) on volunteer U.S. Harvard undergraduate students.

Models of epistemic development

Perry and his colleagues (1968) are credited with the earliest efforts of assessing epistemologies and developing a typology of their development although he called his subject matter 'intellectual and ethical development'. The research consisted of two longitudinal studies that used a combination of the Checklist of Educational Views (CLEV), an instrument he designed, and follow-up interviews, whose transcripts were submitted for rating by a panel of six judges. The analysis of the data yielded a scheme of intellectual development of one's beliefs about the nature of knowledge. This schema of so-called 'epistemological positions'—where the initial number of nine was trimmed down to four sequential categories— theorizes how one moves from one position to the next: (a) Dualism (positions 1 to 2): an absolutist 'right or wrong' view of knowledge characterized by a heavy reliance on authority, (b) Multiplicity (positions 3 to 4): a breakdown of the previous dualist view and a recognition of multiple perspectives possibly of more or less equal validity, (c) Relativism (positions 5 to 6): initial realizations about one's role as active meaning-maker, and (d) Commitment within relativism (positions 7 to 9): the acceptance of one's responsibility to make, given one's best lights, a firm, albeit tentative, commitment to one particular view among many.

Succeeding research on epistemic development extended beyond Perry's (1968) initial sample of American male college students to include exclusively female students (Belenky, et. al., 1986), students at different educational levels (Baxter Magolda, 1987, 2004; King, 1992; King & Kitchener, 1994; Kuhn, 1991; Ryan, 1984), as well as teachers (Schraw & Olafson, 2002; White, 2000). These studies employed a variety of methodologies from scales similar to Perry's (1968) CLEV, Ryan's (1984) dualist scale, and Baxter Magolda's (1987) Measure of Epistemological Reflection (MER) to a combination of qualitative and structured interviews (Belenky, et al., 1986; King & Kitchener, 1994; Kuhn, 1991).

These diverse investigations proposed different, but related models of epistemic development, with various refinements and revisions on Perry's (1968) initial framework (Hofer & Pintrich, 2002; King & Kitchener, 2004). There is a general consensus that beliefs of adults about the certainty of knowledge and the process of knowing lie on a continuum: On one end is the view that knowledge is certain and comes primarily, if not exclusively, from authority. On the opposite extreme is the view that knowledge is uncertain and is formed based on the knower's evaluation of available evidence. Between these two extremes is the belief that knowledge is uncertain, but relative to the knower (White, 2000; Perry et. al., 1968; King & Kitchener, 2004). Table 4 shows a comparative summary of the different models highlighting these approximate points of agreement.

While some researchers are averse to the deterministic connotations of 'stages', preferring labels like 'positions', 'levels', and 'perspectives', there remains a general agreement that a hierarchy exists among the epistemic levels with some levels considered more mature than others. Epistemic development, therefore, occurs as one moves from what is considered a more naïve level of epistemic cognition to more sophisticated ones although caution has been raised

against uncritically accepting such a hierarchy without consideration to cultural differences (Gottlieb, 2006). Moreover, regardless of one's preferred model, researchers agree that epistemic development generally consists of three levels that occur in two shifts (Chai, 2006; Hofer & Pintrich, 1997; Moshman, 2015).

Three levels of epistemic development

In his comprehensive study on epistemic cognition, Moshman (2015) notes the substantial consensus in the literature about the basic course of epistemic development and the process it entails. Epistemic development—which is, to some extent, related to age and education level, though by no means occurring in a linear fashion—involves two major shifts that lead to three distinct levels, resulting from an increasingly active process of reflection and coordination by the individual.

Absolutist epistemology

The first epistemological level—labeled here as 'absolutist' (also, 'objectivist', 'realist', and 'dualist')—is characterized by a heavy reliance on authority and the view that every question has a single correct answer. On this level, assertions are regarded not simply as mental copies of reality, but as beliefs generated by the human activity of knowing.¹⁶ One no longer simply 'knows' that something is true, accepting assertions at face value; one needs to evaluate whether or not a belief is true either directly or vicariously—i.e., through direct observation or more likely, the judgements of those who are considered experts (Kuhn, 1999).

¹⁶ Kuhn (1999) adds a pre-epistemological level labeled 'realist' found among children below the age of 4, for whom assertions are considered mere representations of realities, neither generated by human activity nor requiring evaluation. Only beginning with the absolutist level is there an insight into the interpretive role of knowers in the creation of assertions and consequently, the nature of assertion as beliefs (be they facts, opinion, or judgements).

The development of critical thinking ends up significantly constrained if one remains restricted by this absolutist epistemology. Assertions are primarily treated as facts that simply need to be verified as true or false. Truth consists in a correspondence with an external reality, which dictates the criterion for truth or falsehood. The nature of knowledge is believed to be certain and simple, leading to the simplistic conclusion that disagreements are all ultimately resolvable given that there is only one possible correct answer to every question. This often breeds an uncritical reliance on authority. The role of the knower, which is confined to seeking the necessary information, is far from pivotal. Critical thinking, which consists primarily of a search for this information and occasionally the assessment of the reliability of authority, consequently ends up stunted (Kuhn, 1999; Kuhn & Weinstock, 2002).

Multiplist epistemology

The transition to the second level, called 'multiplist' (or 'subjectivist' or 'relativist') is prompted by a perspectivist shift, which involves a revision in one's notion of the nature of knowledge—from knowledge as certain and simple to knowledge as tentative and complex. This shift constitutes the first prerequisite to epistemic development: a recognition of the possibility and legitimacy of diverse knowledge claims and even opposing viewpoints, and the relocation of the source of knowledge from the external object to the knower.

The catalyst for this shift is usually a disillusionment from one's inability to resolve conflicting assertions through either observation or appeal to authority, especially given numerous and significant disagreements among experts. Often accompanied by a rebellion against authority, especially among adolescents, this

Table 4: Models of epistemic development^a

	Level 1		Level 2		Level 3
Intellectual and ethical development (Perry 1970)	Dualism (Positions 1-2)		Multiplicity (Positions 3-4)	Relativism (Positions 5-6)	Commitment within Relativism (Positions 7-9)
Women's ways of knowing (Belenky et al., 1986)	Silence	Received Knowledge	Subjective Knowledge	Procedural Knowledge	Constructed Knowledge
Epistemological Reflection (Baxter Magolda, 1987)	Absolute Knowing		Transitional Knowing	Independent Knowing	Contextual Knowing
Epistemic Postures (Chandler, Boyes, & Ball, 1990)	Absolutism	Defended Realism	Skepticism	Dogmatism	Postskeptical Rationalism
Reflective Judgement (King & Kitchener, 1994)	Pre-Reflective (Stages 1-3)		Quasi-Reflective (Stages 4 – 6)		Reflective (Stages 7 – 8)
Argumentative Reasoning (Kuhn, 1991; 2002)	Realist	Absolutist Simple Dual	Multiplist		Evaluativist Objective Conceptual
Epistemological Worldviews (Schraw & Olafson, 2002)	Realist		Relativist		Contextualist
Epistemological Positions (Mansfield & Clinchy, 2002)	Objective		Subjective		Integrated
Epistemic Cognition (Moshman, 2007)	Objectivist		Subjectivist		Rationalist
Epistemic Orientations (Gottlieb, 2007)	Realist		Perspectivist		

Adapted and expanded from Hofer & Pintrich, 1997

^a While some researchers identify more than three categories, they nevertheless generally conform to the three main categories.

shift can lead one down the 'slippery slope of multiplism' producing an epistemic skepticism that abandons not only the absolutist idea of certainty, but also the

responsibility towards any evaluative task—i.e., any form of critical thinking. If disputes cannot readily be resolved, then assertions are but a matter of opinion or individual preferences, all of which are to be equally accepted as valid. Compared to an absolutist, who at least subscribes to a criterion of truth, albeit simplistic and inadequate, a multiplist has minimal, if any reason at all, to engage in critical thinking (Kuhn & Weinstock, 2002).

Evaluativist epistemology

A second—but seldom attained—shift is required to achieve the highest level of epistemic cognition: an ‘evaluativist’ epistemology (also, ‘rationalist’ or ‘contextualist’), which accepts the complex and uncertain nature of knowledge, but does not abandon the evaluative task, but on the contrary, embraces the responsibility to assess different assertions based on both evidence and other people’s judgements, especially experts (Gottlieb, 2007; Hofer & Pintrich, 1997; Kuhn et al., 2000). The knower does not reserve an unconditional infallibility for authority, but neither does one skeptically reject whatever authority claims. While authority is given due respect, its expert opinions are subjected to rational scrutiny, so that all available evidence is examined before one makes a choice from among the multiple assertions available (Baxter Magolda, 2004; King & Kitchener, 2004; Gottlieb, 2007).

Only on this level of epistemic cognition is knowing grasped as a process that entails judgement. While people’s views ought to be respected, not all opinions are considered equal. Assertions are neither fact nor opinion, but judgements that require rational assessment. Compared to a multiplist, an evaluativist believes that there exist legitimate criteria for making these judgements. In contrast to an absolutist epistemology, these criteria need to be sought and are not always readily available (Kuhn, 1999).

Table 5: Levels and shifts of epistemic cognition

	Perspectivist shift	Evaluativist shift
Absolutist epistemology	No	No
Multiplist epistemology	Yes	No
Evaluativist epistemology	Yes	Yes

The second evaluativist shift can occur only if one moves away from an uncritical stance towards authority as a source of knowledge to a critical one, where the self takes on a more active role in the justification of knowledge vis-à-vis the external sources of knowledge (Chai, 2006). Justification of knowledge ranges from the purely external to the internal, from passive and uncritical reliance on authority in the absolutist level to a more independent use of one's own judgement, whether this judgement is based merely on one's opinion (multiplist) or on a careful consideration of evidence and argument (evaluativist). As one grows epistemically, the self becomes a progressively more active and independent knower.

Substantial epistemological differences remain even among adults, with relatively few attaining the most sophisticated evaluativist level. While maturity and educational experiences are most likely contributors to epistemic growth, comparative studies between undergraduates and mature adult groups show negligible progression to the evaluativist level despite the increase in age and experience (Kuhn et al., 2000; Kuhn 2001).¹⁷ Most adults encounter difficulty in clambering out of the 'multiplist poisoned well of doubt' (Chandler et al., 2003) and end up remaining multiplist for life (Kuhn, 1999).

¹⁷ Kuhn and Weinstock (2002) cite how the values of social tolerance and acceptance ('Live and let live', 'To each his own') prevalent in contemporary society eclipse the value of reasoned argument and informed understanding and are detrimental to full epistemic development. With the identification of pluralism with relativism, social tolerance and reasoned argument are considered mutually exclusive.

Hence, an evaluativist epistemology succeeds in acknowledging uncertainty—which the absolutist epistemology fails to do—and at the same time refuses to forsake evaluation—of which a multiplist epistemology is culpable (Hofer & Pintrich, 1997; Kuhn, 1999).

The coordination of the subjective and objective poles of knowing

Epistemic growth is driven by the progressive coordination and balancing of the subjective and objective components of knowing. As one transitions from one level of epistemic cognition to another, the objective and subjective dimensions of knowing grow increasingly integrated (Mansfield & Clinchy, 2002; Kuhn et al., 2000).

In the absolutist level, where one views knowledge as facts and relies heavily on external sources of knowledge, the objective dimension dominates over the subjective. Knowledge is located in the external world and can be known with certainty. The next multiplist level, with its recognition of the complexity and uncertainty of knowledge, goes to the opposite extreme, where the subjective dimension prevails at the cost of the objective, resulting in the obliteration of any objective standard for evaluating competing truth claims and eventually, the absence of discriminability among them. It is only in the evaluativist stage, as one begins to move out of the intellectually undemanding multiplist level to a level where one undertakes the task of assessing uncertain and complex knowledge that an integration between the subjective and objective dimensions begins to be achieved¹⁸ (Kuhn & Park, 2005; Mansfield and Clinchy, 2002; Moshman, 2015).

¹⁸ Based on findings from a traditional extended interview, this three-level scheme can be expanded to include a pre-absolutist ('Realist') level, as well as two sub-levels each for absolutist and evaluativist epistemologies: (a) Dual absolutist is distinguished from simple absolutist in the former's acknowledgement of subjective bias and interpretation—and not mere incompleteness as in the latter—as a source of discrepancy from reality; (b) Conceptual evaluativist, in contrast to objective evaluativist, attributes discrepancies between claims to the knowers' frames of

The full development of epistemic cognition is characterized by the balanced coordination between the subjective and objective dimensions of knowing, requiring first of all the integration of the subjective component in a multiplist epistemology through the acknowledgement of the plurality of possibly correct and even conflicting views about reality, followed by the reintegration of the objective dimension, resulting in an epistemic cognition that is characterized by a commitment to the rational assessment of these views.

In summary, there are two contrary beliefs about knowledge that are incompatible with critical thinking, each one represented by a rudimentary level of epistemic cognition. Critical thinking is devalued if knowledge is believed to be entirely objective and certain, and is simply accumulated primarily through authority, rather than constructed by the knower, which is the case in a non-perspectivist—i.e., absolutist—epistemology. At the other extreme, critical thinking becomes irrelevant when knowledge is regarded as entirely subjective and subject only to the knower's personal preferences as in a perspectivist but non-evaluativist—i.e., multiplist epistemology (Bailin, 1999; Kuhn, 2001).¹⁹

In contrast to them, the most advanced level of epistemic cognition, one that is both perspectivist and evaluativist, provides a sufficient rationale for the exercise of critical thinking. Only with such an evaluativist epistemology is argument—along with the critical thinking that it requires—considered valuable (Kuhn, 2000; 2001; Kuhn & Park, 2005). Along with the evaluativist epistemology comes a whole range of beliefs about knowledge and knowing that are compatible with critical thinking: a fundamental belief in reason and rationality, a

reference so that differences cannot be resolved by mere comparison and evaluation of consistencies (as held by the objective evaluativist) (Kuhn & Weinstock, 2002).

¹⁹ Bailin (1999) notes a variety that blends the two: For certain domains, knowledge is believed to be certain and authority its chief source, for others, claims are totally a matter of opinion. Kuhn (2000), on the other hand, acknowledges the domain specificities of epistemic cognitions.

belief in the possibility of justifying knowledge claims, a belief in the desirability of acting on the basis of rationally justified beliefs, and the recognition of one's own fallibility (Bailin, 1999).

Table 6 below provides a summary of the salient differences between the three levels of epistemic cognition.

Table 6: Epistemological beliefs and the three levels of epistemic cognition

Characteristics	Absolutist	Multiplist	Evaluativist
Perspectivist	No	Yes	Yes
Evaluativist	Limited	No	Yes
Nature of knowledge: 'Knowledge' as complex, uncertain, mutable	No	Yes	Yes
Assertions	Facts that are either correct or incorrect in their representation of reality	Opinions are freely chosen by—and accountable only to—their owners.	Judgements can be evaluated and compared according to criteria of argument and evidence.
Reliance on authority: Knowledge has an external source.	Yes	No	Yes
Agency of the knower: Knowledge is generated by the human mind.	Limited: Comes from an external source and is certain, but not directly accessible.	Yes: Generated by the human minds and, therefore, uncertain.	Yes: Generated by the human minds and is uncertain but susceptible to evaluation.
Decidability of assertions	Yes	No	Yes
Critical Thinking	Limited Critical thinking is limited to the purpose of comparing assertions to reality and determining their truth or falsehood.	No Critical thinking is neither necessary nor relevant.	Yes Critical thinking is an important means of promoting valid assertions and enhancing understanding.

Adapted from Kuhn & Park (2005); Gottlieb (2006)

The domain-specificity of epistemic development

A question pertaining to epistemic development is whether it occurs as a single evolution or as distinct processes in different domains (Hofer & Pintrich, 2002). While a number of studies have been devoted to discipline-specific epistemological beliefs, relatively scant interest has been paid to the domain-

dependence of epistemic cognition (Hofer & Pintrich, 1997; Schommer 1990; Hofer, 2001).

Several studies, however, support the hypothesis that epistemic development happens in a domain-dependent manner: The judgements we make in knowing vary across different domains. Every domain entails a different type of judgement (Kuhn & Weinstock, 2002). In their studies of epistemological understanding, Kuhn et al. (2000; 2005) confirmed that epistemic development varied across the five judgement domains investigated: personal tastes, aesthetic judgements, value judgements, truth judgements about the social world and about the physical world. Just as importantly, they hypothesized that epistemic development progressed in a systematic order: The perspectivist shift with its acknowledgement of the subjective dimension of knowing would occur earlier in the domains where subjectivity is more evident—namely, the domains of personal tastes, aesthetic judgements, and value judgements. The reverse order is true for the evaluativist shift if it is to happen at all: The reintegration of the objective aspect of knowing would first materialize in the domains where objectivity is more evident: in the domain of physical truth judgements first, followed by that of social truth judgements before the rest.

Every precaution ought to be taken to prevent an unnecessary proliferation of domains, especially given the increasing number—and increasing incoherence—of research on domain-specificity, not all of which employ epistemological terminology or are specifically focused on epistemic cognition. Distinctly epistemic domains need to be differentiated from what are merely cognitive domains. Cognitive domains refer to the multiplicity of fields and disciplines, which are demarcated by their content and subject matter. Epistemic domains, on the other hand, are defined on epistemological grounds, each with a

distinct conception of truth or justification and a corresponding model of reasoning specific to that domain (Moshman, 2014). In his analysis of different epistemic domains,²⁰ Moshman (2015) notes that development generally conforms to the three epistemic levels characterized by the same two shifts that culminate in the reintegration of the objective aspect in the most developed level of epistemic cognition.

I will now discuss the findings of an investigation of teachers' epistemic cognition in our Philippine network of schools.

EMPIRICAL INVESTIGATION OF TEACHER EPISTEMOLOGIES

A survey was conducted to investigate the epistemic cognition of 1,127 teachers in Philippine Catholic primary and secondary schools. Its aim was to identify the teachers' levels of epistemology in different domains, to determine differences—if any—across these domains, and to ascertain any possible impact that the discipline may have. Unlike other studies on teacher epistemologies, my research is focused on actual practitioners, and not on student teachers.

The survey instrument was adapted from a 15-item instrument designed by D. Kuhn and colleagues (2000) to identify the respondents' epistemologies across five domains: aesthetic judgements, value judgements, truth judgements about the physical world, truth judgements about the social world, and truth judgements about religious beliefs. The respondents' epistemologies in the different domains were classified as one of the following: (a) absolutist (only one possible correct answer); (b) multiplist (more than one possible correct answer, but equally valid); and (c) evaluativist (more than one possible correct answer,

²⁰ Moshman (2015) proposes at least five such epistemic domains: logic and math, the empirical sciences (natural and social), morality, social conventions, history, and identity.

but one is more correct than others).²¹ The study also aims to test whether or not an epistemology and its development are domain-dependent.

This instrument was selected because of its simplicity and theoretical clarity in assessing respondents' epistemologies across different domains. While it leaves out the nuances of epistemological issues, it is able to generate enough data for possible in-depth examination through follow-up interviews, if needed.

Research purpose and questions

The initial research questions are:

- (a) What is the epistemological profile of these practising teachers across the different judgement domains? Are there significant differences across the judgement domains, confirming the domain-dependency of epistemic cognitions?
- (b) How do teacher epistemologies in the domains of value judgements and especially religious beliefs (the two domains taught in Catholic religious education) compare with those in other domains?
- (c) How do religious and values education teachers differ, if at all, in their epistemologies in comparison to their colleagues in the other subjects—particularly in value judgements and religious beliefs?²²

The expected result is that teachers in Philippine Catholic schools, in general—and religious education teachers in particular—would tend to exhibit absolutist epistemologies in the domains of religious beliefs and value

²¹ As discussed in the previous section, a perspectivist and evaluativist ('evaluativist') epistemology is considered more advanced than a merely perspectivist one ('multiplist') or a non-perspectivist one ('absolutist') (Kuhn et al., 2000).

²² Two other questions that the data can answer but are beyond the scope of the present study are: (a) Do the variables age, gender, teaching experience, and grade level taught have any impact on teacher epistemologies? Is there a significant relationship between these variables and their epistemological understandings? (ii) Do the patterns of epistemological understanding support Kuhn et al.'s (2000) hypothesized and predicted pattern in terms of age?

judgements, which are the two domains relevant to Catholic religious education. This predicted preponderance of absolutist epistemology in these domains is based on the hypothesis that the dependence on authoritative teachings characteristic of confessional Catholic religious education may have the unintended consequence of impeding the epistemic development required for the practice of both religious and moral critical thinking.

Moreover, if religious educators manifest epistemologies that are less perspectivist and evaluativist than their colleagues—particularly in these two domains—then such a finding could help define the problem involved in the promotion and practice of critical thinking in Catholic religious education.

The value and impact of teacher epistemologies

A study of teacher epistemologies is important because they shape their students' epistemic development, which in turn are important determinants of their own learning and performance (Chan & Elliott, 2000; Kuhn et al. 2000; Ryan, 1984; Schommer, 1994). Teaching strategies have underlying epistemological assumptions that are unwittingly communicated to students. Investigating epistemological differences among students in different fields of study, Jehng et al. (1993) described epistemological development as a process of enculturation, where the surrounding culture in a particular discipline influences individual epistemological beliefs.

Investigating the impact of students' epistemological beliefs on their performance, Schommer (1990, 1993) conducted separate studies of college and secondary students and cited four ways in which personal epistemologies influence learning—specifically, in terms of students' engagement, persistence in difficult tasks, comprehension of academic texts, and manner of dealing with ill-structured questions (Schommer, 1994).

As mediators of this instructional environment, teachers send subtle epistemological messages to their students about what knowledge consists of and what procedures we ought to follow to obtain and assess knowledge (Schommer, 1994; Brownlee, 2004). While some teachers have been observed to make deliberate use of particular types of instruction and assessment to foster more sophisticated epistemological beliefs in their class, other teachers unconsciously promote more naïve epistemological beliefs that are not helpful and even detrimental to critical thinking and student learning (Schommer, 1998).

The home and especially formal education have both been identified as playing key roles in inculcating disabling epistemological beliefs—i.e., assumptions about knowledge that do not promote learning. Evidence has pointed to students' 'self-defeating' epistemological beliefs as one reason why students fail to integrate information and monitor their comprehension (Schommer 1990; 1994). Based on anecdotal evidence, many of these beliefs that hamper learning are obtained in high school (Schoenfeld, 1983).

An investigation into teacher epistemologies, therefore, is valuable because of their crucial impact on students' learning and epistemic development.

The research design

The section on research design has two parts: (a) a description of the research participants and the process of their recruitment, and (b) the generation of data.

Research participants

Teachers from seven primary schools and eight secondary religious schools in the Philippines were invited to participate in this project. The schools, which are located in different parts of the country, all belong to a network owned and managed by a Catholic religious congregation. They have been selected

because these are the schools that I collaborate with in my professional practice, and for whom the results of this study are primarily—but by no means exclusively—intended.

Two primary schools and two secondary schools are located in Metro Manila, the National Capital Region; one secondary school in Southern Luzon. Two primary schools and two secondary schools are in the Visayas, and three primary schools and three secondary schools are found in Mindanao (Table 7). While all schools are from the same religious congregation, the schools vary in terms of the size and demographic profile of the student population and the tuition fees that they charge.

Table 7: Location of participating schools

Regions	Primary schools	Secondary schools	TOTAL
Metro Manila (NCR)	2	2	4
South Luzon	0	1	1
Visayas	2	2	4
Mindanao	3	3	6
TOTAL	7	8	15

Recruitment of participants

A letter of request, which explained the goals and nature of the research, was sent to the school principals, along with an information sheet and an informed consent form to be signed on behalf of their organizations. The school leaders were duly informed of the rights and procedures that concerned them, the school, and the participating teachers. They were also invited to relay any question that they might have. If they agreed to the provisions in writing, they were asked to set the date of the administration of the survey.

The administrators of the participating schools were requested to invite their teachers to take part in the survey, and to assure them that participation would be strictly voluntary and would not be used for their performance evaluation. For the sake of true and informed consent, participation was strictly

voluntary, and the informants' responses were kept confidential and anonymous. The school leadership was not furnished the names of those who participated in the study.

Out of seven primary schools, six agreed to participate in the study, while all eight secondary schools accepted the invitation (Table 8). While the one primary school that did not participate in the survey (School 1A) due to scheduling difficulties has the largest teacher population (a total of 233 compared to 192 in the school with the second largest number of teachers), there is no reason to believe that their failure to participate has biased the results since School 1A is considered similar to School 1B in terms of urban location and annual fees.

Table 8: Selection table

School Code ¹	City Population	Student Population	Annual fees in PhP	Annual fees in GBP ²	Total participants	Total teachers	% of participants
1A ³	11.8M	4,199	75,346	1044.01	0	233	0%
1B	11.6M	2,982	73,390	1016.90	165	191	86%
1C	1.4M	3,583	28,364	393.02	132	192	69%
1D	0.87M	1,453	32,945	456.49	60	70	86%
1E	0.81M	1,592	21,876	303.12	61	66	92%
1F	0.60M	2,702	20,768	287.76	79	103	77%
1G	0.42M	506	29,549	409.44	29	30	97%
2A	11.8M	2,299	83,104	1150.50	113	141	80%
2B	11.8M	1,066	69,243	959.44	94	101	93%
2C	1.4M	2,030	36,727	508.90	120	134	90%
2D	0.87M	1,108	42,535	589.37	57	66	86%
2E	0.81M	1,087	26,538	367.72	52	56	93%
2F	0.60M	1,747	25,111	347.94	73	93	78%
2G	0.42M	676	29,549	409.44	28	29	97%
2H	0.17M	1,352	28,057	388.76	64	70	91%
		28,382			1,127	1,575	72%
Less					59 ⁴		
Total					1,068		68%

¹Schools were assigned codes based on city and student populations, and identified as primary (1) or secondary (2) schools.

²Foreign exchange rate: 1 GBP = 72.17 PhP

³This is the school that did not participate in the survey due to scheduling difficulty.

⁴This number pertains to the Mainland Chinese teachers who did accomplish the survey, but were excluded from the data analysis due to their limited English proficiency.

The survey was administered in separate sites on different dates designated by each school. The respondents were given a maximum of one hour to complete the survey. Those who completed the survey ahead of time were instructed to review their responses and to check if all items had been answered. The last item in the survey inquired whether or not the respondents would agree to take part in a follow-up interview, if deemed necessary. To signify their willingness, they were requested for their names and contact information. Of all respondents, 41% (or 444) agreed to the interview, while the remaining 58% (or 624) declined.

Demographic profile

Out of the 1,341 teachers in the participating schools, 1127—or 84%—participated in the survey. The 16% who did not participate were either absent for various reasons on the day of the administration, or had not volunteered to join the survey. Of those who participated, 59 were Chinese language teachers who had been recruited from Mainland China and possessed limited English language proficiency, so their responses were later excluded from the study. The remaining 1,068 (80%) constituted the final sample for the study.

