"What is it Like to be a Worm?" Asked Bagel the Bat

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Abstract

One of Nagel's attempts in his 1974 "bat" paper is to not reduce the "unfamiliar" down to the "familiar", which, he rightly recognises, is an error which persists in the Philosopher's thought more than they would like to admit. This essay aims to identify and discuss an aspect of his analysis of consciousness and alien phenomenology which falls prey to the same erroneous intuition. I argue, to state it explicitly, that Nagel betrays the sense of caution he propounds at the beginning of his paper. He does this by acknowledging the bat as entirely alien but ascribing to its alien world physicalist notions. Nagel thus recognises the alien in his world but fails to recognise the world of the alien. Starting with section 2, I reflect upon the phenomenology of an auditory being, whose experience could be close in one aspect to ours but also radically different. Then, within this frame of analysis, I map out the ways in which its world would also be radically different in section 3.2. As an intuition pump, the Prologue utilises the fictional character of a bat called Bagel and its reflections upon the phenomenology of a worm. Its caricatured prejudices towards the worm and its phenomenology are meant to rhetorically bring Nagel's error to light. The entire analysis utilises Nagel's own conception of Objectivity, which is characterised in section 3.1. This is done in an attempt to critique his discourse reflexively without asserting anything original or using another discourse as a crutch. The essay concludes that an auditory being, and a bat - if it indeed is an auditory being - would dismiss physicalism even if it were to be intelligent (A "Martian" would also do the same I conclude, which Nagel asserts would not). As a result, it is not just the so-called subjective phenomena of an alien being which would be radically different but also their understanding of "physical phenomena".

Keywords: Nagel, Bat, Objectivity

Prologue: Thomas Bagel and his friends

One day, resting upside down on a tree, Thomas Bagel, the brightest bat¹ in the eighty-seven trees of the city park, thought to himself, "What must it be like to be a worm?"

So delighted was he by the question that he went to his other Akoesopher² friends to ask what they thought about this. He flew straight to the fifteenth tree since idealists inhabited the first fourteen. There, he met with the famous eliminativist Patricia Churchwaters³ to whom he put this question forth. "You are wasting your time on this question, dear Bagel", said Churchwaters, "there is nothing exotically foreign it is to be a worm. It can be explained through the intensities and decibels of the Auditory how the worm perceives the sounds around it".

"Sounds?" thought Bagel, "But sounds are not what constitutes the subjective experience of the worm. It is touch! It should be baffling how alien the worm's phenomenology must be, experiencing a world full of amplitudes and frequencies only through touch". He believed that even though the world might be Auditory, there is something it is like to be a worm which cannot be explained through the laws of the Auditory. 'Psychoauditory' reduction is not possible, he concluded. Indeed, if the worm were to be intelligent, it would understand the Auditory phenomena of Octaves and Pitches.

Before pecking into the woods, his ideas, which other scholars could chirp into and hear, he wished to gauge the views of the dualists. For this, he flew next to the sixtieth tree, where he saw his dualist friend David Dhalmers⁴, who was explicating the hard problem of consciousness. After his talk, Bagel asked him his thoughts on the issue. Dhalmers, after much contemplation upon this exciting question, said, "Well, of course, the worm is made up of sounds, but from the studies conducted in the department of Wormology, it seems the worm itself touches and feels the opaque lump of sound the earth and its soil is. It is peculiar, indeed, the way the worm navigates through the world. We bats do not solely rely upon touch since it is a primitive and ineffective form of perception. I suppose, Bagel that there must be an inaudible⁵ experience of touch inside the worm, irreducible to the reality of sounds. At the same time, whatever this inaudible experience is, it must surely be a property of the sounds that constitute it".

¹ We imagine these bats to be entirely lacking in ocular capacities. They perceive the world solely through echolocation.

² Akoe (ἀκοή) is the ancient Greek word for hearing. Therefore, Akoesophers; that is, Listeners of wisdom.

³ A pseudonym for Patricia Churchland, who is an Eliminativist in regard to consciousness. That is, she believes conscious processes to be a result of, and reducible to, brain processes. A staunch reductionist, she would be least concerned with Bagel the bat contemplating the "Spiritual-sounding" "Inner and subjective" experiences of the worm. For more, see William Ramsey's article in the SEP (2022).

