A framework for conflict resolution within the theory of Critical Thinking.

Allan W. Kidd
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A FRAMEWORK FOR CONFLICT RESOLUTION
WITHIN THE THEORY OF CRITICAL THINKING

by

Allan Kidd

A Thesis
Submitted to the Faculty of Graduate Studies and Research
through the department of Philosophy
in Partial Fulfillment of the Requirements for
the Degree of Master of Arts in Philosophy at the
University of Windsor

Windsor, Ontario, Canada

1994

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ABSTRACT

By comparing numerous views regarding Critical Thinking (CT), a clearer understanding of conceptual and structural similarities and differences among theories emerges. This meta-theoretical perspective reveals a relatively small set of complex issues dividing opinion, a framework of issues for characterizing the theoretical conflicts regarding CT. Facione [1990] identifies four of the key issues dividing his panel of fifty CT experts, issues concerning the components of CT, the relation of CT to the CTer, and the function of the term, 'CT'. Johnson [1992] reveals important points of discord, identifying four central issues — concerning the relation of CT to other phenomena, the focus of CT and its relation to action, the relation of character to accounts of CT, and the function of the concept 'CT'. Six discernible sets of issues regarding CT are synthesized from these foregoing analyses. These issues concern (1) the components of CT; (2) the relation of the phenomena/concepts 'CT' and 'CTer' to each other; (3) the relation of CT to other concepts and phenomena; (4) the focus of CT, and its relation to action; (5) the function of the concepts 'CT' and 'CTer' in theory and practice; and (6) pedagogical aspects of CT. This framework represents a research agenda, and provides the perspective necessary for the critical evaluation of accounts of CT, for resolution of the larger conflict, and so, for achieving a consensus regarding the nature and meaning of CT.
CHAPTER ONE : BACKGROUND

1. Introduction

The term 'critical thinking' was first used to denote a specific topic of interest by educational researchers and test-designers in the 1940's. Since that time, the concept of critical thinking (hereafter CT) has changed the practice of education. Over the past 50 years, CT has become a concept with immense influence, an ideal that lies at the heart of a growing educational reform movement.

During its first forty years, what is now referred to as "the CT movement" gained momentum. Led by such figures as Ennis [1962], this period saw significant advances in curriculum design and in the development of assessment tools. Yet, while Watson and Glaser [1942] must be acknowledged as the first to use the term "CT" to denote a specific topic of theoretical interest, McPeck [1981] must be credited as the first to critique and thoroughly analyze the concept, faulting previous theorists for "giving short shrift to the conceptual analysis of . . . CT."¹

Until the appearance of McPeck's work, the CT movement appears to have enjoyed a period of relative harmony, untroubled by substantial theoretical controversy. But McPeck notes that "it is not at all clear that people mean the same thing by CT"² and suggests an explanation, arguing that confusion reigns in theory of CT and,

² McPeck [1981], p.1
stems from approaching the concept [of CT] as though it were a self-evident slogan whose precise ingredients were considered to be clear and self-justifying by those who favour its promulgation. The phrase 'CT' is both over-worked and under-analyzed in the same way the term 'education' was before the work of R. S. Peters. Even the more careful work that has been done on CT tends to rush over the analysis of the basic concept and to move on to itemizing the various skills that it is thought to involve.  

In questioning the concept of CT, McPeck raised theoretical questions where previously there had been much presupposition, and ushered in a period of theoretical inquiry into CT, where previously the interests had been primarily practical and pedagogical.

It is now recognized that McPeck's objections to the basic presuppositions of accounts of CT represent a legitimate and significant theoretical challenge. McPeck's analysis of CT called into question much of what had been presupposed by previous theorists, and raised doubts about central assumptions of CT instruction. The value of McPeck's work lies in the insight that previous accounts were insufficient in terms of theoretical support, that the concept of CT is not self-evident, but requires analysis, and that assumptions regarding CT require justification. McPeck's view also demonstrates that different analyses of CT yield considerably different pedagogical implications and practical ramifications.

Because intensive theoretical inquiry into the nature and meaning of CT followed largely in the wake of McPeck,

3 McPeck [1981], p.2
"the theory of CT" is still in its formative stages, comprising a body of literature about twelve years old. Recently Siegel [1988] has claimed that little if any progress has been made in clearing the conceptual controversy surrounding CT:

the notion of critical thinking remains obscure and ill-defined; the theoretical conflicts between the various analyses offered to date are significant. 4

Siegel attempts both to clarify the concept, and to resolve conflicts, through a critical analysis of the theories of Ennis [1962], Paul [1982], and McPeck [1981]. Echoing the latter, Siegel notes "there is no clear agreement as to the referent of the term." 5 The importance of Siegel's analysis for my work lies in the recognition of the plurality both of the conceptualizations of CT, and of the theoretical issues that sustain this debate. Siegel does not end the debate, but rather, adds another voice to the current conflict.

Surveying the literature that follows McPeck, Johnson [1992] observes that,

after lying untouched for many years, the issue of defining CT has suddenly become such a hot topic that almost no one can keep clear of it. In recent years, Ennis [1985, 1987, 1989], Lipman [1988], Siegel [1988], and Paul [1989] have all produced new and apparently distinct accounts of CT. 6

We find, in 1993, that there are several different definitions of CT from which to choose, each having different theoretical commitments and practical

4 Siegel, Educating Reason [1988], p.2
5 Siegel [1988], p.5
ramifications. Controversies regarding CT bring to light the diversity of these several existing theories.

As McPeck originally noted, CT theorists still do not speak with one voice. However, there is much at stake in this conflict, as Norris [1992] argues:

The debate’s outcome promises to have profound impact on the theory and practice of education. It could mean, at one extreme, the abandonment of CT as an educational ideal. At another extreme, it could mean the unifying of the curriculum under the single umbrella of CT. 7 For this reason, a consensus regarding CT is desirable.

However, as Johnson [1992] argues, there are many "problems that we face in attempting to reach consensus on a definition of CT." 8 There are "myriad definitions of CT. Each textbook author has a definition, and one is implicit in every test of CT." 9 The importance of clarifying the concept has also been emphasized by Facione [1990]:

A clear and accurate conceptualization of CT is absolutely essential for the development of valid CT assessment tools and effective CT instructional programs . . . divergent conceptualizations of CT have hindered curricular and assessment efforts. 10

As desirable as consensus regarding CT may be, attempts at achieving such an accord have met with mixed results. For example, while Facione’s findings [1990] of The American Philosophical Association’s Committee on Pre-College Philosophy are ostensibly a "report of expert consensus",

7 Norris (ed.), The Generalizability of Critical Thinking: multiple perspectives on an educational ideal [1992], p.4
8 Johnson [1992], p.52
9 Johnson [1992], p.40
10 Facione, Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction [1990], p.21
they actually reveal "deep divisions" between experts regarding what "the term 'CT' includes in its meaning."\textsuperscript{11} More recently, Johnson [1992] notes, "there is at present no substantive consensus about the nature of CT."\textsuperscript{12}

The CT community does not at this time have a widely-accepted account of CT. Hence, the theory of CT is in a state of conflict; and although this theoretical turmoil regarding CT is generally acknowledged, the particular nature and complexity of the conflict has remained largely unrecognized. More must be said than just that there is no consensus. The literature concerning CT actually reveals a relatively small number of theories divided over an equally small yet manageable number of points. These theories need to be compared, and the issues brought out into the open. In this thesis I attempt to provide a framework that will work toward that end.

To answer the question "How should we teach CT?" we must have an answer to the question "What is CT?" However answers to the latter question have been multiple and diverse, and the theoretical bases of accounts of CT have only recently begun to be analyzed and compared. Nonetheless theorists establish the issues, points of controversy, or theoretical conflicts, insofar as they elaborate and characterize their own accounts, and insofar as they examine and criticize the theories of others.

\textsuperscript{11} Facione [1990], p.21
\textsuperscript{12} Johnson [1992], p.33
In recent years, important aspects of this controversy have begun to surface. Probing the debate reveals a number of points of contention, and important diversities among the individual theories. Johnson notes, "Although there are patches of agreement among the primary investigators, significant areas of disagreement remain".13

Whether or not consensus regarding CT is possible at this time, this thesis proceeds on the assumption that a better understanding of the conflict is necessary for any substantial resolution of these disagreements to occur. To achieve a clear and unequivocal understanding of the nature and meaning of CT, it would be necessary to resolve some of the conflicts that have arisen among the individual accounts. To adjudicate between and among these theories would require, in addition to criteria of evaluation, a clear understanding of the individual theories, their conceptual and structural similarities and differences, and the issues that divide these opinions, i.e., the dimensions of the broader conflict in which these theoretical issues are interrelated. Johnson asserts:

Only if it is determined that there are significant, precisely defined differences would we be in a position to say how these differences might be resolved.14

Johnson argues that "areas of disagreement among principal definers" of CT "are amenable to rational intervention."15 "For rational intervention to occur",

13 Ibid.
14 Johnson [1992], p.40
15 Johnson [1992], p.52
Johnson argues, "we need to develop a higher-order theory of reasoning within which to situate and adjudicate the various theories of CT." Johnson suggests that a meta-theoretical vantage point is required from which the different theories could be analyzed, compared and judged. Such a view would provide the appropriate perspective for identifying and characterizing important theoretical differences. Given an adequate characterization of the controversies, it is possible that appropriate criteria could then be generated for evaluating individual theories. Moreover, this framework is essential to creating a context within which the conflicts among these theories might be resolved.

In this thesis I will illustrate the complexity and variety of theories of CT. By examining these theories (from a meta-theoretical perspective), I will derive a framework for the characterization, and resolution of theoretical conflicts regarding CT.

2. Statement of the thesis

A framework for characterization and resolution of conflicts among theories of CT can be derived from detailed comparative analyses of these theories. In this thesis, I will develop and defend such a framework. I will synthesize the significant contributions that have been made towards such an end, and will elaborate upon and supplement elements of these analyses to outline a framework of six issues for characterizing theoretical conflicts regarding CT. Theories

16 Ibid.
of CT can be understood as involving commitments regarding (1) the components of CT; (2) the relation between the activity (CT) and the agent (the CTer); (3) the relation between CT and other thought processes; (4) the focus of CT; (5) the function of the term 'CT'; and (6) the pedagogical characteristics of CT.

3. Objectives

In this thesis, I do not argue for or defend a particular theory of CT. Instead, my goal has been to take the several prominent theories under consideration, to analyze and compare them, and to present an exposition of this research that will yield a clear understanding of the complexity of individual accounts, the diversity of the prominent contemporary theories, the specific issues that divide opinion, and the interrelations of these issues in the broader context of the theoretical conflict. This understanding of the particular theories, combined with a rich understanding of the issues that divide them, will furnish a meta-theoretical framework in terms of which individual theories can be characterized and criticized.

It is my hope that this framework will provide a better understanding than now exists of the composition and complexity of the various theories of CT, and of the issues that divide opinion within this area of inquiry. It is also my hope that this framework (a) will eventually be used for deriving criteria for explicitly evaluating theories of CT; (b) will assist in creating avenues for the resolution or management of the theoretical conflicts; and (c) will serve
as a basis for achieving an eventual consensus of opinion regarding CT.

4. Synopsis of the thesis

With this sketch of the background literature and the statement of my thesis and objectives set out, in what remains of Chapter One I provide a synopsis of the development of my thesis. Conflicts among theories of CT have not been adequately identified and characterized. This is partly because the different accounts of CT have themselves not been adequately analyzed and compared. Yet the composition and complexity of these accounts are now coming to light. The numerous issues and interrelations among theories are also being identified.

In Chapter Two, I examine suggestions made by Norris [1992] and Johnson [1992] for understanding the composition of theories of CT, and the dimensions of the debate surrounding this concept. Norris argues that important parts of this conflict involve "interconnected conceptual and empirical issues that must be resolved simultaneously."\(^{17}\) Norris also identifies a number of issues and "implicit assumptions" concerning CT which, he argues, need to be questioned. Johnson argues that definitions of CT have to be understood within the context of the broader theories of which they are a part, and characterizes the dimensions of these broader theories. With the help of these analyses,

\(^{17}\) Norris [1992], p.ix
some of the diversity and complexity of theories of CT can be recognized.

In Chapter Three, I examine six issues identified by Facione [1990] for characterizing the conflicts among theories of CT. Facione, in elucidating the "dispositional dimension of CT" and the "procedural, laudatory and normative uses of the term 'CT',"18 outlines several issues, furnishing a basis for the forthcoming framework. I analyze these issues in detail.

In Chapter Four, I examine four issues identified by Johnson [1992] for characterizing these conflicts, which issues further contribute to the emerging framework. Johnson undertakes a comparative analysis of five theories of CT, to reveal the issues that divide these accounts. The discrepancies Johnson brings to light constitute significant unresolved theoretical issues regarding CT, including some of the controversies encountered in Chapter Three, as well as further issues not noted by Facione. I analyze and relate these issues to those identified.

In Chapter Five, I amalgamate the points of controversy that emerged in these previous chapters, and present my own comprehensive framework for the interpretation, analysis and comparison of theories of CT. I bring together the issues identified by Facione and Johnson to create a framework for characterizing the theories and the conflicts among them, supplemented by important contributions made by Missimer

18 Facione [1990], p.20
[1990], and Olsen and Babu [1992].

In Chapter Six, I present my conclusions regarding the state of conflict among theories of CT, and make observations regarding possible directions for the resolution of these conflicts.
CHAPTER TWO: THEORIES IN CONFLICT

1. Introduction

Part of what is required to achieve consensus regarding CT is a thorough understanding of the conflict and the theories involved in it. The lack of consensus within the theoretical discourse can be explained, to some extent, by the fact that the conflict is not well-understood, even by the parties to this dispute. While the plurality of accounts of CT has been recognized, their diversity and complexity have not, nor have important points of the controversy among these theories been adequately identified. I have asserted that a rich understanding of this conflict would involve an understanding of the complexities of the individual theories, and of the diversities of many theories considered collectively. Only with a strong grasp of the concepts and commitments at work in the different theories, and an understanding of the dimensions and diversity of these theories, would we be able to resolve the various conflicts, and ultimately to reach a consensus regarding CT. The complexities of this conflict, and of the theories involved in it, are now being recognized. Recently, Facione [1990] Norris [1992] and Johnson [1992] have all made significant contributions towards clarification of the broader conflict and identification of numerous issues dividing opinions regarding CT. In this Chapter, I will examine recommendations made by Norris [1992], and Johnson [1992] for understanding the composition of theories of CT, and the dimensions of the debate surrounding this concept.
In the following Chapters, I will examine the issues identified by Facione [1990] and Johnson [1992] for characterizing the conflict regarding CT, and will present a framework of issues synthesized from this work.

2. Norris on the complexity of the conflict

Recently, Norris [1992] has edited a volume, The Generalizability of Critical Thinking: multiple perspectives on an educational ideal, that makes significant strides towards clarifying the debate concerning CT.¹ Although the ramifications of this work have not yet been fully appreciated, the importance of Norris’s book for my research is manifold.

Norris is motivated by the same goal as other theorists: the practical necessity of achieving clarity, if not consensus, regarding our central educational concepts.² He acknowledges the conflict concerning CT, and clarifies it in several ways, revealing some of its complexity, and identifying important issues that sustain this controversy.

All contributors to Norris’s volume treat one specific theoretical point of controversy, the issue of generalizability, first raised by McPeck [1981], which has been central to the debate regarding CT. In this way, Norris produces the most highly focused and thorough-going inquiry to date into an important theoretical issue:

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¹ Norris [1992], p.39.
² Norris [1992], p.4.
Until recently, the generalizability question usually was not formulated explicitly in the CT literature. Instead, many theorists assumed implicitly that CT is generalizable, and many others equivocated on the matter...  

Norris also clarifies the conflict through his recognition of both the diversity of opinion regarding CT, and of the legitimacy of the different sides to these theoretical debates. This volume is valuable in that it presents more than one position on the issue of the generalizability of CT, and demonstrates that reasonable arguments may be put forward in favour of different conclusions. The volume includes the latest work of Ennis, Siegel and McPeck. The point Norris brings home is that, despite the dialogue that has been generated, the issue of generalizability remains undecided, though not unidentified.

In addition, Norris highlights further dimensions of the conflict brought about by the multi-disciplinary nature of the inquiry into CT. As the title of his book suggests, research into CT brings together many disciplines or approaches, including the perspectives of philosophy, psychology and education. Norris’s work is important in that it recognizes that all these disciplines have a legitimate interest in CT, and hence, a legitimate voice in this theoretical discourse. The differences in these interests and in the background assumptions at work in these different types of inquiry make for further diversity among opinions regarding CT that must be acknowledged.

3 Norris [1992], pp.2f.
Norris’s volume improves our understanding of the theoretical conflict insofar as it "clarifies many of the concepts and issues involved in the debate and proposes directions for further research."\(^4\) For example, Norris asserts that the issue of the generalizability of CT may involve "interconnected conceptual and empirical issues that must be resolved simultaneously."\(^5\) The controversy surrounding CT may involve questions concerning the meaning of concepts and questions regarding conceptual relations, as well as empirical questions about the nature of a behavioural phenomenon. The conflict may involve issues of different types, raised by researchers with different interests. The upshot of this point is that any thorough analysis of the conflict must be prepared to recognize these diversities.

Norris brings out some of the dimensions of the conflict by identifying previously unformulated issues regarding CT. These papers reveal "a large number of unanswered and unexplored questions about CT generalizability".\(^6\) Here Norris refers, in part, to the work of Johnson [1992] on "The problem of defining CT,\(^7\) which yields important insights into the complexity of both the individual theories and of the debate among their adherents. Norris is keenly interested in the complexity of the theories of CT themselves, supplying an analysis which,

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5 Ibid.  
6 Ibid.  
is meant to provide a partial understanding of the 'deep structure' of the generalizability question, of what lies beneath its surface, and, hence, a deeper understanding of the divergence of views. Norris brings to light several presuppositions of the prominent theorists of CT, and thereby makes explicit important diversities and issues regarding the conceptualization of CT.

For example, Norris maintains that differences between definitions and theories of CT can be understood as following from different presuppositions regarding the nature of 'meaning' and the process of 'definition', specifically regarding the meaning of the terms 'CT' and 'critical thinker'. He writes:

In addition to what 'CT' means, presuppositions about how we ought to go about defining 'CT' affect the generalizability question. For instance, it is presumed by some theorists that CT is an educational value, and that we should define it so as to best promote our educational goals. Other theorists believe that the meaning of CT should be based upon evidence from empirical research about how people think when faced with different kinds of tasks.

Norris argues that issues may be influenced by deeper and often unexamined commitments, and suggests that parts of the conflict, i.e., certain tensions between definitions and broader theories of CT, may be understood as manifestations of deeper conflicts between assumptions constituting implicit 'theories of meaning'. If Norris is correct, then an adequate understanding of the conflict surrounding CT,

8 Norris [1992], p.5.  
9 Norris [1992], p.10.  
10 Norris [1992], p.4.
and of the theories which are parties to these disputes, will need to recognize this theoretical complexity, to distinguish presuppositions from justified opinions, and to make these assumptions, preconceptions and commitments explicit. Norris's observations represent a challenge to theorists of CT to identify, criticize and defend their own presuppositions, specifically regarding 'meaning', in order for their theories to be considered well-articulated and well-supported. Johnson, in the same volume, makes important points regarding the complexity of the conflict, bringing out several "unexplored questions," issues debated in the literature that had not previously been formulated.

3. Johnson on the complexity of theories

What is important for my purposes here are Johnson's claims regarding the "deep structure" of theories of CT. In what remains of this chapter, I will examine Johnson's observations regarding the complexity of the individual theories of CT, which prove helpful in characterizing the dimensions of the larger conflict.

