CHAPTER 1

INTRODUCTION

1.1 Introduction

One momentous and most exciting area of investigation today is the field of brain and mind research. Despite striking triumphs in the mastery of nature by present day science, our understanding of these phenomenon pale into insignificance by comparison. Philosophers and scientists alike have relentlessly struggled, seeking answers to what many consider the mystery of mysteries, viz., the perennial problems of mind. It is not until recently that theoretical and technological advancements have paved ways for comparatively more systematic and programmatic bid on the enigma, making headway that ushers in the era of cognitive studies.

Cognitive Science is, however, a loosely knit coalescence of multiple disciplines. Amongst the leading contributing disciplines are notably Cognitive Psychology, Neuroscience, Philosophy, Artificial Intelligence and Linguistic.¹ Out of these multifarious approaches, philosophy of mind is the primary focus of present study. Essentially, philosophy of mind is defined by the group of paradigmatic problems it embodies. Is reality made of mind or matter? How do we account for

¹For good discussions on historical development of cognitive science as a field, see Bechtel et al. (1998) and Gardner (1985).
the relations between mind and body? What is mental reality? How is mental content individuated? What is consciousness and qualia?

Upon the dawn of the new millennium, we could imagine inventions of increasingly intricate machines with ever growing resemblance to human’s subtlety. Apart from the above long-standing search, could we also claim that machines think or have intelligence or even conscious? If not, how then does artificial intelligence differ from men’s intelligence? Could we justifiably claim that machines have mental life when they perform many of the functions that men do? Where do we draw the line? From this, if it appears obvious that something physical and lifeless like stone could not have mental life, what about animals? Do they have mind? Are they conscious?

Rapid surge in contemporary cognitive studies would one day revolutionize our understanding of this insolvable mystery. At present, they stand as knotty problems that admit no easy answers. Given its recalcitrant resistance to prevalent scientific orthodoxy, the field is thus not surprisingly consummated with philosophical perspectives that take up multifarious stances vying to uncover the mystery. Dennett’s philosophy is borne of such tussles in philosophical ideas. In fact, Dennett’s distinctive standpoint places him as one

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2 Dennett has, himself, provided a rather illuminating sketch on the different paradigms it embodies, and their respective positions vis-à-vis one another (BC 215-234). See also Dennett (1978c). Kim (1996) provides good and easily accessible description of the issues and the underlying alternative paradigms in the field. In this regard, Levine (1997) and Guzeldere (1997) provide penetrative overview on contemporary contending theories of consciousness. Varela’s (1997: 339-341) demarcation, though brief, is no less helpful.
prominent and original philosopher of mind, very much in the forefront of contemporary debate on the issues.

1.2 Background on Dennett

Evidently, Dennett’s carefully sculpted philosophical standpoint has left distinct marks in contemporary discourse in the philosophy of mind. As Symons recently recounts,

Daniel Dennett has been one of the most important voices in the philosophical and scientific discussions of the mind for the past thirty years. While many other philosophers see the mind as a mystery that will never succumb to explanation, Dennett’s work opens the door to scientific inquiry, showing ways to understand difficult phenomena like perception, the will and consciousness using the techniques of ordinary scientific investigation. Philosophers have long debated whether science is powerful enough to explain the place of mental life in the natural world. Dennett’s work offers hope to the optimists and poses a serious challenge to the lovers of mystery….Dennett’s work shows how to connect the scientific investigation of the body with the commonsense descriptions of mental life that form an indispensable part of ordinary experience….Dennett is likely to remain an extremely energetic and important force in philosophy for many years to come….Nevertheless it is already clear that Dennett has responded to traditional philosophical mysteries by offering an important new way for us to think about some very old problems (Symons 2002: 1).

Rocknak in her critical review of Symons’s book on Dennett concurs.

As far as analytic discussions go, Symons is absolutely correct; Dennett has dominated recent conversation. In fact, we might even say that Dennett’s Presidential address at the 2000 American Philosophical Association meeting was, in some respects, a passing of the torch: Quine, sometimes dubbed the ‘most famous living Philosopher’ had died four days earlier. Now, me might conjecture, it is Dennett’s turn to bear this title (Rocknak 2001: 344).

As Ross also asserts,

[although I know of no proper poll that might verify this, as a result of this battle report [locking horn with Gould on Darwin] Dennett almost certainly now stands with or just behind Russell and Wittgenstein as the most famous professional philosopher of the century (Ross 2002a: 272).

Brook and Ross add in further,

[over the past thirty years, Daniel Clement Dennett has had a major influence on our understanding of human intentionality and agency, consciousness (and thereby
phenomenology and the architecture and neuroscience of consciousness), developmental psychology, cognitive ethology, artificial intelligence, and evolutionary theory....Dennett has played a central role in one of the most significant theoretical revolutions of the past fifty years, the cognitivist revolution. This revolution demolished simple empiricism and put in its stead a view of human action as requiring interpretation in terms of a rich reservoir of cognitive resources and, many argue, evolutionary history. Dennett has played a role in this revolution for thirty-five years now (Brook and Ross 2002a: 3).

Certainly, these views are not shared by everyone, but at least they show that Dennett is an intellectual force to be reckoned with in contemporary scene, at least in the area of mind study.

Dennett is currently the Distinguished Professor of Arts and Sciences and Director of the Center for Cognitive Studies at Tufts University, Boston, United States. He is also, at present, the Austin B. Fletcher Professor of Philosophy. Born in 1942, he obtained his B.A. from Harvard University in 1962 and Ph.D. from Oxford University in 1965, under the tutelage of Gilbert Ryle, whose book, The Concept of Mind (1949), arguably laid the cornerstone to much that was to come in the postwar period. Dennett is accomplished and innovatory writer. Gestation of his views is best reflected in the unfolding of his major works. The first of this is Content and Consciousness (1969) which, as Brook and Ross (2002a: 11) aptly note, forms “a blueprint for Dennett’s entire corpus.” Dennett’s later more entrenched and mature views are molded from these early and relatively unassuming beginnings, not unlike the way musical themes are developed, augmented, deepened and transformed. Ultimately, though Dennett’s definitive (or finale) viewpoints may take different forms, the enduring legacy of this early work is obvious.
Brainstorms (1978g) represents more fully Dennett’s articulation of his distinctive approach to content, followed by a more elaborate and compelling elucidation of the same theory in Intentional Stance (1987b). This work represents, in many important ways, the culmination of his views on content. Intentional stance that was presented in relatively cautious and reticent style earlier in Brainstorms is more compellingly and boldly argued here. Ontological commitments of intentional stance and its repercussions thereof is more forcefully spelled out, while the role of evolutionary considerations (in relation to his theory of content) are more broadly accentuated in these formulations. Within the interval of these works, there is no question that Dennett’s conviction (in the theory) grew and has become ever more deeply rooted and unshakable since.

This probably explains why Dennett, as he felt more comfortable and satisfied with his formulation of content upon the appearance of Intentional Stance, issues of content hitherto does not get the seriousness and significance it enjoys in both these groundbreaking works. We see Dennett in fact turning his attention to consciousness in his next major undertaking, thus giving birth to the acclaimed Consciousness Explained (1991h). Besides presenting the Multiple Drafts as the cornerstone of his theory of consciousness, Dennett also draws together a whole thread of interesting recent findings in the field which he resoundingly weaves into this work. Dennett’s views on qualia which he first presented in Quining
Qualia (1990i) gets reinforced and elaborated here. So, given its richness and breadth, this work is Dennett’s magnum opus. And it probably demonstrates best Dennett’s depth and force as a seminal and provocative thinker. However, this work also epitomizes the end of Dennett’s long-standing quest (since Content and Consciousness) of first building a theory of content, and upon this construct a theory of consciousness. His subsequent writings are largely sharpening and refinement of these earlier views. Kinds of Minds (1996c) is to a large extent a reiteration of his views on mentality, perhaps with more elaborate discussion on other minds. Whilst Brainchildren (1998a) represents a collection of essays which extend back to the 1980s, which again, in many ways, extends and augments arguments made in preceding works.

After Consciousness Explained, Dennett is also probably best known to the public via Darwin’s Dangerous Idea (1995h). This could probably be heralded as the modern (updated and revised) version of Darwin’s Origin of Species (Darwin 1993), and Dennett playing the role of modern Huxley. Dennett’s aims here, as Brook and Ross see it, are:

1. Darwin’s theory of evolution is a powerful ‘universal acid’ for dissolving all manner of intellectual ‘skyhooks’ and other pseudoscientific props that philosophers (and not just philosophers) have wheeled onto the stage to try to patch up hopeless theories; and yet,

2. Darwin’s theory of evolution may deflate the pretensions of many accounts of morality but the ones it deflates are highly problematic in any case. Contrary to those who see Darwin as the destroyer of all morality, however, the theory of evolution leaves one perfectly satisfactory approach to morality and political philosophy untouched, namely, traditional Western liberalism (Brook and Ross 2002a: 9).