⁴ A pseudonym for David Chalmers, who is a property dualist. He takes physical entities to be the only kind of things that exist in the world. At the same time, these physical entities have dual properties, some physical and some mental. Consciousness therefore is a property of physical entities according to Chalmers' view, which is caricatured in the story. This is different from Substance dualism, which posits two kinds of substance in the world instead of a single substance with dual properties. For more see section 2.2 in Howard Robinson's article in the SEP (2023)

⁵ Read as, "Not-physical" or Mental.

Familiar with all possible erroneity, Bagel set out to carve his ideas into the Tree of Truth. He established that over Auditory reality, it was something irreducible to be a creature of Touch. Thus, the realm of the Auditory and its laws could not, according to Bagel the Bat, account for the worm's subjective experiences. Nevertheless, siding with the Auditory regardless of its inadequacy, Bagel posited another kind of understanding of the mental realm of the worm objective in its own right. He then pecked some more, describing the Subjective/Objective distinction. The pleasantness of sound, Touch, Timbre, and Smell were all subjective and, therefore, secondary qualities of the Auditory. Decibels and Temporal cavity⁶, on the other hand, were examples of the primary quality of entities in the world. The Objective way of the world was, as such, the most general way to describe the world, even for the worm. The worm's subjective experience of the world as purely Touch, however, remained a mystery. Furthermore, the objective conception of the world and the mental also remained necessarily incomplete since the bat's mind cannot comprehend all of reality as it is. But certainly, worms would, if they came from Mars and were intelligent, understand the pitches of the soil as an Auditory phenomena, no matter the way they thought of it subjectively; that is, purely in terms of touch.

The End.

1.1 Beginning from the End - Introduction

"Philosophers share the general human weakness for explanations of what is incomprehensible in terms suited for what is familiar and well understood, though entirely different."

- Thomas Nagel, 1974, p. 435.

Thomas Nagel, the brilliant American Philosopher, opens his discourse defining 1974 paper, "What Is It Like to Be a Bat?" (Henceforth simply referred to as "Nagel's paper"), with the quote above. His caution is situated in the context of the Mind-Body problem and Consciousness, which makes the former "intractable" for the scientifically oriented reductionists (Nagel, 1974, p. 435). Throughout the paper, Nagel successfully undermines the reductionist methods of studying consciousness and their unsatisfying accounts of psychophysical reduction, where attempts are made to explain the unfamiliar - consciousness - in terms of the familiar - physical entities.

⁶ Read it as an analogue of Distance for Ocularcentric perception. Sound emissions of bats have a delay in their echo. From this delay, the bats can tell how "far away" an object such as an insect is. For more, see Simmons (1989).

Yet, his intuitions when he addresses the Objective/Subjective distinction in the paper betray his own sense of caution as he explains the unfamiliar - "Objective reality" - in terms of the familiar - his own humanistic conception of what counts as Objective. He thus, while trying to distance himself from the mistakes committed by the reductionists, commits the same mistake in the discourse of Objectivity and Subjectivity.

The 'Ironic prophecy' is an archetype of stories that causes great intrigue. There is something enchanting about the kind of twisted fate the characters in such stories have. Insofar as this essay attempts to convey a story, it wishes to be one of cruel foreshadowing and a similar case of Ironic prophecy. Nagel does all he can to talk about the alien as alien, and yet, it seems that he cannot help but ascribe familiarity to the alien. Like Oedipus or Kansa, the fate he turns away from comes back to haunt him. The prologue tries to portray the same in a fable-esque fashion; Bagel the bat comes to confront the otherness of the worm, but so embedded are he and the others around him in their own world of shrieks and sounds that he cannot help but be mistaken about the unfamiliar to somehow also be part of the familiar.

Regardless of the final verdict on the matter, this is at least the narrative this essay wishes to establish, and it does so by making Nagel the subject of his own inquiry; by carrying it out in the same Nagelian spirit. The case argued, thus, is not that Nagel is too radical and therefore wrong, but that he is not radical enough in conceiving the otherness of the bat and is wrong in the way that he is right. In the story of Bagel the Bat, we would not say that Bagel is wrong, but certainly that he is mistaken. On a tightrope, we must tell him not to retreat but to go on and march farther ahead! For that is the only way he can get to the other side without falling into the valley of incoherence. As this essay runs its course, one should be able to see Nagel situated in Bagel's fable and recognise that in the final analysis, it was Nagel's intuitions after all that we were pursuing.