In his paper, Johnson (1992) makes important contributions to our understanding of the conflict surrounding CT and to the identification of the issues sustaining this conflict. Concerned with the recently revived "problem of defining CT," he claims that issues regarding the generalizability of CT cannot be adequately addressed in the absence of a clear understanding of the nature of CT. Yet the number and diversity of stipulative definitions of CT makes consensus difficult. Hence, Johnson
reviews the significant literature pertaining to this topic, and undertakes a comparative analysis of five prominent accounts of CT.

Part of the importance of this paper for my thesis is that Johnson draws attention to some of the complexity of the debate, and provides a comparative analysis of the several accounts of CT, bringing out a number of controversies and patches of consensus among the different theories. Through a consideration of the diversity of these accounts, Johnson brings out previously unrecognized issues, and important parts of the theoretical debate. In addition, Johnson notes some of the complexities of the theories themselves that clarify the broader conflict, drawing his conclusions from a comparative analysis:

In recent years, Ennis [1985, 1987, 1989], Lipman [1988], Siegel [1988], and Paul [1989] have all produced new and apparently distinct accounts of CT. 11

Taken together with McPeck's [1981] thorough critical analysis of the concept of CT, these five theorists have expressed strikingly different views regarding CT. More importantly, these accounts are in Johnson's words "theoretically funded." 12 The accounts of McPeck [1981], Paul [1982, 1989], Ennis [1987], Lipman [1988] and Siegel [1988] are

not free-standing definitions, but rather [each is] embedded in a fuller, if not entirely developed, theory of CT. . . . Not only is each a

distinguished voice within the CT movement, but each may be said to possess a theory of CT of which the definition is an outgrowth.13

Hence, Johnson limits his focus to the five well-articulated contemporary accounts of CT mentioned.

Johnson brings out some of the complexity of the theories, and makes an important observation regarding the structure and interrelations of elements within theories of CT: There is often more to a theory than meets the eye. Theories have both explicit and implicit elements. Hence, definitions of CT have to be understood within the context of the broader theories of which they are a part, as expressions of implicit and often unexamined ideological commitments and assumptions.

By a 'theory of CT', I mean not only a definition, but also the concepts, principles, arguments, and assumptions which support the definition, as well as the interests which fuel the theory and the broader agenda.14

A theory of CT can involve much more than an articulated perspective on the nature and/or meaning of CT. Theories are themselves complex but identifiable constructions having a number of distinguishable components. However, theories are difficult to elucidate when expressed unsystematically, or by language that is imprecise or confused, and hence, theories often need to be teased-out of discourse.

Johnson asserts that the explicit elements of theories, e.g., lists of CT components and definitions of CT, have to be understood within the broader context, and in relation to

13 Ibid.
14 Ibid.
the often implicit elements of the theories of which they are parts: "differences in definitions may be viewed as indications of deeper differences at the level of the theory of CT." Thus, Johnson also brings to light part of the "deep structure" of theories of CT, arguing that the different explicit definitions can be understood as following from different implicit sets of more basic assumptions, e.g., regarding the nature of reasoning, and of the relations between CT and such things as rationality.

Like Norris, Johnson recommends that tensions between definitions and theories of CT be understood as manifestations of deeper conflicts between commitments that constitute implicit theories of reasoning and rationality. If Johnson is correct, adequate conceptualizations of the conflict surrounding CT, and of the theories which are parties to these disputes, will recognize this "deep structure," and make these commitments explicit. These observations also represent a challenge to theorists of CT to identify, criticize and defend their own presuppositions regarding reasoning, in order for their theories to be considered well-articulated and well-supported.

4. Conclusions regarding conflict and theory complexity

The ramifications of Norris’s and Johnson’s observations regarding the complexity of the individual theories of CT for our understanding of the dimensions of

15 Ibid.
16 Johnson [1992], p.45.
the larger conflict are multiple. Norris clarifies the conflict through his recognition of the diversity of opinions regarding CT, and of their individual legitimacy, focusing on the generalizability issue.

Norris presents different positions to be taken concerning the issue of the generalizability of CT, and acknowledges the legitimacy of research into CT from the different perspectives of philosophy, psychology and education. He emphasizes that the conflict involves issues of different types, raised by researchers with different interests. The differences in these interests and in the background assumptions of these different types of inquiry make for further diversity among opinions regarding CT.

Norris also identifies deeper levels of theories of CT, suggesting that differences in definitions of CT can be understood as resulting from differences in the more fundamental presuppositions of the theories. He asserts that these differences take the form of assumptions regarding the meaning of CT, and regarding the nature of meaning in general. These insights add to our understanding of the complexity of the theories involved in these disputes.

Johnson identifies several "unexplored questions," issues that have been debated in the literature without being explicitly formulated. He also emphasizes the complexity of the debate, and provides a comparative analysis of the prominent theories of CT. Johnson observes some of the complexities of the theories themselves, and through consideration of the diversities of the accounts, sheds light on the "deep structure" of theories of CT.
Insofar as Johnson holds that theories have both explicit and implicit elements, he requires that definitions, concepts and arguments, should be seen as supplemented with unexamined ideological commitments and assumptions, e.g., regarding the nature of reasoning, and of the relations between CT and rationality.

Like Norris, Johnson suggests that tensions between definitions and theories of CT must be understood as manifestations of deeper conflicts between commitments that constitute implicit theories of reasoning and rationality. Recognizing this complexity of the individual theories of CT is a necessary prerequisite of understanding and resolving conflicts regarding the nature and meaning of CT.

Hence, Norris [1992] and Johnson [1992] add considerably to our understanding of the composition of theories of CT, and of the dimensions of the debate surrounding this conflict. These analyses help us recognize some of the diversity and complexity of these theories. This adds to our understanding of the compositions and complexity of the individual theories, and provides a basis for recognizing their conceptual and structural similarities and differences.

In what follows I will bring to light some of the unresolved issues regarding CT acknowledged in the literature. Facione [1990] and Johnson [1992] provide characterizations of the broader conflict regarding CT, identifying several theoretical issues which divide expert opinion. In Chapter Three I examine Facione [1990], in Chapter Four, Johnson [1992].

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CHAPTER THREE: FACIONE’S DELPHI PROJECT

1. The Delphi Method

In this Chapter, I examine four issues identified by Facione [1990] for characterizing the conflicts among theories of CT. Facione’s Critical Thinking: A Statement Of Expert Consensus For Purposes Of Educational Assessment And Instruction presents the results of research involving extensive correspondence with a panel of 46 CT experts over a period of 21 months. Facione was requested by the American Philosophical Association Committee on Pre-College Philosophy in December of 1987 to make an "inquiry into the controversial issues known to lie at the heart of the profession’s concern." To that end, he initiated research using The Delphi Method:

The Delphi Method requires the formation of an interactive panel of experts. These persons must be willing to share their expertise and work toward a consensus resolution of matters of opinion . . . . the expert panelists work toward consensus by sharing their reasoned opinions and being willing to reconsider them in light of the comments, objections and arguments offered by other experts. . . . As areas of accord or disagreement emerge these are presented to the panel . . . . The process terminates when the project director determines that sufficient accord has been reached for areas of consensus to be made public. Delphi findings also include descriptions of residual disagreement and statements of minority opinion.2

By this method, Facione attempted to establish a forum for theoretical dialogue that would lead to a consensus regarding the definition of CT.

1 Facione [1990], p.4.
2 Facione [1990], pp.4f.
regarding the definition of CT.

In Section I of his report, Facione provides a "consensus statement regarding CT and the ideal critical thinker" which he describes as "the articulation by a panel of CT experts of a conceptualization of CT in terms of two dimensions: cognitive skills and affective dispositions." Section II (quoted above) describes the research methodology. "Section III addresses the skill dimension of CT, and Section IV the dispositional dimension of CT." Facione reports that there is a consensus among the experts regarding both the concept of CT and regarding "the ideal critical thinker." In addition, Facione asserts that a consensus exists regarding the "two dimensions" of CT. However, these conclusions are not well-supported.

While the title of Facione’s report implies that consensus exists among the experts regarding the conception of CT, that conclusion is not strongly supported by the research as reported. Though this project is motivated by the desire to "achieve a clear and accurate conceptualization of CT", and although the report implies that there were sufficient areas of accord to yield a single statement of consensus, this conclusion is somewhat questionable. The panel of experts cannot be fairly represented as advocating one well-articulated account of CT. Moreover, as I will show, a careful reading of the

3 Facione [1990], p.3.  
4 Ibid.  
5 Facione [1990], p.4.
report indicates that the experts in 1990, though in some marginal agreement, remained significantly divided over several fundamental theoretical issues. Facione's research reveals broad "areas of consensus" and provides a meta-theoretical perspective on a collection of several diverse views, which contributes more to our understanding of the complexity of the theoretical discord than it does to resolving or evaporating these disputes.

The significance of Facione's report lies not so much in its conclusion as in the perspective it achieves by bringing together many opinions and forcing them into theoretical debate. This perspective provides important additions to our understanding of the tensions within theoretical discourse regarding CT. Facione's report is important to my research because it reveals several of the "controversial issues" concerning CT, those theoretical debates and points of "residual disagreement" which are obstacles to consensus, and regarding which there are now, at best, only "areas of accord".

2. Issues regarding "the cognitive skills of CT"

Regarding "the cognitive skill dimension of CT," Facione states that the experts were "virtually unanimous (N>95%) on including analysis, evaluation and inference as central to CT." Facione notes some minor disagreement on the inclusion of certain skills, yet reports that, as well,

7 Facione [1990], p.9.
"Strong consensus (N>87%) exists that interpretation, explanation and self-regulation are central to CT."8 It appears that there is general agreement that CT is to be understood as a phenomenon comprised of a set of rather complex processes, and there is consensus that CT involves what Facione describes as a set of "cognitive skills". Hence, Facione represents the experts as in agreement regarding at least two fundamental conceptual issues:

Issue [F1]: Is CT a complex phenomenon, i.e., comprised of a set of distinguishable sub-activities or components?

Issue [F2]: Does CT consist of or involve a set of cognitive skills?9

The experts appear to conclude unanimously that (1) CT is a complex phenomenon, and that (2) CT involves what Facione calls a skill dimension. There is also some consensus as to the specific component processes thought to constitute CT, i.e., there is some accord as to this further issue:

Issue [F2.1]: Which thinking skills/activities are components of CT?

Therefore, the first part of Facione's statement of expert consensus appears to be justified by the research:

We understand CT to be purposeful, self-regulatory judgement which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgement is based.10

8 Ibid.
9 For ease of reference I use a format in identifying the issues as they arise: [F1] signifies the first issue brought out by Facione's analysis; [F1.1] would indicate an issue which I take to be related, or subsidiary to [F1].
10 Facione [1990], p.3.
However, Facione represents the experts as equating CT with judgement that is purposeful and self-regulatory, although the data reveals no mention of judgement, nor of its alleged purposeful and self-regulatory nature, except for some dissent expressed by the experts regarding the latter alleged property or quality of CT. It was observed by a panel member that the "meta-cognitive aspect of self-regulation . . . . appears to be a skill of a different kind or level."\(^{11}\) Furthermore, Facione acknowledges a lack of conceptual clarity and theoretical support for the offered list of skills:

The experts are clear on the point that not every useful cognitive process should be thought of as CT. Not every valuable thinking skill is a CT skill. CT is one of a family of closely related forms of higher-order thinking, along with, for example, problem-solving, decision making, and creative thinking. Unfortunately the conceptual overlaps and complex relationships among all the various forms of higher-order thinking have yet to be examined satisfactorily. However, that does not imply that one cannot develop a careful and accurate conceptualization of the target, CT.\(^{12}\)

Issue [F2.2]: Is CT coextensive with all thinking skills?

Facione reports that the experts are in agreement that CT is not equivalent to thinking in general. The experts conclude that the concept of CT is more limited. But given the acknowledged lack of conceptual clarity, it remains for each theorist to demonstrate the accuracy of his conception of CT. If, as Facione claims, CT does not entail all thinking skills, and CT can be distinguished from other types of

\(^{11}\) Facione [1990], p.9.
\(^{12}\) Facione [1990], p.13.
species of thinking, then it must be shown which skills are constitutive of CT and which not; and it must be shown what criteria will be used to determine which skills are, and which are not CT skills.

Issue (F2.3): Which thinking skills are not part of CT? and Why not?

Issue (F2.4): What are the criteria for identifying CT skills? 13

Facione does not investigate these issues. Nonetheless, one or another set of skills is accepted by each of the experts as constituting (at least part of) CT. Yet for the majority CT involves much more than a set of skills.

3. Issues regarding "the dispositional dimension of CT"

Facione's report also suggests that consensus exists regarding CT's second component, what he refers to as "the dispositional dimension of CT". 14 Yet closer investigation reveals more dissension than accord among the experts. As Facione states:

whether or not these affective dispositions are part of the meaning of 'CT' in the way that the cognitive skills are, was an issue which divided the experts from the first . . . various experts mean different things when they used the term 'CT' in reference to its possible dispositional components. 15

Thus Facione expresses another key issue for CT theorists:

Issue [F3]: Does CT consist of/involve a set of affective dispositions (in addition to the set of cognitive skills)?

13 Where I disclose issues not explicitly identified by the author analyzed, I use the following format: (F2.3) signifies an issue brought out of the analysis of Facione and related to [F2].
14 Facione [1990], p.20.
15 Facione [1990], pp.20f.
Issue [F3.1]: Are dispositions denoted by 'CT'?  

According to Facione this second dimension or component of CT was a source of controversy in a number of ways. The experts expressed substantial disagreement regarding the relation of the alleged "affective dispositions" to CT:

The deepest division is between the nearly two-thirds majority who hold that the term 'CT' includes in its meaning a reference to certain affective dispositions and the roughly one-third minority who hold that 'CT' refers only to cognitive skills and dispositions, but not to affective dispositions.\textsuperscript{16}

Thus, as Facione describes it, this debate involves the alleged distinction between the cognitive and affective. The experts are represented as split two-to-one in favour of the inclusion of the so-called affective (e.g., such things as open-mindedness, patience, and courage) in the definition of CT. Although substantial consensus exists regarding the "skill dimension" and its specific cognitive components, there is a significant group of experts who reject the inclusion of the entire "second dimension" in the concept 'CT'. While "the majority (61\%) maintain that the affective dispositions constitute part of the meaning of 'CT',"\textsuperscript{17} a minority hold that the "dispositions are not what is meant by 'CT'."\textsuperscript{18} Therefore it can be concluded that Facione does not reveal an expert consensus regarding two dimensions of CT, but in fact reveals a lack of consensus, or better, two patches of consensus, two sets of parties to a dispute over a fundamental theoretical issue.

\textsuperscript{16} Facione [1990], p.21.  
\textsuperscript{17} Ibid.  
\textsuperscript{18} Facione [1990], p.22.
In describing this point of controversy, and the two factions, Facione identifies other important issues which divided the experts. Facione describes the "procedural, laudatory and normative uses of the term 'CT'"19 in his account of this discord. These different uses of CT reveal significant theoretical complexity and diversity, which I will now elaborate.

4. The "procedural sense" of CT

Facione reports that the experts were divided over the disposition issue [F3]. His report describes a group of experts who hold that the affective/dispositional dimension is not part of the meaning of CT:

[A] minority (30%) insist on using 'CT' in a strict procedural sense, that is as referring only to a certain judgemental process. They distinguish sharply between what is true of critical thinking from what is true of critical thinkers. Their primary concern is with the CT skills.20

In describing the procedural sense of CT, Facione brings out a further distinction which he represents as playing an important role in this theoretical debate. The "proceduralists," as Facione refers to this group, reject the inclusion of the dispositions as "part of the meaning of CT" on the grounds that the dispositions are properly understood as qualities of the thinker, and not qualities of the process or product of CT. They hold that, given the distinction between thinking and the thinker, act and agent,

19 Facione [1990], p.20.
20 Facione [1990], p.22.
CT must be understood as the former, as a process or activity. They argue that while agents may exhibit numerous attributes, these are not properly understood as constitutive of the process of CT. Facione describes the procedural view in this passage:

CT is thinking skills. Saying CT is a set of attitudes may be a way of describing what people who are good at CT are like, but it is not a way of describing CT itself.\(^{21}\)

Facione’s report thus raises this issue:

Issue [F4]: What is the relation between CT and the CTer?

It appears that the proceduralists are less interested in what makes a person a CTer than they are in what makes a certain thought process CT. Although Facione reports that they distinguish CT and CTer, he provides no further clarification of this group’s view regarding the relation between CT and CTer. However, according to Facione, the proceduralists hold that CT is best understood as a process or activity. Such a view suggests that the process of CT is capable of being identified and judged independently of judgements regarding the producer, the CTer; assessment of thinker and thinking are discrete judgements, made according to different criteria:

Issue (F4.1): Can CT be identified and evaluated independently from the CTer?

Facione does not report anything concerning the theorists’ commitments regarding evaluation, and the different criteria for evaluation of CT and the CTer. This raises another issue

21 Facione [1990], p.76.
that Facione does not explore:

Issue (F4.2): What are the criteria for the judgement "this is a case of CT" and for the judgement "she is a CTer"?

The proceduralist rejects the dispositions as components of CT, because she distinguishes the process of thinking from the person. The different dispositions thought by some theorists to lead to or ensure production of CT are not as important to this group as understanding the characteristics of the process, and determining what qualifies some processes as CT, and disqualifies others. This view suggests that "doing CT" is "doing X instead of Y," i.e., that CT is one set of thought process that can be distinguished from other thought processes.

While Facione fails to explicate the proceduralists' criteria for judging either CT or the CTer, his analysis indicates that it is necessary for an adequate theory of CT to clarify the relation between CT and the CTer, and to identify the criteria and standards by which CT and CTers are judged. Facione reports that limiting the use of the term 'CT' to this "procedural sense" follows from a recognition of the distinction between the activity of CT and the qualities of the CTer. On the procedural view, CT is a matter of skills and processes. The dispositions or character of the thinker are left to the investigation of psychologists and other theorists.

Contrasting with the proceduralists, however, Facione reports that a majority of the theorists on his panel include dispositions in their accounts of CT:
[The] majority (61%) maintain that the affective dispositions constitute part of the meaning of 'CT'. . . . these dispositions flow from, and are implied by, the very concept of CT. 22

This group conceptually links dispositions with CT, unlike the proceduralists who take such a connection to be mistaken. This controversy brings out a further set of issues that Facione does not explore:

Issue (F1.1): What is the source of the lists of dispositions and of skills? What is the logical relation between these lists and the concept of CT? How are the dispositions of the thinker thought to flow from, or be implied or entailed by, the concept of CT?

Although Facione does not report the theorists' commitments regarding these issues, he does go on to characterize other aspects of this majority view.

5. The "laudatory sense" of CT

Facione represents the majority of respondents as holding that the dispositions are part of the meaning of CT. On such an account, CT refers to more than a certain process:

Thus, in addition to using 'CT' in its procedural sense, these panelists also use 'CT' in its laudatory sense. . . . The laudatory use of 'CT' can suggest approval of how well a person applies her CT skills or it can convey praise for the person because the person has the proper affective dispositions. 23

In some cases, those who use 'CT' in its laudatory sense, i.e., to approve of a certain skill, or of the skilled person, appear to hold that there is a conceptual connection between dispositions and CT, a connection rejected by the

22 Facione [1990], p.21.
23 Ibid.
proceduralists. To use 'CT' in its laudatory sense is to use the term to approve of certain thoughts or thinkers. The judgements "this is CT", "this is a CTer" involve the implicit evaluation "this thinking and/or the person producing the thinking is good, i.e., successful or appropriate." Facione’s account suggests that many theorists use the term to denote not only a process, but also a standard of successful engagement in that process. For these theorists the judgement "this is CT" can mean "this person uses CT skills well," or "this thinking is the product of a person who has the proper dispositions." To say of some thinker "her thinking is CT" is to say not only that "she does X instead of Y," but also to imply that "she does X well," and/or "X is good."

