

PART II

CONSCIOUSNESS

CHAPTER 5

CONSCIOUSNESS EXPLAINED

5.1 Introduction

Some basic discussions on Dennett's methodological assumptions of consciousness set the stage for the chapter. Follow next is an excursion into the heart of Dennett's theory of consciousness, viz., Multiple Drafts model. Subsequently, we focus on culture which Dennett deems critical in the evolutionary history of men's consciousness. The rest of the chapter is devoted to discussion on issues pertaining to quining qualia. Mainly, the aim of this chapter, like those found in Chapter 2, is to introduce the reader to the crux of Dennett's thinking on consciousness.

5.2 Heterophenomenology

To apprehend Dennett's *Consciousness Explained* (Dennett 1991h), it is crucial to grasp Dennett's heterophenomenological method, which essentially is a third person approach to consciousness and mind (RWEC 230, BC 356, 366). Consistent with his generally third person recourse to the mind, and "[b]eing a philosopher of firm physicalist conviction" (BS 312), he proposes a neutral and

objective method that do justice to studying consciousness scientifically.¹

Heterophenomenology is in fact the epitome to the claim that he is "as scientific a realist as one could find" (DC 210; HSCE, CE 66-78, 461).² To Dennett, first person accounts are generally unreliable, dubious and plagued with inconsistencies (CE 65-70). Hence, one ought to be cautious and assume as little as possible in one's undertaking to uncover the mysteries of mental properties.

Mental phenomenon is noted for its inextricable difficulty. This, however, should not be taken to mean that they are not susceptible to scientific scrutiny (CE 71). In fact, Dennett's heterophenomenology is postulated precisely to bridge this seemingly unbridgeable lacuna, to see if there is an objective basis to ground claims commonly associated with the first person.³ Data for empirical study of consciousness is constructed via concrete and objective method. On the one hand, Dennett's heterophenomenology necessitates the subject to receive instructions from experimenters (in terms of inputs),⁴ where subjects provide responses via verbal feedbacks (in terms of outputs), which is later converted to transcripts in a manner that render as faithful as possible all that transpired (CE 74-76, HSCE 160-161). Text constructed is hence purported to be sincere, true and reliable

¹ Dennett has consistently emphasized the neutrality (agnostic) of his method (see especially FFP).

² Dennett has presented a heterophenomenological method which he claims to do "justice in detail to the best work in cognitive science, and lay the foundation for the future by dissolving certain pseudo-problems that have infected the imaginations of theorists" (Dennett 1993b: 57). In fact, he proclaims "that heterophenomenology is nothing other than the scientific method applied to the phenomena of consciousness... for scientific study. I did not invent the heterophenomenological method; I just codified, more self-consciously and carefully than before, the ground rules already tacitly endorsed by the leading researchers" (Dennett 1993b: 50; FFP 3).

³ In other words, he is employing a scientifically legitimate method to study consciousness that would do justice to our rich array of phenomenal experiences.

accounts of subjects. Meanwhile, intentional stance is invoked in interpretation of text as well as in designing of experiments (CE 76-78). Ultimately, subjects are given the privilege to correct drafts before any transcribed texts are rendered final (CE 96).⁵ In other words, careful precautions are taken to ensure that, as far as possible, the final text reflects correctly whatever that is to be accounted for in subject's phenomenological world. Hence, heterophenomenology allows characterization of subject's experiences in neutral and uncontroversial terms.

In the final analysis, however, it is noteworthy that to Dennett, what really counts at the end is phenomenology is real only if we could find also corresponding neural states that support these claims. This is in fact the crux (or the backbone) of heterophenomenology.

My suggestion is that if we were to find real goings-on in people's brain that had enough of the 'defining' properties of the items that populate their heterophenomenological worlds, we could reasonably propose that we had discovered what they were really talking about – even if they initially resisted the identifications. And if we discovered that the real goings-on bore only a minor resemblance to the heterophenomenological items, we could reasonably declare that people were just mistaken in the beliefs they expressed, in spite of their sincerity (CE 85; see also CE 81, 98, 407).

Clearly, to Dennett, subject's alleged claims of phenomenal experiences is justified insofar as there exist ways to map phenomenal items to brain events. And if no such mapping is found, then phenomenological claims are vacuous (illusory in other words). Parallel to this, Dennett employs the analogue of Shakey (robot of sorts that performs simple mechanical functions) to show that humans are not

⁴ “[V]erbal communications is used to set up and constrain the experiments. Subjects are asked to perform various intellectual tasks, solve problems, look for items in displays, press buttons, make judgements, and so forth” (CE 74).

immune to the sort of confabulations that Shakey succumbs to (CE 94, HSCE 172-173).

Accordingly, Dennett construes heterophenomenology text (and hence the denizens of heterophenomenology world) as a world of theorist's *fiction* (CE 78-81). Borrowing from literary theory, Dennett suggests that we interpret heterophenomenology world similar to the way we interpret works of fiction. We read heterophenomenology text as we read novels. Hence, phenomenological items are real the way facts and characters are in novels. In fact, to Dennett, phenomenal experiences are nothing more than dispositional properties of judgement.⁶ Sensational or phenomenal quality of 'what is it like to be something' is seen as dispositional properties of information processing states. In other words, Dennett takes them to be the idiosyncratic and inherent disposition to react to incoming stimuli (QQ 528-529, 535; CE 371-375, 387-389; Dennett 1991f; BC 142-147).

In line with the above, Dennett contends that there is no phenomenal reality beyond content (MNM 921, RWEC 232-235, Dennett 1995i).⁷ We have fallen

⁵ "[W]hen you are put in the heterophenomenological clutches, you get the last word. You get to edit, revise, and disavow *ad lib*.... You are the novelist, and what you say goes" (CE 96; SHCE 161, 174).

⁶ "Are qualia functionally definable? No, because there are no such properties as qualia. Or, no, because qualia are dispositional properties of brains that are not strictly definable in functional terms. Or, yes, because if you really understood everything about the functioning of the nervous system, you'd understand everything about the properties people are actually talking about when they claim to be talking about qualia" (CE 459-460).

⁷ "I must grant, though, that at first sight my theory's domain of direct, immediate consciousness seems catastrophically underpopulated: there are no colours, images, sounds, *gestalts*, mental acts, feeling tones or other Proustian *objets trouves* to delight the inner eye; only featureless – even wordless – conditional-intentions-to say-that-p for us to be intimately acquainted with" (AP 97).

into the trap of supposing there is a difference between something *seeming* pink and thinking (or judging) that something is pink. In fact, there is no difference. There is nothing *seeming* pink beyond judgement (CE 134, 364).⁸ Conscious experiences are hence construed in intentional and cognitive terms, for it "has no properties that are special in *any* of the ways qualia have been supposed to be special" (QQ 520). Dennett's conviction in this is unmistakable. "If the distinction between consciousness and unconsciousness has nothing to do with anything sophisticated like judgement, what else could it involve?" (BC 348).

This is clearly illustrated in Dennett's rebuttal of Block's characterization of consciousness into access- and phenomenal-consciousness. Phenomenal consciousness constitutes the qualitative 'what is it like' to experience something, whilst access consciousness refers to the availability of content for reporting (thought, for instance). Dennett argues that there is no principle distinction between them. Different richness of phenomenality could be accounted for by corresponding richness in content (Dennett 1995i: 252, CE 322-338).⁹ It is hence

⁸ "If you ever had a sudden presentiment that someone was looking over your shoulder, or a *premonition* that something dire was about to happen, you are acquainted with my topic. These are examples *par excellence* of the sort of propositional episode I have in mind: they are propositional – that is, they are thinking that p...Needing a convenient term for these episodes, I call them judgements – though they differ somewhat in their characterization from the judgements encountered in other theories.... I am left defending the view that such judgements *exhaust* our immediate consciousness, that our individual streams of consciousness consist of nothing but such propositional episodes, or better: that such streams of consciousness, composed exclusively of such propositional episodes...." (AP 95; BS 165).