1.2 The Story So Far - Nagel's Bat, Physicalism, and the Objective point of view

Upon a close reading of Nagel's paper, reflecting on it retrospectively after decades of published research in the discourse, it is quite remarkable how much ground he covers and the questions he touches upon in a couple of pages. It would, therefore, be a project on its own to summarise and accurately situate Nagel's arguments in a way that would be relevant to all contexts. Moreover, literature catering to this need already exists (Sundström, 1999). Keeping this in mind, this section will try to briefly map out my reading of Nagel's paper, not with the intent to summarise and situate Nagel's arguments accurately, but with a disproportionate yet faithful emphasis on the parts relevant with scope for further exploration and the objective of this essay.

Nagel's paper engages with two major discussions, first, the validity of Physicalism and Reductionism and how it impinges upon the Mind-Body problem, and second, the Bat's experience of the world fused with the Subjective/Objective point of view. To begin with the former, which is majorly discussed at the beginning and towards the end of his paper, it is interesting to note that Nagel argues explicitly against reductionism concerning the "Subjective point of view", and seems to be arguing against physicalism as well. In fact, this is the standard explication of the essay in the popular discourse⁷. Hence, it is surprising when we find out that Nagel, even in the face of the danger the Subjective point of view poses to physicalism, goes on to advocate for it. He writes, "It would be a mistake to conclude that physicalism must be false. Nothing is proved by the inadequacy of physicalist hypotheses that assume a faulty objective analysis of mind. It would be truer to say that physicalism is a position we cannot understand because we do not at present have any conception of how it might be true" (1974, p. 448).

This is unlike Jackson or Levine, who, at least on epistemological grounds, argue against physicalism (Jackson, 1982. Levine, 1983). Or, more recently, Chalmers, whose articulation of the "hard problem of consciousness" makes it seem impossible for physicalism to account for Consciousness (Chalmers, 1995). The ideas of Jackson, Levine and Chalmers find their sparks and traces already brewing in Nagel's paper. For this reason, I personally find it extremely peculiar that Nagel's position is for physicalism and not against it. However, this essay will not discuss whether his stand on this issue is justified or not since our present analysis will not be able to accommodate it. The essay can perhaps illuminate still the intuitions fueling Nagel's inquiry, which might help explain why, regardless of physicalism's inadequacy, he chose to stick by it. But I will not elaborate on it any further.

Nagel does argue against psychophysical reduction and does so quite successfully. To contextualise this, we must now address his discourse concerning the bat's experience and the Subjective/Objective point of view. We know that bats echolocate, navigating the world through the help of shrieks and echo sounds. This is something entirely alien for the Human, Nagel says. At best, one can imagine, in the capacity of being human, what is it like to hang upside down on a tree, have webbed feet, and hear objects instead of seeing them. But insofar as

⁷ See, YouTube - Thomas Nagel's "What Is It Like To Be a Bat?" and YouTube - What is it Like to be a Bat? - the hard problem of consciousness. Also refer to, Pereboom (1994, p. 317).

one does this, they merely imagine themselves to be a bat. Nagel wants to know "what is like for a bat to be a bat"(1974, p. 439). This gives rise to the following paradox: Physicalism ambitions to explain the point of view of the subjective. But Physicalism is objective, and objectivity has no point of view; it is a "view from nowhere". Therefore, one wishes to understand a point of view from a view of no point.

Nagel writes, "Experience itself...does not seem to fit the pattern. The idea of moving from appearance to reality seems to make no sense here...It appears unlikely that we will get closer to the real nature of human experience by leaving behind the particularity of our human point of view and striving for a description in terms accessible to beings that could not imagine what it was like to be us." (1974, p. 444). He goes on to articulate, "If the subjective character of experience is fully comprehensible only from one point of view, then any shift to greater objectivity - that is, less attachment to a specific viewpoint - does not take us nearer to the real nature of the phenomenon: it takes us farther away from it." (1974, p. 445). This is the crux of Nagel's reflections on the bat's phenomenology (sometimes, he also cites a more abstract entity called the "Martian").