Prima facie, one could see this work as another exercise of a hard core neo-Darwinist campaigning for the essentiality of a Darwinian paradigm in our views
of things. Meanwhile, it could also be viewed as the long overdue Dennett's tour de force in supplying solid substratum for his earlier works on content and consciousness. Apparently, the most important nexus to his work, Dennett only supplies it a posteriori. Dennett's theory of content and consciousness, more than any other contemporary philosopher of mind (except probably Ruth Millikan) is deeply embedded in evolutionary thinking. Without this anchorage, Dennett's theory is likely to break down and appears partial. Hence, Darwin's Dangerous Ideas is important because it helps fuse Dennett's thinking into one complete whole, nailing it ever more firmly into the cast of neo-Darwinian orthodoxy.

The above are the milestones of Dennett's intellectual odyssey for the past three decades. Needless to say, Dennett's repertory is certainly not confined to these, for they are also buttressed by a wide range of secondary written and published (and unpublished) materials, spanning over thirty years of his intellectual life - that are no less important. The significance and importance of Dennett's works are perhaps best gauged by the attention and seriousness his works are regarded by peers and reviewers. In this, Dennett, like other major philosophers in the field, measures up well. Though strictly speaking, no one is a self-proclaimed Dennettian or ardent disciple of Dennett, but given the regularity his work is cited, considered and discussed in the field, Dennett has succeeded to etch for
himself a respectable, though hardly placid paradigm of contemporary discourse in cognitive studies.³

There is a wide range of critical works that address Dennett’s writings, right from Content and Consciousness. They address diverse aspects of Dennett’s rich arrays of work. Certainly, they vary in depth and quality. Some of these are unmistakably penetrative but there are a great number that may be less significant or even shabby. Amongst the more important and impressive collections, however, are notably Dennett’s target article coupled with commentaries appeared in various editions of Behavioral and Brain Sciences (1983, 1988, 1992), looking at different aspects and cover a wide range of issues. Though brief (many less than a page), many of these commentaries are written by people that figure prominently in the area, and hence largely perceptive and invaluable in contributing to Dennett’s scholarship. Next is Bo Dahlbom’s Dennett and His Critics (1993). For the first time, this brings together critical views from Dennett’s supporters and detractors alike edited in book form. Most recent compilation of similar nature is Dennett’s Philosophy: A Comprehensive Assessment edited by Ross et al. (2000), immediately followed by another anthology by Brook and Ross (2002) Daniel Dennett that seeks to explore in greater detail “the influence Dennett has had beyond the bounds of academic philosophy” (Brook and Ross 2002a: 3). Interpolated amongst these are special

³ Brook, for instance, countenances that Dennett has made important contribution to the study of consciousness. “Indeed, one can hardly pick up and leading journal of consciousness studies such as the Journal of Consciousness Studies or Consciousness and Cognition without finding

**1.3 Overview of Major Literature on Dennett**

It is perhaps instrumental at this juncture to take a closer look on these critical works before proceeding further to define the aims and boundaries of the study. Henceforth, we review some of these selected works on Dennett. As it is, at the point of writing, there exists no major analytical work devoted specifically to analyzing Dennett’s major theoretical positions on content and consciousness. Work of such nature that comes closest to this would be commentaries (as already discussed above) by various authors, compiled in the various editions of *Behavioral and Brain Sciences*. As these commentaries are arguably most representative as far as the analyses of these central issues are concerned, we would begin by reviewing them.

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Dennett’s name mentioned somewhere. The influence has not been easily won and the ground is still contested” (Brook 2002: 41).

As the abovementioned literatures are arguably more representative of critical analyses on Dennett’s works, we would hence employ them for review. However, as both 1992 *Behavioral and Brain Sciences* (which concerns more Dennett’s Multiple Drafts model) as well as Brook and Ross (2002) (which concerns more the implications of Dennett’s ideas in various relevant fields) are not the focus of present study, they are omitted. Admittedly, this could only be a selected review because a complete overview of all critical works on Dennett (including those found in the bibliography), would take us beyond the limit of the study, and is, in any case, quite superfluous (given the constraints). Interested readers could, however, consult the references provided in the bibliography.

Given the diverse ways the issues are perceived and the different strategies employed by various authors in approaching and dealing with the issues that Dennett raises, they are not susceptible to easy systematization and summary. Hence, it appears best (and perhaps also most
1.3.1 The 1983 Behavioral and Brain Sciences

The 1983 Behavioral and Brain Sciences commentaries on Dennett (1983a) is essentially an anthology of comments on the employment of Dennett’s intentional system to cognitive ethology. Beatty (1983) discusses the challenge of multiple research programs facing researcher. He favors approach that strikes middle ground and extols the virtues of diversity in approach. Hence, not surprisingly, in this regard, he views positively the contributions from Gould and Lewontin,6 the same way he thinks Dennett’s standpoint ought to be seriously heeded. Meanwhile, Bennett (1983) seems to concern more with the issue of teleological (intentional) and nonteleological (nonintentional) explanation and questions in turn the legitimacy of Dennett’s intentional stance. He also expresses concern over the importance to be rigorous in spelling out details of theory that Dennett proposes. Questions concerning referential opacity and anecdotal evidences are among the issues raised.

On the other hand, Churchland (1983) takes Dennett to task on problems facing Dennett’s instrumentalistic construal of mentality. She questions mainly the explanatory value, falsifiability and the general scientific status of Dennett’s construal of mentality as fiction. The theme that Danto (1983) underscores is straightforward. There is no way we could possibly escape the ‘shackles’ of sensible) to model the review of these critical analyses on Dennett by their sources of publication.
intentionality. Hence, given its indispensability and centrality, they could not be mere stances, the way Dennett takes them to be. Though noting that there is still much to be done before Dennett could convince the field researcher of the Sherlock Holmes method, Dawkins (1983) is generally sympathetic to Dennett’s program. He spends some time reinforcing and strengthening Dennett’s argument for adaptationism in the commentary.

However, Eldredge (1983) essentially reiterates the predominance of neo-Darwinian orthodoxy, whilst believing that the Panglossian question is a nonissue. Amongst others, Ghiselin (1983) questions the novelty of Dennett’s call for better approach to issues facing cognitive ethology, while also raising issues pertaining to anecdote and parsimony. Ghiselin also underscores the ill consequences of Panglossianism. Besides urging caution in the tenability of the pluralistic approach, he nonetheless believes that it is a mistake to see the study of adaptationism in optimal terms.

Meanwhile, Graham (1983) is concern over explanation that involves beliefs and desires. Above all, he stresses the importance of distinguishing between real and nominal systems, which he thinks Dennett fails to underscore, whilst also touching briefly on the question of falsifiability. Griffin (1983) acknowledges the importance of Dennett’s introduction of intentional elements into cognitive ethology but urges Dennett to be bold enough to hold out for a genuine version of the reality of animal mentality. Besides discussing briefly referential opacity,

6Both evolutionary biologists.
Harman (1983) generally argues that (strictly speaking) all forms of theorizing are formulations in virtue of stances and strategies. He also corrects, amongst others, Dennett’s interpretation of Grice.

Heil (1983) on this account is interested in the question of relation between higher order intentional states and language, besides also raising issues concerning the principle of parsimony and rationality. He believes that “evidence for the possession of higher-order intentional states must be linguistic in character” (Heil 1983: 366), hence thinks that it is doubtful to “assimilate language to communication,” because “communication...seems not to require any special sort of intentional backing” (Heil 1983: 366). Humphrey (1983) expresses his puzzlement over Dennett having to go to such length defending the Panglossian paradigm. To him, folk psychology itself is adaptive, an optimal method evolved for prediction. Cognitive psychologists are, in this sense, similar to evolutionary biologists who see adaptation in everything they find in nature, the way their cognitive psychologists counterpart would assume that living things have intentionality.

Jolly (1983) generally concurs with Dennett’s main ideas, though prefers Dennett to have dealt more with the differences between beliefs and desires. She believes that mentalism is relatively imprecise vis-à-vis explication from hard-core sciences but acknowledges correspondingly that in the course of these explanations, the mystery of intentionality is still unresolved. Clearly, Lewontin
(1983) is slightly enraged and displeased with the way Dennett has made him and Gould appear in the target article. Hence, in his reply, he corrects and rebuts Dennett’s interpretation of his ideas. Lewontin has also, in this regard, given a reiteration of the issues involved that nonetheless cast illuminating lights on the issues at stake. Lloyd (1983) thinks that Dennett’s ideas are provocative though he offers some criticisms. He thinks that the answers Dennett gives in relation to the ascription problem “to what (or whom) do we ascribe the rational beliefs and desires that explain evolution” (Lloyd 1983: 368) are not wholly satisfactory, but ultimately believes that this does not defeat intentional stance.