⁹ As he countenances, "[t]here is an alternative, much more direct path that Block ignores, perhaps because it is deeply counterintuitive at first blush: the varieties of consciousness he thinks he sees falling under P-consciousness and A-consciousness can all be accommodated under the two rough *quantitative* headings of *richness of content* and *degree of influence*. Some episodes of mental life have impoverished content, while others are so rich in content – so full of information about the perceived world, for instance – that one has the sense that no practical description or catalogue could do justice to them" (Dennett 1995i: 252).

erroneous to suppose that there exist some extraneous qualitative properties over and above content (Dennett 1993d: 891, BC 141-147, CE 369-411). This, in part, is borne out by his strategy of developing a theory of content that in turn serves as basis for subsequent theorizing on consciousness (Dennett 1969: xiv-xv, BS x, CE 457-458, BC 355-356).

Dennett's basic strategy of building theory of consciousness on content informs and constitutes the underlying philosophical building block of *Consciousness Explained* (Dennett 1991h). This is evident in his individuation of consciousness in terms of the predominance amongst elements of content-fixation or judgement (RWEC, BC 134-135, MNM 921) – as a result of rivalry or competition. Though there is continuity of *Consciousness Explained* with previous works, (in which basic tenets of his philosophical position remain intact), there is obvious shift in his theoretical discussion of consciousness in *Consciousness Explained*.

Prior to *Consciousness Explained*, as in *Brainstorms* (Dennett 1978g), Dennett's theory of consciousness is basically conceived in terms of hierarchical bureaucratic control system, playing roles Dennett himself likens to government's bureaucracy control systems. In *Consciousness Explained*, however, there is fundamental shift in his conceptualization of consciousness. Dennett no longer adheres to his earlier view of hierarchically organized central control system (at least not the hardware). In fact, Dennett strongly argues for the nonexistence of a focal point where everything comes together. In other words, there is no Cartesian

Theater.¹⁰ Instantiation of mental states are mainly conceived in terms of multiple drafts, made up basically of massive parallel processors running simultaneously without central coordinator, realizing a pandemonium instead of bureaucratic homuncular processing mechanism.¹¹ Following this, it is the Multiple Drafts model we turn.

5.3 Multiple Drafts Model

To grapple with this model that forms Dennett's *summum bonum* view on consciousness, the best place to start is undoubtedly the Cartesian viewpoint by which he vehemently aims in overthrowing, to be replaced by his Multiple Drafts (BC 364). This is also the model Dennett claims capable of handling phenomena (of consciousness) that appears puzzling on traditional Cartesian paradigm.

¹⁰ Or, "the illusion that there is a place in our brains where the show goes on, toward which all perceptual 'input' streams, and whence flow all 'conscious intention' to act and speak" (BC 346).
¹¹ In the Multiple Drafts model, "this single unified taking is broken up in cerebral space and real time... the judgemental tasks are fragmented into many distributed moments of micro-taking" (Dennett and Kinsbourne 1992b: 234). "Since there is no place where 'all comes together,' no line the crossing of which is definitive of the end of preconscious processing and the beginning of conscious appreciation, many of the familiar philosophical assumptions about the denizens of human phenomenology turn out to be simply wrong, in spite of their traditional obviousness" (BC 365). Dennett also expresses similar line of thought elsewhere. Based on Kosslyn's metaphor of CRT (cathode ray tube), he develops his arguments by using a tool familiar to engineers, CAD (computer aided designs). He juggled with three thought experiments with each an 'advancement' over the other on design. Dennett argues how, through these examples, the postulation of Cartesian Theater is unmotivated, as the functions perform 'in the mind's eye' could be equally well handled by other models. His examples take one from the primitive Mark I CADBLIND (a CAD meant for the blind) with a CRT to display the processed images for the perusal of Vorsetzer (a computer vision system) that comes with a TV camera targeting the CRT – analogous to the same sort of presentation in the Cartesian Theater for the benefits of an inner observer. Dennett shows how this metaphor could be relinquished in the subsequent 'improved' versions of the CADBLIND systems. In Mark II, the system works without the CRT and the TV camera but still cling on to a weak version of Cartesian Theater in its representation of the processed information. Mark III avoids the Cartesian pitfall as this third generation system could 'tell' Vorsetzer about what has been processed, without the need to 'show' in terms of image-rendition for the benefit of Vorsetzer (CE 285-297).

Cartesian dualism reduces reality into two basic entities, mind and matter – each having features absent from the other. On this thesis, mind and brain are distinct. There is an unbridgeable gap separating the two. One reason why dualism is appealing is that it seems to concur with our everyday notion of psychological properties. Our experiences suggest they are different. The doctrine of dualism is tempting and seems to fit comfortably with our commonsense notions of having a soul, personal identity (or self) and immaterial mind. Due to its inherent difficulties, however, dualism is a doctrine that has few serious proponents today (KM 24).¹² Traditional Cartesian dualism may not have many adherents, but Dennett argues that the legacy of Cartesian thinking in modern day thoughts about mind is manifested in the form he calls Cartesian Materialism (CE 101-111, Dennett and Kinsbourne 1992a: 183-185). Though no one is strictly a card-carrying Cartesian Materialist, this doctrine (has subtly and implicitly) finds its way into the writing of many contemporary thinking on mind (Dennett and Kinsbourne 1992a: 185).

Descartes postulated some sort of central arrival point in the brain, the pineal gland which was suppose to serve as the point where physical brain turns into immaterial mind. It is also the place, arrival of which an event becomes conscious to the subject. So, in like manner, according to the Cartesian viewpoint, one can in principle draw a line that separates conscious from unconscious phenomena.

There is a terminating point that serves as gateway to conscious experience, a place where all information meet. However, a Cartesian Materialist needs not espouse a dualist demarcation of mental phenomena (into the material and immaterial), for they work strictly within the domain of the physical.

She is, however, committed to the view that there is special place in the brain, a Cartesian Theater, that broadcasts brain events upon arrival in the theater, by means of which they become conscious through presentation to inner audience (or observer).¹³ Hence, for those who hold this view, there is always a fact of the matter whether at any given moment, a specific brain event is conscious. There is always stream of consciousness in which individuation is determinate. Temporal properties of brain events correspond to (or fix) order of events obtained in consciousness. It is likewise always possible to give determinate answer to the question whether certain brain event is pre- or post-consciousness.

Hence, on this account, Dennett contends that though at present we have outgrown and become disillusioned with Cartesian dualism, still we are stuck with the bad habit of thinking within the matrix of Cartesian Theater (CE 144). In view

¹² "For many people, this idea (dualism) is still the only vision of consciousness that makes sense to them, but there is now widespread agreement among scientists and philosophers that dualism is – must be – simply false..." (ZH 29).

¹³ Symons puts it well: "Descartes' account of the disembodied subject has served a complicated set of purpose in modern thought. The principal holdover from the Cartesian view of mental life is what Dennett calls the Cartesian Theater model of mind. This view of mental life tends to characterize conscious experience as a unitary point of view that acts as a kind of disembodied spectator. Our cultural and philosophical heritage has shaped our view of ourselves as spectators on our own experience. Like an audience member, sitting in a darkened theater, I sit and watch my experiences pass by on the stage in front of me. The Cartesian account of mental life separates us from the body and the world, viewing it on the stage (or screen) of experience" (Symons 2002: 77; Dennett 2001g: 136).

of this, Dennett has painstakingly underscored the inadequacy of this view and shown how the plight could be overcome with his Multiple Drafts model (BC 132-134). In fact, *Consciousness Explained* (Dennett 1991h) can largely be seen as attempt to defend and elaborate this thesis – where significant part of the book is written with this purpose in mind. So, coming up, we examine Dennett's Multiple Drafts model in more detail.