It should be pointed out that Nagel believes in "types" of experiences. An implication of such a view is that Adarsh, who is often happy, can understand Shivaay's experience, who is also often happy. But Adarsh cannot understand the world of someone who was born blind since he is not acquainted with that "type" of experience. The otherness of experience, for Nagel, is thus concerned with inter-species and not intra-species experiences (1974, p. 441). Once again, this is peculiar since it would create a kind of blatant logical inevitability even for intra-species experiences in that, one could say X can be X, and nothing can else be X, for if it were to be X, it would be X. Each member of a species and their experiences could be wholly unique, from which, even the so-called same "type" of experience could not provide them with an escape. Sundström discusses the logical aspect of this issue (1999, p. 107-110), and Wider discusses, utilising Bernard Williams' views, the impossibility of such a kind of imagination (1989, p. 489-490). Although this, too, is relevant to indicate further ways in which Nagel's paper can be problematised, it lies outside the scope of present discussion. To summarise this point, this is what Nagel writes about the "type" accessibility of subjective experience, "I am not adverting here to the alleged privacy of experience to its possessor. The point of view in question is not one accessible only to a single individual. Rather, it is a type. It is often possible to take up a point of view other than one's own, so the comprehension of such facts is not limited to one's own case" (1974, p. 441).

For Nagel, since the Objective point of view cannot accommodate the Subjective point of view - for only a subjective point of view can account for a subjective point of view - Psychophysical reduction is not possible.

We can still, if we share the same type of experience, take up a common subjective point of view. According to Nagel, this is not the case when we think about the bat's experience since we have not the slightest idea what echolocation sensations feel like. He proposes still that a Martian or an intelligent bat would be able to share the objective point of view, thus being able to understand the objective facts about the world (1974, p. 443), and that we could make a schematic sense out of the bat's view of the world, describing it as a "three-dimensional forward perception" (1974, p. 439). More on this in section 3.2.

Additionally and most importantly, an admission. Nagel's conception of Objectivity is something I struggled with throughout the course of this essay. At times, it seemed he would consider the point that I was trying to make. On other occasions, it seemed he would not. Specifically, in the bat paper itself, it is evidently clear that he thinks if bats were to be intelligent, or if Martians were to stumble across Earth, they would at least share the physical understanding of the world - that is the objective point of view, differing only in their subjective points of view (Nagel, 1974). This is also the case with his idea of objectivity elsewhere being discussed as a point of view that any "rational being" can take up (Nagel, 1986). But in his other works, there are instances where he comes close to considering something akin to the dialectical observation presented in this essay. The issue concerning objectivity is of great relevance to this essay, and since I wished to conceive of it in more or less the same way, Nagel does, and clearly so that the pendulum does not sway against the final analysis, section 3.1 tries to characterise the same. On the whole, I believe there are only two possibilities. Either there is some error on my part in interpreting his conception of the objective point of view, or there is a genuine tension in his views and intuitions which need resolution. In the essay, I have tried to make the case for the latter in sections 3.1 and 3.2. Perhaps this requires further inquiry as well. For now, I hope it is indeed the latter that is the case.

1.3 A Summary of the Thesis

The essay does not aim to take issue with Nagel's arguments against psychophysical reduction. It wishes to further the same caution, in another aspect of Nagel's discourse, against reducing the unfamiliar down to the familiar, which is also how the "Nagelian spirit" was meant earlier. One way it does so is by recognising that the bat can be thought of as familiar and at the same time unfamiliar (Section 2), finally taking this logic to its conclusion where we recognise the bat is even more unfamiliar than Nagel would like to think so (Section 3.2), and to which he attributes concealed familiarity in the garb of physical objectivity.

I do not wish to make - I have not made this clear in the following sections themselves - any claims about the "true" nature of the bat's experience. The conclusion that is to come in Section 2 is thus only a tentative one,

which I will further attempt to deconstruct at the very end. As a result, the point of imagining ourselves as the bat is not to fulfil the ambition to know something about the bat per se but to know what we do not pay attention to within ourselves, what lies right beside what is seen but is never heard; the ear. It is this contemplation concerning Sounds which will lead us to recognise that even Nagel's recognition of the bat's world is mediated by the Ocular rather than the Auditory, which could, if not more, be equally the case. Reflections about the bat are thus a metaphor - as is the prologue - to articulate a thesis, which I will now briefly summarise in the hopes of orienting one to the spirit of this essay and the recognition it seeks.

In essence, we, as humans, lack genuine means to comprehend the world of a bat. It is possible that we may not even fully understand each other - other humans - in a profound sense. The latter is still more likely to be realised than the former, for what is too familiar to us finally reveals itself to be uncanny. However, Reason plays a trick in the case of the absolutely unfamiliar. Desperate in the face of the entirely alien, through a sleight of hand, it attempts to recognise the alien as alien but does so, ever so sneakily, through concepts that are familiar to us.