McFarland (1983) thinks that Dennett has not given us the essence of intentionality. He believes that it is important to reckon that “intentional systems involve representations that cause things to happen” (McFarland 1983: 369), hence the importance of distinguishing between a “passive and an active control system” (McFarland 1983: 369). He ends by describing his own personal experience in experiments involving pigeon that cautious us to the problem of interpretation in the employment of Dennett’s proposed Sherlock Holmes method. Meanwhile, Maynard Smith (1983), being one outstanding neo-Darwinist in contemporary evolutionary biology, is generally supportive of Dennett’s undertaking. Says Smith (1983: 370), “[t]he important thing to remember is that, in using optimization, we are not trying to confirm (or refute) the hypothesis that animals always optimize; we are trying to understand the selective forces that shaped their behavior.” Menzel (1983) opens with obiter
dicta in the beginning of the review, which accuses Dennett of not being sufficiently clear on the issues enlisted which, amongst others, questions the usefulness of thought experiments and emphasizes the need to reformulate philosophical and psychological concepts in light of new evolutionary and behavioral evidences, not the reverse. Menzel also doubts the novelty of Dennett’s claims, in which he duly cites the supposed forerunner of these views. Menzel, however, assents to the Sherlock Holmes method, with legitimacy he believes on par with that of science. In the concluding note, Menzel notes that there is nothing wrong in using mind-related hypothesis as tool for discovery in animal research.

Millikan (1983) expresses concern over the need to be more vigilant in the elucidation of the dividing point that marks off Dennett’s treatment of rationality that places it beyond behaviorism. In her own words, “[e]xactly where does Dennett’s proposed research strategy, whereby we would look upon the more complex of nature’s creatures with an eye to determining how ‘rational’ they are, break off with classical behaviorism” (Millikan 1983: 372). Meanwhile, Rachlin (1983) suggests that some form of mental statements can be replaced by probabilistic statements, hence avoiding the postulation of mentality. Amongst others, Rachlin also questions the rationality assumption of Dennett’s theory. In the end, he sums up by noting that “Dennett’s ‘intentional stance’ does not seem to rest any more firmly on the ground than those mentalistic stances that have previously faltered” (Rachlin 1983: 373). In spite of problems one may
encounter and the caveats he issues in one's employment of intentional interpretations, Ristau (1983) generally concedes that intentional analysis helps in designing experiments and sorting out observations, and uses his own injury-feigning bird research as point of illustration in discussing the different order of intentional levels.

Roitblat (1983), however, balks at the usefulness of Dennett's theory for distinguishing higher than the first order intentional system in nonlinguistic animals. "The method involves a linguistic trick (referential opacity) that on the face of it is not of much use in the analysis of nonlinguistic animal behavior" (Roitblat 1983: 375). Adding to that, he also suggests that the Sherlock Holmes method ought to be refined and more extensively developed to be fruitful. In spite of Rosenberg's (1983) favorable remarks on Dennett's *Contents and Consciousness* (1969), he believes that Dennett's presentation of it in the context of cognitive ethology here is inadequate. He believes that without a robust intentional theory as supporting pillar, Dennett's theory cannot be extended to the domain of cognitive ethology. Essentially, Rosenberg sees the present conceptualization of intentionality as backsliding vis-à-vis the earlier *Content and Consciousness*.

Contrary to the consistency criterion, which Seidenberg (1983) believes is not a good way to do science, Dennett's method allows for the generation of a range of hypothesis to be assessed based on behavioral evidences. Further to this, the
author generally complains that recent research on animal cognition generally employs intentionality, but fails to be rigorous when it comes to real empirical testing. Seidenberg, however, provides caveat on Dennett’s discussion of anecdotes and the views of Gould and Lewontin. Skinner (1983), on the other hand, thinks that Dennett’s resort to mentalist idioms to explicate behavior is superfluous. In his own words, “[w]e do not need them in accounting for innate behavior or for conditioned behavior in nonverbal organisms…. The dimension of wanting, intending, recognizing, and so on, as initiating feelings or states of mind, have never been established, and the hope that neurology will eventually show that they are physical is no more than a hope” (Skinner 1983: 378). Terrace (1983) believes that the essence of Dennett’s approach lies in his adoption of Grice’s method to his analysis, but is doubtful if Grice’s ideas could be so grounded. More specifically, Terrace questions if the vervets could act as Gricean audience. As a result of this, Dennett probably needs to rewrite the rules that define the different levels of intentional system. Apart from that, Terrace also emphasizes on the importance of paying more attention to the nonlinguistic facets when investigating nonhuman intentional systems.

1.3.2 The 1988 Behavioral and Brain Sciences

The 1988 Behavioral and Brain Sciences commentaries represent the next major discussion and response to Dennett’s work on content. Whilst previous commentaries focus more on his theory as applied to cognitive ethology, this
collection of discussions concentrates more on Dennett’s intentional stance theory. We would have a brief overview of these discussions in what follows. Basically, Amundson (1988) wishes to refute Dennett by arguing from the standard practise of evolutionary biology. He balks at Dennett’s relative inadequate discussion of the kinship between adaptationism and intentional stance interpretations. He also finds puzzling Dennett’s treatment of the causal mechanism of natural selection. Besides arguing for the absence of mentality in the working of natural selection, contra Dennett, the author believes that natural selection provides just the causal principle needed to account for the “semantic ascent from physical to teleological ascriptions” (Amundson 1988: 506).

Cheney and Seyfarth (1988) believe that Dennett’s major contribution here is essentially methodological. Both believe that intentional stance is important in helping to clarify claims on animals. However, Cheney and Seyfarth spend quite a great deal of time discussing higher order intentionality. In this, they have qualms over Dennett’s belief that monkeys are nonlinguistic owing to the way their group behavior is organized which leaves little room for private moments of contemplation. Meanwhile, Churchland (1988) balks at Dennett’s refusal to draw the eliminativist conclusion demanded by the premises they both share. According to the author, this puts Dennett in the forsaken land of instrumentalism with all its drawbacks. Dennett’s talk of center of gravity and the predictive power of folk psychology are also single out for discussion and rebutted – subsequently. Churchland ends his commentary by reminding us again
of the forlorn of instrumentalism. If reductionism is given up, the only coherent alternative left would be eliminativism.

Cussins (1988) concerns more in comparing Dennett with Fodor, focusing mainly on the philosophical status of scientific psychology. Amongst the issues raised along this theme is language of thought, the issues of realism and realization of the real essence (of Fodor) and the realization model (of Dennett). Ultimately, the author concludes that to Dennett, there can be no science of psychology, nor could there be a universal psychology, the way the converse is true in physics. Danto (1988) is a realist, hence he naturally resists Dennett’s hard-to-swallow unrealism of content. Specifically, Danto argues for a version of sentential states of mentality. As the author vividly argues, “[n]o one, I think, since Cratylus, has given up language because of perplexities in the theory of naming, and inasmuch as few will foreshow sentences because of vexations in semantical analysis, the latter give us little reason for foreshowing mental sentences” (Danto 1988: 510). On Dennett’s criticism of mental sentences, Danto nevertheless suggests that the questions are best left for empirical investigations.

Dretske (1988), who is also strongly inclined towards realist construal of mental properties, is puzzled by Dennett’s reliance on stances to ground mental properties. Dretske claims that the way mentality works is good enough reason to accord them legitimate reality. As he puts it, “[i]f belief-talk is meant to describe something perfectly objective and real, why aren’t beliefs perfectly objective and
real?” (Dretske 1988: 511). The author also finds fault with Dennett’s construal of center of gravity (in relation to intentionality) and the issues of indeterminacy in grounding belief. Meanwhile, Dummett (1988) contends that Dennett, in his delineation of intentional systems, ought to have paid more attention to the distinction afforded by linguistic and nonlinguistic animals. Indiscriminate interpretations only result in misrepresentation. Besides finding fault with Dennett’s compatibilist influence in his construction of the intentional theory, Dummett also criticizes Dennett’s portrayal of Frege and his conception of the notional world.