In the survey, the respondents were requested to tick one of the following categories for their age: (a) 25 years old and below, (b) 26 to 30 years old, (c) 31 to 35 years old, (d) 35 to 40 years old, (e) 41 to 50 years old, (f) 51 to 55 years old, (g) 56 to 60 years old, and (h) Above 60 years old.²³ To classify the respondents according to professional experience, the following four categories were used: (a) novice teachers (three years of teaching and below), (b) junior

²³ The categories for age and teaching experience used to classify the respondents are based on the official classifications used in the schools.

teacher (four to ten years of teaching), (c) senior teachers (11 to 20 years), and (d) veteran teachers (more than 20 years of teaching experience)²⁴.

Table 9: Demographic profile of respondents

		Number	Percent
Age	25 years old and below	195	18%
	26 to 30 years old	304	29%
	31 to 35 years old	181	17%
	36 to 40 years old	139	13%
	41 to 45 years old	86	8%
	46 to 50 years old	59	6%
	51 to 55 years old	44	4%
	56 to 60 years old	46	4%
	Above 60 years old	10	1%
	No answer	4	.004%
	Total	1068	100%
Gender	Male	322	30%
	Female	736	69%
	No answer	10	1%
	Total	1068	100%
Educational level taught	Primary school	492	46%
	Secondary school	576	54%
	Total	1068	100%
Teaching experience	Novice (1 to 3 years)	196	18%
	Junior (4 to 10 years)	393	37%
	Senior (11 to 20 years)	279	26%
	Veteran (more than 20 years)	175	16%
	No answer	25	2%
	Total	1068	100%
Discipline taught ^a	Hard	330	31%
	Soft	516	48%
	Religious Values Education	104	10%
	Non-teaching	118	10%
	Total	1068	100%

^a *Hard disciplines include science, Math, and Computer Education, while the rest were considered soft, such as English, Filipino, Social Sciences, etc. Religious and Values Education was categorized separately.*

The ages of the 1,068 teacher respondents ranged from 19 to 68 years old. It is a relatively young workforce, with almost half of them below 30 years of age (47%), about a third between 31 to 40 years old (30%). Very few were in their 50s (8.4%) and 60's (0.9%) (Table 9). Such an age distribution was expected of the sample due to the observed increase in turnover among teachers in the

²⁴ A separate category was used for those with three years of experience and below because as per the schools' policy, these teachers were still considered under probation.

Philippines in general in the last two decades, source as supported by their profile in terms of teaching experience, where more than half of the respondents have taught for only ten years or less (18% novice teachers with only one to three years of experience; and 37% with four to ten years). About one-fourth have taught for 11 to 20 years (26%), but only 16% are considered veteran teachers with more than 20 years of teaching experience.

Of the total respondents, 46% (or 492) were primary school teachers, while 54% (or 576) taught in the secondary school. Among the respondents, 30% (or 322) were male teachers, while the majority (69% or 736) were female, a distribution that accurately represents the teaching profession in the Philippines, which is dominated by female teachers.

Special characteristics of the sample

As a result of the Philippine educational system, the respondents were bilingual in English and Filipino. Given the English proficiency requirement for employment in these schools (a requirement imposed on all except for the 59 Chinese language teachers hired from Mainland China), all the teachers were assumed to be adequately proficient in English. The questionnaires were administered in English and not translated into Filipino. Since Bernardo (2008) found in his study of epistemological beliefs of Filipino pre-service teachers that results did not differ whether the instrument was in English or Filipino, the present study has opted not to develop a Filipino version of the survey.

As a matter of policy in Catholic schools in the Philippines, students of all grade levels are required to take Catholic religious education classes and are, along with their teachers, expected to attend occasional Catholic religious services. In practice, the teachers undergo regular spiritual retreats and values formation seminars as part of their in-service training.

Data generation

The empirical study involved the administration of a survey questionnaire adapted from an instrument designed by Kuhn and colleagues (2000) to determine the epistemic level of development ('epistemological understanding') of respondents in five different judgement domains. The survey provided the respondents with 15 cases of two fictional characters disagreeing on issues from the fields of art, morality, social sciences, physical sciences, and religion.

Their responses were used to determine their epistemic cognition for the following five domains: (a) aesthetic judgements, (b) value judgements, and (c) truth judgements about the social world, (d) the physical world, and (e) religious beliefs (cf. Appendix for survey questionnaire).

The epistemologies per domain were classified as:

- (a) Absolutist (non-perspectivist): There is only one possibly correct view;
- (b) Multiplist (perspectivist, non-evaluativist): There are several *equally correct* views;
- (c) Evaluativist (perspectivist and evaluativist): There are several possibly correct views, but one view can be determined as more correct than the others.

For every item, the respondent was presented with a pair of contrasting claims attributed to two fictional characters, Juan and Pablo, and belonging to a specific judgement domain. Following each pair of statements were two questions. The first question was: 'Can only one of their views be right, or could both have some rightness?' The two possible response options were: (a) 'Only one of the views is right', or (b) 'Both views can be right to some degree'.

Selecting the first option was interpreted as indicating an absolutist level of epistemic cognition. If the second option was chosen, the respondent was further asked a second question: 'If your answer is (b): Can one view be better or more right than the other?' with two possible responses: (a) 'Yes, one view can be more right than the other', or (b) 'No, one view cannot be more right than the other'. The respondent's epistemic cognition was classified as evaluativist if the first option was picked and multiplist if the second option was selected.²⁵

Five judgement domains were included in this study: (a) aesthetic judgements (judgements about art); (b) value judgements (judgements about moral issues); (c) truth judgements about the social world; (d) truth judgements about the physical world; and (e) truth judgements about religious beliefs (Table 10).²⁶ For a given judgement domain, a participant was categorized as having an absolutist, multiplist, or evaluativist level of epistemic cognition if responses to two of the three items assessing that judgement domain conformed to the pattern characterizing that level. In cases where no pattern was discernible—e.g., when all three patterns appeared across the three items, the multiplist level was assigned, as per the practice of the instrument designers (Kuhn, et al., 2000).

Presentation and analysis of data

Two statistical analyses were conducted: (a) a test of proportion to determine any significant differences of epistemologies across judgement domains; and (b) a Chi-square test to identify the impact, if any, of the type of

²⁵ Note that what was solicited was not which specific view the respondents agree with, but their views on whether there was only one possibly correct view (absolutist), several equally correct views (multiplist), or one more correct than several possibly correct views (evaluativist).

²⁶ The original instrument included the judgement domain was 'personal taste', which Kuhn et al. (2000) did not analyze. Given the purpose of this study, it has been replaced here with 'religious beliefs'.

discipline taught by the teachers on their epistemologies in the different judgement domains, with a special focus on religious education teachers.

Teacher epistemologies per judgement domain

The findings revealed differences in the distribution of epistemologies in the five judgement domains, providing empirical support for the theorized domain-specificity of epistemic cognition. Since the teachers surveyed manifested different epistemologies across domains, beliefs about knowledge and knowing may vary from one judgement domain to another, and develop in a domain-specific manner.

Table 10: Assessment items by judgement domain

Item no.	Judgement domain
Aesthetic judgements	
3	Jose thinks that the first piece of music they listened to is better. Pablo thinks the second piece of music they listened to is better.
7	Jose thinks the first book they both read is better. Pablo thinks the second book they both read is better.
10	Jose thinks the first painting they looked at is beautiful. Pablo thinks the second painting they looked at is beautiful.
Value judgements	
6	Jose thinks lying is wrong. Pablo thinks lying is permissible in certain situations.
9	Jose thinks people should take responsibility for themselves. Pablo thinks people should work together to take care of each other.
11	Jose thinks the government should limit the number of children families are allowed to have to keep the population from getting too big. Pablo thinks families should have as many children as possible.
Truth judgements about the social world	
4	Jose has one view of why criminals keep going back to crime. Pablo has a different view of why criminals keep going back to crime.
8	Jose agrees with one book's explanation of how children learn language. Pablo agrees with another book's explanation of how children learn language.
12	Jose thinks one books' explanation of why World War II began is right. Pablo thinks another book's explanation of why World War II began is right.
Truth judgements about the physical world	
1	Jose believes that one mathematician's proof of the math formula is right. Pablo believes that another mathematician's proof of the math formula is right.
5	Jose accepts one book's explanation of how the brain works. Pablo believes another view of how the brain works.
14	Jose believes one book's explanation of what atoms are made up of. Pablo believes another book's explanation of what atoms are made up of.
Religious beliefs	
2	Jose believes that the universe was created by a Supernatural Being or Power. Pablo believes that the universe was created out of a purely natural process.
13	Jose believes in life after death. Pablo believes that everything ends in death.
15	Jose believes that God exists. Pablo doesn't believe that God exists.

Adapted from Kuhn et al. (2000)

To determine significant differences in the incidence of epistemologies across domains, testing of proportions (p-test) was conducted ($p < .05$). An analysis of the incidence of the different epistemic cognitions per judgement domain reveals some significant as well as unexpected patterns.

As shown in Table 11, these teachers exhibited a degree of epistemological sophistication in truth judgements about the social world and the physical world. In both domains, the incidences of teachers exhibiting an evaluativist epistemology are significantly higher than those with an absolutist or multiplist epistemology: 53% evaluativist for social world (vs. 7% absolutist and 40% multiplist) and 57% for physical world (vs. 15% absolutist and 28% multiplist).

Table 11: Epistemic cognition per judgement domain

	Absolutist	Multiplist	Evaluativist	TOTAL
	a	b	c	
Aesthetic judgements	31	625	405	1061
	3%	59%	38%	100%
	<b <c	>a >c	>a <b	
Value judgements	313	361	387	1061
	29%	34%	36%	100%
	<b <c	>a	>a	
Truth judgements about the social world	74	422	566	1062
	7%	40%	53%	100%
	<b <c	>a <c	>a >b	
Truth judgements about the physical world	158	299	603	1060
	15%	28%	57%	100%
	<b <c	>a <c	>a >b	
Religious beliefs	599	253	212	1064
	56%	24%	20%	100%
	>b >c	<a >c	<a Significantly higher proportion at 95% confidence level

< Significantly lower proportion at 95% confidence level

A significantly high percentage of respondents manifested a multiplist epistemology in aesthetic judgements: 59% in comparison to 38% evaluativist and 3% absolutist. This finding is understandable given the common, albeit contested notion that appraisals of beauty are not only largely subjective but are also all equally valid. While the incidence of evaluativists did not post the highest

in aesthetic epistemology, a multiplist epistemology already indicates a shift to a perspectival notion of knowledge.

Such is also the case in the domain of value judgements, where there is a statistically equal incidence of evaluativists (36%) and multiplists (34%). The relatively low percentage of moral absolutists (29%) is unexpected given the strong Catholic opposition to moral relativism. All the schools that participated in the survey are Catholic, and prioritize the hiring of staff that profess to be Catholic.

Though expected, the most revealing result is the incidence of absolutist epistemology in religious beliefs. While it consistently registered as lowest in all other domains, it was significantly high in religious beliefs: 56% compared to 24% multiplist and 20% evaluativist. Teachers in the participating schools tend to exhibit more sophisticated perspectivist epistemic cognitions in all domains *except* religious beliefs, raising questions about possible reasons for this difference in epistemic development.

Teacher epistemologies and discipline taught

The profile of epistemic cognition was analyzed according to academic discipline.²⁷ The subjects were classified into three categories:

- (a) Soft disciplines: English, Filipino, Chinese, Social Science;
- (b) Hard disciplines: Science, Math, and Computer Technology; and
- (c) Religious and values education.²⁸

Table 12 below shows the number and percentage of respondents under each category:

²⁷ The data were also analyzed in relation to (a) gender; (b) age, (c) teaching experience, (d) grade level taught, and (e) subject taught, but this analysis is not within the scope of the present study.

²⁸ Although strictly speaking, religious and values education is considered a soft discipline, given the specific interest of this study, a separate category was created.

Table 12: Number and percentage of respondents per type of discipline

	Number of respondents	Percentage of respondents
Soft discipline	516	48%
Hard discipline	330	31%
Religious and values education	104	10%
Others	118	11%
Total	1,068	100%

The Chi Square test for independence was conducted to find evidence of possible associations of teacher epistemologies with the type of discipline taught, with a post-hoc test the critical value at $p < .05$ to specify what may account for the difference.

Among the five judgement domains, only the domain of religious beliefs manifested evidence of an association between teacher epistemologies and the nature of the teachers' discipline—i.e., whether hard, soft, or specifically religious and values education (Table 13). In terms of the other judgement domains, therefore, epistemic cognition seems to be independent of the teachers' disciplines. The domain for religious beliefs, on the other hand, yielded significant results: $\chi^2 = 13.287$, $df = 4$, $p < .01$, suggesting a possible relationship between teacher epistemologies and the academic discipline.

Table 13: Summary of findings: Teacher epistemologies and type of discipline

Judgement domains	Result	Chi Square value
Truth judgements (Social world)	Not significant	
Truth judgements (Physical world)	Not significant	
Value judgements	Not significant	
Aesthetic judgement	Not significant	
Religious beliefs	Significant	$\chi^2 = 13.287$, $df = 4$ ($p < .01$)

Based on the z-test and computation of the standardized residual, there are significantly more religious absolutists among religious and values education teachers (72%) in comparison with teachers in the hard and soft disciplines (Table 14). The significant standardized residual of +2.1 indicates that absolutists are substantially over-represented among these teachers, confirming the initial hypothesis that in comparison to teachers of other disciplines, religious and

values educators tend to exhibit non-perspectivist as well as non-evaluativist epistemic cognitions in the domain of religious beliefs.

Although their standard residuals were not significant, there were also less multiplists (14%) among religious and values education teachers in the domain of religious beliefs relative to teachers of both hard and soft disciplines, and less evaluativists compared to teachers teaching the soft disciplines.

Table 14: Epistemic cognition per discipline taught

		SOFT	HARD	RVE	TOTAL
ABSOLUTIST	Count	276 _a	187 _a	75 _b	538
	%	53.5%	56.7%	72.1%	56.6%
	Std. Residual	-.9	.0	+2.1 ¹	
MULTIPLIST	Count	125 _a	82 _a	15 _b	222
	%	24.2%	24.8%	14.4%	23.4%
	Std. Residual	.4	.6	-1.9	
EVALUATIVIST	Count	115 _a	61 _{a, b}	14 _b	190
	%	22.3%	18.5%	13.5%	20.0%
	Std. Residual	1.2	-.6	-1.5	
TOTAL	Count	516	330	104	950
	%	100%	100%	100%	100%

¹ Significant standard residual vs. the critical value at $p < .05$

These test results show that among the teachers surveyed, there is a significantly higher percentage of religious and values education teachers who, in comparison with the teachers who taught in the other disciplines, exhibit an absolutist epistemology in the domain of religious beliefs.

Discussion of findings and implications

The main findings of this diagnostic survey are as follows:

- There are notable differences in teacher epistemologies across judgement domains, providing confirmation for the theory of the domain-dependence of epistemic development.
- There is a high incidence of perspectivist epistemologies (multiplist or evaluativist) among the teachers in all the judgement domains *with the sole exception of religious beliefs*, as hypothesized. The implication is that teacher

epistemologies tend to be more sophisticated in the other domains, including—contrary to the initial hypothesis—value judgements.

- There is a remarkably higher percentage of evaluativist epistemology in truth judgements about the physical world and the social world, indicating that most teachers have reached the most advanced level of epistemic development in natural and social sciences.
- Contrary to the initial hypothesis, there is a strikingly low percentage of moral absolutists in the domain of value judgements, with about the same incidence of evaluativists and multiplists. This unexpected finding implies a distinction between the domain of value judgements and that of religious beliefs even if they are both taught in Catholic religious education.
- There is a higher incidence of absolutist epistemology among the teachers in religious beliefs, which, in the hierarchy of epistemic cognitions, belongs to the most basic level. Despite more sophisticated teacher epistemologies prevailing in other domains—including value judgements, there remains a higher incidence of absolutist epistemology among the teachers in religious beliefs, exhibiting what is considered the least developed epistemology.
- A conspicuously higher percentage of religious and values education teachers remains absolutist in the domain of religious beliefs.²⁹ In confirming my hypothesis, this finding, along with the previous one, calls attention to possible causes for this relatively retarded development of religious epistemology among teachers, such as the focus on Church authority in Catholicism, or more specifically, Catholic religious education, as well as about its effect on students and the practice of critical thinking in the classroom.

²⁹ Significantly, the epistemic cognitions in other domains of these religious educators exhibit no difference from their colleagues, indicating that they are no less sophisticated in domains other than religious beliefs.

I will focus my discussion of the implications on the following: (a) the domain-dependence of epistemologies; (b) the distinction between the domains of value judgements and religious beliefs; and (c) the prevalence of an absolutist epistemic cognition in religious beliefs among religious and values education teachers.

Domain dependence of epistemic development

The different epistemic levels that teachers manifest across the five judgement domains confirm the view that epistemic development is domain-specific (Kuhn, 2000; 2005). They also imply that the five judgement domains investigated in the survey are distinct epistemic domains.

Worth noting in the profile of this specific sample of teachers is their relatively advanced epistemic cognition: in aesthetic judgements and value judgements, where a significant percentage are multiplist; and truth judgements about the physical world and the social world, where more than half have attained the evaluativist level of epistemic cognition.

For most of the respondents in the survey, the perspectivist shift has occurred in every domain except religious beliefs. A further evaluativist shift has occurred for most teachers in the domains of the social world and the physical world. This reassertion of the objective aspect of knowing in the sciences has not occurred in aesthetic judgements or value judgements.

The teachers' relative epistemic sophistication in these domains has implications on the practice and the teaching of critical thinking in the classroom. Given a predominantly evaluativist epistemology, critical thinking in the natural sciences and social sciences is most likely encouraged and valued. In contrast, in the domains where the multiplist epistemology prevails, namely, in aesthetic

judgements and—disturbingly—in value judgements, there would be no point to critical thinking.

Distinction between value judgement and religious beliefs

Of particular interest to this study is the distinction between the domains of value judgements and religious beliefs, both taught in Catholic religious education classes. The pre-study expectation was that as a function of the Catholic faith, teachers would exhibit the same absolutist level of epistemic cognition for these two domains. However, while as expected, absolutists among the teachers were the majority in religious beliefs, there were, contrary to expectations, less absolutists than both multiplists and evaluativists in value judgements. These findings imply that an epistemological distinction between value judgements and religious beliefs that impacts the practice of critical thinking in these domains. Judgements about religious beliefs seem to belong to an epistemic domain distinct from that of value judgements, a distinct religious epistemology with its own theory for the justification and truth of religious beliefs and the corresponding rationality of action based on religious beliefs.

The unexpected teacher epistemic profile in the domain of value judgements—a higher number of evaluativists and particularly multiplists than absolutists—raises interesting questions about teachers' moral epistemology because of the Catholic Church's condemnation of moral relativism.

Absolutist epistemology in religious beliefs

A little over half the teachers in Catholic schools—and more starkly, almost $\frac{3}{4}$ of religious and values education teachers—exhibit an absolutist level of epistemic cognition in religious beliefs, indicating that not even the first perspectivist shift has occurred in their epistemic development in this particular

domain. The predominantly absolutist religious epistemologies of teachers in general—and even more crucially, of religious and values education teachers in particular—provide an initial diagnosis of the problem of critical thinking in Catholic religious education. Could one of the factors impeding the practice and promotion of religious critical thinking be the fairly underdeveloped epistemic cognition of religious educators?

The results of this empirical study will be used as the springboard for a critical realist analysis of critical thinking. Drawing from critical realism in the next chapter, I will argue that critical thinking needs to be anchored in an explicit ontology and epistemology in order for both teachers and students to appreciate what makes it possible and valuable in the first place.

CHAPTER THREE:

A CRITICAL REALIST ANALYSIS OF CRITICAL THINKING

In the previous chapter, adopting a normative and epistemological account of critical thinking, I hypothesized that epistemic cognition is key to understanding the problem of Catholic religious critical thinking in our schools. An empirical investigation of teacher epistemologies revealed a significant prevalence of an epistemology in the domain of religious beliefs that is not compatible with critical thinking. In this chapter, I will draw from critical realism to further analyze these findings.

I will first summarize what I consider the foundational insights of critical realism and how they refute contemporary philosophies that could undermine Christian truth claims. By exposing the internal inconsistencies and contradictions of these counter-Christian philosophies, critical realism ‘clears the ground’ and serves as an appropriate under-labouring philosophy for Catholic Christianity.

A critical realist analysis of critical thinking will follow, using the triad of ontological realism, epistemic relativism, and judgemental rationality. I will propose a conception of critical thinking as the expression of one’s commitment to judgemental rationality—i.e., the belief in the possibility and necessity of rationally choosing from among competing claims despite the limits of our knowing. Such a conception enables us to analyze a given epistemology in terms

of two underlying principles: ontological realism (the belief that reality exists independently of our knowing), which makes judgemental rationality possible, and epistemic relativism (the recognition that knowing is finite and fallible, which renders judgemental rationality necessary. The three levels of epistemic cognition and their impact on critical thinking, introduced in the previous chapter, can be differentiated in terms of these critical realist concepts.

WHAT CRITICAL REALISM DOES AS UNDER-LABOURER

As an account of the sciences, critical realism focuses its task on analyzing the conditions for the possibility of scientific activities and identifying the features of the world that make science possible and intelligible. As under-labourer, it has appropriately left the specific definition of the structures of that world to substantive scientific investigation (RTS).³⁰

Likewise, to play its under-labouring role in the present study, critical realism will limit itself to the task of ‘removing the rubbish’ by refuting what may be considered contemporary counter-Christian philosophies. By no means does critical realism aspire to conduct substantive theological investigation. In the succeeding chapter, however, I will show how critical realism, while refraining from making such claims itself, can play the occasional midwife (RR, p. 182) by offering fresh perspectives—particularly, by interpreting the Catholic doctrine of revelation and demonstrating the philosophical plausibility of the religious epistemology emerging from it.³¹

THE FOUR CORE INSIGHTS OF CRITICAL REALISM

The four central tenets of critical realism are the following:

³⁰ See list of abbreviations for often-cited sources in critical realism.

³¹ Cf. Wilkinson’s (2013, 2015) work on Islamic critical realism.

- the anti-modernist/postmodernist assertion of intransitivity
- the anti-positivist notion of depth stratification
- the anti-determinist theory of open-system causality
- the anti-reductionist idea of ontological emergence

Each one identifies a distinct feature of reality and serves as the basis for a fifth insight: the anti-relativist commitment to judgemental rationality, which I will discuss in the following chapter for a critical realist analysis of critical thinking.

Insight 1: The anti-modernist/postmodernist assertion of existential intransitivity

A defining characteristic of critical realism is its non-negotiable insistence on the intransitivity of reality, where intransitivity means that reality exists independently of human knowing and agency. Intransitivity applies not only to the natural world, but also to the social world: Although by no means exhausted by it, social reality includes conceptual reality—a reality produced by and therefore, dependent on the human mind. Yet social objects nevertheless exist as distinct referents that are relatively autonomous of their investigation (Al-Amoudi et al., 2011).³²

According to the concept of intransitivity, the world that we strive to know—whether in science or any other field of knowledge—abides autonomously of our knowing. It is this fundamental insight into the intransitivity of the world that enables critical realism, *contra* empiricism and idealism, to reinstall ontology in its rightful place as prior to any epistemology.

³² This concept-dependency of social reality is a limit on naturalism that distinguishes the social sciences from natural science and qualifies the concept of intransitivity when applied to social reality: While a social object is both socially defined and socially produced (e.g., epistemological beliefs), it remains *existentially* intransitive because once produced, it becomes an autonomous referent, not simply dependent on the agent or act investigating it. However, its *causal* intransitivity is relatively limited given its internal relationality and causal interdependency with the science that investigates it (Bhaskar, 1998, *The possibility of naturalism*; henceforth, PN).

The transcendental analysis of sense perception

Positing this existential independence of reality is a necessary condition for the most fundamental activity of the empirical sciences—namely, observation through sense perception. It makes no sense to speak of observation or perception if the world were entirely a human fabrication. We perceive the same object in different ways at different times and places. If we are to make sense of the changes and errors in our perception of the objects in the world, the objects of our perception must exist autonomously of our perceiving—or of any human agency, for that matter (RTS).

Without their ontological distinction from our act of perceiving, the objects of perception are in danger of being reduced to mere mental products. Without the intransitivity of reality, perception would be meaningless, and experience itself epistemically insignificant. The intelligibility of sense perception—or of any experience—requires that the objects of our perception be intransitive and indeed in some sense, *intransigent*—i.e., neither reducible nor subject to the determination of our acts of perception.

A condition for science

Acknowledging the intransitive nature of the world is a necessary condition for the possibility and intelligibility of science and any form of knowing. For scientific and other types of knowledge to make sense, objects necessarily have to be invariant to our knowledge of them: The objects, structures, and processes of the world should endure beyond human knowledge and agency. If reality were entirely dependent on the mind, there would be no sense in any form of investigation. Intransitivity is, therefore, a condition for the possibility and intelligibility of science (RTS).

Moreover, this notion of intransitivity also accounts for several other aspects vital to the scientific enterprise: scientific change, criticism, and training. The self-correction characteristic of the empirical sciences would be unintelligible if the objects of their study were dependent on their very processes. Likewise, there would be no point to science education and certainly no need for scientific training if the world that science scrutinizes is nothing more than its own creation. Without an ontology that posits the distinction of the world from human knowing, there will remain no criterion for the evaluation of scientific knowledge, no basis for its development, and no requirement at all for scientific education and training (RTS).

The transitive dimension of science

Coupled with the intransitive world of science is its essentially transitive work. Science has an existing body of knowledge consisting of established facts and theories, sets of paradigms and models, and entire arrays of methods and techniques available for scientific investigation. These intellectual products comprise the transitive dimension of science and are just as indispensable to it as its intransitive objects of knowledge (RTS).

Knowledge also entails social—and, therefore, transitive—production. Aside from its obvious dependence on human agency, the process of producing scientific and other forms of knowledge is inherently social: Knowledge is produced historically and communally, depending on past knowledge in a ‘social production of knowledge by means of knowledge (or knowledge-like antecedents)’ (RTS, p. 176). In contrast to the naïve ‘clean-slate approach’ that originated with the Enlightenment, by no means, therefore, does scientific knowledge—or any knowledge, for that matter—materialize *ex nihilo* or *tabula*

rasa. Rather, the production of scientific knowledge requires the transitive objects of science as material cause—i.e., the antecedent theories, facts, models, etc. that are either reproduced or transformed in the social activity of science (RTS).

The intransitive character of reality needs to be distinguished from the transitive process of knowing, so that its intransitive objects are not reduced to the transitive objects of knowledge generated by that process. To reinstall ontology in its rightful place, aside from their distinction, the intransitive dimension also needs to be prioritized over the transitive. The failure to establish this priority of the intransitive has led to what critical realism calls the ‘epistemic fallacy’ (RTS).

The epistemic fallacy: Against modernism/postmodernism

The epistemic fallacy is the tendency to reduce reality into our knowledge of it, and to conflate ontology and epistemology (Bhaskar, 2010). The fallacy stems from the mistaken supposition that knowledge is prior to being in logic and time, and that our means of knowing the world defines the world (RTS).