On such an account, 'CT' is an evaluative term. A process qualifies as CT (in the laudatory sense) when it meets a certain standard of excellence. "This is CT" can mean "this skill is good (intrinsically)," "this is the good exercise of a (neutral) thinking skill," or "this skill produces results which are good (instrumentally)." "This is not CT" can mean either that "the thinker does not do X well" or that "this product is not good." To use 'CT' in this way is to hold either that CT is a good thing, or that "doing CT" is "doing something well."

As Facione represents the laudatory view, the judgement "this is CT" can also mean "this thinking is the product of a person who has the right dispositions". To say of some thinker "her thinking is CT" can mean not only that "she does X instead of Y," but also that "she has the proper
disposition." Facione reports that the majority use CT as a normative concept, an ideal encompassing standards, not only of processes of thinking, but also of the character of rational agents.

The laudatory view holds that CT is by nature good; thinking that is judged to be CT has been judged to have met some standard of excellence. That is what it means to say that "this is CT" is an approbative judgement. Yet the laudatory use of CT in some cases is meant to refer to qualities of the agent. Given the proceduralists’ argument, what needs to be clarified is the sense in which this judgement extends beyond assessment of thought processes to assessment of the thinker. It seems entirely possible that a theorist could hold that CT is limited to a process and that CT is nonetheless a good thing. However, the relations between thinking and the thinker, and their respective qualities have not been adequately explored. As Facione represents the controversy, the majority of theorists hold that CT is best understood as the ideal product of a certain type of person, and use the term in a laudatory way to convey praise both for a successful type of thinking, and for the persons engaged in this activity.

The minority hold that CT and CTer, and their respective qualities, must be carefully distinguished. This group, whose primary interest is the process of CT, take the dispositions to be out of place in a definition or characterization of CT. One of the ramifications of this view is that thinkers and thinking must be assessed according to different criteria. Hence, it remains for the
advocates of the skills plus dispositions view to clarify their understanding of the relation between the process of CT and the dispositions of the CTer, and to defend the position that the concept 'CT' entails or implies a set of attitudes and traits over and above the cognitive skills.

Thus, in describing the tensions between the laudatory and procedural uses of the term 'CT', Facione identifies a further set of issues:

Issue [F5]: Is 'CT' a laudatory term, a procedural term, or is 'CT' both?

Issue [F5.1]: What is the relation or distinction between the process of CT and successful or good CT? Is all CT good CT?

Issue [F5.2]: What is the relation between successful or good CT and the CTer? Is it necessary to be a CTer to engage in CT?

Unfortunately, Facione does not adequately clarify the theorists' different views on these issues. It needs to be asked "in what sense is CT 'good'?" Is CT intrinsically good, like humility, an activity good in itself, or is CT instrumentally good, like cytology, an activity that can be used to good ends, or again, is CT like charity, something good in itself that can also be put to good ends? Could the proceduralist not hold that CT is limited to a process, and that such a process is good?

Issue (F5.3): Is CT intrinsically good, or is CT instrumentally good? Is CT both? Is CT neither?

Facione does not adequately explore these questions. Yet the debate indicates that the criteria for making the judgements "X is CT" and "X is a CTer" vary greatly for the two groups. Some proceduralists claim that the task of evaluating CT may not be accomplished by its mere identification.
Judging a thinker to be a CTer may require many judgements of that person's thinking over a long period, but it does not follow that each instance of thinking cannot be assessed as critical or uncritical, independently of judgements of the character of the thinker. One can be judged to have engaged in CT without being judged to be good at it. One can therefore "do CT" without "being a CTer."

Yet, for some who hold the laudatory view, not being good at CT means not being a CTer. What is not clear is whether the laudatory use of CT requires one to be a CTer to be capable of CT. It needs to be asked whether someone who is not a good CTer may yet be a CTer. Proceduralists hold that one can engage in this activity without necessarily possessing the dispositions associated with it. Further, they hold that the act of CT can be done well or poorly. For them, the judgements "this process of thinking is CT," "this thinking is successful," "this thinker is a CTer," and "this thinker has appropriate dispositions or character traits," may require different data, criteria and standards.

What the theorists take to be the specific criteria for making these judgements is not reported by Facione. The issue remains, what are the criteria for the judgement "this is CT" and for the judgement "she is a CTer"? Facione only gives an indication of the criteria applied by the advocates of a laudatory view of CT. He reports that they hold that,

being adept at CT skills but habitually not using them appropriately disqualifies one from being
called a CTer at all. 24

On the laudatory view, "being adept at CT skills" is insufficient to being judged a CTer. Furthermore, "habitually not using [the skills] appropriately disqualifies one" as a CTer. Thus, both groups allow that one could have or use CT skills without qualifying as a CTer. Yet, on the minority account, it is not made clear how one qualifies as a CTer. The proceduralists are not clearly committed to finding the criteria for identifying CTers. Instead, these theorists are interested in the criteria for identifying CT, and distinguishing from other processes. On what basis are the judgements "this is CT" and "X is adept at CT" made? Facione reports no answers to this question.

For those who adopt a laudatory conception, CT is more dependent on the kind of person the thinker is, than on the kind of thought process in which the person engages. Only those who are judged to habitually use their CT skills in appropriate ways, those whose actions are governed by the dispositional components of CT, are considered CTers.

The proceduralists argue that while it may be true that certain attitudes or traits are required to be judged a CTer, it does not follow that those who are not in full possession of these traits are incapable of CT, nor that they cannot be judged to have engaged in CT activities independently of judgements regarding their qualities of character.

24 Ibid.
Facione represents the majority as advocating the following reasoning:

This person . . . is so mentally lazy, close-minded, unwilling to check the facts and unmoved by reasonable arguments that [despite other, perhaps isolated uses of CT] we simply cannot call him a CTer. 25

These theorists imply that, for us to "call him a CTer," a thinker must not be "mentally lazy, close-minded," etc. The proceduralists, however, would argue that this reasoning fails to distinguish assessment of the person from assessment of the thinking. They hold that,

such a person, because of his CT skills, should be called a critical thinker - but not a good one (in terms of his effective use of those skills). 26

Their point may be put this way: The majority fails to consider that the term 'CT' describes a type of thinking, without evaluating that thinking or the person responsible for the thinking. On the majority’s laudatory view CT is evaluative. This puts the distinctions between CT and good CT, and between the CTer and the good CTer at risk. Some theorists might be willing to have bad CT and the bad CTer ruled out as logical impossibilities.

On the laudatory view, to be identified as a CTer is to be simultaneously evaluated, i.e. to be identified as a good CTer. Being a CTer means being successful at CT: one could not be judged to be a CTer, and yet be bad at doing CT.

Proceduralists argue that, the majority is committed to including attributes of the thinker into what should

25 Ibid.
26 Facione [1990], p.22.
properly be an account of thinking because they fail to adequately distinguish CT and the CTer. For the proceduralist the concepts CT and CTer are distinct, CT being a process or activity which, like other processes, yields diverse outcomes - some effective, some ineffective. For these theorists, CT need not be a laudatory term, though it is descriptive of a process. Not all thinking or thinkers will be good. Some will use CT skills very seldom, others may use CT frequently, but poorly. Determining whether these instances of thinking are instances of CT is a different matter from determining whether these thinkers are CTers, and whether CT or CTers are good.

Analysis of the debate brings to light a connection between apparently unrelated distinctions and issues. It turns out that the distinction between skills and dispositions is closely linked to the distinction between CT and the CTer. Many theorists who advocate a laudatory use of CT take CT and skills and dispositions to be conceptually linked. The proceduralists question this connection, charging that dispositions are qualities of thinkers, not of the process of thinking. Positions regarding these issues should also be seen as related to commitments regarding the function of the term 'CT'.

To summarize, Facione's report draws together three major issues which can be expressed as follows:

[Issue 1]: What are the components of CT? Is CT limited to skills or does it extend to include dispositions?

This can be called the component or skills/dispositions issue, as it questions whether CT involves affective traits
of character and dispositions in addition to the unanimously accepted skills.

[Issue 2]: What is the relation between CT and the CTer? Is the concept CTer dependent on the concept CT, or is CT dependent on the CTer? What are the criteria for judging CT and the CTer?

This can be called the act/agent issue, as it questions whether 'CT' is dependent on a characterization of the agent, the CTer, or whether 'the CTer' is dependent on a characterization of the process or activity of CT. It also demands explication of the criteria for making these different assessments.

[Issue 3]: How does the concept 'CT' function? Does CT describe a process which admits of failure, or is CT a normative concept used in the laudatory assessment of successful thinking? Does CT simultaneously describe and evaluate?

This can be called the normative/descriptive issue, as it questions whether the concept 'CT' functions as a laudatory and normative term (involving an inherent value judgement, and so limited in its application to successful thinking), or whether the concept CT is a primarily descriptive term applied to processes having the procedural characteristics associated with CT, irrespective of considerations concerning the success of the activity.

These three issues are interrelated. The majority group describes CT in terms of two dimensions, skills and dispositions. They take CT to encompass qualities of the CTer, and take the possession of certain traits to be necessary conditions of engaging in CT. For this group CT and CTer are ideals or norms: CT is a type of good thinking, CTers are a type of good thinker.
The minority group carefully distinguishes the skills of CT from the dispositions of the CTer, describing CT as a set of sub-activities or processes, and leaving the describing of the CTer to other theorists. They hold that the concept of the CTer is distinct from, though dependent upon, the conception of the activity of CT, and take CT to refer to a certain process, the CTer, to a certain person. This group maintains that CT is a distinct process which admits of degrees of success. One could be judged to have engaged in CT, yet still be judged to be an unsuccessful, unproficient, or unethical CTer. Describing or judging thinkers, though not unrelated, is not equivalent to describing or judging thinking, (and so, CT) because the criteria for making these judgements are quite different.

For the proceduralists, judgements regarding whether a person is successful, consistent, ethical, etc. in their activities, and judgements regarding whether a person possesses or is motivated by the appropriate traits, attitudes or values are secondary to judgements regarding whether an activity constitutes CT. The quality of an act, and the quality of an agent are judged independently and according to different criteria. While the concepts 'CT' and 'CTer' may function as norms, the concept 'CT' loses its utility to the extent that it is not a descriptive term.

Facione reports that these two groups remain divided. Despite considerable effort, the majority was "unable to persuade the other third of their expert colleagues to view
these dispositions as essential to the concept of CT."\textsuperscript{27}

Thus, Facione brings out three interrelated and unresolved issues implicit in the debate. The experts are divided over three issues that revolve around the disposition dimension of CT, the relation of 'CT' and 'the CTer', and the function of the concept 'CT'.

Nonetheless, it must be acknowledged that the experts did achieve some consensus concerning the CTer, the relationship between CT and the CTer, and the place of the dispositions in this relationship:

The majority was, however, persuasive in bringing about virtual unanimity [83\%] regarding using the affective dispositions to describe the paradigm critical thinker.\textsuperscript{28}

To the experts, a good CTer, the paradigm case, is habitually disposed to engage in, and to encourage others to engage in, critical judgement.\textsuperscript{29}

The assertion made by Facione that the experts conceive of CT "in terms of two dimensions" is both unjustified and inconsistent with his actual statement of expert consensus. In the final analysis then, Facione does not describe the one concept, 'CT', in terms of two dimensions. Rather, he presents a consensus statement regarding two distinct concepts, "CT and the ideal CTer" each expressed in terms of one dimension. What Facione actually presents is a procedural definition of CT as a type of judgement involving certain activities, combined with an account of the ideal CTer expressed in terms of a set of values and dispositions.

\textsuperscript{27} Ibid.
\textsuperscript{28} Ibid.
\textsuperscript{29} Facione [1990], p.24.
The data reveal that the experts agree that (a) CT involves a set of cognitive sub-activities or skills, and (b) the ideal CTer possesses a set of affective dispositions or character traits.

But the experts cannot be represented as agreeing regarding the composition or dimensions of CT. Instead, theorists must be seen as divided on the issues elaborated. Facione glosses over this discord in an attempt to express consensus. Nonetheless it is fair to say that the experts agreed as to (some of) the constituents of the ideal CTer, although the nature and meaning of CT itself continues to be debated.

Presented this way, the second part of Facione's statement of expert consensus is also consistent with the research.

The ideal CTer is habitually inquisitive, well-informed, trustful of reason, open-minded, [etc.]

Close examination reveals that Facione's statement of consensus describes CT in procedural terms and describes the ideal CTer in terms of attitudes character traits and values. While this statement is consistent with the data, the Facione report reveals more areas of discord than of consensus.

6. The "normative use of 'CT'"

In describing the parties to these disputes, and the different roles the concept CT plays for the various

30 Facione [1990], p.3.
theorists, Facione comments on "the normative use of CT":

Only a small group (17%), argue in favour of using 'CT' in a normative sense. This minority of experts, all of whom also use 'CT' in its commonly understood laudatory sense, hold that the true meaning of 'CT' extends to a certain set of ethical norms and social values.31

This assertion is troubling. Given that those who use CT in the laudatory or approbative judgement of thinking and thinkers take CT to be a norm or standard, it seems that this entire majority use CT in a normative sense. However, Facione claims that only part of this group advocate a normative use of CT. This claim requires examination.

To take the term 'CT' to be normative is to take CT to be a standard of value used in the judgement of some group of products, processes or persons. Those who use CT in a laudatory way use CT as such a normative concept. What Facione notes is that a small group of these theorists take the extreme position that CT, beyond being a standard of good, i.e., effective use of certain thinking skills, "extends to a certain set of ethical norms and social values." For this group, to do CT is not only to do something well, but also to do something that is ethical. One who does CT poorly or uses CT to unethical ends is disqualified as a CTer, hence, CT is also an ethical norm. It is in this sense that Facione uses the term 'normative':

The majority of experts (52%) forcefully reject the proposed normative use of 'CT'. They hold that it is one thing to say what something is, and another thing to say how it ought to be used.32

31 Facione [1990], p.23.
32 Ibid.
Using CT as a laudatory term is using it in a normative sense, but the term can be normative without being an ethical norm. These theorists object to the extension of the term to encompass an ethical norm. While many theorists take CT to be a norm associated with rationality and rational thinking, they claim,

It is an inappropriate use of the term to deny that someone is engaged in CT on the grounds that one disapproves ethically of what the person is doing. What 'CT' means, why it is of value, and the ethics of its use are best regarded as three distinct concerns . . . .

Thus Facione distinguishes three types of issue: issues concerning the meaning of 'CT', issues concerning the value of CT, and issues concerning the use of CT. Facione’s panel recommends that we distinguish the questions "what is CT?", "(why) is CT of value?" and "how ought CT to be used?" To fail to do so leads to a confusion of rational and ethical norms. Although Facione fails to recognize that most of the experts use 'CT' as a normative term, the point must be taken that a majority hold that CT should not be thought of as an ethical norm.

While his own use of the term 'normative' is somewhat misleading, Facione is aware of the distinction to be drawn between ethical and other norms:

[There] are two senses of the term 'good' which might be operating when one uses the phrase 'good CTeer'. One sense applies to the thinker's effectiveness and responds to the question, "How well is this person using CT?" The second sense

33 Ibid.
applies to the thinker's morality and responds to the question, "Is this person's use of CT ethical?\textsuperscript{34}

Given the prevalent laudatory use of term 'CT', it needs to be asked of those who use the term in a laudatory way whether the CTer is equivalent to just the effective thinker, or to the ethical thinker, or to both, and whether the term 'CT' is meant to be equivalent to effective thinking, ethical thinking, or both. In lieu of this, Facione brings out further issues dividing theorists and reveals a range of opinion regarding these issues:

Issue [F6]: What is the relation between CT and ethical action? Is CT an invariably ethical behaviour?

Issue [F6.1]: What is relation between the CTer and the ethical thinker? Must one be ethical to be a CTer?

A fringe 17\% use CT as an \textit{ethical norm}, and relate CT closely to ethical thinking, and the CTer to the ethical thinker. To do CT is not only to use certain skills well, but also to use them to ethical ends. One cannot be a CTer if one does not use CT skills in ethical ways.

Another 44\% hold that CT and CTer are approbative or laudatory terms extending to the dispositions and character of the thinker. This group also uses CT as a norm, taking CT to be a type of good thinking, and CTers to be a type of good thinkers. To do CT is to do something well, even though one might do CT without necessarily acting ethically or being an ethical person.

\textsuperscript{34} Ibid.
A minority of 30% take CT to be a **procedural** term limited to the description of certain cognitive processes which, and not extending to the motives or personality of the thinker. On such a view, to do CT is not necessarily to do something well. To do CT is to do X instead of Y, where X admits of degrees of success. Just as one can do CT without being ethical, one can do CT without doing it very well. There can be both ineffective and unethical use of CT. Because CT and the CTer are distinguishable and are evaluated independently and according to different criteria, one could do CT without necessarily qualifying as a CTer.

Thus Facione identifies three factions engaged in theoretical conflict over several discernible issues, issues that have until now been inadequately explored and remain unresolved.

7. Conclusions regarding Facione [1990]

While Facione asserts that consensus exists among the experts regarding the conception of CT, this conclusion is not well supported by the research as he describes it. This report provides a meta-theoretical perspective on a collection of several diverse views and contributes more to our understanding of the complexity of the theoretical discord. In fact Facione shows the experts to be divided over several fundamental theoretical issues. These issues can provide a partial framework for characterizing theories of CT, and serve as a basis for further investigation into the diversity of opinions regarding CT's nature and meaning. Facione brings out some of the complexity and depth of the
theoretical conflicts among the several competing accounts of CT, identifying conceptual issues only partially recognized by the experts.

Facione does uncover some broad areas of consensus: The experts are in general agreement that CT is a complex phenomenon comprised of a set of distinguishable components, and that a set of cognitive skills comprises (at least part of) this set of components. All agree that CT involves skills, but just which skills was a point of controversy. While there was consensus that not all thinking skills are to be thought of as CT skills, the criteria for making these discriminations were not reported.

For the majority of Facione's panel, CT involves more than skills. Thus Facione identifies a significant division among the experts regarding the inclusion of what has been referred to variously as the affective/dispositional dimension of CT - the character traits, attitudes, and spirit of the thinker. A considerable group (30%) rejected this proposed set of components as being irrelevant to the concept of CT viewed as a process or activity, while the majority (61%) hold that the dispositions are part of the meaning of CT. Facione's comments suggest that this conflict hinges on the distinction between CT and the CTer.

In addition Facione reveals important differences in the usage of the concept by different theorists. The proceduralists maintain that, given the distinction between the thinker and thinking, CT must be understood as the latter, as a process or activity. Hence the term 'CT' is taken to describe a distinct process, one process among
others. A majority use CT in a laudatory way, to convey praise through an implicit assessment of the thinking or of the thinker. For them CT is a norm, and the identification of CT can involve an implicit evaluation of the thinker. A small group (17%) of those who use CT in a laudatory way take CT to be a standard, not only of reasoning and thinking, but also of action. This group holds that CT is an ethical norm.

Facione outlines a connection between three issues at the heart of the conflict regarding CT. Those who reject inclusion of dispositions in an account of CT maintain a strong distinction between CT and the CTer. Those who advocate the inclusion of dispositions, take CT and the CTer to be interrelated, and fail to distinguish or reject the distinction between CT and the CTer. Those who distinguish CT and the CTer, also allow for a distinction between CT and good, successful, or ethical thinking, while those who advocate the inclusion of dispositions in an account of CT, also fail to distinguish CT and good thinking, using the term CT to identify an ideal or norm. Indeed, the term CTer is used almost universally as an ideal.