Goldman (1988) laments on Dennett’s conceptualization of derived intentionality. Besides raising doubts on seeing genes and mother nature as the genesis of intentionality, Goldman believes that intentionality does not depend on the nature of its origins. Dennett’s notion of derived intentionality that is partly derived from Dennett’s indeterminacy of content, is according to Goldman, mistaken. Griffin (1988) reiterates his conviction that perhaps, in rudimentary ways, it is profitable to grant conscious thinking to animals. We would be committing the error of anthropomorphism to think that in order to qualify as thinking being, the animals have to function like us as full fledge linguistic animals. Meanwhile, Harman’s (1988) thesis is straightforward and brief - formulated in logical form. His main concerns are with Dennett’s ways of attributing intentionality and the way things are viewed from intentional stance. Harman concludes that Dennett’s formulation of the stance is tautological. While
concurring with some of Dennett's ideas, Kirsh (1988) thinks that the omission of causality in his exposition of belief and competence theories is unacceptable. Without causality, there is no way we could realize the competence in terms of design, neither do we have basis to decide equivalent competence theory based on knowledge of hardware.

Kitcher and Kitcher (1988) disagree with the way Dennett has formulated the optimality and rationality principles, besides also complaining that they are insufficiently clear. Pressed further by more detailed evolutionary and content attribution analyses, some of Dennett's (instrumentalistic) claims appear dubious. In particular, the authors also find fault with Dennett's exposition of functional indeterminacy. Lycan (1988) thinks that Dennett's rejection of the causal efficacy of mental states is flawed. Amongst the reasons cited for his objection is the indispensability and the explanatory values of belief states ought to convince us of its truth. Further, according to the author, Dennett's position would finally amount to analytical behaviorism. Besides, threat of circularity and dissociation of folk psychology and Dennett's construal of mental states would result in conceptual discontinuity between folk psychology and empirical psychology.

MacLennan (1988) believes that Dennett's theory of intentionality could be remarkably strengthened if he takes the question of causality seriously. In particular, such consideration could help to clarify three things: i) attribution of
rationality (optimality); ii) alternative consideration to the reliance on sentential consideration; and iii) directedness of consciousness (MacLennan 1988: 519).

Newell (1988) is generally empathetic to Dennett’s aims. In fact, he notes that his description of the knowledge level is akin to Dennett’s exemplification of the intentional stance. Hence, his major concern in the essay is to discover if Dennett thinks there is a difference, and what could that be? Newell himself has drawn up six, which he also subsequently discussed.

Premack (1988) criticizes Dennett’s distinction of real intentional systems from those that are make-believe (non-genuine). In particular, the author provides some grounds where such distinction could be more properly made. Premack has also commented on issues pertaining to multiple levels of control, rationality and anecdotes. Roitblat (1988) briefly sketches the traditional positions that demarcate animals having minds and those without, which he then extends to its modern parallel. However, the author proposes his own alternative view which he believes help resolve the strategic and representational issues briefly raised at the beginning of the paper. Meanwhile, Rosenberg (1988) believes that instead of following Dennett in bestowing intentional items with heuristic existence, we are equally justified to view them as entity equivalent to the way physical entities are treated. Besides, contra Dennett, intentional state by itself predicts nothing. The author also finds Dennett’s linking of abstracta to subpersonal psychology difficult to accept.
Searle (1988) thinks that Dennett’s theory of the mind is implausible. In particular, besides claiming that Dennett’s account of intentionality vacuous, Searle baulks at Dennett’s treatment of intrinsic and derived intentionality. Searle also takes the opportunity to comment on Dennett’s remark on his Chinese room thought experiment. Sloman (1988) concurs that many of the views Dennett attacks are flawed. But Sloman also argues that Dennett is mistaken in separating intentional from design stance. In his own words, “[b]y skilful use of philosophical techniques of analysis to further the more detailed and systematic study of design requirements for various kinds of intentional abilities, Dennett could make a major contribution to our understanding of the mechanism underlying intelligence” (Sloman 1988: 530). Smith (1988) essentially seeks to refine and extend Dennett’s notion of explicit, implicit, and potentially explicit knowledge within the logic-programming paradigm. For instance, he says that if implicit knowledge could be identified with logical consequence, the resulting distinction could be made sharper and more useful (Smith 1988: 530).

Whilst acknowledging that the connectionist debates may undermine strong realist position, Stich (1988) nevertheless believes that connectionist models favorable to nonrealist views do not lend support to Dennett’s version of irrealism. The author believes that there could be no middle way between eliminativism and realism that one could choose from. Meanwhile, Taylor (1988) essentially concerns himself with Dennett’s mistreatment or the undermining of the importance of mattering in theories of mind. He specifically resorts to pain to
make his case. Kleeck (1988) is sharply critical that Dennett has not, at the end, produced anything concrete worth taking seriously. As he puts it, "[d]espite its virtues as a philosophical theory, at present intentional system theory offers little to psychology but promises" (Kleeck 1988: 534). Specifically, he balks at Dennett for not having provided a rigorous intentional theory in terms of its reduction from folk psychology and in providing a competence model.

1.3.3 The 1993 Inquiry

Following the above, lets briefly consider the collection of articles that appear in Inquiry (1993), concerned essentially with Dennett’s Consciousness Explained (1991h). Stephen Clark (1993) asserts that Dennett has not really argued for his case and the evidences he cites are dubious. Hence, he claims that Dennett’s aim in Consciousness Explained fails, for it presents, "but does not demonstrate, a fully naturalized account of consciousness that manages to leave out the very consciousness he purports to explain" (Clark 1993: 3). The author also balks at Dennett’s defeasible account of consciousness, besides questioning his association of meme to the mind and genes.

Foster’s (1993) essay is sympathetic to dualistic account of mind that Dennett rejects. He argues that Dennett’s functionalistic account of mind rests on his earlier rejection of dualism. But he finds Dennett’s grounds for such rejection unfounded, and hence fails to discredit dualism. From this, the author believes
failure to discredit dualism leaves Dennett’s own theory questionable. In particular, Dennett’s account is vulnerable to the standard objection of functionalism. Meanwhile, Sprigge (1993) finds fault with Dennett’s strong inclination towards indeterminacy in his characterization of consciousness. His paper purports to examine Dennett’s theory from an anti-materialist point of view. Contra Dennett, the author asserts that “it remains clear that consciousness is not some obscure theoretical posit but the reality the inherent nature of which we know most intimately…Despite the difficulties we may still find ourselves in about such matters, we must surely resist a materialistic metaphysics which denies the most evident facts of our being” (Sprigge 1993: 56).

Lockwood (1993) argues that Dennett fails to disparage Cartesian Materialism. Besides having qualms with his association of consciousness to culture, he claims outright that Dennett’s account has left consciousness unexplained. And Dennett has also misrepresented qualia. Hence, all in all, though Dennett’s discussions are illuminating, the traditional mind-body problem is typically left unresolved. On the other hand, apart from raising issues pertaining to culture, both Fellows and O’Hear (1993) argue that Dennett’s concerted campaign to deconstruct the mind results in heavy price we pay in watering down consciousness to something we could barely recognize in the end. Besides concurring with Searle’s Chinese room argument and Mary’s thought experiment, the authors also express reservations in Dennett’s claim that his philosophy is a legacy of Wittgenstein’s thinking.
Meanwhile, Siewert (1993) also expresses concern that Dennett has not really explained consciousness beyond showing how it could be expunged. He argues that Dennett in his arguments (issues pertaining to blindsight and zombie) contend that certain things are inconceivable, so if this could be shown otherwise, as the author argues that it could, then Dennett’s claims are untenable. Finally, Siewert argues that the problems Dennett face with his theory of consciousness is a result of epistemological assumptions he has not adequately justified.

Seager (1993b) also believes that Dennett is more concern to explain away consciousness. According to the author, Dennett’s verificationism is too radical to amount to anything. In particular, Seager aims “to show that the sort of verificationist arguments that Dennett employs are fundamentally similar to classical skeptical arguments. The philosophical status of such arguments remains perennially unclear, but none of them produce conviction in their ostensible conclusions. I argue that Dennett’s verificationist strategy suffers from the same fate” (Seager 1993b: 113). The author also claims that banishment of conscious experience does not follow from Dennett’s well-articulated cognitive pandemonium model.
1.3.4 The 1993 Consciousness and Cognition

In what follows, we continue with review of articles found in *Consciousness and Cognition* (1993). Mangan (1993) is unusually critical of Dennett’s philosophy in particular, and functionalism in general, as answers to the mind problems. Essentially, Mangan finds that Dennett’s way of treating the issue is having the problem backward for it is generally detrimental to research, as it denies the very data in which it seeks to investigate. Meanwhile, both Baars and McGovern (1993) are generally skeptical with conceptual arguments employed in philosophy at large. In this, the authors enlist some of the common pitfalls they diagnose in philosophical discourse. Whilst conceding that Dennett’s philosophy is free from some of the difficulties, the authors nevertheless contend that the end result of Dennett’s philosophy is generally unfruitful.