Nagel recognises the subjective point of view of the bat. But while doing so, he does not account for the fact that this radical difference in subjectivity might lead to a different objective world for the bat itself⁸. Thus, he casually ascribes to the bat's perception a certain description, and in the case of "Martians" (consider also intelligent bats), asserts that they understand the subjective phenomena differently but will have the same understanding of it "physically", that is objectively. Bagel does the same in his case, conceiving of the world in terms of sound. Thus, Nagel and Bagel recognise the alien in their world but fail to recognise the world of the alien, which is also alien, leading them to cage the alien-ness of the alien in the non-alien. For now, this is very clear in the case of Bagel, less so in Nagel's.

We must ask: if there were to be super-intelligent beings capable of conceiving the world through touch, sound, vision, and an additional super-sense, would they not find both Nagel and Bagel in the same situation, falling prey to the same dogma manifesting in two different phenomenological contexts? Moreover, if the bat itself were to speak of its experiences as entirely different, would we then conclude Nagel's conception of the bat's otherness to be wrong, requiring rectification by recognising a sense of agnosticism not only for the bat's subjective point of view but the objective point of view? I believe these are original questions and of much

⁸ Here I use Objectivity as Nagel employs it. More on this in section 3.1.

importance to be asked. The essay would like to make the case for them to be validated while it critiques Nagel's discussion of the bat and ruminates over the same.

There could consequently be - if the questions find themselves rightly situated - a disjunction, or a deadlock, between the "centerless" and most "general" view of the world for the human and the bat. Nagel's discourse must thus stand corrected and, at the same time, make room for the bat's voice, which might claim a new kind of objectivity, that of the Hauditory - which is a metaphor for all intents and purposes - or something entirely else! Nagel is unjustified, the essay argues, to assume that there are objective physical phenomena in the world for the bat or a Martian in the same way as they are present to our faculties of Understanding and Reason⁹. Therefore, if we are to follow Nagel's conception of objectivity and his intuitions as are expressed in the bat paper, the bat must, given its radically different subjective point of view - which Nagel recognises - also inhabit a world with a different objective point of view - which Nagel does not recognise. Section 3.2 will discuss this in detail.

There is also an epilogue which discusses how the seeds of the conclusion were already present in section 2. However, language works linearly, and I found myself incapable of making a point and at the same time deconstructing it. The epilogue is thus a self-conscious attempt at staying true to the intuition of not reducing the unfamiliar down to the familiar, which I suspect is present even in section 2. I have used the symbol (*) to mark all the statements which will be used as a context in the epilogue.

Lastly, the reflexive nature of this inquiry might have led me to cite examples and employ descriptions which themselves fall prey to the very thing the essay suggests a warning against. Wherever the danger seems likely, I have tried to show that I am cognizant of it. I will request the reader to receive the reflections and examples as tools to see the truth of the matter and then realise that the tool in itself is of no value other than having enabled the journey; a Wittgensteinian ladder of sorts. It is entirely possible still that there might be places where this inquiry can be applied to itself and turns out to be ignorant of its dialectical consequences. This is a dreadful possibility for any project, but it seems here it would seem to work in the same way that it has worked for Nagel's paper. The contents are negated, but the spirit moves on. The intuition behind Nagel's paper and this essay are meaningful, important, and right I believe, and they must be brought out into the brightest of lights so that even the Auditory-dwelling Bagel may be obliged to recognise it.

⁹ A very conservative aim of the argument could be: it might be the case that the world is "physical" for us, and conceivably "in fact" in reality as well (I would not know what this means). But, if the bat were to hear sounds, and that is what constitutes its world, and it can navigate through it just as efficiently with a phenomenology equally as rich and diverse as us, would it not justifyingly believe that the world is, for it, also "in fact" auditory? There will be no way to convince the bat of the physicality of the world.

2. Cognitive Content and Cognitive Capacity

Even though there exists a rich discussion for the purpose of ascertaining whether the bat's experience of the world is alien or familiar, it is dimly discussed by Nagel's commentators if the "pure experience" so to speak, is the same for the bat - for example, something akin to hearing sounds - differing radically with respect to only cognitive processes that underlie experience, or if, the experience itself is alien. Nagel's position concerning the bat's phenomenology is that it would be clear to "anyone who has spent some time in an enclosed space with an excited bat...[that it is]...a fundamentally alien form of life" (Nagel, 1974, p. 438), he is still not of much help as he goes on to write, "bat sonar, though clearly a form of perception, is not similar in its operation to any sense that we possess" (Nagel, 1974, p. 438), leaving it unclear if the raw experience itself is the same for the bat as it would be for a human, and that the bat's experience differs with respect to the "operation" of its senses, or if the radical difference lies in the very raw experience of the bat.