On Dennett's Multiple Drafts model, processing in the brain (for various kinds of mental activities, e.g., thoughts and perceptions) is accomplished via the processes of discrimination and interpretation of fragmentary drafts in the system. As Block describes, in essence, "main part of the theory is the widely held view that the mind is composed of numerous semi-autonomous agencies competing for control. Much of the content of the theory concerns the original functions of these agencies and their mode of interaction and organization" (Block 1993: 186).

In other words, on multiple drafts model, there exist distinct modules that process different aspects of a perceptual state (or other cognitive states).¹⁴ Each of these modules independently processes these inputs, simultaneously in parallel fashion by means of content 'detection,' 'discrimination,' and 'fixation' (CE 113, Dennett

¹⁴ As Dennett observes, "[p]ositing a gang of homunculi would indeed be just as empty a gesture as the skeptic imagines, if it were not for the fact that in homunculus theories, the serious content is in the claims about how the posited homunculi interact, develop, form coalitions or hierarchies....Pandemonium theories...posit lots of duplication of effort, waste motion, interference, periods of chaos, and layabouts with no fixed job description. Calling the units in these very different theories homunculi (or demons or agents) is scarcely more contentful than calling them simply...units. They are just units with particular circumscribed competences, and every theory, from the most rigorously neuroanatomical to the most abstractly artificial, posits

1996b: 164, RWEC 222).¹⁵ However, one central claim of Multiple Drafts is Dennett's contention that content discrimination has only to occur once (CE 113, Dennett and Kinsbourne 1992a: 185). This is consistent with his rejection of Cartesian Theatre, i.e., there is no need for further transduction for the benefits of inner eye.¹⁶ So, content, once fixed by different modules need not be re-represented or recast for the benefits of inner observer, because there is no special medium rendered in the form of a theater for inner perception (MNM, Dennett 1998e, Dennett 2000a: 376-377, Dennett 1996i: 2, Dennett 1995d: 2-4).¹⁷ However, at any one time, there may be multiple streams (or drafts) at different stages of processing, continuously subject to reinterpretation, revision and other editing processes (CE 111-112, 253-254; Dennett and Kinsbourne 1992a: 185, BC 133-134).¹⁸

some such units and then theorizes about how larger functions can be accomplished by organizations of units performing smaller functions" (CE 261-262).

¹⁵ For an illuminating reconstruction of Dennett's theory, see Akins (1996a).

¹⁶ "The most seductive confusion could be called the Myth of Double Transduction: first, the nervous system transduces light, sound, temperature, and so forth into neural signals (frains of impulses in nerve fibers) and second, in some special central place, it transduces these trains of impulses into some other medium, the medium of consciousness! That's what Descartes thought, and he suggested that the pineal gland, right in the center of the brain, was the place where this second transduction took place – into the mysterious, nonphysical medium of the mind. Today almost no one working on the mind thinks there is any such nonphysical medium. Strangely enough, though, the idea of a second transduction into some special physical or material medium, in some yet-to-be-identified place in the brain, continues to beguile unwary theorists" (KM 72).

¹⁷ Probing which forms essential component in the original formulation of the theory is later retracted (see Dennett 2000a: 379).

¹⁸ "According to the Multiple Drafts model, all varieties of perception, and indeed all varieties of thought and action, are accomplished in the brain by multi-track processes of interpretation and elaboration that occur over large fraction of a second, during which time various additions, incorporations, emendations, and overwritings of content can occur, in various orders" (Dennett 1992d: 10). "The main thrust of Multiple Drafts is well captured by Salter in his penultimate paragraph. Enough information may often be available to fuel more than one version of reality. Then drafts compete in Pandemonium-like rivalry... and the rivalry is resolved in favor of one over the rest... but not for good. The competition is never ending. There is no definitive or archival draft. As Salter remarks, update frequency, great in the early stages, declines as perception recedes

Important implication of this view is that none of these drafts constitute final or canonical version. In fact, Dennett likens this to real life publishing where drafts of text are constantly in circulation, with each competing to be dominant, and thus continuously subject to revision, therefore no version is nonarbitrarily the final version, as even the published copies could later be subject to revision (CE 125-126, Dennett 1992d: 11). On such multiple parallel processing system, one does not expect narrative sequences to reflect in orderly and consistent manner the way outer world is organized. In fact, one is likely to encounter distortion of sequences that does not mirror the way original perception is organized (Dennett 1996i: 12-14, Dennett 1995d: 11).¹⁹

However, notwithstanding the above, we have not discussed how consciousness is to be accounted for in Dennett's scheme of things. To Dennett, however, the key that closes the gap between content discrimination and consciousness lies in the predominance of *winning* contentful state.

Mental contents become conscious not by entering some special chamber in the brain, not by being transduced into some privileged and mysterious medium, but by winning the competitions against other mental contents for domination in the control of behavior, and hence for achieving long lasting effects – or as we misleadingly say, 'entering into memory.' And since we are talkers, and since talking to ourselves is one of our most influential activities, one of the most effective ways for a mental content to become influential is for it to get into position to drive the language-using parts of the controls (KM 155).

into memory. Reinterpretation in memory may continue indefinitely...depending on the contextual (cueing) conditions that from time to time arise" (Dennett and Kinsbourne 1995: 810).

¹⁹ "[I]t does not follow from the fact that we are equipped to make sequence judgments about events in our experience that there is any occurrence in real time of a sequence of neural representations of the events in the order judged. Sometimes there may be such a sequence occurring in the brain, but this cannot be determined simply by an analysis of the subjective content of experience; it is neither necessary nor sufficient condition for a like-ordered subjective sequence" (Dennett 1996b: 163).

So, content that becomes conscious is also necessarily the corresponding brain event that emerges dominant from the spectre of competition amongst these drafts to get precipitated in consciousness, in other words, content that achieves mental fame (BC 134-139, RWEC 224-228). As he also emphasizes,

I propose as the antidote to the Cartesian Theater model the claim that consciousness is a species of mental fame. Almost literally. Those contents are conscious that persevere, that monopolize resources long enough to achieve certain typical and 'symptomatic' effects – on memory, on the control of behavior and so forth. Not every content can be famous, for in such a competition there must be more losers than winners. And instantaneous fame is a disguised contradiction in terms. Being 'in consciousness' is more like being famous than like being on television, in at least the following regards. Television is a specific medium; fame isn't. The 'time of transduction' can be very precise for television, but not for fame. Fame is a relative/competitive phenomenon; television isn't. (Some people can be famous only if others, who lose the competition, remain in oblivion.) And then consider the curious American institution, the Hall of Fame. There's a Baseball Hall of Fame, a Football Hall of Fame, and for all I know, a Candlepin Bowling Hall of Fame. But as many inductees into such edifices must have realized at the time, if you're already famous, then being inducted into the Hall of Fame is a mere formality, acknowledging the undeniable; and if you're not already famous, being inducted into a Hall of Fame doesn't really make you famous. No 'quantum leap' or momentous transition in phase space or 'catastrophe' occurs when you cross the finish line and enter the Fame module – unless of course that event is famous on its own hook, because of your current fame or the current fame of the institution (Dennett 1996i: 7).