Toribio (1993) sketches and comments on the existing approach to consciousness. He divides them into the externalist and internalist approaches. Rejecting externalist approach as unfounded, he goes on to consider the monist alternative within internalist paradigm in which it was further separated into the transitive and intransitive distinctions. Finding the intransitive account inadequate, he then moves on to consider the transitive alternative, in which he takes Dennett’s theory to be representative of the emergentist views. Contending that this emergentist position seems to offer our best chance to uncover the mystery,
he nevertheless finds faults in Dennett’s account which he claims explains away consciousness, besides overemphasizing our uniqueness as language users and the discontinuity that exists in Dennett’s account of content and consciousness.

McCauley (1993) argues that Ramachandran’s (an eminent neuroscientist) findings on the blindspot and his other research on artificially induced scotomas cause problems in Dennett’s account of mind. More specifically, in a concluding note, the author maintains that “if blindsight is also a phenomenon different in kind from the blind spot, which it seems it must now be, then we have pulled the plug on Dennett’s Rylean intuition pump for his deflationary treatment of qualia, as his move from our perfect homely intuitions about blind spot to the elimination of sensory qualia is mediated by assumption of continuity between blind spot and blindsight. The point is that Dennett’s disqualification of artificial scotomas on the basis of their competitive character has undermined his case for establishing that continuity” (McCauley 1993: 164). Though Ramachandran (1993) begins with praises for *Consciousness Explained* (Dennett 1991h), the author nevertheless notes that Dennett’s account is plagued with problems. Specifically, Ramachandran balks at Dennett’s dependence on engineering standpoint to anchor his theory. Ramachandran also questions Dennett’s notion of filling in, which he finds erroneous and inconsistent with facts.
1.3.5 Dennett’s Critics

Dahlbom’s book represents the first attempt to compile works of Dennett’s critics into a book form. Many of these critics figure prominently in the field. Dawkins (1993) essentially seeks to extend and elaborate Dennett’s notion of meme inhabiting the brain and turning it into mind. The author couches his discussion in terms of viruses, via the metaphor of computer viruses. Churchland and Ramachandran (1993) balk at Dennett’s notion of filling in. Both contend that existing facts do not fit with Dennett’s interpretations. As they countenance, “[a]ssuming data are relevant at all to this question – and it is hard to see how they can fail to be – then Dennett’s refusal to budge an inch on the ‘no filling in’ hypothesis in the teeth of countervailing data has a hint of ‘Flat Earthiness’” (Churchland and Ramachandran 1993: 50).

Haugeland’s “Pattern and Being” (1993) discusses Dennett’s vacillation between identifying reality of patterns and reality of the elements of patterns, as well as his wavering in the definitions of patterns. Besides contending that Dennett’s identification of belief to center of gravity misleading, the author also believes that Dennett’s mild realism “is much more likely to confuse than to illuminate” (Haugeland 1993: 64). Meanwhile, Fodor and Lepore (1993) essentially seek to refute Dennett’s argument for intentional irrealism. According to these authors, Dennett relies on discussions of interpretivism to repudiate
intentional realism, but since the principles of Projectivism and Normativism that his interpretivist arguments depend on are false, Dennett’s project is doomed from start.

McGinn’s “Logic, Mind, and Mathematics” (1993) purports to argue that “mental logicism amounts to a kind of foundationalist thesis about the cognitive mind: mentation is erected on a bedrock of logical structure” (McGinn 1993: 90). In the paper, the author considers Dennett’s thesis of mind as a variant of mental logicism. On the other hand, Millikan (1993) concerns herself with issues of representation. She begins by distinguishing and labeling four different kinds of phenomena associated with representation. She then explores issues relating inner representations to ascription of beliefs. Finally, Millikan uses the next half of her paper to discuss matters pertaining to computational manipulation in Language of Thought.

Akins (1993) in her paper “What is it Like to be Boring and Myopic” examines if we can know what it is like to be bats. She believes science is quite capable of providing satisfactory answers to this question, though only time could tell. The fact that we come up short at present to the answer is probably due to our relative ignorance of the associated representational issues. Meanwhile, Dahlbom (1993b) seeks to stress the importance of sociological approach to the problems of mind and consciousness, and argues at the end that his approach suggests addition of ‘artificial stance’ to Dennett’s stances. Particularly, in his own words,
"[w]hat I will do, in effect, is outline an artificial, or social, alternative to naturalism, and what would be more natural than to call it 'socialism'?" (Dahlbom 1993b: 161). On the other hand, Rorty (1993b) tries to urge Dennett on to accept a version of his metaphilosophical position. As Dennett writes, "Rorty eggs me on in this game, largely approving of the plays I have made to date, but urging me to be more ambitious, more radical, and more dashing as a metaphilosopher, than I have been willing to be" (DC 233). Amongst the issues touched upon by Rorty in this essay are intrinsicality, holism and realism.

1.3.6 The 1993 Philosophy and Phenomenology Research

Tye (1993) concurs that there is much that Dennett writes in *Consciousness Explained* (1991h) he agrees with. However, in this paper, Tye questions Dennett's discussion of Stalin and Orwell, as well as his delineation of seeming and believing he believes unsound. Finally, the author concludes that phenomenal consciousness remains puzzling in spite of Dennett's model, and there is much that is yet to be explained. Essentially, Jackson (1993) resolutely argues that there is a compulsory truth-maker question for any materialist account of mind he believes Dennett fails to address. As Jackson puts it: "[t]he truth-maker question for materialist is to specify what it is about a person's material nature which necessitates their psychological nature...The problem is that Dennett leaves it unclear where he stands on the truth-maker question" (Jackson 1993: 901).
Shoemaker (1993) helps clarify some issues Tye (1993) raises pertaining to qualia and judgement. The author also raises some issues pertaining to folk psychology he believes Dennett has not dealt with. The paper subsequently focuses, via ‘inverted’ thought experiment that both behavioral and functional accounts fail to do justice to phenomenal qualia. Meanwhile, Rosenthal (1993) essentially concerns himself with discrediting Dennett’s reliance on using first-person operationalism in his approach to consciousness - accomplished using Rosenthal’s HOT (higher order thought) model. “Without additional support for first-person operationalism, then, we may hope to explain consciousness by a version of the MDM [Multiple Drafts Model] that lacks those operationalist consequences” (Rosenthal 1993: 918).

1.3.7 The 1994 Philosophical Topics

The voluminous 1994 *Philosophical Topics* represents the most lengthy anthology on Dennett to date. It comes to five hundred pages of critical works written on Dennett’s theory. We would briefly review the theme and emphasis of each in turn. Baker (1994) is essentially skeptical that, given the way Dennett’s theory is formulated, his theory of content could provide a basis to ground his theory of consciousness. By focussing on the interface where content meets consciousness (viz., conscious belief and content fixation), and relying on the ‘depth’ metaphor (as she puts it), she claims to have shown that the above two
theories are incompatible. Baker also suggests that in virtue of the real
intentional patterns, brain-mapping test is unnecessary for a third person account
of consciousness. Block’s (1994a) essay takes issues with Dennett’s association
of culture with consciousness. The gist of Block’s criticism lies in his claim of
Dennett’s conflation of culture’s creation of and culture influence on
consciousness. The fault, Block claims, lies in Dennett’s application of
unanalyzed notion of consciousness. Hence, the author claims to have
demonstrated through various considerations of consciousness (access,
phenomenal and minimal self-consciousness) that Dennett’s theory is false.
Parallel to Dennett’s emphasis on culture is his reliance on the concept to ground
consciousness, which Block also rebuts.

Dretske (1994), in a way, extends Block’s criticism of Dennett’s employment of
concepts to ground consciousness. Dretske relentlessly argues that conceptual
uptake (knowledge, belief, recognition, judgement and the likes) could not
ground conscious experience. None of these are required for us to see anything.
As Drekste puts it, “[s]eeing is not knowing, and it isn’t believing either”
(Dretkse 1994: 42). So, while Dennett sees judgement (Drekts e uses belief) and
experience as one and the same, Dretske sees their distinction as the most
distinctive differences in consciousness. The author then resorts to animals and
infants to make his case. On the problem of qualia, the author urges Dennett to
renounce the philosophical accretions rather than qualia as such.
Ivan Fox (1994) writing chiefly concerns issues of representation. According to him, there are essentially two ways mental representatives are individuated. On the one hand, there are mental representatives that allow us to represent the external world in the form of surrogates of external objects, the way for instance elected representatives are stand-in for us in the Congress in passing legislations and ascertaining administrative agendas. On the other hand, at the other end of the spectrum is the representation view. As Fox outlines, “[m]ental representatives of external objects might be like social security numbers, that is, mental states which succeed in representing external objects through an arbitrary but consistent input-output correspondence with them” (Fox 1994: 60). Both methods entail very different functional architecture. Ultimately, however, Fox argues that the representation system is incompatible with human cognitive system that aligns better with the surrogate view of the external world (by which the author spends the greater portion of the paper justifying). The author is concerned more in defending the above, and Dennett is discussed *ad hoc*.