Articulating the intransitive and transitive dimensions of science exposes this anthropocentric tendency of the classical philosophies of science to confuse the ontological order with the epistemic order. As a result, such ontological questions as ‘Does something exist? What sort of thing is it that exists?’ morph into their epistemological versions: ‘Can we know that it exists? How can we know about its nature?’ In the process, the intransitive dimension of science—the independent realm of real entities and processes in the world—collapses into the transitive (RTS; SRHE).

Preserving the distinction between the transitive work of science and the intransitive world it studies, and insisting on the precedence of ontology over

epistemology are the best preventive measures for us from lapsing into the epistemic fallacy and the anthropocentricity that is its root.

Insight 2: The anti-positivist notion of depth stratification

The world that critical realism infers from its transcendental analysis of experimental activity is characterized by depth. In contrast to the empirical realist vision, the critical realist world is far from exclusively empirical. The intransitivity established by Bhaskar's analysis of perception is now, through his analysis of experimental activity, revealed as structured.

The transcendental analysis of experimental activity

As in the case of perception and experience in general, experimental activity would be pointless were the world not intransitive. If the objects of experimentation were not autonomous of human agency (perception and causation), experimental activity would lose its rationale altogether. Unlike observation, however, the goal of experimental activity includes not just the description of phenomena, but also its explanation.

In performing an experiment, the scientist creates a desired sequence of events in order to discover causal laws that account for the phenomenon under investigation. This conjunction of events has been detected in the world and interpreted not to indicate causality, as Humean empiricism assumes, but to *signify* a possible causal law. To verify this, the scientist designs an artificial environment in the laboratory in order to produce the phenomenon to be investigated ('experimental production'), and to 'close' the system in order to isolate factors that normally interfere with—and affect—the phenomenon and to prevent them from doing so in the laboratory ('experimental control').³³ It is

³³ Reality is here revealed as 'differentiated' into artificially closed systems and more prevalent spontaneously open systems. This feature of the world as differentiated will be discussed later.

through experimental production and control that the causal laws governing a given phenomenon become empirically accessible (RTS).

Contrary to the Humean—and empiricist—notion of causality, causal laws are not identical with the constant conjunctions of events. If they were identical, scientists who produce the empirical regularities would also be creating the very causal laws that they are attempting to discover. Experimental activity is intelligible only if we distinguish causal laws from the constant conjunctions of events that Humean empiricism reductively identifies with causal laws.

Hence, while constant conjunctions provide the empirical grounds for causal laws, they are by no means identical with them. Causal laws require an ontological basis that is independent of the events produced experimentally. For critical realism, the basis of causal laws is not the empirical regularity triggered in the experiment, but the underlying non-empirical causal structures that are distinct from the experimentally generated events. The empirical regularities created under experimental conditions enable scientists to discover the underlying causal laws, but the causal laws reside in the structures that generate and govern the phenomenon under scrutiny.

A three-tiered stratification of reality

The concept of depth stratification extends our vision of the world beyond its empirical tip. As it turns out, our experiences comprise but the tip of the iceberg of reality. A distinction between experiences and events has already been made in the analysis of perception: Perception is significant in science precisely because not every event in the world has been—or can be—experienced. If all events could be experienced, there would be no reason to speak of perception; it would suffice merely to speak of events (RTS).

To account for the limits and finitude of perception and human experience, we need to acknowledge that the world we experience endures beyond human experience and existence. In other words, there must exist a class of unperceived (or unperceivable) events. To capture those events that are not necessarily experienced, Bhaskar identifies a 'domain of the actual' distinct from the 'domain of the empirical': While the latter is the set of all events that we experience, the former encompasses all events in general including those that are, for various reasons, not perceived. By explicitly referring to these two domains of reality, Bhaskar has already begun sketching the critical realist vision of the world as stratified (RTS).

The analysis of experimental activity, however, identifies a third domain. By refusing to define and analyze causal laws as empirical regularities, a further distinction is made between the phenomena that we experience and their underlying causal structures. This distinction completes the critical realist stratification of reality (Table 15): Aside from the surface domain of the empirical (the realm of all events accessible to experience), reality is now depicted with two additional realms that lie beyond experience, but are no less real: the domain of the actual (all events in the world, including those not experienced) and the domain of the real (which includes the empirical and actual, but also the underlying existing causal mechanisms even when not in operation).

Table 15: The three domains of reality

	Domain of the Real	Domain of the Actual	Domain of the Empirical
Mechanisms	Yes	No	No
Events	Yes	Yes	No
Experiences	Yes	Yes	Yes

(RTS, p. 47)

What is real is, therefore, irreducible to patterns of events because empirical regularities are distinct from their underlying causal laws. By identifying the domain of the real as distinct from—and in fact, more significant than—the

domains of the actual and the empirical, critical realism has established that underlying causal mechanisms remain real even when their powers are not exercised or realized (RTS).

There is, therefore, indeed more to reality than meets the eye: It certainly consists of what we experience, but it also includes actual events that may be beyond our experience and, even more fundamentally, causes that abide in the world even when they produce no outcome (the domain of the real). The critical realist idea of depth stratification effectively stretches the horizon of scientific—and all—investigation to transcend merely empirical events and actual phenomena to focus on the real causal powers possessed by underlying structures, whether or not they are exercised, and whether or not their outcomes are realized or perceived.

Depth stratification affirms the idea of an intransitive world and the priority of ontology over epistemology: Reality is not to be reduced only to what we experience or know of it. Our notion of reality should include the non-empirical and even non-actual, but no less real, generative mechanisms in the world. Critical realism is characterized by a ‘transphenomenality’—subscribing to an ontology of depth realism that sees beyond surface phenomena, an ontology that acknowledges not only the intransitive character of the world, but also, just as importantly, its stratification (Collier, 1994, p. 6).

The fallacy of the empirical world: Against positivism

The categorical distinctions between experiences, events, and mechanisms correct the ‘fallacy of the empirical world’, which effectively reduces the three domains of reality into a single empirical domain. Safeguarding the distinctions among these three levels of reality prevents us from the danger of

positivism, which is to misread the world as primarily or exclusively defined by our experience of it.

In this reductionist concept of the empirical world, the category of experience has been mistaken as constituting the world. What results from this fallacy is a significant impoverishment of our notion of reality: Excluded from reality are all unrealized and unexperienced events, as well as non-empirical causal mechanisms that are not in operation. The resulting epistemological myopia leads to a denial of the existence of causal powers simply because they have not been exercised or have not produced outcomes that can be perceived. Reality is thus reduced to *perceived* reality, and the real is identified with the merely empirical (RTS).

Insight 3: The anti-reductionist idea of emergent stratification

The depth of the world posited by critical realism refers not only to the underlying domain of reality beneath experiences and events, but also to a hierarchy of causal mechanisms. Not only are there different causes in the world, but there also exist different *types* of causes, each one belonging to a distinct stratum of being. Depth stratification also refers to emergent stratification: Reality consists of multiple strata of causal mechanisms with varying degrees of complexity and properties that are irreducible to one another.

The number and types of ontological levels vary, but at least four such levels are generally accepted: the physical and chemical at the most basic level, followed by the biological, the psychological, and the social. The relationship across these levels is characterized by rootedness and emergence: A causal mechanism belonging to an ontological level of reality is said to be 'rooted in and emergent from' its lower-order levels. This relationship of rootedness/emergence can best be characterized as one of both dependence and irreducibility (RTS).

Unilateral dependence

The existence of a particular causal mechanism ontologically presupposes the existence of one or two lower-order mechanisms directly below it, so that it depends on them for its existence and their laws for its operation. For instance, the physical and chemical mechanisms of the brain are a necessary condition for the existence of our psychological functions. Furthermore, our mental activities are subject to the physical and chemical laws governing the brain. While this dependence is usually one of composition—i.e., the more complex entity is composed of more basic ones—there are also cases when the dependence is more than one way, as in the case of psychological and social mechanisms, which presuppose each other (Collier, 1994, pp. 116ff).

Causal and taxonomic irreducibility

This ontological dependence, however, does not mean that the higher-order level is completely determined by the lower one. The more complex mechanism is said to be ‘emergent from’ the lower-order level precisely because its properties are distinct and irreducible to those of the more basic mechanisms; its reality is *sui generis*. While the higher-order level mechanism remains subject to the laws of its nature at the lower level, it also follows laws peculiar to its own level, so that its behaviors are not completely determined by the lower-order laws (RTS). For example, while biological mechanisms are subject to physical and chemical laws, their operations are also governed by laws peculiar to the biological.

Moreover, the higher-order level mechanism is capable of acting back on a lower-order level mechanism; it can set the boundary conditions for the laws of the lower-order level, either enabling or constraining the operations of the lower-order level mechanisms, thereby changing the course of nature. Even while

remaining dependent on the lower-order level for their existence and operations, more complex mechanisms can, to a certain extent, determine the conditions under which the lower-order laws apply, as illustrated by the capacity of the mind to control the body despite its dependence on it. These situations of 'dual or multiple control' among causal mechanisms have important implications for the critical realist notion of causality, which will be discussed in the next section.

A direct consequence of causal irreducibility is taxonomic irreducibility. Less complex mechanisms can account for more complex ones—but only to a limited extent. The concepts and principles belonging to a lower-order level cannot completely explain more complex mechanisms. For example, concepts pertaining to the physical body cannot be used to explain the workings of the mind exhaustively. The laws and categories of psychology are taxonomically irreducible because biological laws and categories are inadequate in accounting for psychological realities. Given this irreducible distinction, each ontological level requires an autonomous science that is legitimate entirely in its own right (RTS; Collier, 1994).

In summary, the notion of emergent stratification asserts that lower-order causal mechanisms are a condition for the existence and operations of higher-order mechanisms that are 'rooted in and emergent from' them. The higher-order mechanisms, however, cannot be reduced to the more basic ones either causally or taxonomically because the principles governing the more basic levels cannot completely explain or determine the higher-order mechanisms. In this stratified hierarchy of reality, each stratum warrants and requires a discrete science (RTS).

The stratification of the sciences

In the hierarchy of intransitive and causally efficacious mechanisms, each ontological level has properties irreducibly distinct enough to require an

autonomous science (Danermark, 2001). Given the priority of ontology over epistemology, it is the nature of the object under investigation that determines its own cognitive possibility and thus defines the science proper to it. Hence, the ontological emergence found in reality breeds a parallel emergence among the sciences, so that a science dedicated to higher-order entities and processes is founded on a lower-order science and is to a certain extent defined by it. However, given the irreducibly distinct properties of the objects of its investigation, the higher-order level science is legitimate in its own right and cannot be supplanted by a more basic science. Psychology, for instance, cannot be reduced to biology just as biology cannot be reduced to physics and chemistry. The transitive stratification of scientific knowledge reflects—and is grounded on—the intransitive stratification of nature (RTS).

TMSA and SEPM: Against reductionism

The notion of emergent stratification is a roadblock to contemporary reductionist tendencies to explain the nature of complex objects, structures, events, or actions in terms of simpler and more fundamental things in a way that diminishes their causal and ontological status.³⁴ According to reductionism, complex entities, despite their appearances, have no causal efficacy of their own.³⁵ They have no *sui generis* reality: The two entities cannot occupy the same place without being identical or one not becoming simply a part of the other (RTS).

³⁴ Reductionism here specifically refers to synchronic explanatory reduction, which should be distinguished from diachronic explanatory reduction (the explanation of a given entity's emergent process of formation out of lower-order entities without prejudicing its *sui generis* reality) (Hartwig, 2007).

³⁵ Two common examples of reductionism are physicalism or materialism, where higher-order mechanisms are reduced to the natural, and individualism, where the social is reduced to the psychological (Price, 2014).

The concept of ontological emergence opposes the reductionist explanation of a phenomenon in terms of its more basic strata by insisting on its *sui generis* reality and distinct causal powers—as illustrated by the Transformational Model of Social Agency (TMSA) and the Synchronic Emergent Powers Materialism (SEPM). TMSA and SEPM are two critical realist concepts that resist the gratuitously reductionist conflations of ontologically distinct levels of causal mechanisms—in this case, between the social and the psychological, and the psychological and the material.

Transformational Model of Social Activity

According to TMSA, an adequate conceptualization of social reality requires a clear distinction between structure and agency, as well as an articulation of their mutual dependency. Through this model, not only is structure established as irreducible to agency (vs. individualism and atomism), but also, just as importantly, agency is asserted as no less reducible to social structure (vs. collectivism and holism). Both structure and agency have irreducibly distinct properties and causal powers (PN).

However, just as societies are irreducible to people and as such, constitute legitimate objects of social scientific knowledge, so too should the *sui generis* reality and causal status of intentional human agency be preserved. Intentional agency is causally efficacious in its own right and requires its own science: People are legitimate objects of scientific study, with properties that cannot be conflated with those of society (collectivism and holism) or reduced to their neurophysiological condition of possibility (materialism) or to behavior actualization (behaviorism) (PN).

Synchronic Emergent Powers Materialism

SEPM contradicts the ontological doctrine of materialism by defining the mind as having irreducible properties emergent from matter: Mental powers are rooted in and emergent from matter, but by no means reducible to it. While the neurophysiological constitutes the condition for the possibility of the psychological, the psychological cannot be completely explained or determined in terms of the neurophysiological. Although the autonomy of the mind is constrained by the matter from which it is emergent, it remains a *sui generis* real and irreducible causal power (PN).

SEPM just as vigorously opposes the epistemological doctrine of behaviorism, which commits actualism by collapsing mental powers to their exercise or conditions. SEPM, therefore, rejects the positivist reduction of psychological powers to their material conditions of possibility, as well as their actualist reduction to mere behavioral manifestations (PN).

Insight 4: The anti-determinist theory of open-systemic causality

Aside from the stratification of reality, the transcendental analysis of experimental activity also establishes the differentiation in the world. Unlike the experimentally closed conditions of the laboratory, the world-at-large is an open system, where a host of causal mechanisms operate and interact with one another, and in that manner, co-determine phenomena.

The prevalence of open systems

A defining feature of experimental activity is the closure achieved through experimental control, where laboratory conditions are controlled in order to investigate the operations of a single mechanism that has been postulated as causing a given phenomenon. That there is a necessity for this experimental

control in the first place indicates that mere observation is inadequate in identifying the causes that account for phenomena. Unlike the closed systems painstakingly created in laboratories, the world beyond is normally an open system, where there operates a flux of generative mechanisms that interact and co-determine events. The open-systemic world offers no guarantee that a desired pattern of events under study would actually occur and be observable. Moreover, the flux of conditions in the world-at-large makes it difficult, if not impossible, to determine the causal operations of specific mechanisms (RTS).

If as presumed by empirical realism, the world were a universally closed system, there would be no need for experimental activity. In a world with universal and spontaneous closure, with readily available and observable constant conjunctions of events, science would be merely empirical and not experimental. The world, however, is an open system, where spontaneous empirical regularities occur rarely (RTS). We need to conduct experiments to render phenomena and their causal mechanisms empirically accessible by excluding the actions of countervailing mechanisms. Science experiments create 'windows on the world of underlying mechanisms which usually operate unactualized' (Collier, 1994, p. 45).

The reconceptualization of causality

The ubiquity of open systems in the world demands a revision of the notion of causality. Contra Hume, causality is not to be identified as the constant conjunctions of events, but rather, attributed to underlying causal mechanisms that, given the open system, may or may not yield an outcome.

Hume's identification of causality with empirical invariances is incompatible with the depth stratification posited by critical realism, where causality is

attributed not to an antecedent and empirical event, but to underlying causal agents that belong to the non-empirical domain of the real. One implication of depth stratification is this shift in the locus of causality from the domain of the empirical to an ontological basis for causal laws—namely, the enduring causal structures that belong to the domain of the real. It is the operations of these underlying mechanisms—and not the mere presence of empirical invariances—that cause the events in the world (RTS).

According to critical realism, the constant conjunctions of events, canonized by Humean empiricism as necessary and sufficient to establish causality, are neither necessary nor sufficient in the open system. Given the intervention of other mechanisms, causation cannot be inferred just because the expected—but possibly coincidental—empirical regularities have occurred. At the same time, the absence of expected conjunctions of events does not rule out the natural necessity that may not have been manifested due to contraventions from other mechanisms.

On the other hand, the differentiation of reality—specifically, the acknowledgement of the ubiquity of open systems—requires that causal powers operating in the normally open-systemic world be reconceived as ‘transfactual tendencies’: tendencies because they inevitably work in synergy with other causal mechanisms in the open system, and transfactual because they exercise their causal powers whether or not their operations actually yield the expected outcome.

Causal laws make claims about the activity of a causal tendency (a) when their initial conditions are satisfied, and (b) when the mechanism can operate without the interference of others, resulting in (c) the realization of the tendency.

Causal laws, however, make no attempt to define the conditions in which the tendency is exercised and consequently cannot make claims about whether it will be realized or prevented. The operation of a mechanism does not depend on the conditions since the mode of application of the causal law remains the same regardless of the conditions. For this reason, the value of a causal law is not affected by the outcome of the operation of a mechanism since the outcome is a function not of the tendency of the mechanism, but of the conditions in the system. Hence, whether a system is open or closed, whether a causal tendency is realized or hindered, the generative mechanism is at work, as accounted for by the causal law. Causal laws are non-empirical, but transfactual statements because they do not refer to events or experiences, but to structures. They are about the causal tendencies of things, which may not be actualized and perceived. Hence, as statements about transfactual tendencies, causal laws are about causal powers that act as tendencies in both closed and open systems, but cannot be the basis for prediction of phenomena in the open system (RTS).

In summary, the Humean theory reduces causality to empirical invariances, which, as revealed by the idea of depth stratification, constitute only the tip of the iceberg of reality: Not only are their occurrences limited to experimentally closed conditions, but they are also but occasional manifestations of the operations of underlying generative mechanisms that constitute their real causes. Contrary to Hume, therefore, the constant conjunctions of events are neither necessary nor sufficient conditions for causality.

The need for interdisciplinary investigations

Most phenomena in the open-systemic world are multi-mechanismic—i.e., the result of the interaction of several causal mechanisms. Moreover, given the emergent stratification of reality, a phenomenon would be the outcome of the

interaction of mechanisms that belong to different ontological levels. If the world has multiple levels of irreducible mechanisms with their own emergent powers, each requiring its own science, single-factor and mono-disciplinary explanations of phenomena will most likely be insufficient. If an open-systemic phenomenon is indeed generated by a plurality of causal mechanisms, each belonging to a different stratum, only an investigation that draws from the distinct fields of science relevant to the phenomenon and that integrates their knowledge and methodology can yield a non-reductionist explanation. Moreover, the investigation must resist the temptation of methodological colonialism, where methodology from one discipline is simply transposed and in the process, mis-applied to a different type of mechanism (FCR; Danermark, 2013).

The fallacy of actualism: Against determinism

Ontological actualism, which refers to the Humean definition of causal laws as empirical regularities, is based on a misapprehension of the world-at-large as a universally closed system. Such a vision of the world is characterized by constant conjunctions of events and leads to a deterministic notion of the universe, where the prediction of events is perfectly feasible. This form of determinism—i.e., regularity determinism—leaves no room for the possibility of autonomy (RTS).

According to the actualist thesis of regularity determinism: (a) the same event has the same cause (i.e., the total set of conditions that regularly proceeds or accompanies an event); and (b) 'for everything that happens there are conditions such that, given them, nothing else could have happened' (DCR, p. 122).

Actualism reduces the ordinarily open-systemic world to a globally closed system, and focuses on empirical invariances instead of the invariant mechanisms that serve as the ontological basis for causal laws. Far from referring simply to the relations between events and states of affairs, causal laws pertain to the relations between events and states of affairs based on the action of an underlying causal mechanism (RTS). Hence, critical realism shifts our attention away from the merely empirical and actual to the deep structure of reality.

Actualism fails to recognize the normally open-systemic and multi-mechanistic character of phenomena that can be adequately understood only in an interdisciplinary manner. Consequently, actualist theories are often superficial, if not false, since they focus exclusively on surface constant conjunctions of events, which for transfactual theories are but the empirical starting points for the construction of empirically grounded depth explanations (Price, 2014).

In contrast to the actualist thesis of regularity determinism, open-systemic causality, according to critical realism, is recast as 'necessity without determination'. Laws do not undifferentially describe phenomena or uniquely govern them. Since causal laws are about tendencies of acting, which may or may not be realized in any sort of outcome, what they define are possibilities and limits of how things act in the world. By no means do causal laws dictate their outcomes. Anscombe's metaphor of a chess game is instructive: 'Outside the domain of closure, laws are like the rules of chess. The play is seldom determined, but no one breaks the law' (cited in RTS, p. 101). In this sense, therefore, causal laws inform us of possibilities and limits on the ways of acting of causal structures without determining or predicting outcomes or events. Laws ascribe possibilities that may not be realized; they impose necessity in the sense

that they set constraints or limits but do not determine events. Hence, events do not violate laws or falsify them (RTS).

Consequently, in the critical realist view, the laws of nature are not determinants of events—making it, on the one hand, impossible to predict all events, and on the other, creating room to conceive of things as acting autonomously. The revised concept of causality as ‘necessity without determination’ creates a space for a conception of human freedom and self-determination that is compatible with science and its laws. In addition, the idea of emergent stratification supports the conceptual plausibility of human freedom. First of all, based on the idea of dual/multiple control across strata, while human agency is constrained by physical, biological, and social laws and is unable to change them, it can nevertheless act back on them, enabling or constraining their operations. In this manner, human agency is, to a certain extent, capable of self-determination, transcending empirical generalizations and defying predictions (RTS).

Moreover, intentional human agency is identified as a *sui generis* type of causally efficacious mechanism that cannot be reduced to either social cause or neurophysiological cause. As the psychological generative mechanisms that account for human action and behavior, reasons are real powers with an actual ontological purchase on the world and consequently are valuable in accounting for human behavior (PN). However, as in the case of other types of causes, two qualifications need to be made about intentional causes: First of all, like other open-systemic mechanisms, reasons can operate only as tendencies. Given the multiplicity of interacting mechanisms in the open world, reasons, while causally efficacious, may not necessarily yield an outcome since they are subject to changes in circumstances and to the operation of countervailing forces (PN).

Secondly, like other causal mechanisms, reasons shape human action in conjunction with other types of mechanisms. Human action, like other types of phenomena, is co-determined by reasons as well as a host of other mechanisms in the open system. Since reasons operate causally alongside and jointly with other types of causes, an adequate explanation of human action needs to include not only psychological generative mechanisms (both conscious and unconscious reasons), but also non-psychological mechanisms that the former interacts with (PN).

The recognition of human intentionality as a causally efficacious mechanism belonging to an irreducibly distinct level in the hierarchy of causes does not imply that reason can violate or is exempted from natural and social laws. All causal laws define possibilities and limits without determining the resulting outcome or behavior. They operate continually and transfactually, acting on intentional agency, providing it with possibilities and constraints without determining the agent's decision or action. Intentional human agency, for its part, can set boundary conditions for the operation of these other laws. In this manner, critical realism allows for a conception of freedom that does not cheat or defy the natural laws, and is not opposed to—or divorced from—science. In fact, for critical realism, human freedom is entirely compatible with science (PN).

THE SHARED CRITIQUES OF CRITICAL REALISM AND CHRISTIANITY

The compatibility between critical realism and Catholic thought can be surmised from their shared critiques of the philosophies hostile to Christianity—namely, modernist and postmodernist anthropocentrism, positivism, material reductionism, and determinism. All these counter-Christian philosophies are forms of reductionism, resulting from either a failure to accept reality in its own

messy and mysterious terms or an insistence on making it conform to what is easier to understand.

Modernism and postmodernism both prioritize epistemology over ontology, and are therefore, equally culpable of the epistemic fallacy. However, they commit the epistemic fallacy in two completely different and opposite ways. Committed to its Cartesian quest for epistemic certainty, modernism colonizes ontology through epistemology by wresting control over ontology and reducing it to epistemology. On the other hand, in its frustration over uncertainty, postmodernism embraces epistemic skepticism and declares its independence from any sort of ontology, which it totally discards. Both, however, end up with self-contradictions and delusions: Modernism enjoys an illusory epistemic certainty, while postmodernism's divorce from ontology earns it an epistemic skepticism that remains tainted by a tacit certainty in its very denial of ontology (Wright, 2013).

Against modernism and postmodernism, both critical realism and Catholic thought assert that reality cannot be reduced to what we know—or do not know—about it. Pius X's (1907) encyclical letter, *Pascendi Dominici Gregis*, was primarily a condemnation of a set of loosely connected ideas that were combined into a theoretical system called 'modernism' and condemned as the 'synthesis of all heresies' (PDG §39). What is relevant here, however, is its condemnation of modern philosophical systems—in particular, the epistemologies of Descartes and Kant, characterized by the anthropocentric prioritization of epistemology and eventually, a denial of ontology (PDG §38). Like critical realism, Christianity has always affirmed the existence of an objective and non-anthropocentric reality, independent of our knowledge and existence.

Positivism follows quickly as a natural consequence of the epistemic fallacy, when the world is reduced to its empirical features. This actualist

epistemology, according to which only what we experience through our senses can be known (DCR, pp. 169-170), is condemned in the same letter: 'According to [Agnosticism] human reason is confined entirely within the field of phenomena, that is to say, to things that are perceptible to the senses, and in the manner in which they are perceptible' (PDG §6). John Paul II (1998, §5) condemned scientism, which denies the validity of forms of knowledge apart from those of the positive sciences, describing it as the new guise of the discredited notion of positivism.

Through its idea of depth stratification, critical realism asserts the existence of non-empirical realms that transcend the positivist parameters of limiting the real only to what is perceived by the senses. Moreover, it rejects the empiricist perceptual criterion for ascribing reality and instead adopts a causal criterion, which holds that what qualifies something as real is not its empirical quality, but its causal efficacy (RTS). These critical realist positions render Christianity's fundamental assertion of invisible and spiritual realities, contra positivism, as philosophically plausible—or at least not unintelligible.

Materialistic reductionism maintains that the only real causes are the most basic—i.e., material—constituents of matter (DCR, pp. 290-291). Higher functions are reducible and completely explained by physical realities. Hence, the mind, spiritual experiences, and noble aspirations are no more than chemical changes or biological processes since the lower level organization and functions provide both necessary and sufficient conditions for all that happens at the higher level. But like critical realism, Christianity rejects material reductionism and insists on the irreducibility of entities beyond the physical.

Finally, for determinism, the behavior of higher-level systems (e.g., human agency) is completely determined by what happens at lower levels, eliminating the possibility of human freedom (Stoeger, 2012). Through its concepts of open-

systemic causality, emergent stratification, and particularly, the causal efficacy of human intentionality, critical realism refutes determinism by establishing that self-determination—including human freedom—is not mutually exclusive with the laws of nature, in the process preserving the integrity of free will, which the Catholic Church has always taught: ‘Freedom is the power, rooted in reason and will, to act or not to act, to do this or that, and so perform deliberate actions on one’s own responsibility. By free will one shapes one’s own life’ (CCC §1731).