Hence, Facione brings to light both discord and consensus regarding several discernable issues which furnish a basis for a framework for characterizing the conflicts among theories of CT. Facione identifies, and interrelates the component issue (which involves the skills and disposition issues), the act/agent issue, the normative DESCRIPTIVE issue and the ethics issue. Theories of CT can be characterized according to the stances and
assumptions they make regarding these issues. For resolution to occur, theorists must make their commitments regarding these issues explicit, must recognize the validity of the criticisms directed against these assumptions, and must defend their assumptions against this criticism, or abandon them. Only in this way can the conflicts be resolved, and consensus reached regarding these basic issues.

The issues I have distilled from this analysis of Facione’s report are as follows:

[1] The component or skills/dispositions issue:

Is CT a complex phenomenon, i.e., comprised of a set of distinguishable sub-activities or components. (Yes 95%)

What is the source of the lists of dispositions and of skills? What is the logical relation between these lists and the concept of CT? How are the dispositions of the thinker thought to flow from, or be implied or entailed by, the concept of CT?

Does CT consist of/involve cognitive skills? (Yes 95%) Which thinking skills/activities are components of CT? Which thinking skills are not part of CT? and Why not? Is CT coextensive with all thinking skills? What are the criteria for identifying CT skills?

Does CT consist of a set of affective dispositions (in addition to the set of cognitive skills)? Are dispositions part of the meaning of CT? (Yes 61%; No 30%) Which dispositions are components of CT? Which are not part of CT? and Why not? Is CT coextensive with all dispositions? What are the criteria for identifying CT dispositions?

[2] The act/agent issue:

What is the relation between CT and the CTer? Is the concept CTer dependent on the concept CT, or is the concept CT dependent on the concept CTer? What are the criteria for the judgement "this is CT" and for the judgement "she is a CTer"? Is it necessary to be a CTer to engage in CT? Can CT be identified/evaluated independently from the CTer?
[3] The normative/descriptive issue:

What is the function of the concept 'CT'? Is 'CT' a laudatory term, a procedural term, or is 'CT' both? Does CT describe a process which admits of failure, or is CT a normative concept used in the laudatory assessment of successful thinking? What is the relation or distinction between the process of CT and successful or good CT? Is all CT good CT? Is CT intrinsically or instrumentally good? What is the relation between good CT and the CTer?

[4] The ethics issue:

Is 'CT' an ethical norm? What is the relation between CT and ethical action? Is CT an invariably ethical behaviour? What is the relation between the CTer and the ethical thinker? Must one be ethical to be a CTer?
CHAPTER FOUR: JOHNSON'S CHALLENGE

1. On defining CT

In "The Problem of Defining CT,"¹ Johnson asserts that the theory of CT involves a number of ongoing debates regarding the nature of CT. He examines several theories, displays their similarities and differences, and brings to light groups of issues that divide these theories of CT. Johnson argues that some of these theoretical issues have not been well articulated, while others have gone entirely unrecognized.

Beyond the superficial differences in the several proffered definitions of CT, Johnson reveals significant differences in underlying theoretical commitments and principles. He suggests that such deeper assumptions must be made explicit, and must be clarified and defended against reasonable criticism before there can be a resolution of the issues, a management of the conflict, or a consensus of opinion regarding CT. In short, Johnson argues that theories of CT themselves require evaluation. He provides an analysis of five prominent theories (McPeck [1981], Ennis [1987], Siegel [1988], Lipman [1988] and Paul [1989]) to reveal their theoretical diversity. Johnson argues that the controversy regarding generalizability is symptomatic of a lack of consensus regarding more basic and unexamined theoretical issues. By comparing the theories of "The Group of Five," he hopes to identify these issues which divide

accounts of CT, theoretical questions which remain unresolved regarding the fundamental nature and meaning of CT. The issues Johnson identifies will contribute to the emerging framework for understanding, and potentially resolving or managing the conflicts within CT theory.

2. Johnson’s questions

Johnson puts forward four sets of issues expressed as groups of questions that contribute to the development of the framework that began to emerge in the last Chapter. He argues that these problems or issues (among others) stand in the way of a resolution of the question of the generalizability of CT. Answers to the question, "Is CT generalizable?", are dependent on answers to the question, "What is CT?" Johnson argues that pedagogical questions (e.g., Are the skills of CT generalizable? Can, and how ought CT to be taught?) cannot be answered in the absence of the more fundamental understanding of the meaning of the concept CT and the nature of the phenomena and specific operations it is meant to signify. Johnson attempts to achieve this understanding through comparative analysis of the diverse existing theories. He discovers that,

All of The Group of Five agree that CT requires many cognitive skills. Second, all agree that CT requires information and knowledge. Third, all include a dispositional or affective dimension, though they describe and weigh it differently.

However, what Johnson also reveals is that, despite this limited consensus, there are considerable disagreements

2 Johnson [1992], p.51.
regarding several other important issues concerning CT. To those, I now turn.

3. "The network problem"

The first issue Johnson identifies comes out of an examination of Ennis's definition of CT as "reasonable reflective thinking that is focused on deciding what to believe or do".3

Ennis's definition virtually equates CT with rational thinking, and indeed makes a very tight connection between CT, creative thinking and problem solving. He writes: "Note that this definition does not exclude creative thinking" (1987, p.23).4

Johnson questions these conceptual equations, connections and interrelations, and argues that Ennis's definition exemplifies what he calls "the network problem":

'CT' belongs to a network of terms including: problem solving, decision making, metacognition, rationality, rational thinking, reasoning, knowledge, and intelligence. Sorting out the relationships among the members of this network is, in my view, one of the principal tasks that must be dispatched before we can expect an adequate theory of CT.

Here Johnson echoes Facione's observation that relations within this family of concepts require clarification:

CT is one of a family of closely related forms of higher-order thinking, along with, for example, problem-solving, decision making, and creative thinking. Unfortunately the conceptual overlaps and complex relationships among all the various forms of higher-order thinking have yet to be

3 Ennis [1987], p.10.
4 Johnson [1992], p.41.
5 Ibid.
examined satisfactorily. However, that does not imply that one cannot develop a careful and accurate conceptualization of the target, CT. 6

Given that these relations are unclear at best, Johnson questions whether a clear and accurate conception of CT exists. While each theorist expresses some commitment regarding the connection and interrelation of these concepts, they do so (with the exception of Siegel), without much supporting argument. Moreover, Johnson shows that different theorists hold different commitments regarding these conceptual interrelations. Hence, he argues that these commitments must be made explicit and subjected to criticism before we can resolve the questions which depend on this understanding of CT.

Johnson recognizes that questions regarding CT (e.g., What is the nature of CT? or What is the meaning of 'CT'? ) can be answered by making distinctions, and by addressing the issues involved in the network problem:

Issue [J1]: How is CT related to other concepts?

Issue [J1.1]: How is CT distinguished from other closely related concepts?

Issue [J1.2]: What are the criteria for identifying CT?

Answers to these questions vary considerably from theorist to theorist. For example, Ennis equates CT and rational thinking. Likewise, Siegel asserts that CT is coextensive with rationality:

on Siegel's account there is no distinction between CT and rationality. CT is coextensive with rationality; CT is 'the educational cognate of rationality'. It is not clear to me what this means, nor what it entails. . . . Furthermore, for Siegel there is no essential difference between CT and problem solving."

It appears, then, that the network problem can be resolved into a large number of sub-issues, e.g.:

Issue [J1.3]: What is the relation between CT and rational thinking?

Issue [J1.4]: What is the relation between CT and problem solving?

The network problem, i.e., the conflict regarding this set of issues, is sustained by different theorists having different commitments regarding this network of concepts. For example, "for McPeck, the connection between CT and problem solving appears to be very tight". Thus McPeck's view is consistent with Ennis and Siegel in this respect. Yet on McPeck's view "rationality includes CT as a particular aspect (or subset) of itself." As Johnson notes, this "contrasts significantly with Siegel's theory according to which CT is coextensive with rationality." "For McPeck, rational thinking is the broader category".

Johnson advises that these views need to be worked out, justified by explicit argument, and defended against criticism, to be considered well-articulated and well-supported.

7 Johnson [1992], p.44.
8 Johnson [1992], p.43.
10 Johnson [1992], p.43
11 Ibid.
In his defense, it must be noted that Siegel does have a theory of rationality, and so of all the accounts given by The Group of Five, Siegel's is the most theoretically developed.\textsuperscript{12}

What Johnson demands is a further clarification of the alleged interrelation and proposed equation of these concepts by all theorists of CT. Several concepts are associated with CT.

For example, Ennis, McPeck, and Siegel all draw a tight connection between CT and problem solving. However, the network problem applies equally to this conceptual interrelation. It needs to be asked whether this view is well supported by argument. Do all instances of CT constitute problem solving? Do all instances of problem solving constitute CT? What (if any) is the distinction between them? The difficulty is that the concept 'problem solving' appears as unclear as the concept 'CT', and the relation of these two concepts is as unclear as the relationships among most of the members of this network. Johnson emphasizes that this territory has not been adequately explored.

A further issue regarding this network of concepts concerns the alleged relation of CT to creative thinking. Johnson notes that Ennis and Siegel include creative thinking as an element of CT, while McPeck distinguishes these. It needs to be asked whether CT includes creative thinking, or whether they are distinct. The answer at present is unclear. Thus Johnson uncovers another conceptual

\textsuperscript{12} Johnson [1992], p.45.
relation which requires clarification, an additional issue within the network problem:

Issue [J1.5]: What is the relation between CT and creative thinking?

Again, different theorists have reached different conclusions regarding these issues without fully justifying their conceptual commitments through an elucidation of the conceptual network.

Johnson suggests that the plurality of stances regarding the network problem indicates a lack of clarity concerning both this group of concepts and the relations among them. There is no shortage of conflicting opinion regarding these interconnected issues. But, at present we have numerous incommensurable views. It seems likely, therefore, that some of these opinions are based on inaccurate assumptions which need to be made explicit, evaluated and modified or rejected.

Unlike Facione, Johnson argues that we cannot have a clear conception of CT in the absence of an understanding of its connections with this group of its close relatives. For Johnson, an adequate theory of CT will have to address the network issues explicitly. He suggests that existing views are inadequate in this respect, involving unexamined assumptions which constitute implicit and unsupported theories of reasoning.

Thus, the network problem consists of a number of connected issues. Each of these issues concerns the concept CT and its relation to other concepts denoting cognitive processes. The network problem is made apparent by
theorists' conflicting perceptions of the relations and distinctions among the concepts referring to cognitive operations. If CT is not equivalent to all thought processes, then which are excluded, and why? Johnson recognizes that these conceptual interrelations must be clarified. Conclusions regarding such conceptual connections and interrelations must be supported by explicit reasoning, and the criteria for making these judgements must be subjected to criticism before the conflicts among theories can be resolved.

4. "The scope problem"

The second group of issues Johnson identifies is also revealed in the context of an examination of Ennis's definition of CT. Recall that, for Ennis, CT is a type of thinking that is focused on deciding what to believe or focused on deciding what to do. Johnson points out that Ennis's definition involves "extending CT to the sphere of action in addition to belief."\(^\text{13}\) Johnson objects to this extension of the concept, and identifies a further set of issues or questions which he refers to collectively as "the scope problem":

What is the scope of CT? Does it extend to the realm of action no less than belief? Reflective thinking about what one is to do sounds very like a description of problem solving, decision making, or of moral thinking. Does CT contain moral thinking and morality as a proper subset?\(^\text{14}\)

\(^{13}\) Johnson [1992], p.41.
\(^{14}\) Ibid.
Here Johnson expresses distinct issues, which need to be examined in greater detail.

The main thrust of Johnson’s scope problem is best captured in this question:

Issue [J2]: Does CT extend (beyond thinking about what to believe) to thinking about what to do?

Johnson notes that Ennis, McPeck and Siegel all include actions as well as beliefs in the scope of CT, i.e., the theorists extend the meaning of CT to include thought focused on action.

... like Ennis, McPeck includes actions as well as beliefs in the scope of CT.15

... Siegel, too, includes actions within the scope of CT.16

This is the defining characteristic of CT: the focus on reasons and the power of reasons to warrant or justify beliefs, claims, and actions. A critical thinker is one who is appropriately moved by reasons: she has a propensity and disposition to believe and act in accordance with reasons.17

Johnson, however, questions this extension of the term.

The problem he sees is this. Morality and moral thinking are two more concepts to which it is assumed that CT is related, although the relations between these concepts are no better articulated and defined than any others within the network. Thus the scope problem appears to be connected, in part, to issues involved in the network problem, as it is primarily a problem regarding the relation of CT to moral thinking.

15 Johnson [1992], p.43.
16 Johnson [1992], p.44.
17 Siegel [1988], p.23.
Issue [J2.1]: What is the relation between CT and moral thinking?

Johnson puts forward his own position on this issue:

In my view, the focus of the CTer's scrutiny is thought, and I take the word 'thought' in its widest sense of being an intellectual/rational product of some sort, including such items as beliefs, theories, hypotheses . . . whether they are someone else's or one's own . . . . (Here I part company with those who wish to take actions also to be the focus of critical thought.)\(^{(18)}\)

For Johnson, then, CT is "thought evaluating thought".\(^{(19)}\)

Moral thinking is about the evaluation of action. Assessing actions and agents is what moral thinking is, and what it is for. Deciding on actions to take, and thinking about reasons for acting (i.e., ethical deliberation), can also constitute moral thinking. Johnson seems concerned that such types of thinking should not be confused with thinking about what to believe and thinking about the justifications for our claims to knowledge (i.e., logical and epistemological considerations that comprise the core of CT). Johnson's concern is that extending the concept CT to include actions may involve a commitment to an equation or fusion of domains which were previously thought to be distinct.

The "scope problem" primarily involves issues concerning the focus of critical thought. Since this term is used by Ennis, Siegel and Johnson, this set of questions is perhaps more appropriately called the focus issue:

Issue [J2]: What is the proper focus of CT? Can thinking about courses of action be considered CT?

\(^{(18)}\) Johnson [1992], p.49.
\(^{(19)}\) Ibid.
The focus issue involves questions regarding the conceptual relations between CT and moral thinking. This issue can be understood as a further aspect of the network problem:

where is the borderline between CT and morality, and between CT and moral theory?\(^{20}\)

Does CT contain moral thinking and morality as a proper subset?\(^{21}\)

If CT and moral thinking are not distinct, we might be required to abandon the distinction between logic and ethics. Although we may find that the concepts of logic, ethics and rationality suffer equally regarding the network problem, it is reasonable to question the clarity of these concepts and to make attempts at distinguishing them. Johnson alone among the major theorists resists the inclusion of action within the focus of CT, and so, rejects the extension of CT to ethical deliberation.

For Johnson, the stances taken regarding the focus issue indicate a further lack of clarity concerning CT and its connections to other closely related concepts. He suggests that the opinions that have been expressed involve further assumptions that also need to be made explicit and evaluated. The existent views are inadequate because they involve unquestioned assumptions. An adequate theory of CT will also have to address the focus issue directly. What this issue indicates is that the relation between CT and moral thinking, and commitments regarding the focus of CT


\(^{21}\) Johnson [1992], p.41.
must be clarified, defended and evaluated before the larger conflict can be resolved.

5. The character issue

Johnson identifies a third set of issues in the context of his examination of Paul's theory. "In a different way, the scope problem [focus issue] arises" in considering Paul's definition:

CT is disciplined, self-directed thinking which exemplifies the perfections of thinking appropriate to a particular mode or domain of thinking.

Paul places considerable emphasis on the character of the thinker, and suggests that to think critically one must have a certain set of character traits. "Paul's theory [of CT] is heavily dependent on moral character." Yet, as we have seen, Johnson questions the relation of CT to moral thinking, and the extension of the term CT to include thought focused on action. He asks related questions:

What is the relationship between CT and character? In order to think critically, must one have a certain moral character or set of traits? If so, which ones? If so, where are the borderlines between CT and morality, and between CT and moral theory?

Here Johnson reiterates the issue regarding the relation of CT to moral thinking, the focus issue. But in summarizing his argument, Johnson distinguishes this set of questions as a third and separate problem, and thereby identifies what

22 Johnson [1992], p.41.
24 Johnson [1992], p.41.
25 Ibid.
may be called the character issue. This further issue concerns the character and the character traits of the thinker, and concerns the relation of character to the concept of CT.

It should be apparent that the character issue involves issues discussed in analyzing Facione's report. Like the minority of Facione's panel of experts, Johnson questions the role of character in the concept of CT, and so, questions whether the alleged dispositional dimension is essential to CT. Johnson's character issue is equivalent to Facione's disposition issue:

Issue [J3]: What is the relation between CT and character?

Issue [J3.1]: Does CT consist of a set of character traits (in addition to skills)?

Just as the network problem demands criteria for judging which cognitive operations are CT, and which are not, so Johnson's character issue demands criteria for judging which traits or dispositions are essential to CT, and which are not.

Issue [J3.2]: Which (if any) character traits are essential components of CT?

Issue [J3.3]: What are the criteria for judging what's essential to CT?

Johnson's third set of issues is closely connected to issues raised by the minority of expert participants in Facione's research project. The questions Johnson raises ask for a clarification of the relation between the concept of CT and the character and morality of the thinker. Facione describes the proceduralists as having a similar concern. They reject the inclusion of character qualities in the
meaning of the concept 'CT', and raise an important issue which substantially divides opinion regarding CT. The character or disposition issue is connected to the act/agent issue. What is the relation between CT and the CTer? Johnson too seems to question this relation in his treatment of the character problem, specifically in asking whether a moral character or certain character traits are required to engage in CT. Here Johnson stands against a majority.

The majority of Facione's experts include traits and dispositions as essential components of CT. Johnson notes that,

All of The Group of Five agree that CT requires many cognitive skills . . . . all include a dispositional or affective dimension, though they describe and weigh it differently.27

While this group includes dispositions as essential components of CT, the proceduralists attribute this view to the fact that these theorists fail adequately to distinguish the process of CT from the qualities of the CTer. It is not clear whether Johnson himself advocates a distinction between the process, producer and products of CT. But he does recognize the need for clarification of the relation between cognitive operations, and the dispositions and affections of the CTer, and the need for clarifying the alleged connection between CT and moral thinking.

In addition to questions regarding these relations, part of the character issue involves Johnson's question regarding the lists of alleged components of CT (both

cognitive and affective):

[We] need to ask where Ennis’s list of proficiencies and tendencies come from? Does his list cover all the needed proficiencies and skills? How does one get from his definition of CT to this list? Unless we are prepared to maintain the view that a CTer must have proficiency in all cognitive operations, which seems too stringent, then we need to know how we index some and not others. 28

Johnson asks questions encountered in the previous Chapter. What is the source of these lists? How are they derived? The answer is unclear. What is the relation of these lists to the definitions of CT? The lists don’t appear to follow from the definitions themselves. Johnson seems to suspect (as McPeck does) that the different lists are generated in unsystematic or arbitrary ways. The diversity of the many preferred lists supports this suspicion. Hence, Johnson demands that the method by which these lists are generated be explicated, and requests criteria for distinguishing CT from other cognitive operations.

Issue [J3.4]: What is the source of the lists of components of CT? What is their logical relation to CT?

As indicated in Chapter 3, these challenges remain thus far unanswered.

Thus Johnson shows conclusions regarding the character issue to be based on several unexamined assumptions concerning the components of CT, and the nature of character, moral thinking and reasoning. Johnson also argues that a well-articulated theory of reasoning 29 is required to

28 Johnson [1992], pp. 41f.
29 Johnson [1992], p. 45.
adjudicate the conflict between these different assumptions and commitments. He holds that without recourse to a more fundamental theory, the character issue too cannot be resolved.