Levine (1994) confesses that he is a qualophile, hence in this commentary, he resolutely defends a version of qualophilia. Essentially, Levine argues that whilst Dennett’s thesis may jettison bold qualophilia, it does not work against modest qualophilia. Hence, one could be a materialist whilst continuing to propound a version of qualia reality for both are not incompatible. Levine spends the early part of the essay distinguishing between bold and modest qualophilia, which is then employed to establish that qualophobia thesis is in general (not only
Dennett’s) untenable. Levine enlists five strategies generally employed by qualophobic, which he subsequently discusses and rebuts.

McLaughlin and O’Leary-Hawthorne (1994) argue that Dennett’s brand of materialism is a version of behaviorism. Both purport to establish that Dennett’s writing drive him to hold the supervenience thesis (psychological nature supervenes on behavior), hence a version of behaviorism. In particular, the authors spend some time discussing the supervenience thesis before turning their attention to discuss how Dennett’s views on intentionality entail the thesis. In the final section, however, they argue that the supervenience thesis is false and hence Dennett’s brand of behaviorism ought to be renounced. Rey’s (1994) concerns are different. Being a realist, he sees no reason for us to hold a Dennettian version of instrumentalism (or Paternalism), it is more fruitful instead to allow them genuine explanatory mental attributes. Rey in fact defends Cartesian Materialism because he does not believe that Dennett’s writings have refuted it owing to his preoccupation with (his particular brand of) instrumentalism that, according to Rey, is a result of confusion from constructivism, idealization, causality and above all else, his strong inclination for verificationism.

Mark Richard (1994) expresses concerns over the way Dennett has characterized lectern in his exposition of the intentional system theory, which the author dubs the lectern problem. According to the author, to solve the lectern problem, Dennett would need to give “a principled reason for denying that lecterns, trees
and other such thing have intentional states, while remaining within the spirit of the suggestion that to be a believer is to be an intentional system” (Richard 1994: 292). In the end, the author seeks to establish that Dennett has failed to solve the problem, and the distinction between belief and subdoxastic states also fails to account for the difference. In other words, according to the author, the arguments show that “Dennett can’t answer the question, What isn’t a belief? But then he can’t adequately answer the question, What is a belief?, either” (Richard 1994: 315). [sic]

Rosenthal (1994) addresses issues pertaining to first person operationalism. “It’s a form of operationalism because appearance determines reality; but its operationalism is restricted to the first person case, that is, to ‘the realm of subjectivity’” (Rosenthal 1994: 321). Rosenthal finds fault with Dennett’s identification of Multiple Drafts model as a form of first person operationalism. The author discusses aspects of the model he believes free of the predicament. Rosenthal then defends an integrative model familiar to Multiple Drafts model which is employed in turn to demonstrate the redundancy of first person operationalism. Carol Rovane (1994) is interested in Dennett’s discussions of the concept of personhood. Essentially, Rovane argues that Dennett’s notion of person that is inevitably normative would lead him to the possibility of what she terms multiple and group persons. Upon the weakening of Dennett’s strong Kantian underpinning and the strengthening of rationality requirements in moral personhood, the author argues how these two normative aspects of personhood
lead to normative analysis of personal identity with its subsequent implication on multiple and group persons.

Michael Slote (1994) concerns himself essentially with problems of moral luck. Slote contends that problem pertaining to moral luck has not been well regarded in the literature of moral theory. Hence, in this essay, the author is chiefly concerned with demonstrating how luck presents a messy problem to ethics. Subsequently, Slote tries to show how this could be overcome. Though this presents a satisfactory resolution, it is still far from perfect. The author takes this to be a tribute to Dennett’s discussion of similar issue in *Elbow Room* (1984a).

Meanwhile, Tolliver (1994) explores issues of subjectivity and objectivity of color, whilst simultaneously defends a version of subjectivism in color experiences. Hence, Tolliver argues that color objectivism - in whatever guise - is untenable, including Dennett’s version of it in the form of evolutionary relativism. Basically, the aim is to demonstrate that “the visual system does not represent objects as having the color properties presented in those experiences. Rather, these sensuous color properties are part of an internal code for the type-individuation of visual representations; i.e., color experiences is part of a system of internal book-keeping. Any content our color experiences have is best thought of as information content rather than representational content….It certainly is not necessary for maintaining a distinction between veridical and illusory color perceptions” (Tolliver 1994: 412).
Van Gullick (1994) claims that he is not persuaded with Dennett’s philosophy. The author, who is generally a realist, has qualms over Dennett’s notion of Cartesian Materialism, Orwellian and Stalinesque indeterminacy and first person operationalism. More specifically, Van Gullick hopes to have shown through arguments in the essay that i) phenomenal realism need not be committed to applying the Orwellian-Stalinesque distinction in cases such as color phi; ii) even in the color phi case, future evidence to resolve the dispute may be possible if one rejects first-person operationalism as phenomenal realists do (Van Gullick 1994: 453).

Webb (1994) expresses concern that Dennett’s theory of intentional attribution is inadequate because it fails to account for witnessed behaviors, which folk psychology readily incorporates. This omission would result in those who take the stance to attribute wildly erroneous attributions to the subject. However, the author nonetheless argues that even Dennett’s theory is to incorporate this element, it would not be able to do so coherently without also courting radical mental irrealism or end up embracing logical behaviorism.

White’s (1994) project is generally sympathetic to Dennett’s thought. However, the author countenances that Dennett’s functionalistic construal of mentality and the attempt to ground qualia in virtue of content is open to doubt. According to the author, successful response would entail its application over broad issues. His
concern is to see how such account could be provided in the context of color experience. Block’s thought experiment and Dennett’s theory of notional content are both considered and discussed. McConnell (1994) focuses his discussion on knowledge argument. According to the author, it purports to establish property dualism. In this essay, though McConnell agrees with orthodox arguments (including those of Dennett’s) that balk at the conclusion of the thesis, the author nonetheless argues that knowledge argument is not dead. Far from it, the author actually seeks to revive it by examining a version of Frank Jackson’s argument. Conceding that Jackson’s argument is problematic, McConnell nevertheless tries to defend a different version, which if successful, hampers the orthodox solution to the mind-body problem.

1.3.8 Ross et al. ‘Dennett’s Philosophy: A Comprehensive Assessment’

We now turn our attention to surveying papers compiled in Ross et al. (2000). It may be illustrious to be aware of the organizing rationale of the paper. According to the editors, “[t]he wide topical range of Dennett’s work presented us with a challenge in organizing the Newfoundland conference, and in editing this book. On the one hand, we sought a group of papers that would jointly capture the full sweep of Dennett’s professional interests. On the other hand, we certainly did not want a dozen papers all trying to synthesize his entire corpus. We decided not to commission papers by topic; instead, we invited contributors with an eye to
achieving a match between the range of principal interests on which the panel had collectively published and Dennett’s” (Ross 2000a: 6).

Crowe (2000), as evolutionary zoologist, sets before him the task of examining three crucial thesis set out in Darwin’s Dangerous Ideas: i) Dennett’s resort to cranes rather than skyhook as tool of explications; ii) The relationship between natural selection and engineering processes; and iii) The extent in which natural selection acts as ‘universal acid’ that has application beyond biology. The author argues that except for (i), Dennett’s arguments generally falter in (ii) and (iii). The author strengthens his arguments here by drawing on examples from evolution of guineafowl he investigated for over thirty years.

Thompson says that his paper is meant to be “friendly amendments” (Thompson 2000: 202) to Dennett’s undertaking. The author believes that despite the provocative title Consciousness Explained, Dennett’s undertaking is far from finished. And Husserl could play a role in helping to clarify and extend some of the claims that Dennett makes. Hence, accordingly, his aims in the paper are twofold. On the one hand, he wishes to show that Dennett’s heterophenomenology is akin to Husserl’s phenomenology. Following this, Thompson demonstrates where the concepts in Consciousness Explained lead to problems, and suggests subsequently how application of the phenomenological method could help resolve the problem.
Brook (2000) is mainly skeptical on Dennett’s treatment of seeming. In the main, the author maintains that indeterminacies found in consciousness (the Stalinesque and Orwellian dichotomy and the phi phenomena) ought not to jettison the reality of seeming. The author believes likewise in the case of misrepresentation and the problems of inverted spectra. Apart from this, Brook also finds fault with Dennett’s discrediting of seeming through judgement. The author also considers, among other things, Dennett’s views on pain in relation to judgement, which he finds inadequate. Finally, Brook believes that the notion of subject stands up against Dennett’s attack, at least at the F-level (task level), if not at the P-level (procedure level).