Dennett applies his model to account for some puzzling phenomena (for instance, color phi and the metacontrast phenomena) he claims well handled by his model (Dennett and Kinsbourne 1992a: 186). It may be important at this juncture to look at Dennett's notion of Orwellian and Stalinesque revisions (see, for instance, CE 115-126, 139-153; Dennett 1996i: 9-10; Dennett and Kinsbourne 1992a: 190-196; Dennett 1992d: 11-17; Dennett 1995d: 6-9), the crux to his theory of consciousness. In fact, both accounts aim to demonstrate the way pre- and post-experiential revisions provide equally legitimate explanation to phenomenon we ultimately experience. Orwellian revisions concern essentially with post-experiential tampering on memory of what we actually experience. For instance, I may be giving tutorials to eight different tutorial classes. As it is, I was supposed

to discuss in passing theory XYZ to the final eighth class, which I did for the rest of earlier seven classes. However, too engross in following notes and too concern to finish on time, in *actual fact*, it was left out. But as far as I could recall later, my memory tells me that I did go through the materials with them. How could one explain my conviction? How could the revision be explained?

On Orwellian account, I was in fact initially conscious of myself omitting theory XYZ from teaching, but this awareness is later contaminated and completely erased from memory, replaced by insertion of earlier memory (i.e., the memory of me covering the theory with earlier tutorial classes) into my current state of memory, revised completely my true experience of the situation and hence my memory of them. Hence, there is post-experiential revision of what we actually experience or aware of. Meanwhile, on Stalinesque account, tampering occurs even before I am conscious of the fact that the theory has not been covered. Hence, I am not conscious of the omission at all. Unlike Orwellian's tampering, there is no deletion of initial memory, as what I would be conscious from the very outset is that theory XYZ has been covered, due to pre-experiential revision of the fact. Hence, on Stalinesque account, memory is intact, subject suffers from *perceptual* illusion. On the contrary, the reverse is the case on Orwellian interpretation, subject suffers from *memory* illusion whilst perception remains intact. Which account is the correct explanation of my conviction? Was it a post- or pre-experiential revision? Dennett contends that these questions have definite

answer if we are still thinking in terms of a Cartesian Theater, but it does not admit an answer on his Multiple Drafts model.

5.4 The Evolution of Consciousness

One of the most important innovations in evolutionary history crucial for the birth of *homo sapiens* and the spread of cultures and civilizations was the invention of language. Dennett argues that, upon the dawn of language, this provides the ground for the onset of another wave of evolutionary revolution through the birth of meme.²⁰ According to Dennett, along the evolutionary path of human acquisition of language, there comes a time when vocalization becomes important component of communication, from which men began to recognize virtues of self-stimulation by talking and asking oneself questions, as is drawing and writing to oneself. This is important (innovation) as it advances new and novel ways in which cognitive systems could be enhanced through virtual wirings that weld up subsystems not hardwired in the brain (CE 194-199, 228).²¹ This spread and

²⁰As indeed, “[t]housands of memes, mostly borne by *language*, but also by wordless ‘images’ and other data structures, take up residence in an individual brain, shaping its tendencies and thereby turning it into a mind” (CE 254, emphasis added). As Dennett also emphasizes, “there is a huge difference between our minds and the minds of other species, a guif wide enough even to make a moral difference. It is – it must be – due to two intermeshed factors, each of which requires Darwinian explanation: (1) the brains we are born with have features lacking in other brains, features that have evolved under selection pressure over the last six million years or so, and (2) these features make possible an enormous elaboration of powers that accrue from the sharing of Design wealth through cultural transmission. The pivotal phenomenon that unites these two factors is *language*” (DDI 371, emphasis added).

²¹“The haven all memes depend on reaching is the human mind, but a human mind is itself an artifact created when memes restructure a human brain in order to make it a better habitat for memes” (Dennett 1990a: 133), as indeed “transformation of a human brain by infestations of memes is a major alteration in the competence of the organ” (CE 209).

creation of meme is not possible without the invention of language.²² So, this is undoubtedly crucial discovery in the design space of evolution as it confers tremendous advantage of flexibility to the discovery of new design space, as well as accelerating by many order of magnitudes the rate of evolution of human mind (DDI 381).²³

Here, our aim is to see how meme is related to discussion on consciousness.²⁴ The function of meme to cultural evolution is largely similar to that of gene to biological evolution.²⁵ Genes alter phenotypes that natural selection acts upon via its impact on the genotypes. Similarly, memes cause cultural change – the biological equivalence of evolution but in different medium - through memetic evolution in the mind (the way genes evolve in cells) via the process of natural selection. Hence, both genes and memes observe similar laws but act on different medium (CE 202).²⁶

²² It is clear that Dennett believes language and meme are two very powerful architects in shaping the structures of a virtual machine that turn the brain into mind. They are responsible for the disciplining, developing and constraining or in other words creation of unique software that perpetually recreate itself.

²³ "We have language, the primary medium of culture, and language has opened up new regions of Design Space that only we are privy to" (DDI 338).

²⁴ For more comprehensive theoretical discussions on memes, see CE (199-226), DDI (335-369), Dennett (1998f) and Aunger (2000: 1-23). It is also worth looking at Blackmore's (1999, 2000) interpretations of memes, as her views are close to Dennett.

²⁵ "The theory of evolution by natural selection is neutral regarding the differences between memes and genes. They are just different kinds of replicators evolving in different media at different rates" (Dennett 1990a: 128; DDI 345).

²⁶ "The open question is not whether there will be a Darwinian theory of culture but what shape such a Darwinian theory will take. It is obvious that there are patterns of cultural change – evolution in the neutral sense – and any theory of cultural change worth more than a moment's consideration will have to be Darwinian in the minimal sense of being consistent with the theory of evolution by natural selection of Homo Sapiens" (Dennett 2000b: ix).

Perhaps identification of memetic with genetic evolution is not too surprising, as arguably, they are merely different manifestation of evolution. However, Dennett gives it a novel twist by claiming that mind or consciousness for that matter is a product of cultural evolution (CE 203-207, 254; KM 153), in virtue of memes since it is the evolution of memes that culture evolves. In other words, human mind is artifact created by memetic evolution. Memes continuously compete to ensure their continuous replication in memetic pool. As they do so, the mind - the breeding place of memes - is continuously restructured, in other words evolves.

Besides seeing human mind and consciousness as resulting from meme creations (BC 346), Dennett also sees it as a sort of Von Neuman serial (virtual) machine running on parallel hardwired brain. So, mind is software to hardware brain as computer software is to its hardware counterpart. It is virtual (machine) because different programming rules engender different computational power and thus performing different functions whilst running on the same computer. Through eons of sifting and fine-tuning (of natural selection), it has produced hardwired parallel brain structure in proto-humans. However, it is only through various processes of autostimulation and the likes by virtue of meme interactions in memosphere that generate various dispositions and habits of mind (CE 216, 219-220, 224), as a consequence of softwiring that results, which in turn creates virtual machine on hardwired brain that were not originally designed to perform such functions. In fact, parallel brain was primarily designed to perform some primitive physical-behavioral related survival functions, but which was later empowered

and transformed in magical ways with embodiment of the software (CE 210, 225, 254).²⁷ According to Dennett, consciousness is a manifestation of software programming but not the upshot of parallel hardware brain for the following reasons:

- i) it is too recent an innovation to be hard-wired into innate machinery;
- ii) it is largely a product of cultural evolution that gets imparted to brains in early training; and
- iii) its successful installation is determined by myriad microsettings in the plasticity of the brain, which means that its functionally important features are very likely to be invisible to neuroanatomical scrutiny in spite of the extreme salience of the effects (CE 219).