6. The evaluative issue

Johnson identifies a fourth issue in this way:

There is one final problem which surfaces most clearly in a chart that Lipman provides (1988); the inference is that for Lipman, CT is, necessarily, good thinking.30

Johnson questions the relation of CT and good thinking, and notes that different theorists have reached different conclusions regarding this conceptual relation. Together with Lipman,

For Siegel and Paul, it seems evident that CT is by definition a good thing. However, for McBeck, CT is a task and an achievement concept (1981, p.9), and so it appears that there could be such a thing as bad CT.31

The issue Johnson raises has also been encountered in examining Facione’s report. Those who question the laudatory use of CT ask,

What is the function of the term ‘CT’? Is ‘CT’ a laudatory term, a procedural term, or is ‘CT’ both? Does CT describe a process which admits of failure, or is CT a normative concept used in the laudatory assessment of successful thinking? What is the relation between CT and good thinking?

This issue highlights another element of the network of concepts related to CT, and emphasizes the need for clarifying the relation or distinction between CT and good

30 Johnson [1992], p. 47.
31 Ibid.
thinking. As Facione notes, some theorists wish to limit the meaning of CT to describing a process admitting of different degrees of success. Others, instead, take all CT to be good CT. For them, 'CT' is a normative concept that refers to a type of good thinking. The former group charge the latter with failing to adequately distinguish CT and good thinking. Johnson raises the same issue:

Is CT by definition something good? Can there be bad CT? Is CT like virtue (necessarily good), or rather like luck (possibly good, possibly bad)?

Issue [J4]: What is the relation between CT and good thinking? Is CT inherently good, or does it admit of degrees of success from poor to excellent?

This issue is identical to the normative/descriptive issue identified in the analysis of Facione. Johnson wants us to ask, "Isn't it possible to do CT poorly?" He questions the evaluative use of 'CT', and the function of the term in general. If all CT is good CT, does that make the term a norm, an ideal, a value or what? And what kind of concept is 'the CTer'? If CT is by definition something good, is there any distinction to be drawn between the identification and the evaluation of CT? Doesn't the term primarily describe and distinguish a type of thinking? Are judgements which result in the predication "is CT" or "is a CTer" not only descriptive, but also inherently evaluative, and in fact, approbative? These issues have not been adequately explored, and so, remain unresolved. Nonetheless, they comprise a

32 Ibid.

- 69 -
distinct obstacle to consensus regarding CT.

These four issues identified by Johnson make important contributions to the emerging meta-theoretical framework.

7. Johnson's two criticisms

In addition to the four sets of issues Johnson elaborates are two criticisms directed at The Group of Five.

First, none of these definitions adequately captures the force of the term 'critical'; none makes it sufficiently clear why CT is critical and not just plain thinking, or some other form of thinking like rational thinking or higher-order thinking.33

This trouble stems from the fact that the network problem has not been thoroughly addressed by theorists of CT. For Johnson, CT is not a clear and distinct concept to the extent that it cannot be, or has not been, distinguished from other related concepts in the network. Johnson wants these implicit connections and distinctions made clear, and wants the criteria for making such judgements made explicit. He suggests that these criteria are to be derived from a theory of reasoning.34

A thorough consideration of the network problem resulting in a clarification of the elements and relations within the network would provide criteria for differentiating CT from other cognitive operations, and for distinguishing the CTer from others.

34 Johnson [1992], p. 45.
I want my account to allow for differentiation between the CTer and the creative thinker, on the one hand; and the CTer and the uncritical (or dogmatic) thinker on the other.\textsuperscript{35}

Note that Johnson advocates a distinction between the CTer and the creative thinker, and presumably advocates a similar distinction between CT and creative thinking, thus taking a stand regarding issues within the network problem. For him, the clarification of these conceptual relations is necessary to a theory of reasoning, and (derived from this) of CT.

In addition to this criticism (concerning the network problem), Johnson also makes a second criticism regarding the producers and judges of CT, which sheds light on the conflict:

Second, none of them gives adequate emphasis to what I take to be a defining characteristic of a critical person - the ability to take criticism.\textsuperscript{36}

Johnson thereby emphasizes the inter-personal nature of CT. For him, CT is a community endeavour. For example, Paul’s definition of CT,

places too much emphasis on the capacities of the individual thinker, and does not give sufficient attention to the inter-subjective character of critical thought. . . . Many theorists call for self-criticism as a part of the profile of the CTer, without making it sufficiently clear what this means and to what degree it is possible for an individual thinker to satisfy this demand.\textsuperscript{37}

Facione’s report also raised questions regarding the nature of self-criticism and its relation to CT. Johnson too questions the clarity of this concept and questions whether

\textsuperscript{35} Johnson [1992], p. 49.
\textsuperscript{36} Johnson [1992], p.48.
\textsuperscript{37} Johnson [1992], p.42.
it is even possible to satisfy the demand, i.e., whether self-criticism is a reasonable or realistic demand to place on thinkers. For Johnson,

we, the community . . . are the ones who decide whether or not the person is a CTer. No individual can certify himself or herself as a CTer.\footnote{Johnson [1992], p.43.}

That is, the judgement "is a CTer" is conferred on us by others. This is an important insight into the nature of judgements regarding CT and the CTer.

Johnson suggests that we must ask how the judgement "X is a CTer" is made. In what context is this judgement made? What are the criteria? Who is qualified to make such judgements? On his account, CT is the kind of process or product that can best be identified or evaluated by someone other than the thinker. The producer cannot fairly judge the product. Hence, for Johnson the judgement "X is a CTer" has less to do with a person's cognitive operations or affective properties (i.e., what a person thinks and what type of person the thinker is), than it has to do with what a person says, writes or does.

\ldots the CTer's ability properly to assess is characteristically revealed in an articulation. A critic is someone who criticizes, that is, produces critical commentary. We know that someone is thinking critically just to the degree that the person's articulation of judgement displays appreciation of and respect for reasons.\footnote{Ibid.}

For Johnson, the judgement that a thinker's judgement displays CT is left for others to make. These judgements must take the form, "X is a CTer, because X says/writes
this . . . ." This view suggests that we actually require that the things someone says exhibit certain characteristics for that person to be considered a CTer, not that the person herself have certain qualities. On Johnson's account, CT is an inter-personal activity, and so only those judgements that are articulated can potentially be identified as CT, and only those thinkers who articulate their judgements to the community of thinkers can be identified as CTers. Johnson holds that this inter-personal nature of CT has been overlooked by The Group of Five.

For Johnson, then, the focus of CT is thought as articulated in discourse. In identifying CT, the nature of the producer is of secondary import to the nature of the process in which she engages. And while introspection and self-criticism may be important and undeniable mental operations, for Johnson, given the inter-personal nature of the evaluation of CT and CTers, thought itself is of secondary importance to discourse for the purpose of identifying CT and CTers. On his account, it seems that a CTer is to be judged according to her thoughts as they are articulated, and not according to her character (however this might be determined). Hence, Johnson appears to have a view of CT that is more procedural and descriptive than it is laudatory or evaluative, and which questions the relevance of character to judgements regarding CT.

8. Conclusions regarding Johnson [1992]

Johnson argues that while some consensus exists among the experts regarding the conception of CT, this is
over-shadowed by the diversity in their theories. He reveals the experts to be divided over four broad points of controversy regarding the concept of CT. The theoretical issues Johnson identifies are only partially recognized by the experts as demanding resolution. These issues will be added to the emergent framework. The issues I have identified in the course of this analysis are as follows:

[1] The network issue:
How is CT related to other concepts? How is CT distinguished from other closely related concepts? What are the criteria for identifying CT? What is the relation between CT and rational thinking, CT and problem solving, CT and creative thinking, etc.?

[2] The scope/focus issue:
What is the proper focus of CT? Does CT extend (beyond thinking about what to believe) to thinking about what to do? What is the relation between CT and moral thinking? Can thinking about courses of action be considered CT?

[3] The character issue:
What is the relation between CT and character? Does CT consist of a set of character traits (in addition to skills)? What (if any) character traits are essential components of CT? What are the criteria for judging what's essential to CT? In order to think critically, must one have a certain moral character or set of traits? What is the source of the lists of components of CT? What is their logical relation to the definitions of CT?

[4] The evaluative issue:
What is the relation between CT and good thinking? Is 'CT' an evaluative term, a normative term, a descriptive term, an ideal, something else? Is CT inherently good, or does it admit of degrees from poor to excellent? Can there be bad CT?
CHAPTER FIVE : THE FRAMEWORK

1. Introduction

In this Chapter I wish to accomplish two things. First, I will draw together the issues identified in the preceding analyses to develop a framework within which to understand theories of CT in terms of their differences, a framework which can be used for conflict resolution within the theory of CT. Second, I will give an indication of the present state of the conflict regarding each issue. In Chapter 6, I present my own observations regarding possible avenues for conflict resolution.

By comparing many accounts of the nature and meaning of CT, I have attempted to indicate the over-all dimensions of the conflict surrounding CT. The question guiding this inquiry has been, "What are the points regarding which theorists of CT disagree?" Facione and Johnson reveal important parts of the broader conflict regarding CT - several issues dividing opinion. These issues can be brought together in the form of a framework for characterizing the complex conflicts among the theories of CT. This framework is comprised of issues representing obstacles to a consensus regarding CT. These issues concern the meaning of the concepts 'CT' and 'CTer', the nature of the phenomena to which these concepts refer, the relation of CT to other concepts, and the role of these concepts in our language.

This framework is composed of six sets of distinct issues that have emerged in the course of my treatment of Facione and Johnson. The first set of issues concerns the components of CT, and includes the character or
components of CT, and includes the character or skills/dispositions issue. The second set of issues concerns the relation between CT and the CTer, the act/agent issue. The third set of issues concerns the relation of CT to other phenomena, the network issue. The fourth set of issues concerns the scope of the term 'CT', the focus issue. The fifth set of issues concerns the function of the terms 'CT' and 'CTer', and includes the normative/descriptive and ethics issues. The sixth and final set of issues concerns the pedagogical characteristics of CT, and includes the generalizability issue. The issues can be expressed in the form of questions as follows:
2. A framework for conflict resolution within the theory of CT

[1] What are the components of CT?

[1.1] Is CT comprised of cognitive processes, abilities, skills, etc., or does CT also involve a set of tendencies, dispositions, character traits, etc., in addition to these skills? Which ones?

[1.2] What are the criteria for distinguishing CT components from other skills, etc.?

[1.3] What is the source of the lists of CT components? How are the lists generated? What is the relation between definitions of CT and the lists of components?

[2] What is the relation between the activity of CT and the agent - the CTer?

[2.1] Are CT and CTer distinct? Are CT and CTer conceptually interdependent? Is one concept derived from the other? Which concept is primary? Can they be identified and evaluated independently of each other?

[2.2] What are the criteria for the identification and evaluation of CT and the CTer? Before one can engage in CT must one be a CTer? Does one require a certain character to engage in CT?

[3] What is the relation or distinction between CT and other forms of thinking? (the network issue)

[3.1] What is the relation between CT and rational thinking? Is CT equivalent to or a class of rational thinking? What makes CT "thinking"? What makes CT "critical"?

[3.2] What is the relation between CT and creative thinking? Is creative thinking distinct from CT? What are their distinguishing characteristics?

[3.3] What relations hold between (the concepts and phenomena of) decision making, problem solving, meta-cognition, higher-order thinking, informal logic, etc., and CT?
[4] What is the **focus** of CT?

[4.1] Is CT a type of thinking focused exclusively on thought and the evaluation of thought, or is CT a type of thinking focused on the evaluation of action as well as thought?

[4.2] What is the relation between CT and moral thinking and moral theory? What is the relation between CT and such things as aesthetic, political, or legal theory, etc.?

[5] What kind of terms are 'CT' and 'CTer'? What are their functions, properties or conceptual characteristics?

[5.1] Are 'CT' and 'CTer' descriptive terms?

[5.2] Are 'CT' and 'CTer' laudatory/evaluative terms? Are CT and the CTer necessarily good, or do they admit of degrees from poor to excellent? Is CT always successful, or can there be bad CT? Is CT intrinsically good, instrumentally good, both, neither?

[5.3] Are 'CT' and 'CTer' ethical norms? Does 'CT' extend only as far as the ethical use of thinking skills, or can CT be put to different ends from ethical to unethical?

[5.4] What other terms is 'CT' like? Is CT a process?, a product?, both?, neither? Is CT to be identified and evaluated according to procedural or teleological criteria?

[6] What are the **pedagogical characteristics** of CT?

[6.1] Is CT generalizable, or is CT discipline-specific?

[6.2] Can CT be taught as a course unto itself, or is CT relative to, and so, only to be taught within and as it pertains to each specific discipline?

[6.3] How is CT to be assessed?
3. The state of the conflicts

Using the framework just presented, I will describe the current state of the conflict regarding each group of issues, and will give accounts of some recent contributions to the literature.

I. The components of CT (the skills/dispositions issue)

The most divisive set of issues regarding CT concerns the elements that are thought to make up this complex phenomenon. Considerable controversy surrounds the question, "What are the components of CT?"

While it appears to be accepted that 'CT' is a term denoting a complex phenomenon, a composite of many operations, processes, activities, skills, dispositions, traits, values, etc., theorists are in substantial disagreement regarding the specific components that compose this CT complex. Hence, it is fair to represent the theorists as in conflict over a set of issues that may be called the component problem.

Both Facione and Johnson claim that theorists are in agreement that CT refers (at least) to a set of skills. Yet there is some disagreement among the theorists as to the specific skills thought to comprise CT. Facione reports some conflict among the experts regarding the inclusion of "self-corrective" skills in an account of CT. Although I cannot demonstrate the fact here, a careful reading of the many lists of CT skills would disclose substantial incongruities. There is no single, widely-accepted account of the component skills of CT.
A further aspect of the component problem that has generated significantly more controversy concerns the dispositions thought by some theorists to be involved in CT. Johnson reports that the five theorists he examined all include an affective or dispositional element in their accounts, though each weighs it differently.\(^1\) However, while it is true that skills are generally agreed to be components of CT, some theorists have rejected character traits and dispositions as constituents of their lists.

For example, Facione reports that his experts were divided over the inclusion of dispositions in an account of CT, and asserts that this issue represents the deepest division among theorists.\(^2\) A majority of theorists (60%) include dispositions as well as skills in their accounts of CT, yet a substantial group (30%) reject the inclusion of dispositions on grounds of relevance, arguing that these character traits are out of place in accounts of CT and belong properly to accounts of the agent of CT, the CTer. Facione identifies a basic question to be answered by an adequate theory of CT: Does CT involve a set of character traits or dispositions (in addition to a set of cognitive skills), and if so, why? This issue is still hotly debated; the relation between CT and character is unresolved.

Furthermore, the criteria for distinguishing CT components from other skills have not been identified. While what Johnson calls "The Group of Five" take CT to

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1 Johnson [1992], p.51.
2 Facione [1990], p.21.
involve skills and dispositions, Johnson himself questions the relevance of character elements to accounts of CT, and asks, "In order to think critically must one have a certain moral character or set of traits? If so, which ones?" Johnson questions whether the connection between the character traits of the CTer and the performance of CT activities has been thought through. Thus he is sensitive to a connection between the component problem and the act/agent issue. In addition, Johnson notes that criteria have not been produced for distinguishing those traits that are essential to CT from those that are not.

Missimer has also questioned "the connection between having certain dispositions or virtues and the ability to think critically", and argues for a view of CT involving skills only, that "makes no claims about character" and that "does not smuggle in moral prescriptions, leaving ethics instead to the scrutiny of critical thought." Missimer holds that building character into accounts of CT, and viewing these traits as necessary prerequisites of engaging in CT, blurs the distinction between the criteria and conditions necessary for CT and those necessary for behaving morally. Hence, both Missimer and Johnson suggest that the "Character View" has questionable consequences, and both seem to think that the agent and component issues are interrelated.

3 Johnson [1992], pp.47f.
4 Missimer "Perhaps By Skill Alone" Informal Logic [Fall 1990], p.145.
The final issue regarding the components of CT concerns the status of the lists of CT elements, i.e., their source, and their relation to the theories of which they are part. Johnson asks, What is the relation between the lists and the definitions? How does one get from the definitions to the lists of CT components? The lists do not clearly follow from the definitions. For example, it does not follow from Ennis’s definition of CT as "reasonable reflective thinking focused on deciding what to believe or do" that CT does or does not involve certain skills or dispositions. Answers to the source question are not to be found in the literature, although Ennis is reported to have "included all that came to mind." Thus, these questions capture the important aspects of the component problem:

What are the components of CT? Is CT comprised of cognitive processes, abilities, skills, etc., or does CT involve a set of tendencies, dispositions, character traits, etc., in addition to these skills? Which ones?

What are the criteria for distinguishing CT components from other skills, etc.?

What is the source of the lists of CT components? How are the lists generated? What is the relation between definitions of CT and the lists of components?

II. The relation between CT and the CTer (the act/agent issue)

My research shows that the relation between the concepts 'CT' and 'CTer' is the source of considerable

5 Johnson [1992], p.41.
6 Norris [1992], p.10.
controversy, though this fact has not been generally acknowledged. The connection between act and agent, thought and thinker proves to be one of the most important relations that needs to be understood by theorists of CT. What is the relation between CT and the CTer? This question has not been adequately explored in the literature, though it has been suggested by some on Facione's panel that important issues dividing theorists could be resolved by making use of a distinction between CT and the CTer. (I will explore this idea further in the following Chapter.)

Facione points out that the disposition or character issue is related in important ways to the distinction between thought and thinker. 7 Theorists on Facione's panel suggested that the concept CT must be understood in its "procedural sense," i.e., as denoting a type of process distinct from others. These theorists argue that the concept 'CT' denotes a process that should be seen as distinct from the producer, the agent, the CTer. For this reason, dispositions and character are properly understood as properties of the thinker, and so are superfluous to definitions of the process, the activity of CT. For these theorists, distinguishing between 'CT' and 'CTer' causes the issue regarding the character or dispositional components of 'CT' evaporate. Moreover, the activities and processes involved in CT are identified and evaluated according to different criteria than are persons. Theorists who fail to

7 Facione [1990], p.22.
recognize CT as a process run the risk of confusing the process and the producer.

Hence, while a certain character profile may be essential to a definition of the CTer, these theorists argue it is out of place in a definition of CT per se. On this view, theorists who advocate a view of CT that extends to character do so through a failure to distinguish the process from the producer, and so, provide descriptions of activities mingled with descriptions of agents. Thus some on Facione's panel hold that a distinction between the process of CT and the producer, the CTer, resolves an aspect of the component problem.

The relation between CT and the CTer has been explored very little. To see this better, consider Siegel's remarks:

I wish to draw attention to the distinction between CT and the CTer . . . . Tendencies to think or act in certain ways are properties of persons, not pieces of thinking. Ennis's discussion slides over this distinction, but I think that distinguishing between the characteristics of pieces of good thinking and those of the critical thinker is important. 8

Despite this suggestion, it is not clear that Siegel actually puts this distinction to work in his own theory. Siegel also holds that:

[A] full conception of CT must provide not only criteria for assessing pieces of reasoning, but also a characterization of the attributes of the sort of person who is rightly regarded as a CTer. 9

Thus Siegel seems to suggest that a full conception of CT encompasses the concept of the CTer in some way. The

8 Siegel [1988], p.9.
9 Ibid.
implication seems to be that the concept 'CT' cannot be
fully analyzed independently of the concept 'CTer'. On this
view it is not clear that CT and the CTer are distinct. Yet
why one might not define 'CT' independently of 'CTer' is not
explained. Instead, Siegel's demand that a conception of CT
must provide a characterization of the attributes of the
CTer makes the extension of these terms overlap. Siegel
states that

distinguishing between [CT and the CTer] . . .
. . . underscores the importance of incorporating
tendencies, dispositions, and habits of mind into
the characterization of CT . . . it draws
attention to the fact that CT, conceived of as an
educational ideal, concerns the characterization
not simply of a set of cognitive skills . . . but
more importantly of a certain sort of person. To
recognize this is to recognize the depth of the
concept of CT, and the importance of character,
values and other moral dimensions of the concept.10

Siegel's claim that character is a dimension of CT
appears inconsistent with his claim that CT and CTer must be
seen as distinct. His elaboration of CT in terms of "skills
plus tendencies" doesn't appear to acknowledge the
distinction which he elsewhere recognizes:

this cluster of traits to be fostered are traits
of persons, not [of] acts of thinking.11

Although he here recognizes the distinction between acts and
persons, Siegel's conception of CT appears to be instead a
conception of the CTer, "a certain sort of person."