Millikan (2000), perhaps next to Dennett, is the philosopher most inclined to resort to natural selection and evolution to the understanding of mind. In this essay, Millikan questions Dennett’s seeing intentional stance as more basic than the design stance. Though Millikan concedes that there is inevitable indeterminacy in the vagueness of what natural selection has actually selected for, this is only local. As she puts it, we ought not to “confuse epistemological determinacy with ontological determinacy. Indeterminate evidence for history is not indeterminate history” (Millikan 2000: 63). In particular, Millikan also dismisses Dennett’s invocation of Quinean/Davidson indeterminacy as unwarranted, besides having qualms with Dennett’s application of intentional stance to natural selection.
Kenyon (2000) proposes an account that meets many of Dennett’s aims without having to embrace Quinean indeterminacy. Besides, he purports to underline the problems and tensions that underlie Dennett’s instrumentalistic approach to the mind. Further, as Kenyon puts it: “I conclude with some speculation on how to accommodate a form of intentional realism recovering some of the intuitions served by the indeterminacy thesis, without being committed to the doctrine. In particular, I wish to suggest an account of intentional states meeting many of the aims of Dennett’s account, and yet which is effectively divorced from the indeterminacy thesis” (Kenyon 2000: 78).

Ross (2000b) argues for a view he calls ‘Rainforest Realism.’ The author contends that if beliefs and the likes are to be regarded real, then Dennett’s distinction between the *illata* and *abstracta* ought to be abandoned. This is, however, a small price to pay, because according to his formulation of rainforest realism, Dennett has “available to him an ontological thesis that weaves his special varieties of antireductionism, naturalism, and realism into a consistent whole” (Ross 2000b: 165).

Mooney’s (2000) paper is concerned with the ethical aspect of Dennett’s theory. As Dennett (2000a: 383) says, Mooney urges him to push further in his advocation of plural values. In particular, the author seeks to extend Dennett’s critiques of deontology and utilitarianism. It is not only the greedy reductionism that ought to be rejected but also its counterpart - pleonexic maximization.
Mooney argues that “[t]his should provide further reasons for the rejection of rule fetishism on the grounds that it does not fit the facts, and for rehabilitating the notion that ethical time constraints and ‘computer intractability’ are vitally important in determining both moral deliberation and what sort of ethical system we should adhere to. It will, I hope, also lead us to a deeper appreciation of Dennett’s preference for plural values” (Mooney 2000: 309).

Polger (2000) takes up Dennett’s challenge on zombies by asserting that zombie arguments could be non-question begging and useful. The author defends “the concept of functionally identical zombies” (Polger 2000: 281) and concludes that he has sufficiently met Dennett’s challenge. That is, the author contends that he has managed to formulate a largely consistent and functionally identical zombie that avoids the problem of epiphenomenalism.

Though the Stalinesque and Orwellian phenomena may be indistinguishable, Rosenthal (2000) contends that his model of higher order thought (HOT) may, however, help throw light on the problem. And since his higher order thought states are determinate, Rosenthal model is not particularly inclined to characterize consciousness in the Stalinesque and Orwellian format. So, according to Rosenthal, “[r]ejecting first person operationalism allows us to distinguish being conscious of our mental states from the states we are conscious of….it may well be that mental states have determinate content even though the way we are conscious of those states is a function of the subjectively
spontaneous self-interpretations embodied in HOTs... those HOTs can themselves be determinate in content” (Rosenthal 2000: 302-3).

Viger (2000) begins by an exposition of what he takes to be different ways of reading the intentional stance, owing to different aims in characterizing the stances. On one end is the instrumental construal of the stance, whilst at the other spectrum is the mild realist interpretation. The author contends that there is a way to interpret the intentional stance, commensurate with the two interpretations above, which helps mitigate problems in Dennett’s philosophy and throws light on the nature of our type of mind. By using Dennett’s tool, Lloyd (2000) argues that the campaign against realism and Cartesian theater would also discredit the concept of representation. In abandoning Cartesianism, Lloyd suggests that we replace it with a new ontology, phenomenal realism, which he considers a tentative effort along the path stricken by Dennett, but which assumes realism on par with that of science. In this, Lloyd hinges on postulation such as phenomenal complexes and detector to further augment his case.

Meanwhile, Seager (2000) balks at the emptiness of superficial naturalism. He argues that naturalism ought not to be blindly associated with the naturalization of the hard-core sciences. Owing to what he characterizes as the Plato problem, no investigation of the mind could possibly escape what Seager terms methodological mysterianism. However, all is not lost, because we could still opt
for a version of quasi naturalization of mental properties, "which requires neither outright reduction to fundamental science nor yet an empty faith in the naturalist outlook" (Seager 2000: 96).

1.4 Aims, Scope and Limitations of Study

These plethora of research materials constitute vital and imperative component of Dennett's scholarship. Necessarily then, the present study is largely conceived in the contextual setting of the above. However, this study does not, by any means, purport to imitate or merely readapt the foregoing literally, nor does it strive to replicate or echo strictly these critical works of the past. In fact, a significant part of present study is identified by the absence or void in contemporary scholarship it helps redress. Hence, insofar as possible, this study aims to invigorate a fresh critical analysis of Dennett's philosophy. It is hoped that, within its own limits, this study could strike new grounds and breathe new life to Dennett's (critical) scholarship. This undertaking is timely as Dennett's philosophy has arguably reached full-blown maturity at this time. There would

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7 And other scattered works found in the bibliography that are no less important.
8 This certainly is not meant to imply that it closes up all these gaps in Dennett's scholarship. Admittedly, there is still much more that can be done. The present study is only a modest contribution.
9 Of course, this is also far from suggesting that present study is completely novel in content. This would be too presumptuous for given the collection of commentaries on Dennett, overlaps and fortuitous coincidences is only expected and inevitable. However, relevant sources that underpin these symmetries are duly acknowledged. Besides, most of these close parallels are either couched in different lights or they are employed for further developments and refinements.
10 The crux of his theory of mind (content and consciousness) has been fully elucidated, and they appear complete. So, for instance, according to Brook and Ross (2002a: 10), Dennett is currently working on a new book on free will. In fact, Freedom Evolves is set for publication in 2003.
surely be future alterations and reshaping in his work but the well-entrenched core of the theory is likely to remain unmarred for some time to come, lest there is major revolutionary breakthrough in the field.

Meanwhile, more importantly, though Dennett’s position has been analyzed and criticized by peers and reviewers alike, there is yet to appear a work that seeks to scrutinize Dennett’s views in toto (or to put it somewhat less exaltedly – in its relative complete whole). Hence, though significant part of analytical component of the study contains relatively fresh insights and new materials, what perhaps really sets it apart from other pursuits of similar nature is its more thorough and in depth analysis of Dennett’s work in comparative totality (as far as the focussed areas are concerned) because given the relatively more comprehensive assessments of Dennett’s corpus, it has the added edge of subsuming disparate parts of Dennett’s works, hence allowing it better appraisal of the cohesiveness and consistency of Dennett’s claims and assertions at large - set against Dennett’s oeuvre. As it is, most of existing commentaries are somewhat limited precisely because of the absence of this more inclusive privilege. Hence, this study hopes to contribute to the narrowing of this lacuna. A review of the literature reveals that so far no work of the same scope and nature has been done at the point of writing.¹¹ Most of the commentaries that address Dennett’s work

¹¹A work that comes close to this is probably a doctoral dissertation done in the University of Nottingham in 1996. However, the author, though criticizes Dennett at some point, is generally sympathetic to a Dennettian approach of mind, and seeks to develop his undertaking within a Dennettian framework. As Smith asserts, “[m]y position can be developed in numerous ways but I shall elaborate it in terms of a general analysis and critique of Daniel Dennett’s philosophy of mind. It do this for several reasons. Firstly I believe his work is extremely valuable and worthy of a study in its own right. Dennett has made significant progress in generating new
are small-scale (article in journals and books), addressing specific features of
Dennett’s thought.