Dennett's conclusion is all-embracing, because any machine or anything at all (for that matter) is fully conscious insofar as it has the virtual machine as major component in its system. Apparently, the mere presence of a Joycean machine constitutes both necessary and sufficient condition for possession of full blown consciousness. Inert makeup of the hardware is hardly the issue, as it makes no

²⁷Churchland captures it well, better than I can, hence worth quoting at length: "Dennett is well aware, as is everyone else in recent years, that the architecture of the brain is that of a massively parallel computing system. It does not have the structure of a classical, discrete-state, programmed serial computer, and for the most part it does not behave like one either. And yet the massively parallel human brain is still capable, to a degree, of simulating the typical behavior of a serial machine. For example, we can both produce and understand the complex strings of symbols of a language; we can perform deductive operations...we can do recursive arithmetic operations such as addition, multiplication, division....When we do such things, according to Dennett, our underlying parallel neural architecture is realizing a 'virtual' computing machine, whose activities are now of the classical, discrete-state, rule governed, serial kind. What Dennett is adverting to here is the general capacity that your standard, serial, desktop computer has to become a 'word-processing machine' if you load it with your WordStar program, a 'flight-simulator machine' if you load it with your Flight Simulator program....If we program it appropriately, it will even simulate the behavior of a massively-parallel neural network....Similarly, says Dennett, a real, massively parallel hardware neural network can, with suitable setting of its many synaptic weights, simulate the computational activities of a discrete-state serial machine....a parallel machine can sustain a virtual machine of the classical serial kind. This, according to Dennett, is what human brains do when they learn a language. They acquire the capacity, absent in nonhuman animals, to represent and process information in a structured sequence of rule-governed representations unfolding in time. It is this unfolding sequence of representations....that constitutes, according to Dennett, the stream of human consciousness. It is this 'virtual (James) Joycean machine,' realized in and sustained by parallel hardware, that generates the stream of activity that we humans call consciousness" (Churchland 1995: 264-265).

difference whether it is robotic or biologically constituted.²⁸ As Dennett forcefully claims: "YES, my theory is a theory of consciousness. Anyone or anything that has such a virtual machine as its control systems is conscious in the fullest sense, and is conscious because it has such a virtual machine" (CE 281), as indeed, "I have defended a theory of consciousness, the Multi Drafts Model... that implies that a conscious robot is possible in principle" (KM 16).

5.5 Quinning Qualia

Qualia is the philosopher's term denoting the phenomenal aspect of consciousness, the qualitative dimension of mentality. It includes the way it feels like to hear, smell, perceive, desire etc. (e.g., the luscious blue of the sea and serene beauty of dawn, flamboyant shades of colors, burning sensations of pain, gripping subtlety of musical tones and last but not least, the yearning and intoxication of romantic love and the bliss of happiness). Dennett's ontological denial of qualitative experiences constitutes one of the *raison detre* of his philosophy of mind. Following this, lets focus on Dennett's resolute attempt to quine qualia.

²⁸ "Any philosopher of mind who (like myself) favors a 'functionalist' theory of mind must face the fact that the very feature that has been seen to recommend functionalism over cruder brands of materialism – its abstractness and hence neutrality with regard to what could 'realize' the functions deemed essential to sentient or intentional systems – permits a functionalist theory, however realistically biological or humanoid in flavor, to be instantiated not only by robots (an acceptable or even desirable consequence in the eyes of some), but by suprahuman organizations that would seem to have minds of their own only in the flimsiest metaphorical sense" (BS 152-153).

What is the nature of color? Dennett contends that modern science has discredited identification of color with any of the physical properties of objects. Views that uphold simple match between surface reflectance properties or wave length of light with color is misguided. In spite of controversies that rage over what constitute true or real color of objects, on Dennett's contention, there is no color. It is not out there in the physical world neither is it qualitative experiences "that could be colored in some special, subjective, in-the-mind, phenomenal sense" (CE 371), because to Dennett, there is no qualia. Qualia is only a (specie of) figment of imagination.

There is no special mystery in the fact that we like certain things and shun others. Nature has equipped us with largely efficient (though not perfectly infallible) tool of survival with built-in preference for pleasurable or enjoyable activities that tend to enhance our general well-being and innate wirings for aversion of things that debilitate our well-being. (Of course, this is not to deny the possibility of post-natal fixing of design by rewiring through infection by memes.) Hence, enjoyment of certain experiences and the shunning of others serve pragmatic evolutionary ends (CE 383-387). However, according to Dennett, our qualia (or enjoyment of experiences) should not thereupon be viewed as ineffable mysterious properties independent of biological functions it serves. As Dennett puts in colorful way, "[w]hat we want when we sip a great wine is not, indeed, the information about its chemical contents; what we want is to be informed about its chemical content in our favorite way" (CE 384). What Dennett suggests here is

that one ought not be misled by innate qualities of experience into according it special metaphysical status it does not have. One needs not go beyond physical and functional means to explicate them because all there is to experience is discriminative or judgemental properties of the brain. They are mere idiosyncratic mechanical-dispositional properties of brain state in response to external stimuli. There is nothing in them that warrant distinct ontological treatments.²⁹

At first blush, Dennett's claim to quine qualia appears counterintuitive because it purports to challenge a crucial aspect of consciousness that is definitive of being human. The thesis, if true, would revolutionize one of our deepest beliefs in what it means to be human. Let's see what exactly Dennett is denying and affirming. In spite of his aim to oust qualitative experiences, it is important to be clear that Dennett affirms the reality of consciousness. He believes that anything real has properties (QQ 520). What he is denying is that conscious properties have anything to do with properties commonly associated with qualia. In particular, he denies there are any hard-to-define, mysteriously special, qualia-related-properties. In fact, he purports to show that our common everyday notion of qualia (the 'raw feels,' 'phenomenal properties,' 'subjective and intrinsic properties,' and the 'qualitative character') is *chaotic* and *confused*. Accordingly, when we claim to know what qualia is by appealing to introspection, we are at

²⁹ To recap, according to Dennett, judgement is all there is to color. As alluded to earlier, Dennett denies qualitative raw feels ontological bearings over and above judgements (CE 372). He uses the analogy of CADBLIND Mark I Vorsetzer seen in earlier discussion to illuminate this. Dennett sees no qualitative difference between the way Mark I discriminates color (via mechanical means of color-by-label comparison system) and the way color is discriminated in humans. If machine does not have qualia amid color discrimination (as most of us would readily admit that it does

best mistaken. In view of this, Dennett argues that it is best to deny their existence. As it engenders nothing but confusion, and if in the final analysis it does not refer to any properties at all, it does not exist.³⁰

Specifically, Dennett believes it unintelligible to envisage qualia having reality independent of dispositional propensities. In his own words, the

final step presumes that we can isolate the qualia from everything else that is going on – at least in principle or for the sake of argument. What counts as the way the juice tastes to X can be distinguished, one supposes, from what is a mere accompaniment, contributory cause, or by-product of this ‘central’ way. One dimly imagines taking such cases and stripping them down gradually to the essentials, leaving their common residuum, the way things look, sound, feel, taste, smell to various individuals at various times, independently of how those individuals are stimulated or non-perceptually affected, and independently of how they are subsequently disposed to behave or believe (QQ 521).

Ordinarily, qualia is special largely because it can only be discerned from first person standpoint. Hence, it is not possible, for instance, to know how it is like for the next person to listen to a Bach or what is it like to be a bat, for experience is not exhausted by mere possession of any amount of “informational,” “dispositional” or “functional” properties (QQ 522). Hence, wine tasting machine, no matter how intricate and sophisticated in design, could never have mimic or reproduced that very special quale of wine. This is the notion Dennett sets out to banish. Key argument Dennett relies upon - as we shall see later (through various intuition pumps) – to make his case hinges mainly on the impossibility of vindicating the supposed properties of qualia.

not), it follows thereby that qualia does not exist in human because contentful states are similar in both (CE 374-375).