We can use the vocabulary of Cognitive Contents and Cognitive Capacities to inquire into this difference and ask, what aspect of the bat's experience is fundamentally different from ours? In the bat's case, the experience of the echo, which is a sound*, is its cognitive content. The sophisticated manner in which it maps out the world using Sound as a means is its cognitive capacity.* The former can be defined as the phenomenological substrate of experience, that which makes "vision" different from "sound" and "sound" different from "touch". It could also be defined as the last thing without change with keeps an experience from changing its kind*. The latter can be defined as the mechanism that interprets the 'same' cognitive content differently. A good analogue for cognitive content could be qualia. Additionally, the details of cognitive capacity - attention, memory, and so on - are not relevant for now. Now, if it is permissible to think of the bat's experience in this way, it would seem that the bat differs not at all from a human being with respect to the former. Presumably, the bat hears high-frequency echoes in the same way* a human hears a sound in its auditory threshold. Thus, the substrate of cognition - the kind of qualia - for the human and the bat would be alike, that is, it would be a "sound". Some have reached the conclusion that indeed, echolocation in bats, and therefore to be a bat, is to hear sounds of various kinds and make sense of the world through them (Allen-Hermanson, 2016. Alter, 2002. Flanagan, 1996.). It would appear in this case that the bat's phenomenology is not so alien after all. In fact, so familiar it is, beeps and boops and sounds of loved ones calling out to us, that we overlook in its entirety that the bat's

¹⁰ It could be possible that in this particular instance, Nagel means it metaphorically or illustratively. His position on the whole, in any case, is clear and well-established.

¹¹ I have not given references for the definitions. This is because these definitions refer to no school of thought or author in particular, and are merely make-do terms that I use to get the point across. Cognitive scientists do use this vocabulary, and most probably mean it the same way, but I am not acquainted with the context of its usage in the literature and would therefore not like to claim the same discursive force when I employ these terms.

world is constituted out of these very cognitive contents. This would diffuse to a great extent Nagel's claim about the radical alterity of the bat's experience.

The issue of difference in the "operation" of the senses, or the cognitive capacity, still remains. I will discuss in the epilogue what complications arise out of the dialectical entanglement of the cognitive capacities with the cognitive contents. For now, things can be laid out quite simply. A being can differ from us in terms of cognitive contents, cognitive capacities, or both. To imagine a being which differs in both aspects would be to imagine a complete alien. On the other hand, a being could differ from us in terms of cognitive capacities and yet share its cognitive contents. This permutation is of great intrigue and importance. Since, if a being is entirely alien, there is no use in imagining "what must it be like to be them". The answer at best would be, "What is it like to be them is what we cannot imagine it is like to be them". The other possibility, situating us at the cusp of the known and the unkown, gives us a unique view into the alien phenomenology of such a being. It would be like peeking through a window we would have otherwise been incapable of looking into. The recognition that the said being must be understanding the same kind of cognitive content*, "Sound" or "Touch", in a radically different way is the stool we stand upon which enables this. Our job next would be to imagine how alien of a world the being in question must inhabit since we already have a partial access to its world, that is, to its cognitive contents. This is precisely the case with the bat, whose cognitive capacities differ greatly while it shares its cognitive contents with us, and this invites us to imagine the unimaginable ways in which the bat might be making sense of the world through sound and how differently it would conceive sound itself. Furthermore, due to these differences, what, if any, fundamental oddities and contrasts could arise in the structure of the bat's world and ours?

Thus, it is not quite the case that bat phenomenology is simply familiar to us as some commentators of Nagel have come to conclude, neither is it the case that it is entirely alien as Nagel himself would like to think. Instead, it is twisted in that the bat's experience is close to us yet so far away, for it is familiar insofar as cognitive contents are concerned and alien insofar as cognitive capacities are concerned. Nagel treads very close to making this point, but he often cites as an equivalent of the bat's experience of the world the subjective experience of the "Martian", which he defines as entirely different from us, as a result straying away from the possibility of considering the ways in which we could indeed imagine the bat's experience of the world (1974, p. 440). Furthermore, he does not linger over the bat's phenomenology, even in his limited capacity, attempting to imagine just how different our own conception of sound could be. Indeed, how interesting it is to think that