While it may be that CT involves skills and tendencies
or traits, and while it may be that the production of CT
requires these traits, the questions to be answered are,

10 Siegel [1988], pp.9f.
11 Siegel [1988], p.41.
"What is the relation between the concepts 'CT' and 'CTer'?" "Does 'CT' extend to 'properties and traits of persons' as well as to 'pieces and acts of thinking'?" Siegel's position on this point is not sufficiently clear.

In his entire book, Siegel comes close to defining the activity of CT itself (as opposed to defining the CTer) just once. He states:

This is the defining characteristic of CT: the focus on reasons and the power of reasons to warrant or justify beliefs, claims, and actions. A CTer is one who is appropriately moved by reasons: she has a propensity and disposition to believe and act in accordance with reasons.\(^{12}\)

Siegel's theory appears to make the conception of CT secondary to the conception of the CTer. On his account we are left asking, "What is CT itself?" While we might be tempted to take Siegel to be saying that CT is just any thinking focused on reasons, this would be a misrepresentation, because for him, CT is what happens only when some thinker is "appropriately moved by reasons." For Siegel CT is a way of life involving a total fixation on, or love of, reasons. It seems then that to understand CT is to understand a type of person and the conditions which lead to this person's being motivated in appropriate ways by the consideration of reasons. Siegel provides an account of the type of person who engages in the process of CT rather than a description of the process itself. Hence, it is hard to see the manifestations of a distinction between CT and the

\(^{12}\) Siegel [1988], p.23.
CTer in his account.

Paul’s [1989] account of CT has several affinities with Siegel’s view. On Paul’s account, CT also involves both thinking skills and dispositions. On both accounts ‘CT’ seems to refer to the processes involved in the consideration of reasons, as well as to the character and attitudes of the thinker. As Siegel puts it, CT "concerns the characterization . . . of a certain sort of person." 13

It appears, then, that for both Siegel and Paul the term ‘CTer’ is of primary interest. For both, ‘CT’ is dependent on the concept ‘CTer’. Paul has argued that ‘CT’ is conceptually interdependent with several other concepts including ‘the critical person’ 14, and suggests that ‘CT’ and ‘CTer’ cannot be defined independently of each other. Siegel’s position involves a similar dependence. What remains unclear is whether one concept is taken to be derived from the other. There is insufficient evidence to answer for these theorists regarding this issue.

Hence the relation between CT and the CTer demands further exploration, and should be seen as a distinct point of contention among theorists of CT that is related to other central issues. These questions capture the important aspects of the act/agent issue:

What is the relation between CT and the agent, the CTer? Are CT and CTer distinct? Are CT and CTer

13 Siegel [1988], p.10.
14 Paul [1989], p.211.
conceptually interdependent? Is one concept derived from the other? Which is primary? Can they be identified and evaluated independently of each other?

What are the criteria for the identification and evaluation of CT and the CTer? Before one can engage in CT must one be a CTer? Does one require a certain character to engage in CT?

III. The relation of CT to other phenomena (the network issue)

As a prelude to his own analysis of CT, McPeck [1981] set a precedent in suggesting that the concept was not well understood by the theorists who employed it. What the term 'CT' includes had not been established to McPeck's satisfaction, hence he set about to clarify the concept of CT, and to distinguish CT from other related phenomena. However, as Facione reports, the relations between CT and other higher-order thinking skills still remain largely unexplored and undefined. Johnson notes that theorists have related CT to several other equally problematic concepts (like 'problem solving'), and notes the diversities of commitments regarding the relations within this network of concepts.

Johnson argues that it is unclear what relations hold between CT and such concepts/phenomena as decision-making, problem-solving, meta-cognition, knowledge, intelligence, reasoning, rationality, higher-order thinking, informal logic, etc. Are these concepts and phenomena distinct? Are

some equivalent? Do some encompass others? What is it that makes CT "critical?" Theorists are not in agreement on these issues; the relations between these concepts and phenomena have not been clarified adequately. We must recognize that different commitments are made by each theorist regarding these relations. These commitments are often implicit, yet are nonetheless discernible elements of accounts of CT, assumptions emerging from latent theories of reasoning. Johnson maintains that

-sorting out the relationships among the members of this network is, in my view, one of the principal tasks that must be dispatched before we can expect an adequate theory of CT. 16

The existing views on this issue are considerably varied. For example, theorists have suggested that CT is coextensive with skilled thinking in general. Scriven asserts that CT is co-extensive with reasoning skills, 17 while Lipman claims that CT involves that and much more:

-When we think critically, we are required to orchestrate a vast variety of cognitive skills, grouped in such families as reasoning skills, concept-formation skills, inquiry skills and translation skills. 18

What Johnson refers to as the "network problem" involves several issues questioning these conceptual relations. The relations between CT and other concepts and phenomena must be clarified before an accurate and distinct conception of CT can emerge. I suggest that the first question to be

16 Johnson [1992], p.41.
17 Scriven, "Critical Thinking and the Concept of Literacy" Informal Logic [Spring/Fall 1987], p.93.
18 Lipman [1988], p.43.
answered is "What makes CT a type of 'thinking'?"

Critical analysis of the concept 'CT' may begin with McPeck's suggestion [1981] that "Whatever CT may be precisely, it is quite clear that it is thinking of some sort." Unfortunately he leaves the matter at that, thereafter discussing only the intentionality of thinking. Hence, McPeck avoids analyzing the term 'thinking' and demonstrating his own underlying commitments regarding the nature of reasoning.

That 'CT' refers to or denotes a type of thinking is almost unanimously accepted. But given the long history of difficulties surrounding the concept 'thinking,' it is strange that this term is not analyzed by any of the prominent CT theorists. It is hard to imagine that the concept 'CT' could be any clearer than are its component concepts 'critical' and 'thinking.' It appears, then, that theories of CT rest on unexplored commitments regarding the nature of thinking, and more specifically, reasoning.

It should be noted, however, that several theorists question the type of processes to which CT refers. Scriven [1987] in his "CT and The Concept of Literacy", suggests that "Many of the skills we think of as part of the CT repertoire are refinements or extensions of literacy skills." Scriven argues that CT should be understood as something closer to critical literacy, and suggests that

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19 McPeck [1981], p.3.
20 Scriven, [1987], pp.93ff.
21 Scriven [1987], p.93.
'CT' refers to (and "theory of CT" is meant to explain) certain linguistic operations, rather than mental processes.\textsuperscript{22} Olsen and Babu [1992] hold a similar view. For them CT is best understood as critical discourse.\textsuperscript{23} They argue that theories of CT are not so much about the ways we think about thinking as they are about the ways we talk about that thinking, i.e., the ways we talk about our own thinking, and the ways we talk about what others tell us they think.\textsuperscript{24} These few theorists have argued that CT does not primarily refer to a type of thinking. Hence, until the meaning of the term 'thinking' in the phrase 'CT' is clarified, theories of CT are dependent on unexamined theories of thinking. But the meaning of 'CT' is dependent on more than this. A further issue to be addressed concerns what it is for thinking to be "critical." Considerably more controversy has surrounded the meaning of the term 'critical' in 'CT'. Johnson questions the role of this concept in the various prominent definitions of CT, and states, none of these definitions adequately captures the force of the term 'critical'; none makes it sufficiently clear why CT is critical and not just plain thinking, or some other form of thinking like rational thinking or higher-order thinking.\textsuperscript{25} Olsen and Babu have noted two functions of the term:

\textsuperscript{22} Scriven [1987], p.95.  
\textsuperscript{24} Olsen and Babu [1992], p.186.  
\textsuperscript{25} Johnson [1992], p. 48.
At issue is the meaning or use of the term 'critical' in the phrase 'CT'. An adjective such as 'critical' can serve either of two functions. One function is that of an **emphasizer** as the 'good' in the phrase 'good morals'. . . . Such adjectives carry little semantic value; there is no difference between the request to 'think about p' or to 'think clearly or critically about p'. The second function is that of a **classifier**, such as the adjectives 'mathematical' or 'musical' in the phrases 'mathematical thinking' and 'musical thinking'. . . . My suspicion is that it is an emphasizer similar to 'good', 'sound', 'clear' when modifying the gerund 'thinking'. If CT is intrinsically good then it would seem to be an emphasizer; if it is a particular kind of thinking, applying to a particular set of objects, for example, it could be a classifier.  

Olsen and Babu take it to be unclear whether CT describes a kind or class of thinking, or whether CT is a term of emphasis for intrinsically good thinking.

McPeck [1981] has also analyzed the concept:

The adjective 'critical' describes a kind of thinking, just as do 'precocious', 'imaginative', 'creative', etc. . . . the adjective 'critical' simply qualifies 'thinking' (both grammatically and in fact). 

McPeck holds that "CT denotes a particular type of thinking" and that the meaning of 'CT' "is distinguishable from the meanings of...creative thinking' and the like." Thus McPeck concludes that CT is a class of thinking in general, distinct from other types of thinking, and so, draws a conclusion regarding the relation between CT and creative thinking.

Beardsley appears to be the first theorist to suggest a distinction between creative and critical thinking (and to

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26 Olsen and Babu [1992], pp.181f.
27 McPeck [1981], p.4.
29 McPeck [1981], p.5.
distinguish both of these from 'good thinking'):

It is useful to distinguish two fundamentally different aspects of thinking: its _creative_ aspect and its _critical_ aspect. Good thinking is to a marked degree both creative and critical. Yet Beardsley holds that 'critical' and 'creative' denote "aspects" or properties, rather than distinct "species" of thinking, and takes these to be qualities that can apply to thinking in general.

Some theorists reject the position that CT and creative thinking are distinct species. Ennis, for example, asserts that his conception of CT "does not exclude creative thinking." Siegel also asserts that,

a time-honoured distinction which needs to be exploded is that between critical and creative thinking .... I would suggest that CT involves creativity, and that creative thinking involves criticality.

Scriven [1987] goes so far as to abandon the term 'CT' since it misleadingly suggests an exclusion of creative thinking:

Hereafter, I drop the use of the term 'CT'...and use 'reasoning skills' instead, to avoid the suggestion that creative thinking is to be excluded from the domain of interest.

What is it that makes CT "critical?" Johnson argues that what makes thought critical is criticism. "CT may be characterized as thought evaluating thought." For Johnson

30 Beardsley, _Practical Logic_, [1950], p.3.
33 Scriven [1987], p.93.
34 Johnson [1992], p. 49.
35 Ibid.
CT is a distinct type of thinking involving the criticism of thinking, i.e., assessment of reasoning. This appears to be a common element of most theories of CT. For example, Ennis holds that CT involves "statement assessment", and Siegel too acknowledges a "reason assessment component"36 of CT. Nonetheless there is continuing controversy regarding whether CT includes creative thinking as a sub-type, whether CT is distinct from creative thinking, or whether they are related in some other way.

Although controversy surrounds the relation of CT to several other concepts, the relation of CT to rationality has received the most attention and generated the most discourse. While McPeck states that "CT is not coextensive with 'rationality' but is a dimension of it",37 Siegel takes precisely the opposite position: "CT is coextensive with rationality, not merely a dimension of it."38 Johnson rejects the equation of CT and rationality found in Siegel's theory. For him, CT distinguishes a species of thinking from rationality and rational thinking in general. "I would argue that there is more to rational thinking than CT."39

It should be noted that the positions of both McPeck and Siegel presuppose an understanding of the concept of 'rationality'. Siegel asserts that "the theory of CT rests ultimately on the theory of rationality",40 and his

36 Siegel [1988], p.23.
38 Siegel [1988], p.30.
39 Johnson [1992], pp.44f.
40 Siegel [1988], p.149, n.4.
"Postscript: Towards a theory of rationality" indicates that "there is very much more to be said about [the notion] of rationality."\textsuperscript{41} Likewise, McPeck states that "The precise meaning of rationality is a complex question beyond the scope of this analysis".\textsuperscript{42} Thus neither account, as given, provides an adequate explanation of the more fundamental concept of rationality/rational thinking, or of the relation between it and CT.

Johnson argues that the network problem is symptomatic of the fact that different theorists actually subscribe to different implicit theories of reasoning. Differences regarding the network issue follow from different assumptions about the nature of reasoning and the relation between it and CT. He holds that a resolution of the broader conflict, and of this issue in particular, can only take place when concepts such as 'reasoning' and 'rationality' are well-understood. Johnson argues that this can only occur when the relations between and among this network of concepts have been thoroughly explored and clarified. Until these concepts and their relations to CT are made clear, 'CT' cannot be considered a distinct and clearly understood concept. Thus the relation between CT and other forms of thinking constitutes an important point of controversy that must be resolved before an unequivocal account of CT can emerge. These questions capture the important aspects of the network issue:

\textsuperscript{41} Siegel [1988], p.127.
\textsuperscript{42} McPeck [1981], p.12.
What makes CT a type of 'thinking'? And what makes CT 'critical'?

What relations hold between (the concepts and phenomena of) decision making, problem solving, meta-cognition, higher-order thinking, informal logic, etc., and CT?

What is the relation between CT and rational thinking? Is CT equivalent to or a class of rational thinking?

What is the relation between CT and creative thinking? Is creative thinking distinct from CT? What are their distinguishing characteristics?

IV. The scope of the term 'CT'
   (the focus issue)

To my knowledge, Johnson is the first to question explicitly what he calls "the scope of CT," asking whether CT is meant to include thought focused on the evaluation of action (i.e., moral thinking and ethical deliberation). Johnson addresses the question, "What is CT?" by asking "What is CT about? When one thinks critically, what sorts of things does one think about? What is the focus of CT?"

Johnson notes that the Group of Five appear to take CT to be a type of thought focused on thought in the sense of beliefs or arguments. Johnson, however, takes issue with those theorists "who take actions also to be the focus of critical thought," and argues that this view involves a confusion of CT and morality, moral thinking and moral theory. He maintains that the criticism of action lies

43 Johnson [1992], p.41.
44 Johnson [1992], p.49.
45 Ibid.
outside the scope of CT.

Thus Johnson rejects the extension of the concept 'CT' to action on the grounds that this extension conflates CT with ethical thinking. One can be critical of thought, or critical of action. For Johnson, the former is the realm of CT, the latter is properly the realm of moral theory. Johnson's concern seems to be that theorists are blurring the boundary between logic and ethics, hence he demands justification for such a move.

The views Johnson has in mind are those of Ennis and Siegel. Ennis defines CT as "focused on deciding what to believe or do", and Siegel defines CT as "focused on reasons and the power of reasons to warrant or justify beliefs, claims, and actions." Johnson argues that "the focus of the critical thinker's scrutiny is thought." and rejects the view that actions also fall within the focus of CT.

It is not clear to me that Ennis's or Siegel's definition of CT do not equally suggest that the proper focus of CT is thought, specifically, decisions and reasons. I suggest that Ennis and Siegel are not advocating definitions of CT involving both logic and ethics, i.e., which include criticism of both reasoning and action. Ennis and Siegel do not clearly take CT to involve evaluation of action. For Ennis CT is focused on deciding, and for Siegel CT is focused on reasoning. Thinking about actions is not the same as making an evaluative judgement of actions. Deciding what to do may involve the evaluation of a plan of

47 Johnson [1992], p.49.
action, or the evaluation of reasons for acting, but this is not the same as evaluating actions in the sense that Johnson finds troubling. Ennis and Siegel wish only to extend CT to include deliberation, which surely involves thinking, and which perhaps should be seen as involving the criticism of ideas and plans, rather than criticism of persons and actions themselves. At the most, Johnson succeeds in emphasizing that the focus of CT and the relation between CT and moral thinking must be clarified.

What hasn’t been understood by theorists is that the focus issue actually has a long history. From its inception the CT movement has been closely connected to, and concerned with, the discipline of logic. For most theorists 'CT' appears to be related to 'logic', or at least, logic is taken to be an important part of CT.

Black's Critical Thinking describes CT as that type of thinking involving criticism in its "more generous sense". For Black, criticism is understood as a type of thinking involving the "exhibition and defense of principles and standards" which are used in making judgements of different objects. On this account, thinking is "critical" when it involves processes of appraisal or evaluation, the application of criteria and standards in making judgements. Black asserts that logic involves thinking critically about thinking, just as ethics involves thinking critically about

48 Black, Critical Thinking [1946], p.6.
49 Black [1946], p.7.
action.50 Thus for Black, logic, like ethics, is a species of criticism, "the art and science of criticism of reasoning".51 Hence, while logic and ethics are distinct for Black, they both involve CT. Both of these types of thinking are critical. Logic is thought focused on the evaluation of a person’s thinking as it is revealed in discourse. Ethics is thought focused on the evaluation of a person’s character as it is revealed in actions.

Thus, to limit CT to thought focused on thought, as Johnson suggests, is to relate CT closely to logic (in Black’s sense). But it is questionable whether CT does not also extend to thinking about action, as Black argues and as both Ennis and Siegel suggest. There is no clear reason why one cannot think critically about reasoning and about action, although it is questionable whether any theorist other than Black argues for such an extension of the term ‘CT’. Indeed, Ennis and Siegel seem to use CT to refer to what Black called logic, and not to what Black called ethics. Hence, I would agree that Johnson’s criticism needs reconsideration.

The questions, "Does CT extend to the evaluation of action?" and "Does CT encompass ethics and moral thinking?" have not yet been explored adequately in the literature. Thus the focus issue is a distinct controversy within CT theory. These questions capture the important unresolved aspects of this issue:

50 Ibid.
51 Ibid.
Is CT a type of thinking focuses exclusively on thought and the evaluation of thought, or is CT a type of thinking focused on the evaluation of action as well as thought?

What is the relation between CT and moral thinking and moral theory?

V. The function of the terms 'CT' and 'CTer' (the normative/descriptive and ethics issues)

In the course of these analyses a set of issues has emerged involving questions regarding what kind of terms 'CT' and 'CTer' are, and what function these terms serve, or what their role in the language is. Each of these issues concerns and conceptual or linguistic properties of the terms 'CT' and 'CTer'. They address the question "What is CT" by asking "How do these terms function?" and "What other terms are they like?"

It is widely accepted that 'CT' and 'CTer' are ideals, though what this means in each case is not always stated. It is also widely held that 'CT' is an evaluative, or more specifically a laudatory or approbative term, and has even been argued by members of Facione's panel that 'CT' is an ethical norm. This view is countered by a small group who hold an evaluation-neutral view on which the concept 'CT' is descriptive of particular processes or activities.