³⁰ “The idea that people might be mistaken about their own qualia is at the heart of the ongoing confusion” (QQ 526). “I choose to take what may well be a more radical stand than Wittgenstein’s. Qualia are not even ‘something about which nothing can be said’; ‘qualia’ is a philosopher’s term which fosters nothing but confusion, and refers in the end to no properties or features at all” (QQ 524).

More specifically, he identifies four properties of qualia which according to him are second-order properties commonly associated with qualia in traditional analyses:

i) Ineffability

One cannot say to another, no matter how eloquent one is and no matter how cooperative and imaginative one's audience is, exactly what one is currently seeing, tasting, smelling and so forth.

ii) Intrinsic

According to tradition, at least part of the reason why qualia are ineffable is that they are intrinsic properties – which seem to imply *inter alia* that they are somehow atomic and unanalyzable. Since they are 'simple' or 'homogeneous' there is nothing to get hold of when trying to describe such a property to one unacquainted with the particular instance in question.

iii) Private

Verbal comparisons are not the only cross checks ruled out. Any objective, physiological or merely behavioral test would of necessity miss the target, so all interpersonal comparisons of these ways-of-appearing are systematically impossible. [Qualia is hence an island that no science could tread.]

iv) Directly or immediately apprehensible in consciousness

Since they are properties of my experiences, qualia are essentially directly accessible to the consciousness of their experiencer or qualia are properties of one's experience with which one is intimately or directly acquainted or 'immediate phenomenological qualities' (QQ 522-523).

Accordingly, we would, in what follows, make a brief introductory detour to get us more acquainted with the concomitant arguments.³¹

5.5.1 Immediate Apprehension (Privilege Access)

Amongst his key thoughts on qualia, his intuition pump on Chase and Sanborn is perhaps more straightforward and easier to follow, hence it is to this we now turn. This sets the stage for much of Dennett's claim on quinning qualia (QQ 526-

³¹ More critical analysis on these properties would be discussed in Chapter 7.

528).³² Both Mr Chase and Mr Sanborn are hired as coffee taster by world's famous coffee producer, Maxwell House, to help ensure the best quality of Maxwell coffee. However, one day, after 6 years of working for Maxwell House, Mr Chase complains he is not enjoying his work as before. He discovers that he no longer likes the taste of Maxwell House coffee. His taste for coffee has somewhat changed over the years as he becomes a more sophisticated coffee drinker. However, he believes Maxwell House coffee still tastes the same as it used to six years ago, i.e., taste of Maxwell House coffee has not changed, but his preference has changed.

Mr Chase's colleague, Mr Sanborn concurs. Likewise, he finds that things change after 6 years. He also finds Maxwell House coffee less than satisfactory. However, he believes his taste (preference) has not changed. He blames it on his taste buds. He believes his taste buds have changed and this results in basic alteration in the way things taste to him. Though Maxwell House coffee does not taste the way it used to, Mr Sanborn still believes Maxwell House coffee the best tasting coffee in the world. He still likes the original way Maxwell coffee tastes. In other words, his preference is basically intact though the way things taste to him now no longer remains the same. So, interestingly, we have a case where both subjects claim not to like Maxwell coffee, each giving different reasons. As Dennett recounts, his main motive for introducing the story is to set up a bipolar contrast to show how arguments in intra-subjective shift in qualia gravitate

³² Dennett has not explicitly used the Chase and Sanborn argument against privilege access. But the crux of his arguments is perhaps better illuminated by this example. Other arguments

between them. Following this, Dennett enlists various possibilities in Mr Sanborn's and Mr Chase's claims about their liking for Maxwell coffee.

Mr Chase believes his qualia (the way coffee taste to him) has not changed, but his taste (his liking) has changed. For ease of understanding, let's represent these changes in more concrete terms. We could say that Maxwell House coffee initially allows Mr Chase to derive 250 unit of satisfaction, and this initially corresponds to his preference/taste, (i.e., his sophistication as coffee drinker), which is also 250.³³ This explains why initially Maxwell coffee is the best tasting coffee in the world, because qualia of Maxwell coffee allows him to maximally actualize his liking (preference/taste) for coffee. Now, six years later, Mr Chase changes his mind. He claims that he no longer likes Maxwell coffee. He attributes the change to the alteration of his preference (personal taste) for coffee.

Presumably, if before, his sophistication as coffee drinker enabled him to derive 250 unit from coffee, now that he is a more cultured coffee drinker, his personal taste has moved up to say 350. The 100 unit difference in satisfaction explains Mr Chase's complaint about the change in the way Maxwell's coffee taste.

Though Maxwell still tastes the way it originally tasted, i.e., the actual taste of coffee has stayed constant throughout at 250 (Mr Chase's coffee qualia has not changed), Mr Chase's personal preference has developed. He no longer likes the way Maxwell tasted. Now that his personal taste has developed, the way Maxwell

pertaining to privilege access would be discussed along with the commentary in Chapter 7.

taste to him is probably like the way a substandard coffee (say coffee that yields 150 unit) taste to him 6 years ago. However, Dennett claims that Mr Chase could be deluded. Things may not appear the way it seems to him. For it is entirely plausible that his dislikes of Maxwell coffee is explained differently.

According to Dennett, the change in Mr Chase, without him realizing it, could be due to alteration in coffee qualia. That is, his preference/personal taste for coffee may well remain at 250, but his qualia for Maxwell coffee has dropped to say 150. Hence, again there is a net change of 100 that equally explains Mr Chase's complaint. But in this case, it is his coffee qualia that slipped while his taste remains constant. Likewise, Mr Chase's complaint could also conceivably be explained by changes in both his coffee qualia as well as his preference for coffee. In this case, his preference may have dropped from 250 to 225, whilst his coffee qualia has shifted to 125, again yielding a net change of 100 unit.³⁴

³³ For the sake of illustration, assume we are able to quantify utility that Chase and Sandborn derive from coffee consumption.

³⁴ Dennett claims that same logic could be applied to Mr Sanborn. Assuming at the outset, Maxwell coffee is capable of generating a coffee qualia worth 300 to Mr Sanborn, while his preference/personal taste for coffee is also 300 unit. Hence, initially, Maxwell coffee is world's best tasting coffee to him because Maxwell's qualia corresponds to his personal best in preference. Mr Sanborn, like his predecessor Mr Chase, may be right. The change he discerned 6 years later may be attributed to deficit in his qualia-tasting modality. Owing to this, Mr Sanborn is suffering from a dip in qualia for Maxwell coffee from the high of 300 to the present 250, while his personal preference remains constant. So, the deficit of 50 unit explains Mr Sanborn's quip about changes in the way Maxwell taste to him. However, Mr Sanborn could be deluded. The 50 unit change may be due to changes in preference. Unbeknownst to him, his personal taste may have shifted while his coffee qualia remains the same. Thus, it is possible that his personal preference has risen to say 350, while his Maxwell's qualia has remained at 300 which yield a qualia difference of 50 units, and hence accounting for his complaint of the change in taste-perception. Mr Sanborn, misled by his own experiences, has misidentified the true cause of his predicament. Meanwhile, the discrepancy could also be accounted for by shift in both coffee qualia and personal standard. Personal standard has risen to 400 unit, while Maxwell's qualia increase to 350, thus accounting for the 50 unit discrepancy in taste-qualia.