As I will discuss in the next section, another contemporary philosophy that seeks to undermine Christianity and which critical realism also refutes is what Ratzinger (2005) has labeled ‘the ‘dictatorship of relativism’—an attitude that ‘does not recognize anything as definitive and ‘whose ultimate goal consists solely of one’s own ego and desires’. In *Fides et Ratio*, John Paul II (1988, §5) wrote, ‘A legitimate plurality of positions has yielded to an undifferentiated pluralism, based upon the assumption that all positions are equally valid, which is one of today’s most widespread symptoms of the lack of confidence in truth’. Consequently, relativism poses a threat to orthodoxy (J-B. Metz & E. Schillebeekx, 1987).

The Church’s rejection of this general relativism and religious relativism in particular (CDF, 2000, §22) is supported by the fifth core insight of critical realism.

CRITICAL THINKING AS THE EXPRESSION OF THE COMMITMENT TO JUDGEMENTAL RATIONALITY

To unpack the epistemological conception of critical thinking, I will draw from the critical realist triad of ontological realism, epistemic relativism, and judgemental rationality. First, I will discuss what I regard as the fifth core insight of critical realism: the anti-relativist commitment to judgemental rationality.

Insight 5: The anti-relativist commitment to judgemental rationality

At the heart of its four-fold vision of the world as intransitive, structured, emergent, and differentiated is critical realist epistemology, which is defined by its anti-relativist commitment to judgemental rationality.

The triumvirate of critical realism

Three fundamental principles constitute the epistemology of critical realism. Ontological realism refers to the critical realist principle that the world is intransitive—i.e., that reality endures and acts independently of our knowledge. As discussed earlier, ontological realism is a necessary condition for the possibility and intelligibility of science in particular, but also of all human knowing (SRHE).

Epistemic relativism refers to the transitive process of human knowing. All knowledge is socially produced and necessarily contingent. Like every human activity, knowing requires a social process that conditions and determines the very way we perceive and make sense of things. Our knowing is characterized by perspectival relativity, and our knowledge of the world necessarily shaped by the particularity of our epistemic framework and constrained by our categories, modes of analysis, and other available conceptual resources (DCR, p. 345; Fleetwood, 2004; Lawson, 2003). We have no unmediated access to reality, and given the historically conditioned nature of our truth-values and even of our criteria for rationality, our knowing is inherently finite, characterized by a susceptibility to error that renders all our knowledge corrigible and that demands a constant vigilance to revisions (DPF; DCR, p. 241).

Finally, judgemental rationality is the belief in the possibility of rational assessment of alternative competing truth claims and, despite the finite and fallible quality of our knowing, a commitment to making the best possible choice

among them. Judgemental rationality is implied by a belief in both ontological realism and epistemic relativism (SRHE). Without ontological realism and its assertion of a reality that serves as an independent criterion for knowledge, judgemental rationality would neither be possible nor intelligible. Without epistemic relativism and its acknowledgement of the constitutive and historical limits of our knowing, there would be neither need nor value for judgemental rationality. If human knowing were not finite and fallible, there would be no need to exercise critical thinking in order to make a rational choice among the existing alternative views. Hence, while ontological realism serves as the condition for the possibility and intelligibility of judgemental rationality, epistemic relativism accounts for its necessity and value.

Duality of truth

Judgemental rationality is made possible by what Bhaskar calls ‘the duality of truth’—i.e., the intransitive and transitive dimensions of knowing: an acknowledgement of the independent existence of reality irrespective of human knowing (ontological realism), and an admission of the inherent quality of human knowing as socio-historically contingent and consequently, perspectivist and fallible (epistemic relativism) (SRHE, p. 99).

Ontological realism and epistemic relativism express the fundamental conditions of human knowing: While asserting a human-independent world establishes an objective basis for knowledge, recognizing the socially dependent nature of knowing uncovers its finitude and fallibility. Through a consistent distinction between the intransitive and transitive dimensions, critical realism is able to insist equally on a ‘realism of things and beings’ and on a ‘relativism of thoughts and beliefs’. By confining relativism to the transitive dimension of epistemology and at the same time preserving realism in the intransitive

dimension of ontology, critical realism succeeds in resolving the dilemma that Bhaskar has called 'the Scylla of epistemic absolutism and the Charybdis of judgemental relativism' (SRHE, p. 43).

Judgemental rationality and critical thinking

A critical realist epistemology faces two opposite extremes: Naïve realism and radical relativism (Scott, 2005). Both epistemologies, failing to preserve the intransitive-transitive distinction, are deficient in either ontological realism or epistemic relativism, consequently falling into the very Scylla and Charbydis successfully circumvented by critical realism: Wanting in epistemic relativism, naïve realism ends up committing epistemic absolutism, while radical relativism, bereft of ontological realism, is trapped in judgemental relativism.

Deficient epistemologies

The lack of either ontological realism or epistemic relativism in these two deficient epistemologies has significant impact on the possibility of judgemental rationality and the exercise of critical thinking.

Radical relativism

Radical relativism is a perspectivist, but non-evaluativist, epistemology. It subscribes to epistemic relativism, accepting the contingent nature of human knowing. It, however, denies ontological realism, neglecting the intransitive dimension of knowing. Unlike critical realism, it fails to restrict relativism to the transitive dimension, allowing it into the intransitive, and slipping to the gratuitous conclusion of judgemental relativism. As a result, it rejects any possibility for—or sense in—judgemental rationality. All truth claims, after all, are based on opinion and are consequently equally valid and correct. Such a judgemental relativism constitutes an abandonment of critical thinking.

A radical relativist epistemology is inconsistent in its epistemic relativism because despite its allergy to dogmatism, it ends up precisely culpable in that regard. As Bhaskar puts it: 'To be a fallibilist about knowledge, it is necessary to be a realist about things. Conversely, to be a sceptic about things is to be a dogmatist about knowledge' (RTS, p. 33).

Naïve realism

Naïve realism is a non-perspectivist and non-evaluativist epistemology, accepting ontological realism, but neglecting the socio-historically conditioned quality of knowledge (epistemic relativism). By overlooking the transitive dimension of human knowing, it commits epistemic absolutism. Hence, a naïve realist epistemology maintains that there is only one possibly correct view of every reality.

Unlike radical relativism, however, it does not give up the assessment of truth claims. Although assertions are not reduced to opinion, they are, however, demoted to facts. The task of critical evaluation becomes limited to the mere assessment of the correspondence of such facts to reality and of the credibility of the sources of these facts. The judgemental rationality that issues from naïve realism is compromised, and its expression in critical thinking substantially circumscribed.

Critical realist epistemology

Distinguished by its commitment to a judgemental rationality, a critical realist epistemology is grounded on the two indispensable principles of ontological realism and epistemic relativism. Only a critical realist epistemology acknowledges both the intransitivity of reality and the transitivity of human

knowing, and at the same time, preserves their distinction, so that *if—and only if*—bundled together, they provide the conditions for judgemental rationality.

Ontological realism, epistemic relativism, and the resulting judgemental rationality are necessary beliefs that enable one to engage in the enterprise of critical thinking. To be a critical thinker is to be a judgemental rationalist. But to be a judgemental rationalist, one must simultaneously be an ontological realist and an epistemic relativist.

Ontological irrealism, epistemic absolutism, and judgemental relativism

The repercussions of the lack of ontological realism and epistemic relativism are clarified when they are compared with their opposites, and their impact on judgemental rationality is examined. Judgemental rationality is inconsistent with ontological irrealism, the denial of the intransitivity of reality characteristic of a radical relativist epistemology. On the other hand, while the commitment to ontological realism of naïve realism offers room for judgemental rationality, its epistemic absolutism—i.e., its neglect of the intransitive quality of human knowing—results in the devaluation of judgemental rationality, diminishing the need for critical thinking (Table 16).

Table 16: Critical realism compared to naive realism and radical relativism

	EPISTEMIC ABSOLUTISM (Non-recognition of the transitivity of knowing)	EPISTEMIC RELATIVISM (Recognition of the transitivity of knowing)
ONTOLOGICAL REALISM (Recognition of the intransitivity of reality)	NAÏVE REALISM Non-perspectivist, non-evaluativist Limited judgemental rationality	CRITICAL REALISM Perspectivist and evaluativist Judgemental rationality
ONTOLOGICAL IRREALISM (Non-recognition of the intransitivity of reality)		RADICAL RELATIVISM Perspectivist but non-evaluativist Judgemental relativism

The compatibility of epistemic relativism and judgemental rationality

Ontological realism need not, as anti-realists have mistakenly presumed, necessarily entail epistemic absolutism. Precisely by virtue of the critical realist distinction between the intransitive and transitive, ontological realism and epistemic relativism are not incompatible. To be a realist about reality does not demand a denial of the historically conditioned and inherently transient nature of human knowing (SRHE).

One who subscribes to epistemic relativism, on the other hand, need not jump into the unwarranted conclusion of judgemental relativism. While both epistemic and judgemental relativism are premised on the finite and fallible character of human knowing, radical relativists rashly assume that the contingency of human knowing and its capacity for rational judgements are mutually exclusive. Just because human knowing is necessarily fallible does not mean that it is always necessarily mistaken (Gunton, 1983).

Its insistence on the intransitivity of reality enables critical realism to posit that alternative and competing theories are ultimately about one and the same theory-independent world, which provides the necessary referential overlap between them, which, against the thesis of incommensurability, serves as the basis for the possibility of judgemental rationality (Bhaskar 1998a).

Bhaskar's distinction between the intransitive and transitive dimensions enables him to qualify—and clarify—Kuhn's claim of the incommensurability between paradigms: 'Though the [intransitive] world does not change with a change of paradigm, the scientist afterwards works in a different [transitive] world'. It is, therefore, entirely possible to have 'transitive disagreements about a common intransitive object' (Wright, 2013, p. 79). Because of this referential

overlap, judgemental rationality is possible³⁶ in spite of the inevitable meaning variances resulting from the contingency of human knowing (SRHE). In addition, *precisely on account of these variances*, judgemental rationality is necessary. A commitment to judgemental rationality is, therefore, entirely compatible with epistemic relativism.

The crucial distinction preserved by critical realism between reference (ontology) and sense (epistemology) serves as an important corrective to two erroneous views: (a) that epistemic relativism is synonymous with judgemental relativism and therefore, incompatible with judgemental rationality, and (b) that ontological realism with its rejection of judgemental relativism constitutes an embrace of epistemic absolutism (SRHE).

Table 17: Ontological realism/irrealism and epistemic absolutism/relativism

		Possibility & Intelligibility	Necessity & Value
ONTOLOGY (Intransitive dimension)	Ontological realism	Yes	
	Ontological irrealism	No	
EPISTEMOLOGY (Transitive dimension)	Epistemic absolutism		No
	Epistemic relativism		Yes

A commitment to ontological realism is, therefore, a condition for the possibility and intelligibility of judgemental rationality, while the acceptance of epistemic relativism is a condition for the necessity and value of judgemental rationality (Table 17). Critical thinking is the expression of this critical realist

³⁶ To exercise judgemental rationality between two competing truth claims, two conditions need to be met: (a) The two theories should be in conflict with each other and, therefore, true alternatives, requiring a choice; and (b) both theories must share a referential commonality—i.e., they refer to the same world. Should one encounter a case where two theories have no referential overlap (Bhaskar's total 'Kuhn-loss'), then the theories cease to be alternatives (for either the same community over time, or for different communities at the same time). Since they are not alternatives, there is neither sense nor value in making a choice between them, much less, replacing one with the other (SRHE).

commitment to judgemental rationality, and belief in judgemental rationality provides the motivation for the enterprise of critical thinking.

Critical realist analysis of critical thinking

Critical thinking analyzed through a critical realist prism yields two important implications: (a) founded on the non-negotiable priority of ontology, and (b) motivated by a commitment to judgemental rationality.

The primacy of ontology

A critical realist epistemology explicitly anchors the exercise of critical thinking to an ontology. It insists not only on the distinction of ontology from epistemology, but also on its unequivocal priority over the latter. According to the critical realist notion of emergence, reality is stratified into ontologically distinct levels; each level, therefore, possesses irreducible properties and consequently requires a discrete science proper to that level. Each level of reality, given its uniquely distinctive nature, determines how it reveals itself to us—and consequently, its own legitimate form of study. As Bhaskar puts it, it is the world that determines its own cognitive possibility (SRHE). In other words, whether we like it or know it or not, when it comes to knowing, it is intransitive reality that defines the possibilities and limits of our transitive knowledge. Ontological realism refers precisely to this recognition of the primacy of being, challenging us to resist every procrustean temptation to stretch or amputate it to suit our necessarily limited conceptions.

This anchoring of every human knowing on reality is captured succinctly in what Catholic theologian Bernard Lonergan's (1973, p. 55) calls the 'transcendental precepts': 'Be attentive, be intelligent, be reasonable, and be responsible'. It is a call to base our decisions and actions on knowledge that is *purposefully* and—to the degree possible—*faithfully* grounded in reality.

Aside from this non-negotiable ontological realism, critical realism also demands that epistemic relativism be taken no less seriously than ontological realism: Given our intrinsically limited knowing, we may at times feel unable to 'step into the same river twice'. Yet explore the depths of that river we must, respecting its mystery and trusting that if we persist in our work, its riches will be revealed in time.

Against the post-Enlightenment notion of pure objectivity and universal reason, the brand of critical thinking animated by critical realism by no means aims at achieving a mastery of reality, but at retrieving its *mystery*—or as the later Bhaskar in his *Philosophy of metaReality* puts it, 'a re-enchantment of being' (PMR). With attentiveness and reverence, the critical realist thinker is necessarily an 'agent-subject-in-relationship' with the world (Groome, 1991, p. 32), standing before reality, ever mindful of its sovereignty. Critical thinking conceived as the expression of our judgemental rationality, therefore, entails not so much that we issue our judgements about reality, but that we submit our necessarily finite and possibly fallible judgements to the more authoritative judgement of reality.

Commitment to judgemental rationality

Viewed as the expression of judgemental rationality, critical thinking can now be analyzed not only in terms of an underlying ontological realism that makes it possible in the first place, but also—just as crucially—an epistemic relativism that makes it necessary.

According to a critical realist analysis of critical thinking, knowers will not exercise critical thinking unless they are committed to judgemental rationality. Judgemental rationality, however, becomes possible and intelligible if and only if one's epistemology is a properly critical realist one, where there is, first of all, an explicit recognition of the intransitivity of reality (ontological realism). However the

actual need for—and the value of—judgemental rationality will surface only given an acknowledgement of the contingency of human knowing (epistemological relativism).

Mining the critical realist triad of epistemological principles, I propose that it is by virtue of the principle of epistemic relativism that the epistemology shifts to a perspectivist one, and by virtue of ontological realism that it becomes properly evaluativist. In other words, what leads to a perspectivist epistemology is at least a tacit acceptance of the contingency of human knowing (epistemic relativism), and for an evaluativist epistemology, a similarly implicit and fundamental commitment to the autonomous existence of reality (ontological realism).

Kuhn's (2000) three levels of epistemic development—namely, the absolutist, multiplist, and evaluativist—are defined according to two important shifts in epistemic development:

- (a) a perspectivist shift: from belief that there is only one possible correct view of reality (absolutist) to one that there exist several possibly correct perspectives (multiplist or evaluativist); and
- (b) an evaluativist shift: from belief in the multiplicity of diverse views of reality (multiplist or evaluativist) to a commitment to the rational assessment of these different claims given one's admittedly limited knowledge (evaluativist).

These two shifts are necessary to attain what is considered the most sophisticated epistemic level, the requisite level for the exercise of critical thinking. Only given a post-subjectivist epistemology that is both perspectivist and evaluativist will a knower engage in the enterprise of critical thinking. Unlike the multiplist, the evaluativist has not abandoned the responsibility to assess which of

the different views about reality is the better or more correct one. Only upon reaching this highest level of epistemic development does critical thinking acquire a value, when assertions are regarded neither as mere facts to be received primarily and passively from authority (absolutist epistemology), nor as different opinions that are equally valid and require no critical assessment (multiplist epistemology).

Analyzed in this manner, the three levels of epistemic cognition correspond to naïve realist, radical relativist, and critical realist epistemologies, respectively (Table 18).

Table 18: The three epistemic cognitions

	Non-Perspectivist	Perspectivist
Non-Evaluativist		Level 2: Multiplist Radical Relativist Assertions as opinions Several equally correct views
Evaluativist	Level 1: Absolutist Naïve Realist Assertions as facts Only one correct view	Level 3: Evaluativist Critical Realist Assertions as judgements One more correct view among several others

The investigation into teacher epistemologies in Philippine Catholic schools, showed a significant prevalence of an absolutist epistemology especially among religious educators. This non-perspectivist and non-evaluativist epistemology—considered a constraint to the exercise of critical thinking—can be identified as naïve realist. According to our critical realist analysis, critical thinking is the expression of one’s commitment to judgemental rationality. Judgemental rationality, however, is possible *and* necessary only given an underlying ontological realism and epistemic relativism, respectively.

From the prevailing naïve realist religious epistemology observed to be prevalent among religious education teachers in the survey, we may infer that while such an epistemology subscribes to ontological realism, what is lacking is

an epistemic relativism that takes adequate account of the transitive aspect of knowing in the domain of religious beliefs. If teachers do not have the requisite appreciation of the contingency and fallibility of human knowing, then what will result is a form of epistemic absolutism that inhibits the practice of critical thinking in the classroom. If we do not believe that there are different, possibly correct and conflicting perspectives to reality, then the necessity and value of critical thinking would be minimal.

In the next chapter, I will investigate Catholic religious epistemology based on its theology of revelation and especially its notion of '*sensus fidei*'. Having identified a prevalence of a naïve realist epistemology among our religious and values educators in the domain religious beliefs, I will examine whether or not Catholic religious epistemology is compatible with critical thinking in the first place. In other words, can it, based on Catholic theology, be characterized as critical realist—i.e., defined by a commitment to judgemental rationality with an underlying fundamental ontological realism and especially epistemic relativism? And if so, how can the notion of the '*sensus fidei*' instruct us on the exercise of Catholic religious critical thinking?

CHAPTER FOUR:
CATHOLIC RELIGIOUS CRITICAL THINKING
AS THE EXERCISE OF *SENSUS FIDEI*

After demonstrating that critical thinking ought to be problematized in confessional Catholic religious education in the Philippines, I have proposed an epistemological and specifically critical realist approach to critical thinking that defines it as the expression of one's commitment to judgemental rationality. Given this critical realist account of critical thinking, the religious epistemology identified in the empirical study as most prevalent among our religious educators has been diagnosed as naïve realist—i.e., lacking in epistemic relativism and, therefore, detrimental to critical thinking.

In this chapter, I will argue that such an epistemology does not conform to Catholic religious epistemology as inferred from its theology of revelation and especially its notion of the *sensus fidei*. Prevailing impressions to the contrary notwithstanding, the epistemic absolutism associated with Catholic religious epistemology as evident from the survey, far from being authentically Catholic, is an anomalous by-product of the Church's polemical reaction to both post-Enlightenment concern for rational certainty and post-modernist attraction to relativism (Groome, 1991). Possible reasons for the surveyed teachers' predominantly naïve realist religious epistemology include the Catholic Church's emphasis on teaching authority, as well as recent tendencies towards centralization and stress on doctrinal clarity, both symptoms of an underlying fear

of change because it is perceived as a threat to the permanency of revelation and the stability of the institutional Church (Orsy, 1987).

Focusing on the traditional—but until recently, underplayed³⁷—notion of the *sensus fidei*, I will argue that Catholic religious epistemology is, in fact, critical realist, defined by a strong commitment to judgemental rationality that is founded on ontological realism and—contrary to the survey findings—epistemic relativism. By showing how the doctrine of the *sensus fidei* expresses the Catholic commitment to judgemental rationality and its subscription to ontological realism and epistemic relativism, I will argue that Catholic religious critical thinking is not only possible and intelligible, but also, in fact, by virtue of the *sensus fidei*, necessary and valuable.

Finally, I will offer some recommendations on how the issue of religious critical thinking in Philippine Catholic religious education may be addressed given the findings of this study.

THE DOCTRINE OF REVELATION, RECEPTION, AND *SENSUS FIDEI*

The significant percentage of naïve realist religious epistemologies revealed in the survey suggests a fundamental problem in the practice of Catholic religious critical thinking in our schools: an apparent incompatibility between Catholic religious epistemology and epistemic relativism. We need to investigate whether epistemic relativism, without which critical thinking would not be valued, is, in fact, compatible with Catholic religious epistemology in the first place.

³⁷ Vatican II's teaching on the *sensus fidei* (LG §12) was considerably weakened, for example, in the *Code of Canon Law*, where it is reduced to a 'common adherence of Christ's faithful under the guidance of sacred magisterium' (CCL §750). The *sensus fidei* has understandably been described as 'a gift that has been buried for the moment' (Burkhard, 2008, p. 560) and 'an elusive ecclesial reality' (Rush, 2001, p. 231), whose consequences, for Walter Kasper, are 'far from [being] exhausted in principle and in practice' (quoted in Burkhard, 1992, p. 18).

Any discussion of Catholic religious critical thinking must begin with a consideration of its underlying epistemology. For believers, it is the constellation of Catholic doctrines concerning divine revelation and its reception that defines the possibility and limits of their religious knowing.

In this section, I will show that (a) based on Catholic doctrine, revelation, while believed to be of divine origin, requires the human process of reception by the Church for it to be actualized; (b) the reception of revelation is enabled by the *sensus fidei*—a sense for the faith given both to the corporate body of the Church and individual believers for the faithful interpretation of revelation; and (c) contrary to the survey’s predominantly naïve realist religious epistemology, the Catholic religious epistemology resulting from this theology of revelation and the *sensus fidei* is critical realist, undergirded by both an ontological realism and an epistemic relativism that together result not only in the possibility of judgemental rationality in the domain of religious beliefs, but also its necessity. It is, in fact, this commitment to judgemental rationality—expressed through the Church’s exercise of the *sensus fidei* in its ongoing reception of revelation—that has generated its body of teachings, including what it considers the two fundamental norms for all subsequent ecclesial reception, Scripture and Tradition.

Revelation and the need for reception

Revelation in Catholic theology is complex and full of paradoxes, with multiple aspects that need to be sorted out. Several distinct models of revelation have been proposed to highlight distinct aspects of revelation.³⁸

³⁸ Dulles (1983) names five such models—revelation as: (a) doctrine, (b) historical events, especially the death and resurrection of Jesus Christ, (c) interior encounter with God, (d) divine initiative and human response, and (e) a new consciousness resulting from revelation.

The act and content of revelation

Catholic doctrine makes a distinction between the process of revelation and the product of revelation.³⁹ In its primary sense, revelation refers to God's free initiative of self-communication to humanity, when out of God's goodness and wisdom, God discloses not only His existence and identity, but also His eternal decrees (DV §2; ND §113). This act of revelation happens in history, realized as much in deeds as in words, occurring gradually and believed finally to culminate definitively in the teachings and life of Jesus Christ, the Incarnate Word of God, who is 'both the mediator and fullness of all revelation (DV §2-4). The entire foundational revelation of Christianity is considered summed up in this so-called Christ event. As 'the definitive and normative self-communication of God', the Christ event serves as the ultimate criterion against which all other claims to revelation are measured, with no further need for nor expectation of additional revelation (McBrien, 1994, p. 268).

Revelation, however, refers not only to the action initiated by God, but also to the *result* of that action: the accumulated data of revelation, which once officially accepted by the Church, is incorporated into its so-called 'deposit or heritage of faith' (*depositum fidei*). This deposit of faith has two distinct but related modes—Sacred Scripture and Apostolic Tradition—which together comprise a single sacred deposit of the Word of God—'in the written books and in the unwritten traditions' (ND §216)—and are to be 'accepted with equal sentiments of devotion and reverence' (DV §9-10). This deposit of faith is the product of the Church's reception of revelation.

³⁹ The main references for Catholic doctrine are the dogmatic constitutions of the Catholic Church, documents of the highest teaching authority, issued by the Pope or a Church council to proclaim a dogma. Vatican II issued two such documents: one on the Church (*Lumen Gentium*) and another on divine revelation (*Dei Verbum*). Although these two documents define no new dogma, they reassert and reinterpret existing ones for the contemporary world. Their authority remains undiminished, and they are considered infallible.

The reception of revelation

Apart from the original speaker and the text of what is communicated, the receiver is often a neglected, but no less crucial, element in communication (Rush, 2004). Without reception, revelation remains merely revelatory. The Word of God is heard if and only if it is received—i.e., God’s self-communication as accepted in one’s life and not just in theory. It is, therefore, the *reception* of revelation—the experience and acceptance thereof—that actualizes revelation (Schneiders, 1991). Since ‘the entire holy people united with their shepherds’ are the intended recipient and transmitter of revelation, the Church plays a crucial role in this reception of revelation (DV §10).

Spiritual reception

The reception that actualizes revelation refers primarily to the Church’s response of faith to God’s offer of salvific revelation.⁴⁰ ‘Revelation always and only becomes a reality where there is faith’ (Ratzinger, 2008, p. 52). The Christian response of faith can be understood properly only in relation to the Catholic notion of revelation as fundamentally relational: God’s primary purpose for revelation is to establish a personal relationship with humanity. Faith is the response to God’s invitation to a relationship, entailing a free commitment of one’s self, ‘offering the full submission of intellect and will to God who reveals’ (DV §5).

⁴⁰ Rush (2009) lists a total of nine senses of reception: (a) personal (the condition for the possibility of any relationship, communication, interaction, and learning), (b) spiritual (the response of faith); (c) juridical (the canonically required assent to an official teaching of the Church), (d) hermeneutic (interpretation and application to one’s context), (e) theological (the theological understanding of revelation), (f) approbative (the determination of the orthodoxy of a specific matter of faith or morals), (g) literary (appropriation of a literary work into one’s own), (h) intra-ecclesial and (i) ecumenical (exchanges between local churches within the Roman Catholic communion and beyond, respectively). For the purpose of this thesis, I have focused on spiritual reception, interpretive reception (which corresponds to Rush’s hermeneutic and theological reception), and approbative reception.

However, aside from being God's act of self-communication, revelation also includes the content of that communication. Faith, therefore, has a cognitive dimension, entailing not only a commitment to a relationship, but also an assent to beliefs. Faith cannot be considered an exclusively affective relationship stripped of propositional truths, but neither should it be reduced to a purely intellectual response. A disproportionate focus on its cognitive dimension reduces revelation into a mere set of beliefs and the faith response of the believer into mere intellectual assent. Albeit valid, such an extrinsic conception of revelation with its separation of the action of revelation from its content is incomplete and loses sight of revelation as an invitation to a personal relationship (Latourelle, 1994).

Interpretive and approbative reception

Just as spiritual reception corresponds to the fundamental relational dimension of faith, reception has two additional senses that more directly concern its cognitive dimension: (a) interpretive reception (the making sense of the data of revelation—including Church teachings—and applying them to one's context, and (b) approbative reception (the evaluation of the fidelity of particular teachings to revelation) (Rush, 2009). These interpretive and approbative tasks comprise the Church's meaningful and faithful reception of revelation.