we look at objects and say things like, "I see that building". Whereas, the bat, if it could speak, might say things like "I hear that building", even though it would be completely bizarre to us that it can "hear" a Physical object (we are considering stationary and in themselves inaudible objects like a building or a tree, of course). More on this in later sections. Nagel, in his paper, simply insists that the bat's experience of the world is entirely alien, that "these experiences also have in each case a specific subjective character, which it is beyond our ability to conceive" (1974, p. 439). Perhaps it is, and towards the very end, we will see, how - in a way that Nagel does not even know - he might after all be right about the Bat being entirely alien to us. But for that, we must first turn towards the auditory, which is more alien than we think, to which we often pay little attention. And contemplate the ways in which Nagel does injustice to the bat's phenomenology. We must do this while imagining the bat as a peculiar little thing; a creature which might be as alien as a "Martian", yet as familiar as what is received through the ear.

3.1 Nagel's Conception of Objectivity

Before turning towards the Auditory and confronting Bagel's auditory conception of objectivity, we must make an attempt to establish Nagel's conception of the same. This will clarify the way the term has been used in the essay and the contention that is to come. To see what Nagel has to say about it, this section will utilise another one of Nagel's works, his 1986 book, "The View from Nowhere" (VFM). Apart from the motivation to have a deeper conversation with him, this work is also referenced because, in the bat paper, Nagel never talks about Objectivity concretely.

In the first half of the paper, Nagel talks mostly in terms of the Subjective and the Objective point of view, where he characterises the latter in opposition to the former. He writes, "An organism has conscious mental states if and only if there is something that it is like to be that organism...we may call this the subjective character of experience" (1974, p. 436). This he also calls the subjective point of view. On the other hand, the objective point of view in the first half of the paper seems to be a purely negative category. In contrast to a "point of view", it is a "view from nowhere", which, of course, being incompatible with a subjective point of view, cannot account for a view from somewhere.

At one point Nagel also seems to equate objectivity with intersubjectivity. He writes, "There is a sense in which phenomenological facts are perfectly objective: one person can know or say of another what the quality of the other's experience is" (1974, p. 442).

Then, while describing the move from the subjective to the objective characterisation, he expresses that he wishes to remain "noncommittal about the existence of an endpoint, the completely objective intrinsic nature of the thing, which one might or might not be able to reach", and that "It may be more accurate to think of objectivity as a direction in which the understanding can travel." (1974, p. 443). It is only later on in VFN that he writes of the primary qualities of the Physical as objective, as a point of view which is absolutely general, some end point of thought towards which we must strive to reach: "This means not only not thinking of the physical world from our own particular point of view, but not thinking of it from a more general human perceptual point of view either: not thinking of how it looks, feels, smells, tastes, or sounds. These secondary qualities then drop out of our picture of the external world, and the underlying primary qualities such as shape, size, weight, and motion are thought of structurally" (1986, p. 14).

A question can be raised here, and this will be expanded upon in the next section: Why is that shape, size, and weight "underlie" the "shallow" and more "subjective" secondary qualities? Could there be an entirely alternate set of primary qualities which happen to be incommensurable to the physical ones? Here, the question is not proposing something original in that it is attacking the Primary/Secondary Quality distinction. The Locke-Berkeley debate already exists, which concerns precisely that, and although I am myself not deeply acquainted with the literature, much of it is present to engage with (See Bolton in the SEP, section 5.2, 2022). Our inquiry here is slightly tangential.

It could be the case that there exists a set of primary qualities which we posit to constitute the world objectively. Of course, as beings of ocular-centric perception, we inhabit the world and move around in it while giving emphasis to certain ways of being. For us to posit size, shape, or texture as primary qualities should be seen as a logical extrapolation of our own subjective point of view, but not independent of it¹². It could be the case that auditory-centric beings, those who make sense of the world through sounds and not light*, speak of amplitudes and frequencies of sound as objective and underlying primary qualities of the world¹³. This would result in a

¹² This is not a suggestion to embrace Subjectivism. For now, I can only express my intuition concerning this without expanding upon it so that the motivations for what is said are clear. Practically speaking, if we were to be a creature of the sea, water quite literally would not exist for us. In that case, it is meaningless for another to debate from a point of view external to the sea, attempting to make the case that the water also exists for us. This universal claim seems to me to be nothing more than an epistemic imposition. This is not to say I do not agree with the latter, I do, but only because I already have access to both points of view. Any metaphor we construct concerning this would be misleading since we already know the truth which we are subjecting to differing perspectives. I personally do not see any point in convincing the creature of the sea that water does exist. This, however, does not change the fact for me that water exists. An abstract articulation of my motivations - not one which will make total sense at the moment - would be that primary qualities are not subjective, but neither are they objectively subjective. They are, in a way, Objective but subjectively determined - thus, subjectively objective.