In order to strengthen his arguments, Dennett spends some time discussing the difficulty of empirically ascertaining which alternative is true. Basically, the essence of his arguments lie in the fact that both Mr Chase and Sanborn complain that the way Maxwell taste has somewhat changed, but this fact is a resultant of various possible combinations of change in "dispositions to generate or produce qualia" (i.e., coffee qualia) and "dispositions to react to qualia" (presumably the personal taste for coffee). But qualia could only have impact on action/behavior (basic variable in empirical study) through our judgement about them, hence any empirical means employed to detect the change is powerless to tell the difference, because ultimately judgement is only a result (or end product) of interaction between two factors above. Dennett also makes use of the idea of inverted spectrum to further illustrate his point, but this would be touched upon in Chapter 7.

Thus, we see how Dennett shows various ways we could account for change in qualia perception. There is no fact of the matter as to which of these accounts is the right explanation for both Mr Chase and Mr Sanborn. Nothing in fact could have helped choose among these alternatives. Hence, if there is more than one correct explanation and nothing could in principle decide which one, then claims of privilege access is unwarranted.³⁵ More particularly, he claims that

[t]here is a strong temptation, I have found, to respond to my claims in this paper more or less as follows: 'But after all is said and done, there is still something I know in a special way. I know how it is with me right now.' But if absolutely nothing follows from this

³⁵ Dennett has, in several places (QQ 526, 532, 533), emphasized the need for subjects to resort to outside third person to help confirm the truth about the various claims of qualia. If this is so, then the subject does not have the privilege to decide on the question, thereby undermining privilege access.

presumed knowledge – nothing for instance, that would shed any light on the different psychological claims that might be true of Chase or Sanborn – what is the point of asserting that one has it? Perhaps people just want to reaffirm their sense of proprietorship over their own conscious states (QQ 528).

5.5.2 Intrinsicity

Dennett then moves on to attack the idea that qualia is intrinsic property of consciousness (QQ 533-536, 538-539). There is nothing intrinsic about qualia.

Dennett tries to show this through the use of a couple of intuition pumps we briefly consider below.

Imagine now...that someone offers me a pill to cure my loathing for cauliflower. He promises that after I swallow this pill cauliflower will taste exactly the same to me as it always has, but I will like that taste! 'Hang on,' I might reply. 'I think you may have just contradict yourself.' But in any event I take the pill and it works. I become an instant cauliflower-appreciator, but if I am asked which of the two possible effects (Chase-type or Sanborn-type) the pill has had on me, I will be puzzled, and will find nothing *in my experience* to shed light on the question. Of course I recognize that the taste is (sort of) the same – the pill hasn't made cauliflower taste like chocolate cake, after all – but at the same time my experience is so different now that I resist saying that cauliflower tastes the way it used to taste. There is in any event no reason to be cowed into supposing that my cauliflower experiences have some intrinsic properties behind, or in addition to, their various dispositional, reaction-provoking properties (QQ 535).

Perhaps his argument against intrinsic property (of qualia) is better brought out in the following intuition pump. Phenol-thio-urea is a chemical substance tasteless to a small part of population whilst very bitter to large portion of people in the world. Then the question whether phenol-thio-urea is inherently bitter or tasteless is not meaningful, because if it can appear bitter to some people whilst utterly tasteless to other people, then the taste of phenol-thio-urea is relational. Therefore, the question cannot be asked independent of its reactive properties. This, Dennett holds, presents problems for those who believe that qualia is intrinsic quality of

conscious experience (fixed, stable and unchanging). Because if quality space of taste (qualia) could be altered with the change in

one's attitude towards, or reactions to, experiences are in any way and in any degree constitutive of their experiential qualities, so that a change in reactivity *amounts to or guarantees* a change in the property, then those 'qualitative or phenomenal features,' cease to be 'intrinsic' properties, and in fact becomes paradigmatically extrinsic, relational properties (QQ 533).

5.5.3 Ineffability and Privacy

Following this, let's see how Dennett defends the position that qualia does not possess the property of ineffability and privacy (QQ 540-544). Dennett asks us to assume that he possesses no prior experience of osprey cry. Without first hand experiences, he cannot know what osprey cry amounts to. However, books on birds have described the particular way it may be like to experience osprey quale. Though this helps Dennett to have some inkling, this is still a far cry from actually knowing what constitutes the cry. At best, descriptions in books help narrow down choices, still these by no means enable him to pin down (concretely) its phenomenal space.

Therefore, the only way Dennett could get acquainted with the quale is to listen to one, i.e., to participate in the real experience of actually listening to one. This Dennett accomplished one day in the wild. Equipped with binoculars, he sighted an osprey, heard it cried out concurrently. For the first time, Dennett genuinely appreciates the way osprey sounds. Dennett dubs this osprey-qualia 'S.'

Ineffability of 'S' is real because there is no way Dennett could possibly locate 'S' by means of verbal descriptions.

After repeated hearings and practises, Dennett develops a regular and highly dependable property detector for the detection of property 'S.' But what is this property 'S?' In his endeavor to undercut traditional arguments for qualia, Dennett here suggests that they are only *practically* ineffable. Using the metaphor of Rosenberg's jagged edge password device,³⁶ if asked what is property M, we could only say that M is indeed the property detected by M-detector. It is because of the subtle ways M is cut out (according to the Jello Box allegory) that no description could possibly exhaust its complexity. Hence, M's ineffability is not absolute but practical. Analogously, osprey-qualia or S is ineffable to the extent that information bearing property it embodies is complex. By way of summing up argument in the section, Dennett succinctly observes:

it would be a mistake to transform the fact that inevitably there is a limit to our capacity to describe things we experience into the supposition that there are absolutely indescribable properties in our experience. So when we look one last time at our original characterization of qualia, as ineffable, intrinsic, private, directly apprehensible properties of experience, we find that there is nothing to fit the bill. In their place are relatively or

³⁶ "Consider the old spy trick, most famously encountered in the case of Julius and Ethel Rosenberg, of improving on a password system by tearing something in two (a Jello box, in the Rosenberg's case), and giving half to each of the two parties who must be careful about identifying each other. Why does it work? Because tearing the paper in two produces an edge of such informational complexity that it would be virtually impossible to reproduce by deliberate construction. (Cutting the Jello Box with straight edge and razor would entirely defeat the purpose.) The particular jagged edge of one piece becomes a *practically* unique pattern-recognition device for its mate; it is an apparatus for detecting the shape property M, where M is uniquely instantiated by its mate. It is of the essence of the trick that we cannot replace our dummy predicate 'M' with a longer, more complex, but accurate and exhaustive description of the property, for if we could, we could use the description as a recipe or feasible algorithm for producing another instance of M or another M detector. The only *readily available* way of saying what property M is is just to point to our M-detector and say that M is the shape property detected by this thing here. And that is just what we do when we seem to ostend, with the mental finger of inter intention, a quale or qualia-complex in our experience" (QQ 541).

practically ineffable public properties we can refer to indirectly via reference to our private property-detectors – private only in the sense of idiosyncratic... So contrary to what seems obvious at first blush, there simply are no qualia at all (QQ 544).

5.6 Conclusion

To Dennett, postulation of inner self or inner observer orchestrating and coordinating mental activities, functioning as central manager or command system that generates meanings and regulating behavior is illusory. As seen, the central tenet of *Consciousness Explained* (Dennett 1991h) is the notion of Multiple Drafts. Dennett devotes significant part of his book to show that postulation of Cartesian Theater is unwarranted and false. To him, the workings of brain is best seen as the interplay of complex set of interconnected networks, without there being central control system governing and organizing these interactions. In this regard, consciousness is best seen as dominating influence of content fixation of different intricately connected modules simultaneously producing multiple drafts with each competing with one another trying to attain mental fame.