The Church's task of reception is both creative and critical: First of all, it generates imaginative interpretations of the contents of revelation, adapting them to new and diverse historical contexts, which make such interpretations possible in the first place. Secondly, the approbative function of reception entails the critical discernment of the resulting interpretations in terms of their fidelity to the core elements of revelations and past authoritative interpretations (Rush, 2009).

Since the reception of the Word of God lies at the very heart of its mission, the Church has been rightly described as a ‘communion of those who *receive* the Gospel’ (Alberigo, 1987, p. 3; italics added). Guiding this ‘community of reception’ is the Holy Spirit, which not only makes reception possible, but also brings it to fulfillment by granting the recipient of revelation the wherewithal to engage in its reception (Beinert, 1997, p. 325). This gift from the Holy Spirit is called *sensus fidei* and is bestowed on the primary recipient of God’s revelation, which is the whole Church (CCC §91).

The Catholic notion of the *sensus fidei*

Key contemporary Church teachings on the *sensus fidei* are found in Vatican II’s Dogmatic Constitution on the Church (1964) (*Lumen Gentium*) and, most recently, in the groundbreaking 2014 document issued by the International Theological Commission called ‘*Sensus fidei* in the life of the Church’ (henceforth, SF).⁴¹

Sensus fidei (literally, ‘sense of the faith’) refers to the Church’s and its members’ active capacity for spiritual discernment in their appropriation of revelation, the capacity to understand it (interpretive reception) and to discern authentic Christian doctrines and practices and reject what is false (approbative reception) (SF §2). The Church has recognized the notion of *sensus fidei* as early as the patristic and medieval periods, but its conceptualization emerged only with

⁴¹ The International Theological Commission, composed of theologians distinguished ‘in the science of theology and fidelity toward the magisterium’ and appointed by the Pope, was established in 1969 to study important doctrinal questions and issues and acts in an advisory capacity to the pope and the Congregation for the Doctrine of the Faith. Other conciliar documents use the following terms to refer to the *sensus fidei*: *sensus catholicus* (AA §30); *sensus christianus fidelium* (GS §52), *sensus christianus* (GS §62), *sensus religiosus* (NA §2, DH §4, GS §59); *sensus dei* (DV §15; GS §7), *sensus Christi et ecclesiae* (AG §19); *instinctus* (SC §24; PC §12, GS §18); implicitly in DV §8.

the passage of time in response to the context and needs of the Church beginning with the Reformation (SF §22ff).

The capacity for meaningful and faithful reception

Lumen Gentium makes two important points about *sensus fidei*: First, it is a common ecclesial gift, which expresses the underlying unity of faith in the Church despite its diverse charisms and ministries (Burkhard, 1993b). The *sensus fidei* is given to all members of the Church, by virtue of their baptism, enabling all the baptized, both lay and ordained, to participate in the prophetic office of Christ and to share in the Church's teaching office (LG §12, 35). In a significant shift from a juridical ecclesiology that focuses almost exclusively on the hierarchy, Vatican II stresses the participation of all the faithful—including the laity—in the common mission of the Church. The Church's mission is portrayed as a sharing in the three-fold ministry of Christ as 'king, priest, and prophet', corresponding respectively to the Church's governing, sanctifying, and teaching office (LG §10-13, 31). Given this lay participation in Christ's prophetic office, the Church's teaching authority is not limited to its official teaching office, the magisterium (the college of bishops in unity with the Pope), but shared with the laity.

Secondly, as a result of this gift, the Church as a corporate body 'cannot err in matters of belief' because of the charism of infallibility that is given to the whole Church' (Vorgrimler, 1985, p. 3) based on its unity with Christ and the indwelling of the Holy Spirit (SF §28). This corporate infallibility is manifested in a *consensus fidelium*, when there is a common consent among the faithful—a universal agreement in matters of faith and morals in the Church 'from the Bishops down to the last of the faithful' (LG §12).

Hence, the *sensus fidei* is a 'collective faith-consciousness' that enables the whole Church to participate in the prophetic office of Christ, leading not only to a stronger faith, but also to a more correct understanding of it and its fuller application in one's life (LG §12; Vorgrimler, 1985, p. 3). It is what enables the Church to engage in meaningful and faithful reception of revelation.

Dimensions of *sensus fidei*

To appreciate the different dimensions of *sensus fidei*, two distinctions need to be made: (a) the ecclesial and personal, and (b) the subjective and objective.

Ecclesial and personal dimensions

On the one hand, *sensus fidei* has for its agent the whole body of the Church. As an ecclesial reality, it is the Church's instinct of faith, by which the Word of God is discerned and God's presence and action recognized (Pie-Ninot, 1994; SF §3). The *sensus fidei* is the Church's 'eyes of faith through the centuries'⁴² that enables it to fulfill its mission of faithfully receiving salvific revelation and effectively transmitting it for future generations through the centuries (Rush, 2009).

However, the *sensus fidei* is not just the faith conviction of the whole Church, but also a believer's interior disposition to the whole of revelation (Burkhard, 2005). Every member, especially those struggling to become 'believing and practicing disciples', by virtue of baptism, also possesses a personal instinct of faith.⁴³ This capacity of individual believers is formed by one's

⁴² A range of synonyms and metaphors employed to refer to *sensus fidei* includes: 'eyes of faith' (Augustine, *Epist.* 120.2.8 [PL 33:458]), 'light of faith' (Aquinas, ST, 2-2, q. 1, a. 5, ad 1), 'eyes of the spirit', 'illative sense' (Newman, 1870).

⁴³ Although there is no unanimous consensus on the matter, Rush (2009) includes 'inactive, lapsed, and disaffected' Catholics as secondary sources of the *sensus fidelium* and other

participation in the life of the Church (ARCIC II, §29). Having no authoritative status of its own, the individual's *sensus fidei* can be exercised legitimately only within the communion of believers and in union with the ecclesial *sensus fidei* (Tillard 1988, cited in Burkhard, 2005).

Ambiguity in its terminology in the literature calls for some clarification. In such documents as *Lumen Gentium*, *sensus fidei* and *sensus fidelium* are employed interchangeably to refer to the Church's communal sense of the faith while other authors reserve *sensus fidei* for the individual believer's capacity and restrict *sensus fidelium* to its communal sense (Legrand, 1997; Rush 2001; Vitali, 2001).

In this study, the term *sensus fidei* will be used generically, but *sensus fidelium* ('sense of the faithful') or *sensus fidei fidelium* ('sense of the faith on the part of the faithful') will be restricted to the ecclesial dimension. When exercised by individual believers, *sensus fidei* will be called '*sensus fidei fidelis*'—i.e., the personal capacity of the believer to discern the truth of faith (Legrand, 1997; O'Donnell, 1996; SF §3).

Subjective and objective dimensions

Aside from the distinction between its ecclesial and personal dimensions, *sensus fidei* also refers to both the subjective capacity for making sense of the faith ('a sense *for* the faith') and the objective interpretations produced by the use of that capacity ('senses *of* the faith'). This distinction corresponds to the distinction between *fides qua creditur* (the act of faith *by which* one believes) and

Christian churches as its ancillary source, citing the 'subsistence' of the Church in the Catholic Church (LG §8) as indicating the presence and guiding action of the Holy Spirit in communities outside the Roman Catholic communion (cf. AARC II; Burkhard, 2005; 2006; Glaser, 1968; Hartin, 1991; Rush, 2001; 2009).

fides quae creditur (the content of faith which one believes) (Rahner, 1988b, p. 152).

Sensus fidei as a ‘sense for the faith’ refers to the Church’s organ of faith and its understanding, which, whether exercised corporately or individually, generates diverse ‘senses of the faith’—a multiplicity of interpretations of the faith resulting from the interpretive reception of revelation. These interpretations are not unconditionally authoritative; hence, the need to discern the authenticity of these varying senses of the faith, not all equally valid, and to judge which one, given a particular question of faith or morals, is faithful to the Word of God, and ought to be accepted and promulgated as ‘the faith of the Church.’

As I will propose later, the subjective dimension of the *sensus fidei fidelis* refers precisely to the believer’s capacity for religious critical thinking, while its objective dimension consists of their factual but ‘fragmentary and imperfect faith’ (Rahner, 1991, p. 167), or ‘concrete catechisms’ with their own hierarchy of the truths of faith that need precisely to be measured against the *sensus fidelium* (Rahner, 1988a, p. 165-166).

On the other hand, the *sensus fidelium* refers to the faith of the Church—more specifically, the *underlying* truths of the faith—i.e., ‘what the faithful believe and profess that can be grasped externally, *objectively*’ (Pie-Ninot, 1994, pp. 992-3)—yet not necessarily articulated. If the Church reaches a consensus in its discernment and the hierarchical magisterium recognizes the ‘universal consent of the faithful’ and officially declares it as the faith of the Church, it is identified explicitly as a *consensus fidelium* (Legrand, 1997; O’Donnell, 1996).

Table 19: Terms and dimensions of *sensus fidei*

	Personal dimension <i>'Sensus fidei fidelis'</i>	Ecclesial dimension <i>'Sensus (fidei) fidelium'</i>
Subjective dimension <i>'fides quae creditur'</i> (the faith by which we believe)	Personal 'sense for the faith' The capacity for religious critical thinking	Ecclesial sense for the faith
Objective dimension <i>'fides qua creditur'</i> (the faith which we believe)	Personal 'sense of the faith' Concrete catechisms	Ecclesial 'sense of the faith' (The faith of the Church) If promulgated: <i>Consensus fidelium</i>

The three conditions for the *sensus fidelium*

Typical of its consistently anti-Gnostic allergy to 'the elite and the esoteric', it is the Church as an entire body—and no single privileged group within it—that is affirmed as the primary recipient of both revelation and the requisite *sensus fidei* to interpret revelation meaningfully and faithfully (LG §12; Rush, 2009, p. 64).

The principle of reception

The Holy Spirit as the very principle of the reception of revelation stirs this inner sense for the faith among the members of the Church and inspires not only the receptivity of faith to divine revelation, but also its correct understanding and formulation (ITC, 1989, C, II, I). The Holy Spirit's guiding action, therefore, is a non-negotiable condition for the Church's exercise of the *sensus fidei*.

However, the dangers experienced by the early Church demonstrated the need for a continuation of apostolic authority in some form in order to preserve the truth of revelation, as well as the unity of faith (Scanlon, 1990). Aside from the Spirit's gift of understanding, the Church's reception of revelation is further conditioned by two norms established in the second and third centuries: the canon of Scripture and the judgements of bishops as embodied in the Church's living tradition. Scripture and Tradition, comprising the deposit of faith, ensure the continuation of apostolic oversight and regulates the evaluation of all subsequent

‘senses of the faith’ and their approbation as the Church’s *sensus fidelium* (Rush, 2009; Vorgrimler, 1985).

The deposit of faith

The mission of the Church consists of the meaningful and faithful reception of revelation, as well as its transmission and propagation. The reception of revelation and the ‘traditioning’ of what has been received are two distinct but inseparable aspects of the Church’s mission (Brueggemann, 2003, pp. 8-9).⁴⁴

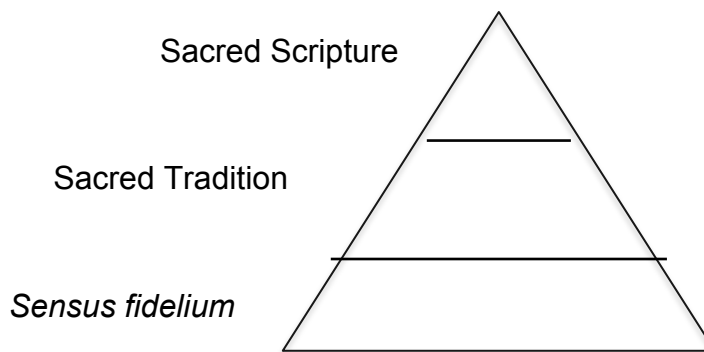
The Church’s reception of revelation is in the service of tradition (Legrand, 1997). Tradition is the living transmission of the apostolic preaching preserved and perpetuated through the continuous line of the succession of bishops (DV §7-8), and entails the reception of revelation: What has been received in faith and understanding needs to be handed on in tradition, but what has been handed on needs to be received anew for the sake of effective transmission to the next generation. Tradition is, therefore, intrinsically related to reception. In fact, in Catholic doctrine, the usual meaning of tradition as a process includes the reception of revelation because it is ‘the act of reception that renders the content of tradition concretely effective or formative of the life of the Church’ (Scanlon, 1990, p. 3).

Moreover, tradition refers not only to this twin process of reception-transmission, but also to its *product*—i.e., what the Church has determined as official interpretations of revelation. Tradition as content refers primarily to the so-called ‘deposit of faith’, which includes the written Word of God—Sacred Scripture—that norms revelation in a privileged—but by no means, exhaustive—way. Both Scripture and Tradition are, therefore, themselves fruits of the

⁴⁴ ‘Tradition’ is used as a verbal to stress that it is a living tradition, an active and ongoing process of ‘imaginative remembering’ (Rush, 2009, pp. 8-9).

Church's ongoing reception of revelation and *sui generis* products of the *sensus fidelium*: While Scripture is the foundational written expression of the early Church's *sensus fidelium*, Tradition is the ongoing authoritative articulation of its *sensus fidelium* throughout history. The primary and secondary norms of revelation respectively, Scripture and Tradition are construed as foundationally normative of all subsequent receptions of revelation, against which the authenticity of every Church teaching is to be measured (DV §9-10) even as they themselves continue to require reception.

Figure 1: *Sensus fidelium*, the apostolic tradition, and sacred scripture



The hierarchical magisterium

The third condition for the Church's exercise of the *sensus fidei* is the normative judgements of the hierarchical magisterium, the Church's official teaching office. As a privileged criterion of Christian faith, the magisterium is entrusted with safeguarding the faith of the Church through its supervision of its faith-statements. As trustees of the content of revelation, the magisterium's role is nevertheless restricted to the interpretation of faith, and their teaching is no less subject to reception (Burkhard, 1993b).

The members of the magisterium—namely, the Pope and the bishops—share in the *sensus fidei*, the fundamental instinct for the truth of the Gospel given to all the baptized. However, by virtue of their episcopal ordination, they are

believed to have received ‘the sure charism of truth’ (*charisma veritatis certum*) (LG §25; SF §76, 79). This magisterial charism refers to an ‘infallibility in teaching’ (*infallibilitas in docendo*) reserved for the Church’s official teaching office, which has been granted the special power to proclaim and authenticate the Word of God. It is, however, grounded on the Church’s more fundamental and universal charism of ‘infallibility in believing’ (*infallibilitas in credendo*) (LG §12, 25; SF §128). The episcopal charism is inseparable from the *sensus fidelium* and is linked to it in a mutual coordination of responsibilities (ARCIC-II, 1999) so that the two are exercised ‘in communion and in complementary, mutual service’ (Burkhard, 2005, p. 454).

While the doctrine of the *sensus fidei*, therefore, corrects Vatican I’s overemphasis on hierarchical infallibility by contextualizing it within the Church’s infallibility (Beinert, 1971, cited in Burkhard, 1993b), it recognizes the magisterium’s special regulative function in the exercise of *sensus fidelium* (CCC §94). To it alone belongs the prerogative to make authoritative judgements and official formulations of the Church’s *sensus fidelium* (DV §10). The *sensus fidelium*, therefore, is intimately linked not only with Sacred Scripture, but also with the magisterium, whose normative judgements are necessary for the continuing development of Tradition.

Three agents of the *sensus fidei*

Vatican II does not limit the teaching office of the Church to the official magisterium, but declares it as shared by the whole Church, including the lay faithful. As the primary recipient of revelation and of the corresponding gift of the *sensus fidei*, the whole Church participates in Christ’s prophetic office and fulfills its teaching function (LG §12, 35).

The contribution of the faithful

Vatican II stresses the positive contribution of the lay faithful in the development of the apostolic tradition by highlighting their experiences of 'the intimate sense of spiritual realities' in contrast to the theologian's study of revelation and the bishops' preaching (DV §8). The Church's understanding of the Word of God is enriched by the praxis of faith because it is in the believer's life of faith (*vita fidelium*) that the Christian faith is most concretely realized. Each lived faith is a privileged locus of revelatory experience because the *sensus fidei* is founded in the immediate experience of faith, where faith is inculturated and the meaningfulness of revelation comes to expression (Burkhard, 1993b; Tillard, 1988, cited in Burkhard, 2005).

Compared to the ordained and religious, lay people experience a greater proximity to family responsibilities, the economy, politics, and culture, and experience them with greater intensity. This privileged access to important realms of human existence and society enables the laity to appreciate certain facets of Christian revelation differently. Given the reciprocity between the practice of faith and the understanding of its content (SF §65), this daily immersion in the world provides them with a privileged grasp of the concrete implications and imperatives of the Gospel (Burkhard, 1993a). Questions and issues about a teaching sometimes emerge only when it is applied to one's life; hence, the believers' life of faith enables them to anticipate a development or explanation of a practice. The understanding of revelation takes place primarily in the daily faith-life of believers (Alszeghy, 1988).

It is the laity that accomplishes the religious socialization of each new generation, mediating revelation and handing on the faith (Burkhard, 1993b). Bishops and theologians play crucial roles in presenting the authentic Christian

faith in ever-changing situations, and at times need to confront and correct prevailing inaccurate notions with the truth of the Gospel. Many times in the history of the Church, however, the laity has played a significant role in the development of various Church doctrines—either through an unmistakable consensus among bishops, theologians, and the people (*conspiratio pastorum et fidelium*) or through a consultation with the laity, where the emerging *consensus fidelium* was considered an argument in support of a teaching. The Church's history, in fact, includes occasions when the 'truth of the faith' has been preserved neither in theological study nor magisterial teaching, but, especially at times of disagreements between bishops and theologians, through the hearts of believers, whose intuitions have served as the deciding factor that tipped the scale⁴⁵ (SF §72, 119).

The development of Christian moral teachings, in particular, constitutes a contribution of the lay faithful. Guided by their *sensus fidei*, the lay faithful's reflections on their concrete experiences in living out the Gospel and on the imperatives they encountered in real-life situations have served as the basis for the study of theologians and the judgements of the magisterium. Hence, the faithful's life experiences, where they carry out their faith in actual practice and make moral judgements arising from their *sensus fidei*, are a valuable source of data for both the hierarchy and theologians, and a significant *locus theologicus* for the Church (Glaser, 1968; SF §73). In particular, the experiences and insights of Catholic social pioneers and activists have influenced the Church's social

⁴⁵ For example, the laity's *sensus fidei* was the decisive factor in the debates on the divinity of Christ, when for nearly sixty years even after its definition from the Council of Nicea in AD 325 until the Council of Constantinople in AD 381, the bishops remained uncertain about the matter. It was the lay faithful that proclaimed it more than the bishops, constituting a 'temporary suspension of the functions of the *Ecclesia docens*' (i.e., the teaching Church) (SF §26). For other examples, see Newman (1859).

teachings especially in Pope Leo XIII's 1896 *Rerum novarum* (1891), and the declaration on religious liberty in *Dignitatis Humanae* (1965) (SF §72-73).

The unique contribution of the laity in matters of faith lies in the fact that the *sensus fidelium* is expressed not through rational or logical formulations, but through its practice in life, communicated in the richness of human experience. Since the truth of the faith encompasses the whole person's existence rather than just what is expressed propositionally, it is the *sensus fidelium* that can more appropriately express what is intended by the faith (Burkhard, 1993a). Moreover, it is the lay faithful's life of witness that endows faith with vitality and the power to attract believers (Bottigheimer, 1997, cited in Burkhard, 2006).

As a genuine mediation of God's Word, therefore, the *sensus fidelium* has a legitimate authority alongside that of the magisterium and theology, and is not merely to be tested against revelation or magisterial teachings (Beinert, 1993, cited in Burkhard, 2005). It serves what Beinert (1971, cited in Burkhard, 1993a) calls a 'criteriological function': The *sensus fidelium*, while inseparable from the magisterium, is unique because it provides a more concrete and more complete witnessing to the faith. But due to the lack of institutional means for expressing it, *sensus fidelium* as found in the praxis of the faith is not easy to clarify and determine (Vergauwen, 1999).

The lay faithful are thus significant bearers of revelation. Far from being passive recipients of their bishops' teachings and theologians' explanations, the lay are called to be 'living and active subjects' who are expected to participate in the articulation and development of the faith (SF §67). The faithful are to be treated with respect, no longer expected to remain mere obedient and meek followers of their pastors or undervalued as second-class citizens in the Church.

Rather, they are encouraged to speak up and express themselves, playing an active role and to be, in appropriate ways, consulted in matters of governance and pastoral issues, as well as doctrine (SF §121-122; Vorgrimler, 1985).

Three teaching authorities

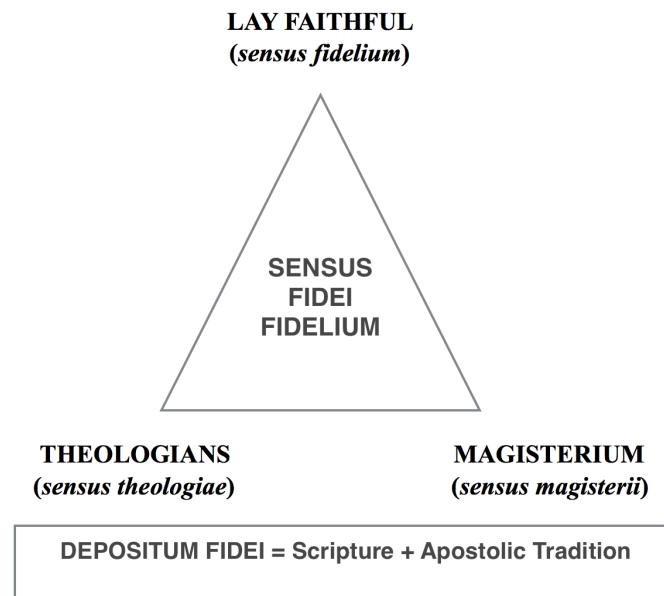
Along with the magisterium and the theologians, the lay faithful are agents of the *sensus fidei* that generate the development of doctrine and shape Tradition (SF §39, 46). By virtue of their *sensus fidei*, all three are called to participate in the prophetic office of Christ, each offering its own distinctive contribution (SF §11):

- (a) The magisterium, through their pastoral leadership, as well as their authentic interpretation of the Word of God, serves as the Church's final arbiter in determining the Church's *sensus fidelium* and formulating it into authentic teachings (DV §2, 8).
- (b) The theological community, through their academic scholarship and rational study (*scientia fidei*), promotes a deeper understanding of the contents of revelation in the light of the present context (DV §6; DVer §23-24; GS §2, 7, 44, 62; UR §4).
- (c) The lay faithful, who are neither authoritative teachers nor trained theologians, but comprise the vast majority of believers, make their unique contribution through reflections and insights that can only come from the concrete experiences of their lived faith, the *vita fidelium*, the most concrete incarnation of revelation (DV §2, 8; Gaillardetz, 1997a).

The magisterium, theologians, and the lay faithful constitute 'three teaching authorities within the Church's one teaching office': the official authority of the magisterium (normative), the scholarly authority of the theologians

(scientific), and most preeminently, the authority that derives from the believer's concrete life of faith (experiential) (Duquoc, 1985). These are the three modes of the *sensus fidei*, of which the *depositum fidei* is the norm, and the *sensus magisterii* the sole official voice.

Figure 2: The three agents of the *sensus fidei*



Vatican II's theology of revelation and reception mentions only scripture, tradition, and the magisterium, and does not explicitly mention two other essential expressions of Christian faith: theology and the *sensus fidelium* (Beinert, 1993, cited in Burkhard, 2005). Rush (2009) proposes that the formulation in DV §10, which merely implies *sensus fidelium* and theology, be revised so that these are made explicit. Hence: 'It is clear, therefore, that [the *sensus fidelium*], sacred tradition, Sacred Scripture, [theology] and the teaching authority of the Church, in accord with God's most wise design, are so linked and joined together that one cannot stand without the others, and that all together and each in its own way under the action of the one Holy Spirit contribute effectively to the salvation of souls'.

Ecclesial reception as a quest for consensus

The interpretive and approbative reception of revelation is a quest for ecclesial consensus for the determination of the Church's *sensus fidelium* in a particular matter of faith or morals. This universal ecclesial consensus—the '*consensus fidelium*' ('the consensus of the faithful')⁴⁶—is the primary object of discernment in the Church. As the public expression of the faith of the whole Church, it is both a criterion for the authenticity of a Church teaching and a condition for the magisterial exercise of its infallibility in teaching.⁴⁷ *Consensus fidelium*, which provides the service of interpreting dogmas (ITC 1989, C, II, 4), refers to a single formulation of an agreement among believers in a particular matter resulting from a process of ecclesial discernment involving the entire Church, though authoritatively judged, authentically formulated, and officially promulgated by the magisterium. In practice, the *consensus fidelium*, far from a given fact, remains an unfinished task, 'always to be desiderated, of course, yet never completely attained' (Haarsma, 1972, p. 125).

The *consensus fidelium* refers not to a mere collection of opinions in the Church regarding a matter of faith or morals, but to a genuine faith-inspired convergence of faith among bishops, theologians and other scholars, as well as the ordinary faithful based on their fundamental *sensus fidei*. (Legrand, 1997). Hence, *consensus fidelium* is by no means decided exclusively through majority opinion, but through a careful discernment process whose primary criterion is what is eventually judged as the Church's universal corporate sense of the faith, found not only bishops and theologians, but also in the laity (SF §47; Scheffczyk,

⁴⁶ Also referred to as: *universum ecclesiae sensus* (the universal understanding of the Church), *sensus christianus, catholicus intellectus, communis fidei conscientia* (Rush, 2009).

⁴⁷ The three other conditions to the content of infallible dogma aside from universal consensus are: (a) revelation, (b) Holy Spirit, and (c) magisterium (DV §8, 10; LG §12, 25).

1988). Public opinion, however, remains valuable as one of several ways of determining the *sensus fidelium* (Burkhard, 2006).

Given the controversies and heresies faced by the Church during the patristic period, the *consensus fidelium*—i.e., the faith of the whole Church as inferred from the faith and practices discerned in all the local churches—became an important criterion for discerning the content of the Apostolic Tradition (SF §23). In the first five centuries of its history, in fact, it was this *sensus fidelium* that was decisive not only in articulating the foundational doctrines of Christianity such as the divinity of Christ and the divine motherhood of Mary, but also in the formation of the canon of Scripture.

A dialogic process

The process by which the *sensus fidelium* is discerned and identified as a consensus in the Church can be a tedious and thorny process, requiring not only openness, but also the patient endurance of the tensions inherent in such a dialogic process (Beinert, 1993, cited in Burkhard, 2005). In recent decades, efforts in the Church to build such consensus have been weak, and not all parties involved have permitted themselves to be engaged in the process (Legrand, 1997). If the Church's reception of revelation, however, is a quest for authentic ecclesial consensus, the three foundational witnesses of revelation need to enter into a dialogue made possible by a balance between the faithful's understanding of the faith and the hierarchy's responsibility to define and teach it (Finucane, 1996). While the faithful attend constantly to the teachings of bishops, the pope and the bishops, on their part, must listen to the concerns and questions of the faithful, with neither 'lording it over the word of God' (DV §10; Vitali, 2001). In a true *conspiratio* among its three agents, the *sensus fidelium*, first intuited by the

faithful, needs to be normed by Scripture, clarified by theologians, and finally, accepted by the magisterium (Burkhard, 1993a).