The aim of study, in the main, is the investigation of the dual backbone that
informs much of Dennett’s works, viz., content and consciousness. Specifically,
it aims to analyze

i) Dennett’s theory of content which he claims is the basis in which his
theory of consciousness is founded. We would scrutinize Dennett’s
intentional stance in relation to science. Further to this, we would
examine Dennett’s chess playing example, his notion of lectern, his thesis
of original and derived intentionality and also issues pertaining to
subpersonal model;

ii) Following this is an examination of Dennett’s thesis of quinning qualia.
We would look at the properties that are supposedly to ground qualia -
namely ineffability, privacy, privilege access and intrinsicaly;

iii) Further to the analysis on content and consciousness above, the study
also scrutinizes Dennett’s heterophenomenology (or third person
standpoint) which forms Dennett’s methodological basis to the mind and
a concomitant analysis on the way Dennett straps his theory of content
and consciousness into balanced whole; and finally

iv) Attention is also given to Dennett’s views on meme, culture and the way
consciousness is related to qualia, amongst others, for he claims to banish
qualia yet he writes a book *Consciousness Explained* (Dennett 1991h).
Just what is he denying and can he do so coherently\(^{12}\)

ways of conceiving of what it is to be a subject of consciousness. Despite this he has been much
maligned and I hope to show that there is more substance to his position than many give him
credit for. Secondly I support the same general thesis and approach, and many of the same
supporting theses, as Dennett. Many of the technical developments he initiates – in particular
the introduction of his ‘intentional systems approach’ and exploitation of computational
concepts – lend themselves to deployment in my project. Thirdly, despite this affinity with his
approach I do nonetheless have numerous misgivings about the precise development of his
position and certainly don’t accept it in its entirety. Developing my project in a Dennettian
context allows me to analyze, exploit, criticize, and develop his approach” (Smith 1996: 26).

\(^{12}\)That said, not every aspect of Dennett’s philosophy is single out for critical analysis. There are
admittedly auxiliary aspects of his work that is not addressed here. Amongst the more
significant of these are his views on filling in, blindsight, free will, morality, zombies, self,
Searle’s Chinese room and the knowledge argument, as well as his likening of meme to gene.
This also encompasses above all else the Multiple Drafts model. These issues are not explicitly
Whilst the study does not claim to be comprehensive in purpose and approach, it nonetheless purports to permeate the raison d'etre of Dennett’s Weltanschauung. Succinctly, amid Dennett’s extensive writings on diverse subjects, this study is aiming to provide a critical and rigorous treatise at the heart in which much of Dennett’s repertoire is constructed and informed. Specifically, it seeks to explore the tenability of a Dennettian philosophy of mind (and the extent it is vulnerable to criticisms). Finally, it is hoped that this work would open up new vista and genuinely contributes to Dennett scholarship.

1.5 Organization of Chapters

Accordingly, this study is divided into three parts. Part I would look at the first half, or the nucleus of Dennett’s philosophy whilst Part II concentrates on the issues of consciousness and qualia. Part III comprises the concluding chapter.

Prior to embarking the analytical quests, Dennett’s philosophy of mind is briefly discussed because given the extensiveness of Dennett’s corpus and the accompanying constraints, it is impossible to analyze in critical detail each and every aspect of Dennett’s work. Selective co-optation is inevitable. Besides, as far as the above is concerned, there seems nothing else I could have done to improve on what we already have in existing literature. They are in large measure self-contained, embodies much more than I could offer. However, omitting them does not in any significant ways put in jeopardy arguments made in the study generally. Having said that, it is not the intention here to give the impression that all of Dennett’s work is hereby scrutinized. This admittedly is the ideal, but given the constraints, this is not quite possible. As the library I am working from is not one of major world libraries with rich international collections, most of Dennett’s unpublished materials (papers presented in workshops, colloquia, invited lectures, responses and so on) could not be solicited. But all is not lost because Dennett has taken great effort to put up most of his important written works (some unpublished and some yet to be published) on the web. And Dennett has generously advice through correspondence that these works could be cited with quotations. Hence, this is not a serious shortcoming likely to adversely affect the completeness and viability of present
presented as the preamble, by bringing together related themes and putting them into coherent whole. This is important so that readers are better able to appreciate Dennett as a thinker and follow arguments presented in the ensuing analytical sections. Hence, for the most part, Chapter 2 (of Part I) and 5 (of Part II) serve as gateway to a brief introduction of Dennett’s theory of content and consciousness respectively. Needless to say, exposition here is not meant to be exhaustive, neither are they by any means critical. The aim here is to present Dennett’s thinking and thoughts in as faithful manner as possible. Of course, it goes without saying also that not all aspects of Dennett’s writing are discussed. Issues raised here are concerned mainly with Dennett’s key thoughts that form the crux of his philosophy. Though these two chapters mainly reproduce literally Dennett’s thought, albeit reformulated and condensed, they are important to ensure the general cohesiveness and flow of arguments as well as satisfying the essential logic of presentation and organizations of the thesis.

Analytical review begins in Chapter 3. This chapter is mainly concerned with the placement of Dennett’s theory against the wider context of science. Science is the monumental attainment of human undertaking. But men (as far as we are its best personification) cannot function without intentionality nor folk psychology – the way we know it. Hence, this chapter seeks to examine how Dennett’s theory of intentional stance gets in line with the practise of science. Early

undertaking. The side consequence is likely to be immaterial for either all his important thoughts are laid down in published works or they could be found on the web.

Of course, to readers who are versed in Dennett, this may not apply. However, contents presented in these chapters do not necessarily coincide with issues single out for analysis in
developments of atomic theory and particle physics are employed to make the arguments more cogent. Issues raised here are critical because if it could be shown that Dennett's theory cannot account for the way science is usually formulated, then his theory is likely flawed. Conversely, if it could be shown that Dennett's theory meshes in well with the way science is conceived, this certainly helps boost confidence in the theory.

Chapter 4 opens with a brief discussion on Dennett's conception of intentional system and lectern. Again, this is the key to Dennett's conceptualization of content. Besides analyzing the tenability of Dennett's conceptualization of intentional system, it spends some time scrutinizing Dennett's notion of lectern. Issues on what constitute intentional system raised in the beginning of the chapter is then taken up again and explored more concretely via chess playing computer. Issues of attributions and causality are examined next, by which Dennett's notion of original and derived intentionality is presented and analyzed. These are not independent issues, however, but interrelated. Hence, they stand or fall together. Discussion in this chapter ends with a consideration of Dennett's individuation of subpersonal model via the postulation of intentional stance theory. This is, arguably, another pillar of Dennett's theory of content. If this falls apart, Dennett's theory is likely to lose the support that lent it wings to soar high.
As far as Dennett’s theory of consciousness is concerned, without language, culture and meme, Dennett’s theory would be like a car without wheels. Hence, making them the starting point of the critical analysis of Part II is never more befitting. Unlike the Multiple Drafts thesis, Dennett’s linking of this triplet to consciousness is a daring and novel postulation, though outside (especially Julian Jayne’s) influence is not to be totally discounted. As prevailing discussions of this is largely conjectural, Dennett’s theory is no different here. Present analysis, however, is mainly concerned with the tenability of Dennett’s claim of culture (and language) in accounting for the emergence of consciousness. In between, we have the opportunity for brief excursion into issue of complexity pertaining to consciousness. In the final section, we turn our attention to Dennett’s deep rooted belief in the role of memes to yield some kind of softwares that result in human consciousness. Though relatively brief, issues raised here are of paramount importance to the entire formulation of Dennett’s theory. Because if this is not viable, the whole of Dennett’s theory of consciousness is likely to come crushing down.

Subsequently, we turn our attention to Dennett’s views on qualia as expounded in Quining Qualia (1990i). This comprises detailed arguments Dennett presents to reinforce the other major cornerstone of his theory, i.e., to quine qualia. Dennett’s argument hinges primarily on the four tradition-bestowed properties of qualia he singles out for close scrutiny. Dennett’s strategy here is straightforward. If qualia is alleged to possess these properties, and if it could be
shown otherwise, then qualia does not exist. Analysis here explores the theoretical viability (or legitimacy) of seeing this quartet as the properties of qualia. This is arguably important for if they are found wanting, then Dennett’s project is doomed or destined to fail, even at the point of inception. It is divided into two parts. The first examines these quartet properties in toto, whilst the later part investigates them independently. Generally, the aim of this chapter is to throw doubt on the way Dennett claims to have banished qualia by virtue of reasoning found in the paper. Chapter 8 is essentially an extension of arguments found in Chapter 7. Issues pertaining to qualia and consciousness not discussed above are more adequately treated here.

Chapter 9 of Part III sums up the work. This is an important chapter. Basically, it examines the bedrock that holds up Dennett’s entire superstructure. It begins with a critical analysis of Dennett’s resolute first person methodology to mind, followed by the scrutiny of his heterophenomenological approach. Next is the examination of the extent by which Dennett could be said to have explained consciousness, with a concluding note on the interdependence of content and consciousness as well as a final run down on Dennett’s views on syntax and semantics. All these strike the heart of Dennett’s Weltanschauung. Consideration of these foundational issues in the final part of the study is germane because if they are discredited or put to doubt, then regardless of how noteworthy or significant Dennett’s earlier arguments, ultimately they are likely only to be of peripheral concerns.