The tensions between the views regarding the descriptive, approbative and normative functions of the term 'CT' are more clearly identified by Facione, and further explored by Johnson.
The use of 'CT' as an ethical norm

Considerable conflict surrounds the alleged normative function of the term 'CT'. Facione reports that a substantial 52% of his expert panel explicitly reject the normative use of 'CT', holding that it is an inappropriate use of the term to deny that someone is engaged in CT on the grounds that one disapproves ethically of what the person is doing.52

Yet several theorists have suggested that CT entails or encompasses ethical norms or standards of behaviour. Facione reports that a small group (17%), argue in favour of using 'CT' in a normative sense. This minority of experts, all of whom also use 'CT' in its commonly understood laudatory sense, hold that the true meaning of 'CT' extends to a certain set of ethical norms and social values.53

Two of the most influential theorists of CT - Paul and Siegel - appear to endorse this view. Paul has argued for a definition of CT that includes such intellectual virtues as "humility" and "justice",54 suggesting that to be capable of CT, and to be a CTer, one must have acquired these character traits. Siegel as well has presented an account that makes reference to the "moral dimensions of the concept".55 His conception of the CTer as "appropriately moved by reason" can be interpreted as demanding that the thinker "do the right thing" based on a consideration of reasons. These two theorists go furthest toward connecting CT and ethical

52 Facione [1990], p.23.
53 Ibid.
54 Paul [1989], pp.219f.
55 Siegel [1988], pp.9f.
behaviour, and seem to exclude the thinker who is unjust or is moved to inappropriate ends (e.g., who uses CT to exploit others) as a CTer. On both accounts CT appears to extend only as far as the ethical use of thinking skills. Those who use thinking skills for bad ends are disqualified as CTers. The CTer is one who not only thinks critically, but who also uses CT skills ethically.

To hold that CT is an ethical norm is to sanction the judgement "Mary’s use of CT is unethical, hence she is not a CTer." As stated above, 52% of Facione’s panel reject the judgement "What X is doing is unethical, so X is not engaged in CT." What needs to be asked of those who view CT as an ethical norm is: "Cannot the thinker (though judged to be unethical, and so, not a CTer) still be judged to have engaged in CT? Can the process of CT not be identified and its quality assessed independently of the identification and evaluation of the thinker?" If it is the case that CT can be identified and assessed independently of the CTer, then these tasks will likely be accomplished using different criteria. However, the methods and criteria by which CT and CTer are identified and assessed have not been adequately clarified in the literature.

For Missimer [1990] CT does not, and should not be taken to involve, ethical norms. Missimer holds that CT is a way of thinking: "the consideration of alternative theories in light of their evidence."56 On her account, those who are

56 Missimer [1990], p.145.
judged to be immoral are not thereby disqualified as CTers, nor are they judged to be incapable of CT. Missimer has criticized the accounts of Paul and Siegel for theoretical improprieties - the advocacy of a dogmatic (and hence uncritical) moralism.57

Missimer argues that the attempt to incorporate a character profile of the thinker into accounts of CT leads to the pitfall of requiring that a certain character is necessary for engaging in CT, a view she rejects. For Missimer, as one gains a greater capacity to think critically, one becomes a better CTer, i.e., one approaches the ideal. Engaging in CT is prerequisite for becoming a consistently critical person. Becoming a CTer comes slowly, through the practice of CT. Thus, learning CT is about learning skills. It is hoped that the learning of skills will build critical character, but this outcome is never guaranteed.

Missimer appears to take the concept of the CTer to be secondary to, and perhaps derivative of, CT, and takes the CT theorist's primary concern to be with a description of the processes involved in this type of thinking, and not with the elaboration of a concept of an ideal thinker.

Thus the work of Facione and Missimer suggests that issues regarding the function of the terms 'CT' and 'CTer' are connected to the distinction between the activity of CT and the character of the thinker. If CT is thought to

57 Missimer [1990], p.151.
function as an ethical norm, then CT involves a set of values, and it is necessary that the CTer have a certain character or disposition to be capable of achieving this standard of performance. If CT is thought to serve a purely descriptive function, then CT consists of (and the term 'CT' refers to) a set of activities, and the character of the CTer becomes unlinked to this description.

The evaluative use of 'CT'

For many theorists it seems that CT is by definition successful thinking. In his early view, Ennis qualifies the process of CT as "correct statement assessment".58 The implication is that incorrect assessment of statements is not CT. To be considered CT, the performance must meet some standard of excellence. Doing CT is doing something well; thinking must have a successful outcome to be CT. It appears that prominent theorists regard CT as a type of criticism which results in success, e.g., correct assessment. The term 'CT' denotes thought that not only involves judgement and criticism, but thought that achieves its goal.

Moreover, as both Facione and Johnson note, for some theorists CT is by definition a good thing, all CT is good CT. Not only is doing CT doing something well, doing CT is doing a good thing. For example, Paul takes CT to exemplify "the perfections of thinking appropriate to a particular

58 Ennis [1962], p.83.
mode or domain of thinking."  Thus CT is taken to be a norm of reasoning. For Siegel, it is not sufficient that a thinker be moved by reason - to be a CTer the thinker must be "appropriately moved by reason." Lipman goes so far as to equate CT with both "good judgment" and "good thinking". Hence Ennis and Siegel draw a tight connection between CT and successful thinking, and Paul and Lipman fail to distinguish CT from good thinking.

Completely overlooked by these theorists is the need for distinguishing conceptions of CT as something good in itself, and conceptions of CT as something that yields or can be used to generate good results. Is CT intrinsically good, or instrumentally good? Is CT both, or neither? The prominent theorists are silent on this issue. However, some theorists have explicitly rejected positions that equate CT with good thinking.

To my knowledge, Johnson is the first explicitly to raise the issue, "Is CT necessarily good thinking?" Yet many assumptions regarding this question can be found throughout the literature.

As Facione represents the broader conflict regarding CT, theorists advocate either a "laudatory" or a "procedural" definition of CT. He reports that 60% of his panel hold that 'CT' is a laudatory, i.e., evaluative term that presupposes some norm or standard of performance

60 Lipman [1988], pp.38;40;43.
roughly equivalent to good thinking. Another 30% hold a procedural view of CT, and take 'CT' to be descriptive, i.e., to identify a process that admits of various outcomes that are evaluated according to some criteria other than those used in the identification of the process.

Facione represents the theorists who use 'CT' in a laudatory way as holding that the judgement "this is CT" can involve an appraisal of the thinker. Facione asserts that this view sanctions the judgement "Mary is not proficient in her use of CT; hence, Mary is not a CTer." It is argued that a thinker could have CT skills, and yet not be considered a CTer because she never or seldom uses the skills, or because she lacks the appropriate traits to motivate her to use the skills she has. Thus this view sanctions the judgement "Mary uses CT skills, but is not a CTer."

This argument, given in support of the approbative or laudatory view, is taken directly from Siegel, who argues that possession of skills, and occasional use of skills is insufficient in itself to being judged a CTer. Siegel requires that skills be used consistently for one to be so judged. In this way he argues that skills are insufficient to CT, and that, insofar as these character traits alone guarantee that the skills are put to use consistently and appropriately, a characterization of the traits of the CTer is required in a fully-articulated conception of CT.

62 Facione [1990], p.21.
63 Ibid.
64 Siegel [1988], p.6.
65 Ibid.
Siegel's view involves a commitment to character components. What Siegel fails to recognize is that CT and CTers may be identified according to different criteria. Since a thinker can use CT skills without being a CTer, skills may be insufficient to being a CTer but sufficient to engaging in CT. Indeed, the terms may function in radically different ways. This issue also has not been adequately explored.

The descriptive use of 'CT'

Facione reports that, for the proceduralist, the judgement "this is CT" does not imply "this thinking is successful" or "this is a good thing," any more than it implies "this process has no inherent value," or "this is not good." Likewise, the judgement "Mary is a CTer" does not imply "Mary is a good, successful, consistent, etc., CTer." It is possible that one could think critically without thinking well, just as one could think critically without doing something that is inherently good. Furthermore, while thinking critically could be doing something that is inherently good, this inherently good process might be used to bad ends, e.g., the clever thief. Hence, for the proceduralist, the term 'CT' must be primarily descriptive of a process, and not necessarily evaluative of that process or its products.

McPeck [1981] was the first to argue that CT is not the same as good (i.e. successful) thinking. We needn't demand that the CTer produce correct judgements, but only that the CTer engage skillfully in the task of judging. The criteria for judging CT and CTers has to do with the nature of the
process, and not with the quality of the outcome of the process. McPeck exemplifies the procedural view of CT, and advises that if CT is understood as a set of processes or skills, then clearly all CT need not be good or successful CT. McPeck’s analysis of ‘CT’,

does not guarantee that success will issue from its employment: it, like education, is a ‘task’ and ‘achievement’ concept . . . . It is therefore no contradiction to say of S, ‘S is a CTer in X but is not particularly good at it’, because skills admit of degrees. 65

In arguing that CT is a task and achievement concept, McPeck emphasizes that the term ‘CT’ refers to two different things. The term denotes both a process and an outcome. That is, CT describes a process which can be done poorly without being considered uncritical, and CT also denotes the product of that process, and the end towards which the process is aimed, the norm against which outcomes are judged.

For McPeck the judgement "Mary is a CTer" is not dependent on the successful outcome of the task or process of CT, i.e., on judgements like "Mary’s thinking is successful, consistent, appropriate, good, ethical, etc." CT can be good or not so good. "This is CT" and "This CT is good" are separate judgements made according to different criteria. Thus for McPeck, to see CT as a process is to recognize it may not be invariably or inherently good.

Lipman [1987] must be seen as somewhat in line with McPeck’s view. He argues that CT cannot be defined teleologically, but must instead be defined functionally,

asserting that

CT is a process that occasionally results in decisions or solutions, but the process is not to be defined solely by those occasional consequences. And even if decision-making or problem-solving were said to be the goals rather than the consequences of CT, the matter would be unchanged: CT must be defined functionally rather than teleologically. 66

Lipman’s position is that, while theorists like Ennis are right that CT occasionally results in "deciding what to believe or do", CT often does not have (i.e., is not limited to processes having) these specific outcomes. While CT is a process which occasionally has the identifiable goal of "deciding," its defining characteristics are not limited to outcomes or goals, but rather pertain to the process by which these ends are sometimes achieved. Thus both Lipman and McPeck argue that CT cannot be equated with a particular type of outcome or product. They argue that it is the nature of the process that determines what is appropriately considered CT. To say that the outcome of thinking is CT, is to say that the product was produced in a certain way. It is only by virtue of their being produced by these means that outcomes are judged to be 'CT'. Thus both Lipman and McPeck take the critical nature of the process to provide the characteristics or criteria for making the judgement, "This is CT."

Unlike McPeck, Lipman takes all CT to be good thinking, yet he recognizes that thinking can be judged to be critical based on functional criteria, and independently of

66 Lipman [1987], p.5.
judgements regarding the outcome of the process.

Johnson suggests that using 'CT' as a term denoting thinking that is by definition good overlooks the fact that CT denotes a species of thinking, a particular set of thought processes among others. He also holds that using 'CT' as a primarily descriptive term denoting a species or category of thinking involves recognizing CT as a process that admits of degrees of success, and involves questioning the view of CT as denoting an intrinsically good thing.

These considerations point out the need for distinguishing conceptions of CT as a process to be defined procedurally, and conceptions of CT as a process to be defined by its results.

'CT' as task and achievement

Like McPeck, Johnson sees it is possible to address the question, "What is CT?" by asking "What other sorts of things is CT like?" Is CT a process, a product, both, neither? Like McPeck, Johnson puts forward other terms that 'CT' may be like:

Is CT by definition something good? Can there be bad CT? Is CT like virtue (necessarily good), or rather like luck (possibly good, possibly bad)?

Johnson appears to accept McPeck's view that 'CT' is analogous to 'education' and his conclusion that CT admits of degrees of success. But the question Johnson raises, "What other terms is 'CT' like?" needs further exploration.

67 Ibid.
McPeck's view that 'CT' is a term like 'education' deserves elaboration.

To say that education is a task is to say that 'education' refers to an activity, the task of teachers, a job that can be done well or poorly. Not all teachers are good at educating, yet they all engage in the task of education. To say that education is an achievement is to say the term refers to the outcome, results or product of the process of education. 'Education' denotes both the real outcome of the task, and the abstract goal towards which educators aim in educating students. When educating is successful, the student is said to have "received an education." While education in this sense can certainly vary in quality, it seems to be the case that "getting" or "having an education" is an invariably good thing. Nonetheless, there can be bad educators, bad educating, and bad educations.

What McPeck notes, in charging that 'CT' is a task and an achievement concept, is that 'CT' denotes both a process and a product. To say that CT is a task is to say that 'CT' refers to an activity, i.e., 'CT' denotes the task of CTers, a job that can be done well or poorly. Not all thinkers are good at thinking, yet all that engage in the task are thereby thinkers. Similarly, not all CTers are good at CT, yet for McPeck (and perhaps for Missimer and Johnson), they all engage in the task, and are thereby CTers.

To say that CT is an achievement is to say that 'CT' refers to the outcome, results or product of the process of CT. In this sense, the term 'CT' also denotes the abstract
and ideal goal towards which the process of CT is aimed. When (the task of) CT is successful, the thinker is said to have produced CT (as an achievement). Hence, it appears that a distinction between CT as process and CT as product may be useful in clarifying and resolving this issue.

These arguments suggest that it needs to be reconsidered whether CT is necessarily good, i.e., approbative, or whether CT is descriptive of a process which admits of degrees of success from poor to excellent. It is still a point of controversy whether CT is to be limited to successful or to ethical use of thinking skills, or whether CT can be put to different ends. It remains unclear whether the term 'CTer' refers to agents who can be both ethical and unethical in their use of CT, or whether the CTer by definition behaves ethically. It is not yet widely agreed whether the terms 'CT' and 'CTer' should be thought of as normative or descriptive terms; the function of the concepts 'CT' and 'CTer' continues to be debated. This issue is a distinct and recognizable point of controversy among theories of CT. The arguments in favour of normative and teleological accounts of CT need to be made explicit and evaluated, as do the arguments supporting descriptive and procedural accounts. The criticisms of these views need careful reconsideration before the broader conflict can be resolved. These questions capture the important aspects of this issue:

What are the functions of the terms 'CT' and 'CTer'? What are their conceptual properties or characteristics?

Are 'CT' and 'CTer' descriptive terms?
Are 'CT' and 'CTer' laudatory/evaluative terms? Are CT and the CTer necessarily good, or do they admit of degrees from poor to excellent? Is CT always successful, or can there be bad CT? Is CT intrinsically good, instrumentally good, both, neither?

Are 'CT' and 'CTer' ethical norms? Does 'CT' extend only as far as the ethical use of thinking skills, or can CT be put to different ends from ethical to unethical?

What other terms is 'CT' like? Is CT a process?, a product?, both?, neither? Is CT to be identified and evaluated according to procedural or teleological criteria?

VI. The pedagogical properties of CT
(the generalizability issue)

The final set of issues I have identified concern the pedagogical properties of CT. Stances taken regarding these issues do not answer the question "What is CT?" directly. Instead, these positions represent answers to the question "Can CT be taught, and if so, how is it to be taught, and how assessed?" Answers to this question are dependent on responses to the issues elaborated regarding the nature of CT. In addition, answers to this question are largely dependent on answers to the generalizability issue, which has not been explicated here.

Historically the first issue to divide theories of CT was the issue of generalizability raised by McPeck [1981]. McPeck questioned whether CT could be taught in the way suggested by such theorists as Ennis [1962], arguing that the concept was not well-understood, but was in fact under-analyzed, and had been defined in different ways by several theorists. McPeck argued that accounts of CT were based on the erroneous assumption that there were such
things as 'general CT skills'.

According to Norris, before McPeck theorists had assumed that CT was generalizable. McPeck argued that CT was not generalizable, as had been presupposed, but was in fact discipline-specific, and so, could not be taught as a subject unto itself insofar as it did not constitute a separate discipline. Thus McPeck revealed that the answers to important pedagogical questions hang on the issue of generalizability.

McPeck's work elicited several critical responses. Ennis [1985, 1987, 1989], Paul [1982, 1989], Siegel [1985, 1988] and Lipman [1987, 1988] all sought to defend the generalizability of CT, and CT courses, against McPeck's criticisms. However this issue remains unresolved. Thus an essential element of a framework for understanding the conflicts among theories of CT concerns these pedagogical issues that have dominated interest within the literature until very recently. This set includes issues regarding the generalizability of CT (e.g., are CT skills transferred from one context to another?) and other pedagogical issues (e.g., Can, and if so, how should CT be taught?) dependent on the generalizability question.

Although the issue of generalizability has been the focus of much theoretical interest, Johnson suggests that it should be seen as a secondary problem, or better, as a pedagogical issue dependent for its resolution on other more fundamental conceptual and theoretical issues. Yet, while Johnson takes this issue to be an obvious point of controversy, Facione never raises the question of
generalizability, nor reports any dissent among the experts. Facione claims, instead, that CT skills are thought by all theorists to be readily transferable to, and used in many contexts.⁶⁸ (Facione's panel of experts included Ennis, Paul, Lipman, Siegel, Norris and Johnson. Notably absent from the panel was McPeck.)

Norris asserts that theorists have only recently recognized and formulated the generalizability issue. In fact, this issue is singular in its having been recognized and identified by the parties to the dispute as standing in need of exploration and resolution. Norris claims that the subsequent investigation has revealed many other unexamined and unexplored issues which remain to be probed and resolved. Facione and Johnson in particular bring out the theoretical diversity of accounts of CT and show the question of generalizability to be one of several identifiable issues generating controversy among theories of CT. The issue of generalizability comprises only one point of contention between McPeck and other theorists. All three questions regarding the pedagogical characteristics of CT are dependent on answers to the more basic question "What is CT?" Hence, an understanding of the broader conflict must involve much more than this superficial issue. Facione and Johnson provide such an understanding by identifying several of the central debates. Yet the generalizability issue must be recognized as the first issue to divide theorists, and

must also be acknowledged as a continuing controversy within the theory of CT.

These questions capture the important unresolved issues regarding the pedagogical properties of CT:

Is CT generalizable, or is CT discipline-specific?

Can CT be taught as a course unto itself, or is CT relative to, and so, only to be taught within and as it pertains to each specific discipline?

How is CT to be assessed?

4. Conclusion regarding the framework

Taken together, the six sets of issues discussed in this chapter constitute the significant aspects of the conflict among theorists of CT. These are the issues that a theory of CT must address and, if possible, resolve in order that a singular, widely-accepted conception of CT can be acquired.
CHAPTER SIX: CONCLUSIONS AND OBSERVATIONS

1. Conclusions

In this final Chapter, I present my conclusions regarding the state of the theoretical conflict, and make observations regarding possible avenues for its resolution.

The CT community does not at this time have a single widely-accepted account of CT. Instead, the theory of CT must be seen as in a state of conflict. Although this theoretical turmoil is generally acknowledged, the complexity of the conflict has remained largely unrecognized. Answers to the question, "What is CT?" have been multiple and diverse. However, by comparing these numerous and varied views, a clear understanding of the individual theories, their conceptual and structural similarities and differences, and the issues that divide them can be achieved. The dimensions of the broader conflict, the complexity and variety of theories of CT, and the interrelation of these theoretical issues, can be established by means of a meta-theoretical analysis. In this way, a framework of issues for characterizing the theoretical conflicts among accounts of CT can be derived. Such a framework is essential to creating a context within which these conflicts might be resolved.

In this thesis, I have identified some of the issues that remain unresolved regarding the nature and meaning of CT, and have brought them together in the form of a framework of issues for understanding the dimensions of the debate. This framework provides a better understanding than
previously existed of the composition and complexity of individual theories, and of the issues that divide opinion within this area of inquiry. My hope is that this framework will aid in deriving criteria for explicitly evaluating theories of CT, will assist in creating avenues for the resolution or management of the theoretical conflicts, and will serve as a basis for achieving an eventual consensus of opinion regarding CT.

The meta-theoretical views of Norris and Johnson, outlined in Chapter Two, provide the perspective required for recognizing the complexity of individual theories of CT: Theories are pieces of discourse composed of concepts, definitions, arguments and assumptions; they differ from one another in terms of these elements. It is necessary to appreciate this complexity of the theories to recognize the full extent of the diversity among them, and thus, the depth of the over-all controversy over CT.