Concurring with McGinn, Dennett believes the answer to closing the explanatory gap between immaterial conscious mind and physical brain lies in McGinn's proposition of intermediate hidden structure (neither phenomenological nor material) but dismisses McGinn's claim that such structure is forever hidden and beyond epistemological grasp of humans. Dennett believes that his software-virtual machine proposition is such structure (CE 433-434). Consciousness is

nothing but the instantiation of software programs, the product of memetic or cultural evolution, implemented on parallel hardware brain. Qualia is not Nagel's subjective ineffable phenomenality, but is the dispositional properties of brain states reacting to stimuli (CE 431).

Dennett acknowledges that his thesis of founding conscious experience in software programs is counterintuitive. Many find it difficult to believe that computers or robots or any machinery for that matter could be conscious in the full sense – the way humans are. We have not seen any computers or artificial intelligence devices demonstrate feat of that sort. However, Dennett contends that what actually stands in between (in our appreciation of the above) is our prejudices and relative lack (or even poverty) of imaginations (CE 434-448). This failure in imagination is further exacerbated by thought experiments and intuition pumps that appear convincing on surface, but essentially lack clarity and plagued with unfounded premises. According to Dennett, Searle's famous Chinese room argument is a good case in point (CE 435-440).³⁷ Searle purports to refute computationalism (and with it functionalism, artificial intelligence and cognitivism etc.) by showing that mere manipulation of formal symbols does not constitute

³⁷ For Dennett's rebuttal of Block's gigantic look-up table, see MNM (923-924), Mary's knowledge argument (CE 398-401), and on zombies, see BC (171-177), GR (517-519) and Dennett (2000a: 380-382). Dennett also asserts that "I'm one of the few philosophers who thinks Twin Earth to narrow content are artifactual philosophical conundrum of no importance to cognitive science" (BC 284).

genuine intelligence. Syntactic formalism by itself is powerless to give rise to intrinsic intentionality with genuine semantic content.³⁸

Dennett, however, argues that Searle's conclusion does not follow. For if the program could pass the Turing test, there is no discernable difference in the Chinese room response from that of an intelligent Chinese speaking person, its sophistication would have gone beyond simple manipulation of symbols proposed by Searle in the Chinese room.

Any program that could actually hold up its end in the conversation depicted would have to be extraordinarily supple, sophisticated, and multilayered system, brimming with 'world knowledge' and meta-knowledge and meta-meta knowledge about its own responses, the likely response of its interlocutor, its own 'motivations' and the motivations of its interlocutor, and much, much more (CE 438).

In such sophisticated system, it is no longer clear there is still no genuine understanding or intentionality in the system. Dennett agrees that simple matching up of symbols, as envisaged by Searle is too impoverished to characterize semantics, but this ought not be generalized to system that is far more complex, especially when the system could pass the Turing test, for complexity does matter.

³⁸In Searle's Chinese room argument, an English-speaking-only subject is locked in a room, and given a set of formal instructions in English that enables him to manipulate Chinese characters in most competent ways. Though subject does not understand a word of Chinese, she could, however, respond competently to questions posed in Chinese passed into the room; response that was essentially indistinguishable from those given by competent Chinese speaking person, thanks to the set of instruction manual. Searle therefore concludes from this that strong AI cannot be true because it asserts that sophisticated and properly programmed computer suffice for intentionality and semantic. But as Searle claims to have shown in the Chinese room argument, the subject, who is just mechanically manipulating symbols and blindly following instructions, analogous to the mechanistic processing of information in computer, understands nothing and means nothing. Syntax is hence not sufficient for meanings for it involves no genuine understanding nor is there any real intentionality.

Dennett in fact urges us to be fearless and more forward looking in *imagining* that genuine intentionality and understanding could somehow arise from complex systems (CE 438-439), and he invokes same kind of reasoning to quell doubts (or to crush opposing arguments) that virtual machines cannot possibly amount to consciousness.

It is obvious that no teddy bear is conscious, but it's really not obvious that no robot could be. What is obvious is just that it's hard to imagine how they could be. Since my friend found it hard to imagine how a robot could be conscious, he was reluctant to imagine a robot to be conscious – though he could easily have done so. There is all the difference in the world between these two feats of imagination, but people tend to confuse them. It is indeed mind-bogglingly difficult to imagine how the computer-brain of a robot could support consciousness. How could a complicated slew of information-processing events in a bunch of silicon chips amount to conscious experiences? But it's just as difficult to imagine how an organic human brain could support consciousness. How could a complicated slew of electrochemical interactions between billions of neurons amount to conscious experiences? And yet we readily imagine human beings to be conscious, even if we still can't imagine how this could be (CE 432-433).

The 'software' or 'virtual machine' level of description I have exploited in this book is exactly the sort of mediating level McGinn describes: not explicitly physiological or mechanical and yet capable of providing the necessary bridges to the brain machinery on the one hand, while on the other hand not being explicitly phenomenological and yet capable of providing the necessary bridges to the world of content... We've done it! We have imagined how a brain could produce conscious experience. Why does McGinn think it is beyond us to engage in this 'radical conceptual innovation'?... He doesn't even try to imagine the intermediate level he posits; he just notes that it seems obvious to him that there is nothing to hope from this quarter.... Once we make some progress on the difficult task, imagining how a brain produces the phenomena of consciousness, we get to make some slight adjustments in the easy task: imagining someone or something to be conscious... Now that the stream of consciousness has been reconceived as the operations of a virtual machine realized in the brain, it is no longer 'obvious' that we are succumbing to an illusion when we imagine such a stream occurring in the computer brain of a robot, for instance. McGinn invites his readers to join him in surrender: It's just impossible to imagine how software could make a robot conscious. Don't even try, he says. Other philosophers have fostered this attitude by devising thought experiments that 'work' precisely because they dissuade the reader from trying to imagine in detail, how software could accomplish this (CE 434-435).

In the same way, Dennett audaciously claims that we could know what it is like to be a bat (CE 441-448). We may not have structural make-up of bat's brain represented in our brain, but this does not mean, as Nagel suggested, that third

person account is completely powerless (for nothing from such probing would reveal anything about bat's conscious experience). Dennett insists that we can know a lot indeed. While we cannot possibly turn our mind into those of bats, there is, however still a lot to be desired through third person structural and physiological investigation. Given the structural design of bat, we could in fact know a lot, through imagination, about what bat could be conscious of, hence ruling out unlikely items that ill correspond to bat's cognitive structure. The heterophenomenological world of bats could then be constructed, just like the way it is constructed for human subjects, based on non-verbal behaviors of bats. Hence, the obstacle is surmountable if one is audacious enough to take the leap. Moreover, with his many thought experiments and intuition pumps throughout the book, it would have made the climb less difficult as many of the obstacles (intrinsic qualia, filling in of mental figment, Cartesian Theater, inner self) would have been removed. It is perhaps apt to end the chapter with a concluding note from Dennett's writing:

[m]y explanation of consciousness is far from complete. One might even say that it was just a beginning, but it is a beginning, because it breaks the spell of the enchanted circle of ideas that made explaining consciousness seem impossible. I haven't replaced a metaphorical theory, the Cartesian Theater, with a nonmetaphorical ('literal, scientific') theory. All I have done, really, is to replace one family of metaphors and images with another, trading in the Theater, the Witness, the Central Meaner, the Figment, for Software, Virtual Machines, Multiple Drafts, a Pandemonium of Homunculi. It's just a war of metaphors, you say – but metaphors are not 'just' metaphors; metaphors are the tools of thought. No one can think about consciousness without them, so it is important to equip yourself with the best set of tools available. Look what we have built with our tools. Could you have imagined without them? (CE 455).