A listening magisterium

Ecclesial consensus is achieved only when the magisterium listens attentively to both the lay and the theological community. In order to determine the Church's sense of the faith in the matter, the bishop—particularly through his priests—must listen attentively and respectfully to these manifestations of the *sensus fidelium* (Tillard, 1982). In a 'reception in reverse', the bishop enters into a process of 'rethinking, weighing, testing and clarifying what the faithful (including theologians) are saying' (Tillard, 1988, cited in Burkhard, 2005), and is, in the process, alerted by the *sensus fidelium* to any need that his local church might have for its well-being and mission, specifically if there is a necessity for a new reception of elements of the tradition (ARCIC-II, 1999; SF §74-75).

Scheffczyk (1988) rejects three current models of the *sensus fidei* that impact on the relationship between the hierarchy and the laity: (a) as a wedge of opposition between the two, (b) as a means of check and balance against the abuse of power by either, and (c) as a mere device for elevating the self-worth of the lay faithful vis-à-vis the ordained. In their place, a more organic interrelationship between the two is proposed, where not only do both share in the *sensus fidei*, but the exercise of their distinct charisms are mutually reciprocal and beneficial: The *sensus fidei* of the faithful is provided direction and clarity from the magisterial guidance, while the magisterium draws from the concreteness of the laity's life of witness.

A listening theologian

The process of determining the Church consensus likewise requires a listening theologian. Since the Christ event is believed to be a present salvific

reality that is most concretized in contemporary experiences of revelation, the starting point of theology is faith as *lived* by the Church, and its proper locus the *sensus fidelium*. Hence, theologians must be open to the legitimate and rich theological resource that is the *sensus fidelium*, including prophetic and mystical movements (SF §82).

The theologian strives for a rational, critical, and systematic understanding of the faith both as taught by the magisterium and as embodied in the practical intuitions of the *sensus fidelium*; theirs is a necessary mediation between the hierarchy and the faithful that results in the credibility of the Gospel both within and beyond the Church (Bottigheimer, 1997).

Hence, the three distinct witnesses to revelation depend on one another in their communal pursuit of the truth of the faith. For this reason, the pastors and theologians need to encourage the laity to express themselves. The 'listening bishop and the 'listening theologian' are, therefore, crucial for receiving and determining the *sensus fidelium* (SF §74, 81). A genuine voice for the laity can be heard only through meaningful dialogues, such as those possible in synods. But the contemporary Church lacks adequate institutional means for expressing and clarifying this voice, with the laity *de facto* resorting to public opinion, as illustrated by the widespread rejection of the *Humanae Vitae* (Pottmeyer, 1991). It is, therefore, through the deliberate efforts of both bishops and theologians that the *sensus fidelium*, in the absence of procedures or mechanisms, can be accessed and included in the discernment of ecclesial consensus.

CATHOLIC RELIGIOUS EPISTEMOLOGY AS CRITICAL REALIST

In this next section, I will propose that the Catholic religious epistemology that emerges from its theology of revelation manifests a critical realist

commitment to judgemental rationality by showing its underlying conviction in both ontological realism and epistemic relativism. In particular, I will argue that the notion of *sensus fidei* establishes the epistemic relativist quality of Catholic religious epistemology because it highlights: (a) the socio-historical process of reception, (b) the perspectival relativity of our beliefs, and (c) the inevitable development of doctrine. By virtue of its ontological realism and epistemic relativism, therefore, not only does Catholic religious epistemology permit the possibility of judgemental rationality, but also, in fact, requires it.

***Sensus fidei* and the possibility and necessity of judgemental rationality**

As in the case of the sciences and human knowing in general, religious knowing is possible and intelligible only if the intransitivity of reality is assumed. The denial of a mind-independent reality renders knowing in any domain unintelligible. Catholic religious epistemology, in particular, requires an ontological realism that posits the intransitivity of God and the reality revealed by His revelation. For if the contents of revelation were but human fabrications, then it would not make sense at all to speak either of revelation or reception.

Ontological realism: The intransitive dimension of revelation

Catholic doctrine's assertion of the necessity of divine revelation illustrates the intransitive dimension of revelation and reveals the ontological realism underlying Catholic religious epistemology.

Reason as limited and our need for revelation and faith

The whole Christian theology of revelation is premised on the inadequacy of human reason to know God. The utterly independent existence of God—i.e., His transcendence—is the basis for the Catholic teaching on revelation; it also constitutes the foundation for Catholic ontological realism.

While the Church teaches that human reason can know about God with certainty from the created world (DF §114, DS §6), human reason inevitably falls short because God is transcendent—‘the inexpressible, the incomprehensible, the invisible, the ungraspable’ (Chrysostom, —then human reason will inevitably fall short (DS §3876). As Thomas Aquinas wrote in his *via negativa*: ‘...concerning God, we cannot grasp what he is, but only what he is not, and how other beings stand in relation to him’ (SCG §1, 30). The Fourth Lateran Council similarly declared that ‘between creator and creature, no similitude can be expressed without implying an even greater dissimilitude’ (Lateran Council IV; DS §806).

Hence, we require divine revelation because the limits of natural reason prevents us from accessing what only revelation can offer: ‘divine treasures which totally transcend the understanding of the human mind’ (DF, DS §3005).

While we can rely on our reason to know God’s existence (‘that God is’) and to infer, to a limited extent, God’s nature (‘what God is’), only the illuminative light of faith can offer us a fuller knowledge about God and ‘the eternal decrees of His free will’ and the ‘divine goods which altogether surpass the understanding of the human mind’ (DF §5, ND §113-114). In fact, the knowledge offered by revelation is a personal knowledge of God (‘who God is’). According to Aquinas, for instance, reason can establish the existence of the one God, but only revelation enables us to recognize the mystery of God’s triune nature (Benedict, 2010). Because of these limits of human reason, faith in divine revelation is necessary for salvation (ND §122, 132).

According to Catholic theology, God can be known through human reason only in a limited manner given the finitude and fallibility of our knowing. We are dependent on God for our knowledge of Him; revelation is not only distinct from our knowledge, but also wholly independent of it.

Revelation as pure divine initiative

Revelation is God's act of self-communication with humanity, freely initiated by Him, its manner and time of implementation completely determined by God. Revelation is a purely divine and totally human-independent initiative. Without asserting this human-independent nature of revelation, revelation would be a mere human product, so there can be neither possibility nor sense in the notion of either revelation or reception. The idea of the reception of revelation is, therefore, rooted in and contingent on the intransitivity of reality—in this case, the transcendence of God and His revelation.

Ontological realism underlies the Catholic theology of revelation, most evident in its insistence on revelation as a completely free initiative from God. Based on its theology of revelation and its reception, Catholic religious epistemology is premised on the belief that God, the ultimate ground of reality, can be known only in God's own terms—i.e., in the precise manner and time that He wishes. It is God who initiates His self-communication, and God alone who determines His own cognitive possibility. Since it is God who, as it were, calls the shots in His self-revelation, and since His act of revelation is by no means dependent on its intended human recipients or the power of their reason, Catholic religious epistemology is unmistakably grounded in ontological realism.

The teaching that unless there is reception, revelation remains unrealized may be misconstrued as a case of the epistemic fallacy, where the intransitivity of revelation is collapsed into the transitive dimension of reception. Instructive here are the critical realist insights into depth stratification and open-system causality. Since the world is an open system, divine revelation may have no realized—and perceived—effect given the interaction of divine, social, and especially psychological causes operative during the act of reception. Without reception, revelation is not actualized.

Epistemic relativism: The historical nature of revelation and the transitive process of reception

While divine revelation has a non-negotiable intransitive dimension, it also has an essentially transitive—i.e., historical and sociocultural—aspect. This inherent—but often overlooked—epistemic relativism of Catholic religious epistemology may be gleaned from its teachings on the historicity of revelation and the transitive nature of the process of reception and tradition.⁴⁸

By no means synonymous with the judgemental relativism rejected by the Catholic Church as incompatible with its faith, epistemic relativism refers to the historically conditioned quality of Church teachings, as well as their reception and articulation. This acknowledgement of the socio-historical process of reception by no means compromises the Church's essential continuity with the first apostles. It is, in fact, the *sensus fidelium* resulting from the ongoing inculturation of the Gospel by the Church that ensures this continuity (Crowley, 1992).

The historical and relational quality of revelation

Historicity is a constitutive and organic element of revelation. According to Christian doctrine, God has chosen to reveal Himself *within* history through a gradual and piecemeal process of divine self-communication involving different stages of revelation that unfolds through specific historical events and is mediated by specific historical persons before definitively culminating in a chronologically specified point in the person of Jesus of Nazareth (DV §4; Latourelle, 1994).

⁴⁸ There are indications that Aquinas had an insight into epistemic relativism, as evidenced by the following: 'whatever is received into something is received according to the condition of the receiver (*Quidquid recipitur ad modum recipientis recipitur*)' (ST, 1a, q. 75, a. 5; 3a, q. 5); and "a thing known exists in a knower according to the mode of a knower' (*Cogitum...est in cognoscente secundum modum cognoscentis*)' (ST, 1a, q. 12, a. 4).

This historical particularity of Christianity, labeled in the 19th century as ‘the scandal of particularity’, is rooted in its central doctrine of the Incarnation and the belief that the salvation of all humanity is achieved through one geo-historically particular person, Jesus of Nazareth. The same historical particularity is evident in its theology of revelation: Christianity is not a religion of timeless truths as it is about accounts of particular events in the lives of particular people belonging to particular historical eras (Himes, 1997).

Its historical and relational notion reveals the transitive dimension of Christian revelation and illustrates the epistemic relativist quality of Catholic religious knowing. For God’s interventions are ‘embedded in human events, are perceived by human minds, and are communicated by human words and images’ (Orsy, 1987, p. 476).

The historical and social process of the reception of revelation

The Church’s insistence on the equally important role that Tradition plays alongside Sacred Scripture acknowledges the transitive dimension of revelation. It is the process of ecclesial reception, empowered by its *sensus fidei*, that drives and shapes the Church’s tradition and makes it a living one. For Congar (1966), tradition makes explicit what is implicit in Scripture. As a result of its centuries-old activity of reception, the Church has generated—and continues to generate—a tradition that incorporates increasingly deeper understanding and increasingly detailed elaborations of revelation. It is because of this constant inculturation and interpretation of revelation, requiring both invention and reinvention, that Christianity has continued to be ‘the living faith of the dead’ and not ‘the dead faith of the living’ (Pelikan, 1984, p. 65). The development of Church Tradition, like the ecclesial reception on which it is wholly dependent, is a transitive process.

The crucial role attributed by Catholic doctrine to the *sensus fidei* in the reception and traditioning of revelation illustrates the epistemic relativism of its religious epistemology. The Church's task of interpreting revelation necessarily takes place within socio-historical and cultural specificities, and entails the understanding and application of revelation for every new context. Because of the historical nature of its intended recipients, by no means have all the implications and significance of revelation been spelled out. The passage of time and the changing historical contexts require the Church—precisely through the exercise of the *sensus fidei*—to deepen its understanding of revelation and to unwrap its manifold meaning (DV §9). Indeed it is for this reason that reception is never complete and remains an open and ongoing process long after the core of Christian revelation has been completed in Jesus Christ.

The Church's continuing need to discern the *sensus fidelium* across generations is proof of the historical and hermeneutical character of reception, and consequently, the openness of the truth of revelation. Moreover, the necessity for dialogue among its agents demonstrates the incompleteness of human knowledge—even of the magisterium: Taken alone, one acquires at best a partial understanding of revelation, regardless of one's ecclesial status (Burkhard, 2006). Doctrines are open since they have, in the past and with the necessary concurrence of bishops, submitted to change, with bishops learning from the *sensus fidelium* (Dionne, 1987). Moreover, the *sensus fidelium* always has an unfulfilled and open status—'true knowledge, but knowledge that is also partial and that expresses the pilgrim character of all saving knowledge, both for the individual believer and for the whole community of believers.... Faith is always both project and possession' (Burkhard, 2006, p. 52).

The transitive products of the reception of revelation

The exercise of the *sensus fidei* in various communal and individual receptions of revelation generates a multiplicity of interpretations of the faith with varying degrees of orthodoxy. The Church's sense *for* the faith breeds different senses *of* the faith. The process of interpretive reception yields what Rahner (1988a) calls 'concrete catechisms'—i.e., individual and communal religious convictions based on, but short of, the official catechism.

Like the production of knowledge in other fields, the generation of these interpretations of the faith does not happen *tabula rasa* or *ex nihilo*: It is a communal and activity-dependent task that continually builds on the past in a spirit of creative fidelity. Reception is always normed by the faith of the Church as embodied in Sacred Scripture and Tradition. Communal and individual senses of the faith, therefore, are conditioned and produced by means of antecedent senses of the faith, especially those incorporated within the Church's deposit of the faith. For this reason, the reception of revelation has a necessarily social and transitive character.

There has also been an increased consciousness of the cultural-linguistic character of the Church's expressions of faith: In order to mediate meaning to historically particular persons, the language used in expressing the Church's beliefs also need to change. For both theological and cultural-linguistic reasons, however, this task of redefining the faith is not the exclusive domain of the hierarchy, but is the responsibility of the whole Church (Sartori, 1981).

The diversity of the expressions of faith resulting from the *sensus fidei* is significant for several reasons. First of all, contrary to expectations, diversity—particularly the diversity of theological expressions generated by the theological community—is necessary for mediating the faith (Tillard, 1982). Moreover, the *de facto* existence of different—and sometimes conflicting—interpretations of the

faith with varying degrees of fidelity to revelation demonstrates the perspectival relativity of the Church's reception of revelation. Finally, the historicity, diversity, and fallibility of these fallible formulations of faith establishes the Church's need to critically discern these varied interpretations through an ecclesial exercise of judgemental rationality.

Hence, the ongoing task of ecclesial reception, as demanded by the changing historical contexts of the Church and as enabled by its *sensus fidei*, is an indication of the epistemic relativism underlying the Catholic theology of revelation and characteristic of Catholic religious epistemology that it defines. This reception of revelation is an inherently transitive process, by which the Church, drawing from its *sensus fidei*, understands, interprets, and applies the content of revelation in changing historical contexts. Resulting from the reception of revelation is a multiplicity of communal and individual interpretations of the faith, illustrating not only the epistemic relativism characteristic of Catholic religious epistemology, but also the Church's ongoing need to exercise judgemental rationality.

In conclusion, the Catholic theology of revelation and its human—and necessarily socio-historical—reception fosters a religious epistemology that is properly critical realist, defined by a fundamental ontological realism and epistemic relativism, resulting not only in an option for judgemental rationality, but an actual mandate for it.

Judgemental rationality: Doctrines as retroductive models

In its approbative reception of revelation, the Church assesses the authenticity of various interpretations of the faith generated by its interpretive reception, constituting an ecclesial exercise of judgemental rationality. The *sensus fidei* underlying this interpretive reception, which produces the multiplicity

of finite and fallible interpretations of the faith, is the same sense for the faith operative in the Church's task of approbative reception. In Catholic religious epistemology, the *sensus fidei* is the condition for the possibility of exercising judgemental rationality.

Abductive reasoning and retroductive explanations

Ecclesial reception refers not only to the ongoing interpretation and deepening of understanding of Christian revelation, but also the judgement of the authenticity of these interpretations in light of their fidelity to the faith of the Church. Despite the limits of reason, the Church needs to evaluate different ways of understanding the revealed mysteries of faith and to identify which one best articulates their truth. The *sensus fidei* provides the Church an assurance of the Holy Spirit's assistance in this two-fold task of interpretive and approbative reception. The Church's meaningful and faithful reception of revelation, which generates the multiplicity of expressions of the faith with varying degrees of orthodoxy, may be conceived as an ecclesial exercise of judgemental rationality, paralleling the critical realist abductive-retroductive-iterative process through which scientific explanations are produced.

The abductive-retroductive-iterative process entails a search for the most powerful and comprehensive explanations possible to help us understand an object or event. It consists in the construction of theoretical models, beginning from abduction leading to retroduction and onto iteration. Abductive moments are constituted by breakthrough encounters with reality, characterized by new insights or hunches resulting from the discovery of new data or fresh perspectives of existing problems. These novel insights and perspectives prompt us to formulate retroductive hypotheses of plausible underlying causes to account for the reality under investigation. Judgemental rationality is exercised in the

choice of the best possible explanation, which is iteratively tested, refined, and if necessary, replaced with an explanatorily superior one (McGrath, 2009).

The canon of scripture

The formation of canonical scripture in the early Church demonstrates the Church's exercise of judgemental rationality in its task of interpretive and approbative reception. The whole canonization process of Scripture resulted from the exercise of both individual and communal *sensus fidei*, generating diverse senses of the faith and judging between sometimes conflicting claims. From among this plurality of interpretations about the meaning of the life and person of Jesus Christ, the Church made the choice of which writings to include in the New Testament based largely on their usage by the different churches. The ecclesial consensus on the canon of Scripture affirms that these—and only these—writings provide 'a single standard sufficient for both expressing the unity of the faith and for judging legitimate diversity in the ongoing interpretation of the Christ event' (Rush, 2009, p. 151).

Two things need to be noted in the formation of the canon of the Christian scripture: First, the books included in the New Testament continue to represent an entire range of diverse retroductive accounts of Jesus Christ, illustrating that unity in the faith and the plurality of its expressions need not be mutually exclusive (Burkhard, 2005). Secondly, the Scripture, unlike, for example, the Q'uran, is acknowledged as a transitive product of the Church's transitive process of interpreting revelation and as a *norma normans ut normata* ('an interpreting interpretation' because Scripture constitutes a 'model interpretation'), requires continuing interpretation (Boff, 2009, p. 140).

The canonical scripture was the outcome of a careful discernment in pursuit of ecclesial consensus. Its formation exemplifies the prolonged, if not

convoluted, process through which the Church reaches a universal consensus in particular questions of faith and morals. Far from following a neat and formal decision-making procedure, the determination of the Church's *sensus fidelium* entailed a wide and diffuse communal discernment that lasted over four centuries, involving the laity, theologians, and bishops, and was overseen—but by no means controlled by—the latter.

Possible objections to a critical realist Catholic religious epistemology

Epistemic relativism in Christianity entails a rejection of any form of premature epistemic closure and the recognition that its truth claims about the ultimate nature of reality are historically conditioned and consequently necessarily incomplete. True to the critical realist spirit, this admission of the contingency of human knowing does not entail an abandonment of the evaluative task.

For Catholic theologian Edward Schillebeeckx, precisely because all knowledge is made possible by the framework of language and history, 'the Holy Spirit can be distorted by the manipulation of those in office or their negligence. The Magisterium can produce poorly formulated or one-sided doctrines that need *correction* in the context of the wider Christian tradition' (Thompson, 2003, p. 27; italics mine). The Church recognizes the products of its exercise of judgemental rationality—the classical Christian doctrines—as human constructs that cannot be complete expressions of the ultimate truth even as a classical Christian doctrine like the Blessed Trinity, for instance, is officially promulgated as having a superior explanatory power—at least, thus far—as a retroductive account of the nature of God (Wright, 2013).

A Catholic dogma like the teaching on papal infallibility, taken in itself—has understandably been described as a Catholic 'flirtation with epistemic closure'

(Wright, 2013, p. 88). However, the dogma of papal infallibility, when examined within its historical context, emerges as largely a defensive reaction of the papacy against the perceived perils of modernism. Secondly, it was a contested doctrine even during its discussions at the First Vatican Council, so that as a result of the deliberations, the exercise of papal infallibility was restricted only to matters of faith and morals and only to occasions when the pope speaks *ex cathedra*.

What is significant is that the dogma of papal infallibility by no means ignores the *sensus fidelium*, but in fact presupposes it as its basis. The original draft constitution, *Supremi Pastoris*, had devoted one chapter to the infallibility of the Church as the foundation of papal infallibility although its discussion was deferred and not taken up. However, the spirit of the teaching on papal infallibility is that it is not divorced from the rest of the Church and entails consultation (SF §40). Papal infallibility, far from a personal prerogative of the Pope, is an expression of—and cannot be divorced from—the ecclesial ‘infallibility in believing’—reserved especially for occasions when there is a clear *consensus fidelium* (Sartori, 1981). The *consensus fidelium* serves as one of the criteria used by the magisterium in defining the faith of the Church. While the consent of the Church is not a juridical requirement for the legitimacy of a doctrine, it serves as a *confirmation* of what is officially taught (Haarsma, 1972). For this reason, in the Catholic Church, the common consent among the faithful—or *consensus fidelium*—is considered the sure manifestation of the authenticity of a doctrine or practice and serves as a confirmation that it belongs to the apostolic faith (SF §3).

This restriction of the exercise of papal infallibility to cases of the *consensus fidelium* is illustrated in the infallible definitions of the dogmas of the Immaculate Conception of Mary and the Assumption into Heaven; in both cases, the *sensus fidelium* played an important role (Heft, 1992; SF §27). Consultation

was conducted for both, and the data showed the belief in Mary's Immaculate Conception, as well as her Assumption, was 'thoroughly rooted in the minds of the faithful'. Pope Pius XII observed that the *conspiratio* showed 'in an entirely certain and infallible way' that Mary's Assumption was 'a truth revealed by God and contained in that divine deposit which Christ delivered to his Spouse to be guarded faithfully and to be taught infallibly'. In both cases, then, the papal definitions confirmed and celebrated what were already the deeply held beliefs of the faithful' (SF §42).

The Catholic teachings on infallibility—whether or not actually exercised officially by the Pope and bishops—may be misconstrued as a claim to epistemic closure that is contrary to epistemic relativism. However, without explicitly admitting their fallibility, the Church's doctrines on the necessary reception of revelation and the function of the faithful's *sensus fidei* acknowledge the contingency and limitations of its retroductive doctrines and dogmas.

In summary, Catholic religious epistemology, understood as critical realist, subscribes to what Collier (1994) calls a realist and rationalist account of religious belief: Not only does it make truth claims about reality (realist), but it also asserts that there are grounds for faith in these truth claims (rationalist). Only such a realist and rationalist epistemology—i.e., critical realist—enables us to accept 'a judgmental rationalism within an epistemic relativism within an ontological realism' (p. 44).

***The sensus fidei* and a critical realist Catholic religious epistemology**

The Catholic notion of the *sensus fidei* helps us define a Catholic religious epistemology that may be characterized as critical realist, with the requisite ontological realism and especially epistemic relativism. Ontological realism is manifested by its fundamental assertion of the transcendental nature of God's

revelation as a totally free and independent divine initiative and as humanly inaccessible knowledge, as well as the resulting human need for divine revelation and our strictly non-negotiable reliance on God for the manner and content of revelation.

Its less apparent epistemic relativism, however, is established by the *sensus fidei* by highlighting the historicity of reception: The *sensus fidei* constitutes precisely the Church's capacity to engage in the socio-historical process of interpretive reception—i.e., its inevitably ongoing task of making sense of revelation in changing historical times. Furthermore, the plurality of finite and fallible 'senses of the faith' generated by ecclesial and individual reception illustrates the perspectival relativity of the human reception of revelation and establishes the need precisely for judgemental rationality: The Church's task of assessing the diverse interpretations in order to determine the *sensus fidelium* becomes all the more necessary—not just for the preservation of the truth but also for the unity of the faith.

The Church's doctrine-generating task of reception is significant because these formulations of the Church's beliefs indicate its realist character: The doctrines claim epistemological purchase on ontological reality (Wright, 2013). Reception also results in the development of doctrine—i.e., the Church's ever-deepening understanding of the content of revelation as the fruit of centuries of prayer, study, reflection, and practice of faith—demonstrating its commitment to and exercise of judgemental rationality. The Church's body of doctrines—the *depositum fidei*—may be viewed as a growing collection of retroductive accounts of reality that are iteratively refined and deepened in time—in a manner similar to, but also significantly different from, the scientific enterprise.

While the logic of judgemental rationality is shared by—and characterizes—every science, the way it is exercised varies in a domain-

dependent manner. True to the critical realist spirit, the possibility and manner of verifying a particular retroductive account—whether it can be purposefully induced as in the case of the experimental sciences or not as in the intrinsically open human and social sciences—varies from one ontological level to another, just as the criteria used for the selection, refinement, or rejection of retroductive accounts also differ from domain to domain.

Hence, Catholic religious epistemology may be characterized as properly critical realist as it adheres to the triad of ontological realism, epistemic relativism, and judgemental rationality (Table 20). This commitment to judgemental rationality, which is possible, intelligible, and necessary in light of its ontological realism and epistemic relativism, provides the oft-overlooked but much-needed *raison d’etre* for Catholic religious critical thinking.

Table 20: Summary of the critical realist character of Catholic religious epistemology

Ontological realism	Transcendent nature of revelation: divine initiative and limits of reason
Epistemic relativism	Socio-historical nature of interpretive reception Perspectival relativity of interpretations and expressions of faith
Judgemental rationality	Need for approbative reception

In the next section, I will focus on the individual believer’s exercise of the *sensus fidei* and suggest its exercise as the legitimate form of Catholic religious critical thinking.

CATHOLIC RELIGIOUS CRITICAL THINKING AS THE EXERCISE OF *SENSUS FIDEI*

Critical thinking as the expression of one’s commitment to judgemental rationality provides the needed rationale for the practice of critical thinking and constitutes an essential basis for the so-called ‘critical spirit’. However, the disposition for critical thinking, while necessary, is not sufficient. A domain-appropriate competence in critical thinking is also called for.

In this section, I will first analyze the notion of the individual *sensus fidei* based on the Church's recognition of the role of the laity in the reception of revelation. I will then propose that the specific form of critical thinking involved in one's personal reception of revelation is the exercise of one's *sensus fidei*, clarifying that Catholic religious critical thinking entails a distinct kind of knowing that is not purely rationalistic. Given this conception of Catholic religious critical thinking as both an expression of judgemental rationality and an exercise of the believer's *sensus fidei*, an important goal of Catholic religious education will be to encourage reasoned and faithful assent. I will discuss how *sensus fidei* opens up the possibility of legitimate dissent, a necessary condition for any authentic exercise of critical thinking. Finally, I will recommend two initial concrete steps to work towards promoting critical thinking in confessional Catholic religious education, given the insights of this study.

The *sensus fidei* of the individual believer

An important dimension of *sensus fidei* is its exercise by the individual believer. This personal aptitude to discern the truth of the faith ('*sensus fidei fidelis*') enables the believer to judge the conformity of a particular doctrine or practice to the Gospel and to the Christian faith as received in the Apostolic Tradition (SF §49). It is distinct from, but rooted in, its communal counterpart.