What Johnson’s meta-theoretical perspective reveals, and what has not been widely recognized until now, is that theorists hold many assumptions regarding CT which do not follow from the definitions they provide, but which nonetheless must be seen as constitutive of their theories. Conclusions regarding, for example, the generalizability issue do not clearly follow from any of the definitions of CT in the literature. That is, it does not follow that CT is (or is not) generalizable, transferable, teachable, etc. from any of these definitions taken alone.

Nor is it clear that conclusions regarding the conceptual characteristics of 'CT' follow from the
definitions of CT. For example, does it follow from Ennis's definition of CT as "reasonable reflective thinking focused on deciding what to believe, or do" that 'CT' is (or is not) descriptive, approbative, normative, an ideal, etc.? Not clearly so. Neither do conclusions regarding the components of CT clearly follow from the definitions. For example, does it follow from the definition alone that 'CT' does (or does not) involve dispositions? No; so what is their source?

Johnson shows that, despite the fact that their derivation is unclear, commitments regarding the pedagogical and conceptual characteristics of these terms, regarding the components of CT, the relation of CT and CTer, and the relation of CT to other phenomena, must all be seen as important dimensions of the individual CT theories.

Facione’s "report of expert consensus," analyzed in Chapter Three, discloses "deep divisions" between experts regarding what "the term 'CT' includes in its meaning."¹ Facione identifies four of the key issues dividing his panel of fifty CT experts. These issues concern the components of CT, as well as the relation of CT to the CTer, and the function of the term, 'CT', in the language. I identify these as the skills/dispositions issue, act-agent issue, normative/descriptive issue and ethics issue.

In particular, Facione shows the inclusion of dispositions in accounts of CT to be the most significant point of conflict among theorists. He also emphasizes the importance of the distinction between the act and the agent

¹ Facione [1990], p.21.
of CT, and highlights the role this distinction plays in clarifying the skills/dispositions issue. In addition, Facione demonstrates that the experts are divided as to how the concept 'CT' is to function in theory and practice. There is no consensus among the experts as to whether 'CT' is a normative term (either ethical or approbative) or whether the concept is (or ought to be) purely descriptive and value neutral. The points of controversy Facione identifies are central to the debate over CT.

Johnson's paper, discussed in Chapter Four, uncovers "patches of agreement among the primary investigators," as well as "significant areas of disagreement," and thus, reveals important points of discord regarding several discernible issues that reinforce the emergent framework. Johnson identifies four of the central issues dividing theorists. These issues concern the relation of CT to other phenomena, the focus of CT and its relation to action, the relation of character to accounts of CT, and the function of the concept in the language. I refer to these as the network issue, focus issue, character issue, and evaluative issues.

In particular, Johnson shows that the relations between CT and other associated phenomena have not been adequately investigated. Johnson uncovers several unexamined assumptions about the nature of CT, and relates these to the explicit elements of the theories. Issues identified by Johnson have affinities to those identified by Facione.

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2 Johnson [1992], p.38.
Johnson's recognition of the problems involved in the inclusion of character in accounts of CT echoes the reservations voiced by Facione's panelists. Likewise, Johnson acknowledges the lack of consensus concerning the evaluative or approbative use of the concept 'CT' demonstrated by Facione, and explores avenues suggested by McPeck for resolving this issue.

Both Johnson and Facione draw out the differences in the explicit theories, and in the assumptions made by several theorists regarding the basic nature and meaning of CT, and its relation to other concepts and phenomena. Their analyses suggest that many of the issues dividing theories of CT are interrelated. Moreover, both show the weighty controversies among theories of CT to concern issues other than that of generalizability which has been the focus of much attention. These issues reflect conflicting assumptions as to the nature of CT, the relation of CT to other concepts and phenomena, the nature of meaning and definition in general, and the nature of reasoning and human behaviour.

Theories of CT can be characterized according to the stances they hold regarding the issues Facione and Johnson have identified. I have synthesized these issues and presented a framework, elaborated in Chapter Five, for resolution of conflicts within the theory of CT. I distinguish six sets of issues concerning (1) the components of CT; (2) the relation of the phenomena/concepts 'CT' and 'CTer' to each other; (3) the relation of CT to other concepts and phenomena; (4) the focus of CT, and its relation to action; (5) the function of the concepts 'CT'
and 'CTer' in theory and practice; and (6) the pedagogical properties of CT.

Although at first glance the literature on CT presents the appearance of an immensely intricate conflict, the apparently overwhelming controversy surrounding CT can be made more manageable. The theory of CT is in turmoil, but a meta-theoretical perspective reveals the theorists to be divided over a relatively small set of complex issues. The framework offered provides a set of discrete issues representing a research agenda for theorists of CT, provides the perspective necessary for the critical evaluation of accounts of CT, and so, paves the way for resolution of the larger conflict, and for achieving a consensus regarding the nature and meaning of CT.

Having seen what is at issue, I now indicate what is required as a prelude to resolution, and present my own observations as to how these issues might be resolved.

2. Conceptual analysis: a prelude to resolution

Comments made by several prominent theorists indicate that the central concepts of theories of CT are problematic. Each of these theorists points to the need for further conceptual analysis. I outline part of this literature in what follows.

Much of this conflict is conceptual, involving questions about the nature of CT, its extension, and its relation to other cognitive entities. My research discloses many unsupported assumptions concerning these issues, e.g., regarding the use of 'CT' as an evaluative term.
Furthermore, it is not only the concept of CT that has come into question, but also the many other concepts in terms of which CT is elaborated. For example, Olsen and Babu [1992] raise this point:

... much of the CT discourse is philosophical rather than psychological - a discourse appropriate for describing ideals rather than for correctly characterizing human behaviour. The claim that in order to be a CTer one must have a critical spirit (Siegel 1988, p.39) is such a statement. It may be ideally true or worth striving for; the fact that there are no persons who possess such a spirit is presumably neither here nor there for such discourse. But the question then arises as to the function that such ideals play in policy and practice.  

Olsen and Babu suggest that theorists who are defining ideals run the risk of confusing this enterprise with the description of behavioural phenomena, a job perhaps better left to psychologists. If CT is an ideal, then it isn't measured against reality; ideals are not required to refer, or to meet standards of accuracy. But to the extent that this concept is meant to denote behavioural phenomena, to secure a referent, it is necessary that it be accurately descriptive, and herein, they suggest, lies a problem.

Missimer has argued that ideals such as 'CT' and 'CTer' must be empirically founded to have any practical relevance. 4 In addition, Missimer notes that there is substantial incongruity among the many offered lists and accounts of the character of the CTer. 5 The same can be said of the lists of cognitive skills. There is no single,

3 Olsen and Babu [1992], p.183.
4 Missimer [1990], pp.146ff.
5 Missimer [1990], p.146.
widely-accepted account of either the skills of CT, or of the dispositions of the CTer. These observations suggest that the concepts thought to refer to components of CT have not been adequately analyzed.

A fact not noted in the literature is this. While Ennis, Paul, Siegel, Lipman and McPeck all describe CT in terms of two dimensions, these theorists use different terms to describe these components. The terms used in describing these components include: abilities, proficiencies, operations, activities, skills, tendencies, dispositions, attitudes, values, character traits, etc. These component types differ from each other in important respects, yet these differences have not been elaborated. The same holds for concepts that refer to the "cognitive" and concepts that refer to the "affective dimension of CT." These concepts require examination, and their important differences require explication, before a clear understanding of the components of CT can be expected.

Norris has raised questions about the status of concepts forming CT theories, and argues that "a minimal condition of adequacy for a theory of human learning is that its central terms refer." Norris holds that this "is necessary if we want any theory that employs the term as a central concept to have anything to do with educating people," and points out that "A central term of many CT learning theories is 'thinking disposition'. The adequacy of these theories is reduced if thinking dispositions do not

6 Norris [1992], p.12.
exist." Norris questions whether the concepts forming theories of CT secure referents. No definitive answer to this question can be supplied, because the theorists have different assumptions. Yet questioning the adequacy of the central concepts of theories of CT is an important step towards clarifying CT itself.

McPeck [1992] has raised questions regarding the referent of the concept 'skill', arguing that "Concepts such as 'general thinking skill', 'CT skill', and the like" are vague:

In what sense can it be claimed that the same skill is being used in two different domains or subject areas? Does reasoning to a conclusion in science require the same or a different skill as reasoning to a conclusion in ethics? ... When is skill at two tasks a general skill, as opposed to two separate skills? 8

Answers to McPeck's questions are not to be found in the CT literature. McPeck holds that the relation between the concept 'skill' and the numerous isolated observable activities it is thought to denote is not as clear as has been assumed. In short the concept 'skill' requires further analysis. For McPeck, 'skill', 'disposition', etc. need to be operationally defined; these processes and traits need to be cashed out in terms of performances. Without such an understanding, CT is unclear.

Olsen and Babu [1992] have argued that concepts such as 'skill' must be understood as part of an outmoded

7 Ibid.
psychology:

Discourse about CT and the teaching of CT is typically framed in psychological terms such as 'skills', 'abilities', and 'dispositions': In order to be a CTer, a person must have... certain attitudes, dispositions, habits of mind, and character traits (Siegel, 1988, p.39). Yet, almost a half-century of psychology has gone into disabusing us of the explanatory value of such notions as traits, abilities, and dispositions. Nothing is added by the term 'skill' in the phrase 'CT skill'; this is mere hypostatization - creating an entity by adding the noun 'skill'. Consequently, CT is not explained by saying that someone has CT abilities or dispositions.9

The point to note is that the vocabulary of 'skills', 'dispositions', etc. is a potentially misleading way of talking about what human beings are observed to do.

Olsen and Babu write: "To build a theory or pedagogy of CT on the development of skills, abilities, and dispositions is, then, to embrace an obsolete psychology."10 They suggest that theories of CT need not be caught up in psychological considerations:

A theory of thinking may be concerned with thought and how it comes to manifest itself in action or utterances... CT is not an account of thinking but a description of the ways of reflecting on someone else's, or one's own, thinking. CT, then, is thinking about thinking... To think about someone's thinking is to think about what someone has said... The interpretation, analysis, and criticism of [discourse] is what CT is, and what it is for."11

According to Olsen and Babu, a theory of CT is not a psychology, nor a theory of mind, thought, or reasoning, though it can be highly dependent on accounts of, and

9 Olsen and Babu [1992], p.182.
10 Olsen and Babu [1992], p.183.
assumptions about, the nature of these phenomena. A theory of CT is not focused on clarifying the operations of the mind. Instead a theory of CT is focused on clarifying a complex part of human linguistic behaviour - critical discourse. CT is about an important part of our language, that part which allegedly describes the operations of the mind. To fail to recognize this fact is to run the risk of falling into the grips of an outmoded psychology. Thus Olsen and Babu challenge CT theorists, not only to rethink their positions regarding the nature of CT, but also, and more importantly, to rethink the vocabulary in terms of which they have described the theoretical issues.

Missimer [1990] also maintains that the concept 'skill' has been underanalyzed, and that it may involve fallacious assumptions. Missimer argues that the concept has been misconstrued by advocates of the "Character View," particularly Siegel, who objects to a view of CT as skill alone because it "sanctions our regarding a person as a CTer even though that person never, or only infrequently, thinks critically."¹²

The problem Missimer sees here is an important one. Siegel argues that a view of CT involving "skills only" allows the judgement "Mary is a CTer" based on the judgement "Mary has the skill" and without evidence of the form "Mary uses the skill." Missimer rejects Siegel's argument and suggests that he draws an artificial distinction between

¹² Siegel [1988], p.23.
possessing a skill and its utilization.

It appears that Siegel takes dispositions to be necessary to the practice of CT, because he sees CT as the activity of the proficient thinker, and because he believes engaging in the ability proficiently requires a disposition to do so. One can engage proficiently in CT only when one has become a CTer, i.e., when one has accumulated the appropriate traits. Yet for Missimer one can gain skills without having the associated traits, and one can become a great CTer only by repeatedly engaging in CT. Using CT is necessary to becoming a CTer, but being a CTer or having certain traits is not necessary to engaging in CT.

It may be that Siegel's trouble follows from his failure to distinguish CT from the CTer. But the problem goes deeper. Missimer argues that Siegel overlooks the tight relation between skill and practice.\textsuperscript{13} As Missimer points out, skills are only acquired through practice; only by engaging in the act does one gain proficiency, i.e., skill. Siegel fails to see that being able to, i.e., having skill is dependent on utilizing skill, i.e., doing CT. Hence, on a "skills only" view there is no real risk of assessing those who don't think critically as CTers.

It needs to be emphasized that, while it may be that certain dispositions are necessary to being judged a CTer, or that these dispositions are necessary for habitually appropriate use of CT, one could still conclude that

\textsuperscript{13} Missimer [1990], pp.149f.
dispositions are not necessary for the mere proficient performance of CT, since one could do CT (i.e., use CT skills) proficiently, albeit infrequently or inconsistently, without having these dispositions or character traits. For this reason, theorists need to ask, "What role do the dispositions and character traits play in the process of CT?", and "What function do they serve in theories of CT?"

For theorists such as Paul and Siegel, the dispositions make the difference between the sophisticated and the Socratic thinker, the CTer. They make the difference between the thinker who uses CT skills to defend his own prejudices or mislead others, and the thinker who has the humility, inquisitiveness, and courage to question his own beliefs, and to stand up for what he believes. For Paul and Siegel, the skills of reasoning assessment are conceived as mere tools, while the dispositions take the lion's share of the credit for what actually counts as CT. The skills are common to both Socratic and sophisticated thinkers, i.e., critical and uncritical thinkers. Hence, on such an account it is the dispositions alone that distinguish the critical from the uncritical thinker.

Missimer suggests that the sophisticated and Socratic thinker may both be CTers. This judgement depends entirely on the activities in which they engage. However, consideration of their dispositions and motives for acting provides the basis for a moral judgement. The distinction between CT and uncritical thinking, and between the CTer and the uncritical thinker, ought not to be a moral distinction, hence, the dispositions need not be essential to CT, and at
best, the relation of character to CT must be clarified.

I hold that the challenges raised by these theorists demand response. Moreover, they make it apparent that an extensive project of conceptual analysis and clarification lies ahead for theorists of CT if we are to have clear and accurate conceptions and theories. The foregoing framework and observations can serve to clarify the work ahead.

3. Avenues for conflict resolution

I believe that the most profitable avenue for conflict resolution concerns the interrelated component and act/agent issues. In reporting the findings of his research project, Facione describes the experts as having reached a consensus regarding "the two dimensions of CT" when in fact they did not. Although a majority endorse a view involving skills and dispositions, the minority view CT as involving only certain operations, and concede only that what is encompassed by the affective/character dimension refers to the CTer. Indeed, Facione himself perhaps unwittingly presents his findings in terms of an account of the two concepts "CT and the ideal CTer," and so must be seen as distinguishing an account of the process from an account of the producer.

Facione's statements regarding "the two dimensions of CT" are not supported by his research and are inconsistent with his own findings. Yet it seems that the distinction between thought and thinker, act and agent, is an important consideration in resolving the skills/dispositions issue, and so, the component problem in general. Facione himself, in reporting the expert opinion, applies this distinction to
circumvent these major controversies regarding CT.

Thus Facione's report shows that this distinction is a profitable avenue to travel with an eye toward resolving the skills/dispositions issue. Given such a distinction, 'CT' can be defined in terms of skills, activities, operations or processes, while 'the CTer' can be defined in the more psychological terms of dispositions, attitudes, tendencies or character traits.

Missimer [1990] is keenly aware of the connection between this issue and the CT/CTer distinction, and of the importance of the latter distinction in resolving issues between CT theorists.\textsuperscript{14} Missimer should be seen as sympathizing with the proceduralist view, insofar as she suggests that proponents of the "Character View" of CT fail to distinguish what is true of the act of CT from what is true of the person of the CTer.\textsuperscript{15} Missimer criticizes Paul and Siegel for incorporating a characterization of an ideal thinker into their definitions of the process of CT, and argues for a definition limited to a description of the process only. On Missimer's account, "CT is a skill or set of skills."\textsuperscript{16}

Moreover, Missimer argues that the inclusion of character in accounts of CT involves a type of moralism that could lead to the legitimization of \textit{ad hominem} argumentation, and to the rejection of thoughts on the basis of judgements.

\textsuperscript{14} Missimer [1990], pp.145ff.
\textsuperscript{15} Missimer [1990], p.145.
\textsuperscript{16} Ibid.
about the thinker's character. Thus the addition of character traits to the definition of CT only confuses an account of these logical processes with a profile of the ideal rational and moral agent. Johnson voices a similar concern about the relevance of character traits to accounts of CT, and like Missimer, questions the connection between having a certain character and engaging in CT.

It seems that the positions of Paul and Siegel require more support than they have offered. In their writings to date neither Paul nor Siegel have adequately explained the relation between CT and the CTer, or its bearing on other points of controversy. Hence, given the apparent importance of this distinction, the onus falls on Paul to show that these terms cannot be separately defined or distinguished from each other, and on Siegel to clarify the ramifications and the role of this distinction in his theory.

I argue that, although the concept of the CTer does appear to be dependent on the concept CT, it is not clear that the concept CT is dependent on the concept of the CTer. Understanding what a CTer is requires understanding what CT is. But understanding what CT is does not clearly require an understanding of the CTer, because an understanding of the agent is not necessary to an understanding of the activity. Hence, I suggest that the concept CT is primary.

Given a distinction between CT and the CTer, CT may be described as an activity consisting of the exercise of a set of skills (operationally defined), while the CTer may be

17 Missimer [1990], pp.148f.
described as embodying a set of dispositions, or even the "critical spirit". On such a view, the act of CT involves certain observable processes, while the complex character trait that being a CTer constitutes could serve as an ideal. One could then hold that, while CT operations are largely evaluation neutral, i.e., not in all cases intrinsically good, the CTer's character is inherently good, an ideal.

I suggest that a substantial amount of controversy can be eliminated by clarifying this misunderstanding. The act/agent, skills/dispositions, and normative/descriptive issues are interrelated, and a distinction between the act and agent of CT clarifies, and may provide a resolution of all these issues.

4. The state of the theory of CT

Because of the pedagogical influence of concepts such as 'CT' it becomes the duty of educators and theorists to ensure that their use of these concepts is based on an understanding that is appropriately supported by evidence. Theorists must clarify their basic concepts before issues dependent upon them can be resolved:

The rational ideal is the application of critical habits of thought to all practical problems of human existence, and the employment of rational criteria in the evaluation of all opinions and prospective beliefs . . . . A first step toward the realization of this rational ideal is the critical evaluation of the language we use to express our thoughts; for the most frequent cause of intellectual confusion is the unanalyzed and, therefore, uncritical employment of words.18

18 Werkmeister, Critical Thinking [1947], p.xvi.
Although theoretical discord regarding CT may appear somewhat scandalous since it concerns a fundamental educational concept, the situation is not significantly different from what is found in other areas of theoretical inquiry. For theories to be considered well-articulated, theorists must make their commitments regarding the recognized issues explicit. For theories to be considered well-supported, theorists must recognize and respond to these issues, by defending their accounts against reasonable arguments which oppose their commitments or conclusions. Theorists must recognize when the criticisms directed against their own assumptions are valid, and then, must either abandon their assumptions, or else defend them against this criticism. Only in this way can consensus be reached regarding CT. On such a view it is the responsibility of each theorist, as a member of the community of thinkers, to act as the arbiter of the theoretical conflict, by recognizing what is at issue and working toward a resolution of those issues. Resolution of the conflict surrounding CT is thus the first job of all theorists of CT, and it is my hope that the framework developed here will be instrumental in that effort.
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Allan Kidd was born in 1963 in Windsor, Ontario. Since graduating from the University of Windsor in 1988 with a B.A. (Honours Philosophy), Allan has become a candidate for the Master's degree in Philosophy at the University of Windsor and hopes to graduate in 1994.