Since all members of the Church share in its corporate *sensus fidei* (LG §12), they each possess a personal form of this faith consciousness, rooted in one's response to the revelation entrusted to and interpreted by the Church (SF §49). Just as the faith of the individual believer participates in the faith of the Church, the individual's *sensus fidei* is inseparable from its *sensus fidelium* (SF §48; 65-66). The ecclesial *sensus fidelium* is the environment that both nurtures

and regulates the individual's *sensus fidei*. But every believer's *sensus fidei* also contributes to—and enriches—the Church's *sensus fidelium*.

***Sensus fidei* as a mode of knowing**

If, as proposed, Catholic religious critical thinking is conceived as the exercise of one's *sensus fidei*, we need to investigate whether *sensus fidei* constitutes a valid way of knowing and what mode of knowing it entails. At the outset, the *sensus fidei* is to be distinguished from the *scientia fidei* of theology and from the normative judgements of the magisterium. Compared to the scientific and normative modes distinctive of theologians and bishops, respectively, the mode of understanding by the faithful is fundamentally experiential (Alszeghy, 1988). However, this 'spontaneous judgement of a loyal and faithful Catholic' possesses not only a credibility grounded on the witness of their lived faith, but also, as a consequence, significant theological value (Glaser, 1968, p. 742).

What *sensus fidei* is not

To define the type of knowing that constitutes *sensus fidei*, we need to eliminate common misconceptions about it—namely, that it is (a) purely discursive, (b) anti-rational and subjective, (c) passive and mechanical, and (d) individualistic.

Purely discursive

What its very name as a 'sense of faith' makes clear is that the *sensus fidei* is not identical to discursive or theoretical knowledge. It is not a science (as in the theologian's *scientia fidei*), but rather a sense, a 'supernatural instinct' (SF §2). It refers to the more direct and immediate kind of knowing prior to the secondary moment of abstraction and conceptualization. It is more intuitive and

not totally susceptible to conceptual articulation. The *sensus fidei* corresponds more to the *fides qua* ('the act of faith by which we believe') which enables and conditions our understanding, interpretation and application of the *fides quae* ('the content of faith that we believe') (Rush, 2009).

The *sensus fidei* is what Rahner calls a pre-conceptual form of knowing (knowledge as tacit, non-discursive, non-reflexive) as distinguished from conceptual knowing (knowledge as explicit, thematized, reflexive). Both forms of knowing have limitations, which can be overcome only through the use of both. Neither is superior to the other, with the exclusive right 'to act as the court of last appeal in all instances' (Glaser, 1968, p. 749). Hence, the pre-conceptual mode of knowing entailed by the *sensus fidei* is valid, but requires the conceptual modes of theological study and magisterial teachings to complete it.

Anti-rational and subjective

The unfortunate, though understandable, definition of *sensus fidei* as 'intuition, instinct, or spontaneous judgement' may suggest that it is not rational. The point of these definitions is to clarify that the *sensus fidei* is not limited to discursive reasoning, definition or strict analysis, but no less legitimately belongs to the realm of knowing (Burkhard, 1993b). It has been compared to an experienced medical practitioner's 'clinical eye' (Haarsma, 1972, p. 120). Hence, the *sensus fidei* is not an anti-rational 'feeling' or 'sixth sense' (Thompson, 1973). Though spontaneous and non-discursive and non-conceptual, it is no less rational but is specific to the faith out of which it arises: It gives reasons for everything relevant to that faith (Haarsma, 1972). In fact, it has theological value despite its inarticulate and spontaneous form (Glaser, 1968).

Moreover, while it constitutes a personal and interior understanding of the

faith, it cannot be reduced to subjective knowledge or opinion. Even tacit and non-theoretical knowledge (practice, emotion) is object-centered—i.e., defined not by its knower, but by its object. In fact, tacit knowledge, when articulated, often proves as objective as theoretical knowledge (Collier, 2003).

Passive and mechanical

Sensus fidei is also not the mere passive reception of magisterial teachings. It refers to the underlying pre-conceptual grasp of the faith that actively seeks consensus within the Church. The *sensus fidei* is always active—and interactive (Thompson, 1973). The temptation to conceive of the *sensus fidei* as passive, as compared to the active knowing of the magisterium and theology corresponds to the outdated and artificial distinction between a ‘learning Church (*ecclesia discerns*) and a ‘teaching Church (*ecclesia docens*). As clarified by Vatican II, the entire Church is called to learn and teach (Burkhard, 1993b).

There is also a naïve tendency to regard the *sensus fidei* as supernatural not only in terms of its origin in the Holy Spirit, but also in its actual operation: A believer automatically or even magically acquires infallible understanding of the faith—without any reliance on one’s human faculties (Thompson, 1973). Recipients of the *sensus fidei*, however, are called to exercise it, and in its exercise, they inevitably bring ‘the weight of their own fragility, power, self-appointed goals and sinfulness into play’ (Burkhard, 1993b, p. 133).

Individualistic

Finally, as discussed earlier, the *sensus fidei* can never be exercised exclusively by an isolated individual believer in a manner divorced from the primary recipient of revelation, which is the whole Church. It must always be understood relationally—in terms of the believer as a member of the Church

(Beinert, 1971, cited in Burkhard, 1993a). Its authentic exercise must always be regulated by the rule of faith, the rule of dialogue with theologians and magisterium (Alszeghy, 1988; Beinert, 1993, cited in Burkhard, 2005). Moreover, *sensus fidei* requires a basis of trust between believers since a person's faith is necessarily mediated by the faith community and operates in a circular structure, where the Church's beliefs (*fides quae*) elicit an individual's faith (*fides qua*), which in turn enriches the ecclesial faith (*fides quae*) (Burkhard, 1993b).

***Sensus fidei* as a way of knowing**

Two models can help us understand the type of knowledge that *sensus fidei* constitutes: as existential and connatural knowledge.

Existential knowledge

Since revelation applies to all of life, the *sensus fidei* is directed towards existential knowledge, providing a context for understanding and acting in the world, and encompassing life in both its richness and uncertainties. Because it is experiential, the primary form of the *sensus fidei* is the 'narrative of a life' (Rush, 2009, p.246). The understanding offered by *sensus fidei* is global, not limited to 'either the scientific or nonscientific, to either the conscious or the subconscious, to either the known or the experienced, to either the defined or the undefined' (Burkhard, 1993b, p. 134).

Connatural knowledge

Sensus fidei has been explicitly linked to what Aquinas calls 'knowledge by connaturality', a legitimate and rational form of knowing that is acquired more through inclination and sympathy rather than concepts and discursive reasoning (Glaser, 1968)—what Thompson (1973, p. 480) calls 'spontaneous knowledge',

which enables one actually to discern more than what can be conceptualized or articulated.

Sensus fidei is rooted in the connaturality that faith establishes between the believer and the truth of God as revealed in the Gospel. It is a relationship marked with enough familiarity and intimacy that the two share in the same dispositions and inclinations, making possible a knowledge that is different from conceptual and discursive knowledge, but rather spontaneous knowledge based on empathy—i.e., ‘a knowledge of the heart’ (SF §50).

***Sensus fidei* and dissent**

The notion of *sensus fidei* is valuable not only because it defines the kind of knowing entailed in Catholic religious critical thinking, but also because it provides an important condition for critical thinking: the possibility of dissent.

For McDonough (2010a), the Church needs an explicit philosophical concept of dissent that will provide a more adequate theoretical grounding for the expression and reception of dissent in the Church, particularly in Catholic schools. In the absence of such a theory, the default Catholic response to the expression of dissent in the classroom—or any public forum, for that matter—has been aimed at the minimization, marginalization, and restriction of dissent. Such a response is problematic, exacerbated by the inability of families to address questions about the controversial teachings of the Church (McDonough, 2010b). Not only is the existing practice intellectually frustrating among sincere thinking Catholics, but it also often eventually leads to resignation and eventually, to the abandonment of the faith (McDonough, 2012).

Dissent must be understood as distinct from outright rebellion (McDonough, 2009). To dissent is ‘to sit apart from those one is a part of’ (McDonough, 2010a, p. 254). Legitimate dissenters, therefore, are necessarily

insiders who: (a) are expressing a disagreement that is morally sound and not socially divisive, and (b) are challenging the authority and the status quo in their group precisely out of loyalty and out of a desire for the good of the group. Only given such a conception can there be faithful and, therefore, legitimate dissent (McDonough, 2009). By avoiding the two extremes of total adherence and total sedition, such an understanding of dissent creates a space for what McDonough (2012, p. 226) has appropriately called ‘high-quality dissent’—i.e., dissent expressed *on behalf of* and *as part of* the Church, so that one is able to think *with* and *for* the Church without either blind conformity to the prevailing view or separation from the group.⁴⁹

The possibility of dissent is established by the three-fold discernment involved in the individual believer’s exercise of the *sensus fidei*: (a) the discernment of the *coherence* of a doctrine or practice taught by the Church with what they sense as the Church’s authentic faith; (b) the discernment of its *significance* in relation to the core of the faith; and (c) the discernment of the *practice* of the faith through the application of a Church teaching in their lives (SF §60). This three-fold discernment is significant because they acknowledge the legitimacy, possibility, and value of dissent in the Church.

Discernment of coherence: The legitimacy of dissent

In the discernment of coherence, believers, relying on their *sensus fidei*, judge whether or not a particular teaching is faithful to what is intuited as the *sensus fidelium*. In discerning its authenticity, Catholics may respond by granting their assent—or withholding it. Upon detection of an incongruence with authentic Christian faith, believers may respond with a ‘warranted interior resistance’

⁴⁹ Cf. McDonough (2012, 145ff) for his seven conceptual criteria to describe reasoned and faithful dissent (enfranchisement, shared epistemic history, contra-hegemony, ethical purposes, public expression, and persuasive argument).

leading them to withhold their assent. Such a dissent may be made 'even to the teaching of legitimate pastors if they do not recognize in that teaching the voice of Christ, the Good Shepherd' (SF §62-63).

The legitimacy of dissent follows from the teaching on the *sensus fidei*, and by no means constitutes new teaching.⁵⁰ The *Catechism of the Catholic Church*, however, downplays the contested nature of the reception of authoritative teaching, placing the faithful's duty to obey the magisterium within the context of the *sensus fidelium* (Yarnold, 1994). The issue of the reception of magisterial teaching, however, is not as unproblematic as suggested. The history of reception in the Church is one of 'discontinuity, detours, and even dead ends' (Dionne, 1987, p. 362). The occasions when official doctrines are received not with unanimous reception in the Church, but with indifference and even rejection are acknowledged in the 2014 document on *sensus fidei*. Whereas in the past, dissent was invariably attributed to a believer's lack of faith or reason (e.g., an uncritical acceptance of contemporary culture), this time, equal blame is pinned on a failure of consultation with the faithful and the insufficient consideration of their experiences and *sensus fidei* (SF §123). Especially in cases of inadequate prior consultation, the lay faithful's refusal or inability to give its assent to authoritative teaching can no longer automatically be labeled sinful or ignorant (Murray, 1994).

By acknowledging a valid reason for a lack of reception, the Church recognizes occasions when dissent may be considered legitimate (SF §63),

⁵⁰ Aquinas, referring to the *sensus fidei* as 'habitus' writes: '[The believer] must not give assent to a prelate who preaches against the faith.... In fact, the habitus of faith inclines him against such preaching because that habitus necessarily teaches whatever leads to salvation' (*Scriptum*, III, d.25, q.2, a.1, q.4, ad 3). Ratzinger in his commentary on Vatican II writes: 'Over the Pope as the expression of the binding claim of ecclesiastical authority, there stands one's conscience, which must be obeyed before all else, even if necessary against the requirement of ecclesiastical authority' (Ratzinger, 1967, p. 134).

representing an important shift towards acknowledging the reality of difficult reception and the legitimacy of a reasoned and faithful dissent.⁵¹ While authentic *sensus fidei* is, in principle, incompatible with a resistance to magisterial teaching, the faithful are nevertheless encouraged to express and articulate their *sensus fidei*, and the magisterium is asked to listen attentively (SF §124).

Such an explicit acknowledgement of the legitimacy of dissent is significant given the Church's previous reluctance to do so, as evidenced by the absence of any statement on dissent even in Vatican II's teachings on *sensus fidei* (LG §12, 25). The Church's stance towards dissent has been at best inconsistent. Referring to 'schizoid pronouncements' in Church documents, Callahan (1986) notes, for instance, the discrepancy between Vatican II's declaration on religious freedom, which acknowledges the authority of the conscience and freedom of non-Catholics and non-Christians on the one hand, and the Vatican's position that conscientious objection should be retracted if requested by the magisterium.

The Church's tendencies to repress dissent in the past have largely been a reaction to perceived threats to the truth of revelation and the unity of the faith. Much effort has been exerted towards institutional centralization precisely to protect the identity and unity of the Church against modernist positivism and postmodern relativism (Alberigo, 1987). The *Catechism of the Catholic Church* is an example of Vatican efforts to strengthen magisterial authority and to preserve a gratuitous unity of expression of faith (Burkhard, 2005). A claim of a premature epistemic closure, however, is not only unwarranted, but also discourages a commitment to judgemental rationality and its expression in critical thinking.

⁵¹ Levada (1988) has, for example, expressed his opposition to Catholic religious educators teaching their students what he calls 'responsible dissent', declaring it as counterproductive and opposed to the requirements of the Catholic faith.

In cases where there is such a dissent or lack of reception, the magisterium is enjoined to evaluate the process in two ways: (a) whether or not adequate consultation has been held, with proper consideration of the *vita fidelium* and the *sensus fidei*; and (b) whether or not there is a need to reformulate the message for clearer and more effective communication (SF §80). The magisterium ought to ensure that open channels of communication through regular dialogues on issues of faith and morals are maintained with the lay faithful. Although the *sensus fidei* is not equivalent to public opinion, such exchanges of opinion can serve as a helpful forum for gauging the *sensus fidelium* (SF §124-125).

The faithful, on the other hand, is expected to exert every effort to be open to the new teaching, to understand and accept it, if possible. In cases where dissent is the discerned legitimate response, Aquinas cautions the individual believers against considering themselves as the ultimate criterion of the truth of faith, and advises them to defer assent and appeal interiorly to the authority of the universal Church (SF §63).

In creating room for legitimate dissent, therefore, the Church is demonstrating that it is not simply paying lip service to *sensus fidei* because *sensus fidei* ought to transcend mere blind assent and lead to reasoned and faithful assent, which corresponds to the believer's responsibility for the interpretive and approbative reception of the Word of God. However, among the issues concerning Church authority that remains unresolved is precisely the permissibility of legitimate dissent from authoritative but non-infallible teaching⁵² (Gaillardetz, 2012).

⁵² The other three unresolved issues named by Gaillardetz (2012) are: (a) the subject of magisterial authority (roman curia, the synod of bishops, episcopal conferences), (b) the object of

Discernment of significance: The possibility of dissent

Sensus fidei and its exercise in religious critical thinking require the possibility of dissent as a condition for its authentic exercise. But what kind of dissent is allowed in the Church? The second discernment that an individual believer is called to undertake is a discernment of the significance of a given teaching—to distinguish between what is essential and non-negotiable and what is only of secondary importance. There exists a hierarchy of Church teachings, so that they are not of equal importance or significance in defining one as a Catholic. Some teachings are relatively more central and essential, rightly belonging to the core of the Christian faith, while others are more remote and secondary in importance (Rahner, 1988a).

The doctrines of the Incarnation and the dual nature of Christ are relatively more central and fundamental than the Catholic teachings on the Immaculate Conception of Mary and her Assumption, despite their officially dogmatic status. Consequently, assent to these central Christological beliefs ought to be more mandatory than the Marian doctrines even if the latter have been infallibly defined as dogmas.

The believers' *sensus fidei* enables them to distinguish between beliefs that are essential to the core of the faith and those that are only of relatively secondary importance. The sense of the faith, therefore, grants Christians an authentic liberty in light of this hierarchy of doctrines taught by the Church (SF §64).

magisterial teaching (disputed status of definitive doctrine), (c) the exercise of magisterial authority (ordinary papal magisterium to confirm teachings of the ordinary universal magisterium).

The hierarchy of authoritative teachings in the Church

The significance of Church teachings can also be discerned concretely in terms of their level of teaching authority. Not all teachings are equal; there are significant differences in their authoritative character. There are a total of four categories of Church teachings, each one with a different attitude and response expected of the faithful (Gaillardetz, 1997b).

Definitive dogma

The highest level refers to dogmas, which are teachings that are taught infallibly as divinely revealed.⁵³ With regard to dogmas, Catholics are expected to respond with an assent or submission of faith (*obsequio fidei*), in which the believer makes an act of faith trusting that God has revealed the teaching to the Church.

Only a limited number of dogmas have been defined by the hierarchical magisterium in an *ex cathedra* exercise of its teaching infallibility (e.g., the dogma of the Immaculate Conception). While Catholics are bound to accept such dogmas, there is a theological opinion that dissent towards dogmas may not necessarily exclude one from the Church, the infallible character of the teaching notwithstanding, especially since heresy is committed only with full understanding and volition and as long as the believer accepts the more central doctrines in the Church's hierarchy of doctrines (Rahner, 1974; Gaillardetz, 1997b, 1997c).

Definitive doctrine

Belonging to a second category of Church teachings is a fairly recent addition called definitive doctrine, referring to teachings that, strictly speaking, are

⁵³ There are four restrictions to the content of infallible dogma, which constitute the conditions for both the Church's infallibility in teaching and in believing: (a) a matter of universal consent of the faithful; (b) refers to the content of revelation only (LG §25); (c) the agency of the Holy Spirit; and (d) the recognition of the magisterium (Pie-Ninot, 1994, p. 993).

not considered divinely revealed, but ‘are so intimately linked with [divine revelation] that for practical purposes they stand and fall together’. Definitive doctrine is proposed infallibly as irreversible teachings and, therefore, though falling short of demanding an assent of faith, requires ‘firm acceptance or assent’ from a Catholic, in which the believer ‘accepts and holds’ the teaching to be true. What this response exactly entails is not clear; what is clear is that it is a response to a teaching register that is distinct from dogma and the other levels of Church teachings (Gaillardetz, 1997c).⁵⁴

Non-definitive but authoritative doctrine

The majority of Church pronouncements on doctrine and especially morals belong to this category of ‘non-definitive but authoritative doctrine’. These are teachings, which, while issued by the magisterium, are not proposed as infallible because the magisterium has, for some reason, opted against an appeal to infallibility in its pronouncement. In its judgement, the Church is unable or is simply not ready to bind itself to the revelatory character of a particular teaching. Because of its non-infallible authority, one can, in principle, accept the possibility of its error.

The desired response from the faithful here is called ‘*obsequium* of the intellect and the will’ (*obsequium mentis et voluntatis*). Although its precise meaning remains contested and unclear, the Second Vatican Council carefully distinguishes it from *obsequio fidei* (assent or submission of faith) due to infallible teachings: While assent is an act of faith in a teaching as true, the *obsequium* of the intellect and will is but a response of submission or respect (Kaufman, 1995). Dissent, therefore, is in principle a legitimate response to non-infallible teachings.

⁵⁴ This category is not included in the 1983 *Code of Canon Law*, which speaks only of assent of faith (for dogma) and *obsequium* (for non-definitive authoritative doctrine).

Prudential admonitions and provisional applications of doctrine

Finally, prudential admonitions and provisional applications of doctrine include such ecclesiastical pronouncements as warnings against dangerous theological trends and opinions, or the laying down of concrete disciplines of Church or specific moral norms. The expected response from the faithful is ‘conscientious obedience’, entailing an external assent to a law or judgement while reserving the right to question the advisability, prudence, or even correctness of that law or judgement. It is called ‘conscientious’ because it is conditioned by the exercise of one’s conscience and prudential judgement (Gaillardetz, 1997c).

Table 21: Types of Church teachings

TYPES OF CHURCH TEACHINGS	EXPECTED RESPONSE OF THE BELIEVER	Possibility of dissent
Definitive dogma infallibly defined teachings (<i>definitive credenda</i>) (Boyle, 2000, p. 360)	Assent or submission of faith (<i>obsequio fidei</i> ; theological faith)	No
Definitive doctrine “proposed definitively, even if they have not been taught to be divinely revealed” (<i>definitive tendenda</i>) (Boyle, 2000, p. 360)	Firm acceptance	
Non-definitive authoritative doctrine what “the Church proposes as true, though not defined as infallible and not necessarily unchangeable” (Pilarczyk, 1986, p. 175).	<i>Obsequium</i> of intellect & will	Yes
Prudential admonition and provisional applications of doctrine	Conscientious obedience	

Gaillardetz, 1997c

In general, all magisterial teachings, by virtue of their nature as judgements of the magisterium, are to be received in principle as an expression of the *consensus fidelium*—i.e., assuming that it has been arrived at through dialogue with the two other teaching authorities of the Church—namely, the theological authority of scholarship and expertise and the wider and more basic ecclesial authority of the *sensus fidelium* (Rush, 2009). However, the basic principle to follow is that the commitment that the Church makes to a pronouncement in terms of infallibility defines the commitment expected of the faithful (Orsy, 1987). Of the four levels of Church teachings, only the first two are

proposed infallibly: definitive dogma and definitive doctrine. Strictly speaking, therefore, the remaining two allow for the possibility of legitimate dissent—i.e., *obsequium* of intellect and will although this has been far from consistently accepted in the Church.⁵⁵

The discernment of practice: The value of dissent

The final discernment involves determining the concrete ways in which the faithful can put their faith into practice. Individual Christians draw from their Spirit-gifted *sensus fidei* not simply to receive and transmit the faith, but also to approve it, in the process, making a vital contribution to the Church's reception of it (SF §126). This personal reception requires the practice of the faith in their lives because only in their very concrete experiences can the faithful discern the implications and application of a particular teaching. The *sensus fidei* as 'a truth-finding and truth-attesting function' draws from the faithful's experiences (Beinert, 1995, p. 656).

Dissent from the faithful is, therefore, a valuable datum. Constructive dissent helps the Church uncover hidden layers of Scriptures not yet articulated by the magisterium, as well as refine its formulations and integrate new knowledge, without giving up core dogmatic beliefs. Valid dissent, coming from a minority ahead of their times, is a vital and necessary component of living Tradition, and may be a manifestation of the Spirit in bringing the Church to a deeper fidelity to the Gospel—even if its source may be the marginally involved or even hostile critics (Burkhard, 2005).

⁵⁵ The Vatican under the papacy of John Paul II, with Cardinal Joseph Ratzinger at the helm of the Congregation for the Doctrine of Faith, has shown a tendency to dissolve the distinction between infallible and non-infallible teachings, as exemplified in the 1986 case of Charles Curran (Curran, 1987). This lack of distinction becomes problematic when it involves *controversial* non-infallible teachings, where there is a significant lack of consensus among stakeholders [e.g., artificial contraception (Paul VI, 1968), female ordination (John Paul II, 1994), and homosexuality (Congregation for the Doctrine for the Faith, 1986)]. Although proposed by the Church as true, they are not taught as infallible and are not necessarily unchangeable (Pilarczyk, 1986).

Implications of Catholic religious critical thinking as the exercise of *sensus fidei*

There are several important implications in the proposal to conceive Catholic religious critical thinking specifically as the exercise of one's *sensus fidei*.

First of all, Catholic religious critical thinking should, in principle, include self-critique—i.e., a critique of the institution of the Church and a disagreement with its teachings—but is not to be reduced to negative dissident thinking. Although it is a way of ‘thinking with the Church’ that does not—and need not—always conform to its official positions, its disagreement with the magisterium is rooted in a deep fidelity to Catholic tradition (McDonough, 2012).

Secondly, Catholic religious critical thinking belongs to its own genre. While motivation for it cuts across disciplines, as expressed by the critical realist commitment to judgemental rationality, competence in critical thinking is domain-specific. Catholic religious critical thinking is not a generic form of critical thinking whose principles and procedures are simply transposed from other disciplines and applied in the domain of Catholic beliefs. This brand of critical thinking especially proper to confessional Catholic religious education is defined by a religious epistemology that is grounded on the Catholic theology of revelation and its reception through the *sensus fidei*. Hence, the critical thinking to be taught and promoted in Catholic religious education—proposed here as entailing non-discursive connatural knowledge—has a shape different from its counterparts in other disciplines. Catholic religious critical thinking is ‘thinking religiously’—analogous to *and* distinct from thinking mathematically or historically. Catholic religious critical thinking is not purely rational, but includes personal spiritual experiences, even an examination of conscience (McDonough, 2012, p. 28).

Moreover, Catholic religious critical thinking is necessarily contextualized in the individual believers' appropriation of their faith—i.e., in their personal task of meaningful and faithful reception. It is an integral component of the believers' response of faith to God's revelation that has first been received and is now mediated by the Church. As a result, the individual practice of Catholic religious critical thinking—i.e., the exercise of one's *sensus fidei*—cannot be divorced from the Church's *sensus fidelium* and ought to be accomplished within its context. Seen in this light, Catholic religious critical thinking may be characterized as one that not only aims for reasoned and faithful assent, but also, in principle, permits the possibility of equally reasoned and faithful dissent.⁵⁶

Consequently, strictly speaking, Catholic religious critical thinking can only be properly exercised by a believer—in fact, given the proportionality between one's commitment to the praxis of faith and the person's credibility in expressing the *sensus fidei*, only by a *practicing* believer—even if lapsed and inactive Catholics are, by virtue of their baptism, included among the recipients of the *sensus fidei*. Given the complexity involved in exercising the *sensus fidei* and in discerning the Church's *sensus fidelium*, certain dispositions are required as conditions necessary for one's authentic participation in the *sensus fidei*. These dispositions, which serve as criteria for the authentic exercise of the *sensus fidei*, are: (a) participation in the life of the Church; (b) attentiveness to the word of God; (c) openness to reason; (d) adherence to the magisterium; (e) a life of holiness characterized by humility, freedom, and joy; and (f) a desire for the unity

⁵⁶ *Obsequium*—the response permitted for non-definitive but authoritative teaching—may be interpreted precisely as reasoned and faithful dissent, a valid exercise of the *sensus fidei* in fulfilling one's obligation to seek the truth and accept the consequences. Several conditions for *obsequium* have been proposed (The West German bishops, 1967; McCormick, 1993; Gaillardetz, 1997b, 1997c).

of the Church (SF §73). Clearly then, one has to be an ‘insider’ to practice Catholic religious critical thinking.⁵⁷

Finally, *sensus fidei* as connatural knowledge depicts knowing as primarily relational—i.e., as a relationship between the knower and the object of knowledge, characterized in true critical realist spirit by the sovereignty of the latter. Knowing conceived as such a relationship entails more than exclusively—or even primarily—the cognitive located as it is on a fundamental existential level. It sketches a distinct genre of critical thinking that is specific to a Catholic religious epistemology and one that is only properly promoted in a Catholic religious education classroom: a form of rationality primordially rooted in a faith commitment and necessarily mediated by the faith community. Catholic religious critical thinking aims precisely at the understanding sought, but only made possible, by faith.

SOME PROFESSIONAL IMPLICATIONS

This study proposes two conceptions of critical thinking, one more general than the other: An explicitly critical realist account of critical thinking as a commitment to judgemental rationality provides us with the very motivation for critical thinking. A specifically Catholic conception, on the other hand, presents Catholic religious critical thinking as the exercise of one’s *sensus fidei* in the meaningful and faithful reception of the Word of God and guides the actual practice of critical thinking. Whereas the first corresponds to the dispositional component of critical thinking (the ‘why’), the second one focuses on its more

⁵⁷ This restriction by no means implies that the critical thinking that non-Catholics employ in investigating Catholic beliefs and practices is not valid; rather, it would not be the Catholic religious critical thinking that is to be taught in the Catholic religious education classroom.

domain-specific competence component (the 'how'). They have valuable implications in the professional context of our schools.

Staff development on religious epistemology

One immediate implication from this study is that teachers will benefit from learning about their religious epistemic cognition and its impact on learning and critical thinking. In order to practice and to promote critical thinking in the classroom, teachers need to appreciate their often-unconscious assumptions about the possibilities and limits of knowing and their consequences on their practice and their students' learning. Our religious education teachers should be offered guidance in reflecting on their level of epistemic cognition and growing conscious on how it can facilitate or hamper critical thinking—their own as well as their students'.

An appropriate professional development program can also be designed to educate our religious education teachers on Catholic religious epistemology as defined by the Church's doctrine on revelation and the *sensus fidei*. An understanding of the critical realist character of this epistemology, especially its underlying epistemic relativism, would be helpful in clarifying the possibility and necessity of Catholic religious critical thinking.

The classroom as a nursery for *sensus fidei*

The confessional Catholic religious education classroom provides an ideal venue for fostering the needed critical realist epistemology to motivate critical thinking, as well as for developing the specific competence for practicing Catholic religious critical thinking—namely, the exercise of one's *sensus fidei fidelis*. For McDonough (2009, 2011), the Catholic school serves as a privileged—though by no means exclusive—forum for the expression and nurturing of reasoned and

faithful dissent. More than the family and the parish, the school can provide students with 'the informational, critical intellectual, and environmental means to support decisions of conscience and ecclesial choices outside the school that do not reduce to a binary between strict conformity to or rejection of the official prevailing view' (McDonough, 2012, p. 234). The religious education classroom in particular presents numerous valuable opportunities to nurse the students' *sensus fidei* and to orient them on its authentic exercise.

In this connection, a preliminary step that a Catholic school may consider is to specify the development of the students' *sensus fidei* as an explicit goal of its programme. The fostering of the faithful's sense for the faith remains one of the important tasks of the Church, to prepare the faithful for the responsibility to participate in the ongoing ecclesial definition of faith. The adoption of this goal has implications in curriculum, instruction, and assessment.

In terms of the curriculum, the degree and manner of the promotion of the students' *sensus fidei*, needless to say, have to be age-appropriate. It may, for younger students, be limited to the nurturing of the dispositions identified as essential for the authentic exercise of the *sensus fidei*. The existing curricula most likely already address most, if not all of these dispositions, and these dispositions constitute a necessary foundation in the Catholic Christian formation of the students anyway. However, it makes a difference if the development of these dispositions were expressly aimed at developing the students' *sensus fidei*. The way the goal is operationalized will be significantly different if the exercise of *sensus fidei* is articulated as a valued goal of the programme.

Instruction will also undergo changes given the goal of fostering the students' *sensus fidei*. Fundamentally, teachers will have to examine the status and agency that they grant their students. It has been observed that student-centered instruction tends to be promoted more explicitly in other subjects than in

Catholic religious education classes. Teachers will have to employ a pedagogy that optimizes learners' agency as preparation and training for their active role as mature believers to exercise their *sensus fidei* in the Church, in contrast to a merely passive following of the hierarchy. They need to learn the high regard that the Church reserves for their dignity and contribution in defining the faith and sharing it (Burkhard, 1992). Students should increasingly be encouraged not only to learn Church doctrines and practices, but also evaluate them, following the three-fold discernment of coherence, significance, and practice of faith, and always in the spirit of the *sensus fidei*: with the proper respect accorded to the magisterium and an appreciation for the Church's reasons for the doctrines and practices.

Finally, and perhaps most significantly, schools may consider revising the way student learning is assessed in confessional Catholic religious education. All the schools in our network have limited the assessment of student learning to the mastery of content—i.e., understanding, if not sheer recall, of Church teachings. With the nurturing of *sensus fidei* as an explicit aim, learning will have to be redefined as not only consisting of understanding of content, but also reasoned and faithful assent. In other words, the question that has never been asked in a confessional religious classroom will now be added as an important, if not central question: 'Should I give my intellectual assent to this teaching? Why or why not?'

There are at least three implications here. By including this question, the teacher is sending the students the message that demonstrating their understanding of the doctrine or practice is not sufficient. The second implication is that blind assent is no longer adequate. Mere acceptance of a Church teaching simply based on an appeal to authority is not ideal. What is sought is 'reasoned and faithful assent'. In other words, in developing the students' *sensus fidei*, the classroom should provide training and rehearsals for the fundamental mission of

the Church, in which every Christian is invited to participate: the meaningful and faithful reception of revelation. A reasoned and faithful dissent requires not only a correct and sufficient understanding of Church teachings, but also an appreciation of the historical contexts from which they have emerged, their rationale and value at the time, as well as at the present.

Finally, to inquire about the student's assent opens up the possibility of dissent. It is important that students are taught the parameters of reasoned and faithful dissent as well.

Concretely, all this entails assessing student learning not only in terms of recall and understanding of Church teachings, but also beyond the mere measurement of the student's understanding of the content and authoritative status of Church teachings to demonstrate: (a) an appreciation of the rationale for the teachings and arguments in their favor, including their historical context, their value then and relevance now; (b) a fundamental tone of continued respect and trust in the Church, particularly, the magisterium; and finally, (d) the student's reasoned and faithful assent—or dissent, where blind/unreasoned assent and especially unreasoned and unfaithful dissent ought to be challenged. A Catholic religious education class that promotes religious critical thinking, therefore, must measure what it ought to *treasure* most: high-quality—i.e., academically responsible—reception, be it in the form of assent or dissent.

The role of the listening teacher

A religious education class envisioned to be explicitly anchored on a critical realist religious epistemology and purposefully designed to promote reasoned and faithful reception calls for a rethinking of the role of the religious education teacher. McDonough (2008) distinguishes three pedagogical stances for the religious educator: (a) the dogmatic indoctrinator, who is primarily

concerned with teaching the official beliefs of the Church; (b) the professional equivocator, who neutrally presents the prescribed curricular material and just as neutrally facilitates student debates without betraying his or her own personal stance; and (c) the 'pedagogue of dissent' (p. 59), where the teacher plays the role of classroom theologian or philosopher of religion, who guides the students in participating in critical discussions of the issues and eventually in making reasoned and responsible personal decisions about the matter.⁵⁸

In playing this third role, Catholic religious educators need to mediate between the institutional demands to teach official Church beliefs and individual students' pedagogical needs to make sense of and to appropriate them. Like the magisterium and the theologian, religious education teachers are challenged to *listen* to their students, making every effort to solicit what they think and feel about the teachings of the Church—not only concerning their formulations, but also the controversies and consensus surrounding them (McDonough, 2008). As listening teachers, Catholic religious educators need to use a pedagogy that not only encourages questions, but also admits dissent, not only respecting it, but also challenging it.

Needless to say, before students can be taught reasoned and faithful reception, the teachers themselves must understand why a particular Church doctrine or practice warrants our assent. For this reason, their class preparation should include the articulation of their own answer to the question, 'Should I give my intellectual assent to this teaching? Why or why not?'

To promote Catholic religious critical thinking as an expression of one's commitment to judgemental rationality on the one hand, and as an exercise of

⁵⁸ Hand's (2008) distinction between 'teaching-as-settled' and 'teaching-as-controversial' may be instructive here: While teaching something as settled corresponds to the role of the teacher as dogmatic indoctrinator, teaching something as controversial would be compatible with both the stances of professional equivocator and pedagogue of dissent. An important difference would be the willingness of the teacher as pedagogue of dissent to express his/her own belief or to endorse one particular belief. Open-mindedness and commitment need not be mutually exclusive.

one's *sensus fidei* on the other, the religious educator is called upon not only to be a model of a critical realist religious epistemology, but also an agent of reasoned and faithful reception.

It is important to note that, intellectual assent—or dissent—to the Church's teachings does not exclusively or even primarily define a person's faith. Our personal response to the Word of God is disclosed most concretely and most definitively in our *vita fidelium*. It is in our daily following of Jesus that our reception of God's invitation and self-communication—faithfully, but imperfectly expressed in Christian doctrine—is most fully actualized (Gaillardetz, 1997b).

Some examples

I will now discuss three examples of religious education classes that illustrate attempts to promote Catholic religious critical thinking. Two of them were implemented in a Philippine Catholic school, while the last one was observed in a classroom in the United States. Each example features a distinct ingredient in a Catholic religious education class that is envisioned as nursery for the students' *sensus fidei*: (a) increased student agency, (b) reflection on epistemic cognition; and (c) reasoned and faithful reception.

Increased student agency

The activity 'Bible circles' has been designed by a team of religious educators in one Philippine Catholic high school and adapted from an activity called 'literature circles'. Literature circles is a carefully scaffolded student-centered activity that encourages not only thoughtful discussion of literature among small groups of students, but also a love for reading (Daniels, 1994). As a pedagogical alternative to the more traditional teacher-dominated discourse,

literature circles have been observed to be effective in promoting critical thinking and reflection among students (DaLie, 2001).

In its religious education version, students are also divided into small groups, where members are assigned specific roles to enable them to contribute in their discussion of Scripture. Student roles range from conducting research on the historical background of a given passage to citing commentaries on its theological meaning, and drawing connections to other Scriptural texts, literature, pop culture, historical or current events, and their personal experiences.

For a class on the Parable of the Good Samaritan (Luke 10:29-37), Bible circles was conducted in lieu of a traditional teacher-led discussion. In one group, a student reported on the parable's historical context—i.e., the immediate situation prompting Jesus to tell the parable, as well as the significance of his deliberate designation of a Samaritan as the protagonist in the story. Another student cited scriptural passages pertaining to Samaria and describing the relationship of its people to the Jews, including Jesus' encounter with the Samaritan woman (John 4:4-43). One student called the group's attention to how Jesus significantly refocuses the meaning of 'neighbor' from someone whom one ought to help to someone who helps others. From the discussion, a member observed that 'it's interesting how "Samaritan" used to be a bad word, but now it's a compliment to be called a "Good Samaritan"!' From there the group discussed modern-day versions of 'Samaritans'—i.e., outsiders—such as the homeless and refugees. The discussion led to questions about what the students might be able to do as Good Samaritans to help modern-day Samaritans.

The small group discussions, facilitated by the students themselves, allowed the members to participate actively and take the lead in the discussion. The students were also able to evaluate their experience and learning since they were involved in assessment, both of themselves and their group members.

Aside from increased engagement, the Bible circles seems to have encouraged greater critical thinking among the students: Not only did they reflect on the issues more deliberately, but they were also able to clarify—and even challenge—the ideas exchanged in their group.

Reflection on epistemic cognition

'Reflection triangles' has been designed for my own senior high school religious education class not only to encourage student-centered discussions of doctrinal and moral questions, but also to provoke student reflections on their own underlying epistemological beliefs. A question is raised for individual reflection and class discussion, where students are given three possible answers. Students are then requested to form a triangle by moving to one of three designated corners of the room that represents their choices. Two or three students from each corner are asked to present the reasons for their choices. After all three sides have been presented, students are given the opportunity to ask questions to clarify or challenge their classmates' views. Afterwards students are invited to move across the room and to consider switching sides if they have found someone else's point convincing.

Unbeknownst to the students, each of the three corners represents one of the three levels of epistemic cognitions: absolutist (naïve realist), multiplist (radical relativist), and evaluativist (critical realist) (Kuhn, 1999). After students have made their decision to retain or change their positions, this information is disclosed, and the implications of the different epistemic cognitions are discussed with them. Afterwards students are encouraged to examine their epistemic cognitions and to consider a change.

Reflection triangles proved particularly effective for the discussion on the relationship of other world religions to Christianity—specifically, the soteriological

role of Jesus Christ. The three options given to the students were: (a) 'There is one and only way to salvation, and it is Jesus', (b) 'There are many paths to salvation, and Jesus is just as good as any of the others' (e.g., Buddha, Mohammed, even New Age Spirituality)', (c) 'There are many possible paths to salvation, and Jesus is the *better* way'. Not only do these three options correspond to the three epistemic cognitions of naïve realism, radical relativism, and critical realism, but they also represent the three main theological approaches to the soteriological role of Jesus Christ (exclusivism, relativism, and inclusivism) (Dupuis, 1994).

The activity turned out to be more engrossing than traditional class discussions, with perceptively greater student participation. In the course of their debates, students volunteered concrete examples of people in history as well as people they knew, and wondered if they would be saved, regardless of their religious beliefs or even in the absence thereof.

Only after the first round of discussion were the concepts of exclusivism, relativism, and inclusivism introduced, each representing a distinct approach to the role of Christ in salvation (Dupuis, 1994). The corresponding epistemological beliefs about religious knowledge were then discussed. Students were asked to evaluate their epistemological beliefs and once again invited to make the decision whether or not they should change their beliefs.

Like literature circles, reflection triangles attempt to transform the conventionally teacher-centered class into a more student-centered one. Students are encouraged to think critically about Church teachings and to consider revising their previous judgements in light of new information. Just as

importantly, they are guided in making a similar critical re-evaluation of their religious epistemic cognitions.⁵⁹

Reasoned and faithful reception

The third example is drawn from a classroom observation of a tenth-grade religious education class at a Jesuit high school in the United States (Walsh, 2000). The topic for the class—the ordination of women—is telling especially in light of the then-recent statement issued by the Vatican suggesting that the Pope's opposition to it was—contrary to traditional Church teaching—infallible (John Paul II, 1994). The discussion of the pros and cons to women's ordination, described by Walsh (2000) as 'judicious and impressive', served as an effective springboard to explain such key concepts as the distinction between traditions and official Church Tradition ('with a big T', another term for the *sensus fidelium*), as well as between infallible and non-infallible teachings.

During the discussion, students were challenged to carefully consider different possible implications of such a teaching (e.g., the inequality between men and women) and to assess whether a teaching with such implications would conform to—or contradict—the *sensus fidelium*. Without explicitly saying so, the teacher was, in effect, inviting the students to draw from their *sensus fidei* and guiding them in an exercise of approbative reception.

The teacher also asked the students to examine whether or not the claim that the teaching on the ordination of women implied male superiority was, in fact, a valid claim. By doing so, the teacher was demonstrating a form of high-quality religious reasoning that is necessary for the desired academically responsible assent—or dissent—to Church teachings.

⁵⁹ Reflection triangles have been especially effective in the discussion of moral issues and problems.

The teacher synthesized the discussion by telling the students that 'it's going to be your generation that decides this, so get ready for it'. Perhaps without consciously doing so, the teacher was appealing to the students to nurse their *sensus fidei* and to prepare for their role in defining the faith and practices of the Church. He also challenged the class to begin this preparation concretely and immediately by using inclusive language, supporting campaigns for women, and especially, treating women as equals 'starting 3 pm today' (Walsh, 2000, p. 142). The religious educator was effectively inviting the class to prepare themselves for their task of reasoned and faithful reception.

CONCLUSION

I began my research project by problematizing critical thinking in confessional Catholic religious education as practiced in the Philippines. While ‘careful rigour in the study of culture and the development of a critical sense’ are listed as among the primary goals of Catholic education (CCE, 1988, §101), I argued that given the tensions inherent in the Catholic school’s mission of education and evangelization resulting from its dual nature as both an academic and ecclesial institution, the promotion of critical thinking cannot be presumed to be feasible especially when the *de facto* goal of the programme is partially catechetical, as in the case of confessional religious education in Philippine Catholic schools.

An empirical investigation into the epistemic development of our teachers shows that the prevailing epistemic cognition among religious educators is generally considered incompatible with critical thinking. Without eliminating other contributing psychological and social factors,⁶⁰ I hypothesized that our religious education teachers’ level of epistemic development may constitute an important factor in the problem of critical thinking.

To begin addressing the problem of critical thinking in our context, I drew from critical realist epistemology and the Catholic notion of the *sensus fidei*. Through an epistemological and specifically critical realist analysis of critical thinking and the definition of a Catholic religious epistemology, I have proposed that critical thinking be understood as the expression of one’s commitment to judgemental rationality, rooted first of all in a reverence for reality as mystery

⁶⁰ The confessional curriculum, the ecclesial nature of the schools, and the generally lower ecclesial status and limited agency of lay people—to name a few possible topics for further study.

(ontological realism) and a recognition of the socio-historical and perspectival character of the reception of revelation (epistemic relativism). Critical thinking begins with the recognition of the finitude and fallibility of our knowing so that it is precisely on account of—and not simply in spite of—the uncertainty and limits of our knowing that we exert effort to be attentive to what reality discloses.

A critical realist epistemology provides the motivation for engaging in critical thinking in the first place, but the *sensus fidei* guides us on how to exercise Catholic religious critical thinking. For this reason, I have suggested that Catholic religious critical thinking be understood specifically as the exercise of one's *sensus fidei*. The type of critical thinking based on the *sensus fidei*, given its experiential character, employs a mode of reasoning best described as pre-conceptual and connatural, distinct from discursive reasoning but no less rational.

I hope that the framework of critical thinking proposed as the expression of a commitment to judgemental rationality, and specifically, of its Catholic religious variety as the exercise of one's *sensus fidei* constitutes an important contribution to the field of Catholic religious education. Given this uniquely critical realist and Catholic account of critical thinking, the religious education classroom becomes a venue for deepening one's commitment to judgemental rationality and for nurturing the *sensus fidei*, including the dispositions that make its exercise authentic.

I also hope that the recommendations at the end of this study will help address the challenge of critical thinking in confessional religious education classrooms in the Philippines. I intend to report on my findings to the administrators and staff belonging to our network of schools as much to educate them about epistemic cognition and the *sensus fidei*, as to provoke the much-

needed reflections and conversations about the issue of Catholic religious education especially in light of the proposed conceptions of critical thinking as well as my recommendations.

The religious critical thinking that emerges from the critical realist and Catholic perspective is, on the one hand, an intellectually humble—but no less rigorous—pursuit of understanding, and, on the other, an open-minded—but no less committed—relationship to truth. Catholic religious critical thinking is rooted in a critical ‘hermeneutic of faith’ rather than a hermeneutic of skepticism, subscribing to the medieval counsel of ‘faith seeking understanding’ and rejecting the modernist ideology of ‘understanding seeking faith’ (Wright, 2013). This pursuit of understanding, therefore, necessarily requires faith as its starting point, and in light of both critical realist and Catholic perspectives, the enterprise of Catholic religious critical thinking entails a faith that aims not at the full possession of truth, but rather, at the unceasing search for it.

Appendix A: STUDY INFORMATION SHEET

My name is **Johnny Go** and I am studying for a Doctor of Education (EdD) degree at the National Institute of Education (NIE), Nanyang Technological University, 1 Nanyang Walk, Singapore 637616, a dual award programme with the Institute of Education, University of London, 20 Bedford Way, London WC1 H 0AL, United Kingdom.

In partial fulfilment of the doctoral program, I am working on a research project entitled: **An Exploration of Teacher Epistemology and Religiosity in Primary and Secondary Schools in the Philippines.**

I wish to invite you to participate/take part in my research study. The period of participation is February to April of SY 2009-2010.

Purpose of my research project

My research involves the study of epistemological and religious beliefs of teachers in Jesuit basic education schools in the Philippines.

My study intends/aims to explore the relations, if any, between the epistemological and religious beliefs of teachers in eight Jesuit schools in the Philippines. The following are related questions that the study will seek to answer:

1. What are the epistemological beliefs reported by Filipino teachers working in religious primary and secondary schools?
2. Are there significant differences in their epistemological beliefs in terms of age, gender, teaching experience, and such school-related factors as school type and discipline taught?
3. What is the profile of their religiosity and religious background?
4. Are there significant differences in their religiosity with respect to age, gender, teaching experience, school type, and academic discipline?
5. How are these teachers' religiosity related, if at all, to their epistemological beliefs?

I intend to address identified gaps in the research in epistemological beliefs by: (a) investigating their relations with religious beliefs, (b) studying Filipino school teachers, and (c) focusing on practitioners rather than student teachers.

Study/Research procedures and what happens to information gathered during the study

The research will involve the seven Jesuit primary schools and eight Jesuit secondary schools in the Philippines.

Data/Information will be collected through a survey questionnaire, which will take approximately 30 minutes to 1 hour to complete, and if necessary, a follow-up interview, which will take no more than two hours of your time.

Confidentiality of all research participants and collected data will be protected. Research participants will choose to remain anonymous and/or to use pseudonyms. Personal information will be de-identified/coded as far and as early as possible, and will be stored and transferred as de-identified/coded information. The participants' names will be kept confidential and their identity will not be used in the reporting of the research data nor in any intended publication of any sort, be it electronic or print media. All records containing personal information will remain confidential and no information which could lead to identification of any individual will be released.

All research data compiled during the study will be stored in a secure site at Xavier School's standardized exam vault for a period of 3 years from the completion of the research. After that time all data will be destroyed. The data will be protected against loss or theft and unauthorized access, disclosure, copying, use, and modification. Security measures taken will involve restricted access to the data and other pertinent documents.

Original data stored on computer/laptop will be deleted after they have been transferred to more robust form of storage, e.g., DVD or CD and stored securely as described above. Audiotapes (if any) will be similarly stored but notes derived from them (if any) will be destroyed at the conclusion of the study.

It is envisaged that the data gathered during the research will be analyzed and incorporated in a thesis, which will be submitted to NIE for examination. The research findings from this study may/will be summarized as a report which will be provided to NIE. The research findings from this study may/will also be presented in a conference and published in a journal/conference proceeding or other scholarly avenue.

Your participation

Participation in this study is fully voluntary.

If you agree to take part in my study, you will be requested to sign an informed consent form before you begin your participation.

You are free to withdraw from this study at any time prior to publication without penalty, prejudice, negative consequences, repercussion, or disadvantage. Your decision to withdraw from this study will be kept confidential. Upon withdrawal, all data obtained from you and associated with you will be erased and destroyed.

There is no foreseeable risk arising from participation in this study.

There may be a risk of psychological/emotional harm that is beyond the normal experience of everyday life, in either the short or long term, from participation in this project. Confidentiality of results of the study shall be duly ensured. Further, information on who did or did not participate will not be provided to the school leadership.

Your privacy will be protected and nothing will be published that will identify you.

If you would like a summary of the research findings from this study or a copy of the final research report/paper published, please tell me so I can arrange to provide you a copy.

Ethical issues

This project has received ethical clearance from the Interim Research Ethics Committee of the National Institute of Education, Nanyang Technological University.

Signature:

Date:

Appendix B: INFORMED CONSENT FORM

Name of participating school:

Name of researcher: Johnny Go

Title of research project: An Exploration of Teacher Epistemology and Religiosity in Primary and Secondary Schools in the Philippines.

I have been given and read the Information Sheet describing the study and the nature of the study, including interviews and other procedures. I understand and voluntarily accept, in behalf of my organization, the invitation to participate in the above study.

I understand the purpose and process of the research project and our involvement in it.

I also understand that

- I, in behalf of the school, or any of the participants, can at any time prior to publication withdraw from participation without penalty, prejudice, negative consequences, repercussion, or disadvantage and demand that my personal data/information be permanently deleted from the database.
- the researcher will use my personal data/information solely for this study.
- the researcher will render my personal data/information anonymous and protect the privacy and confidentiality of my personal data/information.
- while information gained during the study may be published, the school and the participants will not be identified and my personal data/information will remain confidential.
- the research records will be securely kept under lock and key.
- the ethical aspects of the project have been approved by the ethics committee of NIE.

I confirm that participants in this study are over 21 years of age.

If I have any questions about the research at any point in time, I will contact (Johnny Go, jcgosj@gmail.com, tel. (632) 723-04-81 loc 201).

Name of participant (Principal):

Signature:.....**Date:**

Researcher's confirmation statement

I have provided information about the research to the participant and believe that he/she understands the nature of the study, the expectations of the procedures, and the rights of a research participant.

To the best of my knowledge, the participant has voluntarily signed this informed consent form, without coercion or undue influence.

I have witnessed the participant signing this form.

Researcher's signature: **Date:**

Appendix C: SURVEY INSTRUMENT

Below are cases involving the contrasting views of two fictional characters: Jose and Pablo. Read the cases and the questions following them. For every item, choose the response that best expresses your response to the question by putting an X in the appropriate box. Please note that there is no right or wrong answer.

<p>1. Jose believes that one mathematician's proof of the math formula is right.</p> <p>Pablo believes that another mathematician's proof of the math formula is right.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>
<p>2. Jose believes that the universe was created by a Supernatural Being or Power.</p> <p>Pablo believes that the universe was created of a purely natural process.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>

<p>3. Jose thinks the first piece of music they listened to is better.</p> <p>Pablo thinks the second piece of music they listened to is better.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>
<p>4. Jose has one view of why criminals keep going back to crime.</p> <p>Pablo has a different view of why criminals keep going back to crime.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>
<p>5. Jose accepts one book's explanation of how the brain works.</p> <p>Pablo believes another book's explanation of how the brain works.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>

<p>6. Jose thinks lying is wrong.</p> <p>Pablo thinks lying is permissible in certain situations.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>
<p>7. Jose thinks the first book they both read is better.</p> <p>Pablo thinks the second book they both read is better.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>
<p>8. Jose agrees with one book's explanation of how children learn language.</p> <p>Pablo agrees with another book's explanation of how children learn language.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>

<p>9. Jose thinks people should take responsibility for themselves.</p> <p>Pablo thinks people should work together to take care of each other.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>
<p>10. Jose thinks the first painting they looked at is beautiful.</p> <p>Pablo thinks the second painting they looked at is beautiful.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>
<p>11. Jose thinks the government should limit the number of children families are allowed to have to keep the population from getting too big.</p> <p>Pablo thinks families should have as many children as they choose.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>

<p>12. Jose thinks one book's explanation of why World War II began is right.</p> <p>Pablo thinks another book's explanation of why World War II began is right.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>
<p>13. Jose believes in life after death.</p> <p>Pablo believes that everything ends in death.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>
<p>14. Jose believes one book's explanation of what atoms are made up of.</p> <p>Pablo believes another book's explanation of what atoms are made up of.</p>	<p>Can only one of their views be right, or could both have some rightness?</p> <p><input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE</p> <p>If your answer is (B): Can one view be better or more right than the other?</p> <p><input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.</p>

15. Jose believes that God exists.	Can only one of their views be right, or could both have some rightness?
Pablo doesn't believe that God exists.	<input type="checkbox"/> (A) ONLY ONE OF THE VIEWS IS RIGHT <input type="checkbox"/> (B) BOTH VIEWS CAN BE RIGHT TO SOME DEGREE
	If your answer is (B): Can one view be better or more right than the other?
	<input type="checkbox"/> (A) YES, one view CAN be more right than the other. <input type="checkbox"/> (B) NO, one view CANNOT be more right than the other.

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