¹³ Since it would be otherwise tough for us to imagine this, the prologue to this essay could serve a significant purpose for aiding our imagination at this junction of our discussion.

final analysis which would entail two kinds of objectivity, both of which are the most "general" and "centerless" way of viewing the world, but are incommensurable to each other; not contrary, but parallel - not more shallow or underlying, but different verticals of objective thought - one which lends itself to humans and another to echolocating beings such as bats¹⁴. The thesis would thus be that starting from an entirely alien phenomenology and consequent means of understanding the world would also result in different kinds of Objectivities.

It would appear at this point that we are going against Nagel, but from what Nagel writes in VFN, it seems like he might entertain this idea himself. He already posits two kinds of objectivity; one in the realm of the Physical and another in the realm of the Mental (p.17-19). Why could it then not be the case for the intelligent bat or the Martian that there be another objective epistemic category, that of the "Auditory"? We shall continue this in the next section. For now, Nagel recognises the point I have made in some way (given my reading of the text is correct). He, in fact, comes very close to talking about this in VFN, in the chapter concerning Idealism (see, p. 95-97), albeit not in the context of a bat.

Nagel also recognises that Objectivity has its own limits and has an odd attitude where he seeks to "critique" it at the same time as he "defends" it (1986, p. 5). While acknowledging the limits of objectivity, he explicates how objective ideas themselves change and evolve into "more" objective paradigms, making it sound like his conception of Objectivity is more a method than anything else (1986, p. 14). Moreover, his critique, to be specific, involves conceptualising objectivity not as a property of the world - which is usually how one might think of it - but rather as the relation between thought and the world. He writes, "In pursuing objectivity, we alter our relation to the world, increasing the correctness of certain of our representations of it by compensating for the peculiarities of our point of view. But the world is in a strong sense independent of our possible representations, and may well extend beyond them" (1986, p. 91). This begs the question, what is the world, which apparently lies outside both the subjective and the objective points of view, is it something super-objective?

¹⁴ Although this will be discussed in the next section, it is important to not appeal to the reduction of auditory primary qualities to Ocular primary qualities.

Considering all that has been discussed in this section, Nagel's conception of Objectivity can be characterised in the following ways:

- 1. A view from nowhere as opposed to a point of view of a specific subjectivity.
- 2. An intersubjective characteristic of facts accessible to all kinds of rational beings.
- 3. A function of the understanding in its movement towards greater representation.
- 4. The most "general" view of the world, one which is "centerless" and can be taken up by any being of a rational nature.
- 5. The method of representing the world accurately in thought; a specific orientation one's understanding takes in relating to the world. However, it is not all-encompassing, and the world could still escape an objective understanding. That is, there are facts that lie outside the possibility of objective analysis.
- 6. At least two kinds of objectivity; physical and mental.
- 7. Size, motion and shape as objective qualities of the non-mental realm.

3.2 Bagel's Conception of Objectivity

Nagel speaks in the first half of his paper about the subjective character of the bat's experience, which lies outside the objective means of understanding - physicalist methods - employed by humans. If Bagel were to read the paper, he would be delighted. "The same question I asked concerning the worm, Mr Nagel directs towards our own phenomenology!", he would say. It would not be long, however, before Bagel notices something odd. Here are two excerpts about which Bagel would have something to say¹⁵:

"For example, we may ascribe general types of experience on the basis of the animal's structure and behaviour. Thus, we describe bat sonar as a form of three-dimensional forward perception" (p. 439)

"A Martian scientist with no understanding of visual perception could understand the rainbow, or lightning, or clouds as physical phenomena, though he would never be able to understand the human concepts of rainbow, lightning, or cloud, or the place these things occupy in our phenomenal world." (p. 443)

¹⁵ I should make it clear that these are not the only excerpts which can we problematised in the way we are analysing them. There are many others, which, if one finds merit in the arguments of this essay, will be able to recognise while reading Nagel's paper. However, they are implicit and quite entangled with other affairs in the paper, and are thus not considered.

Upon this, Bagel would comment -

I find it odd that Mr Nagel describes our perception as "three-dimensional" and "forward". For I am certain our cognitive so-ience departments describe it as "Stereophonic" and "Aurally oriented" ¹⁶. Furthermore, How am I supposed to understand the rainbow, lightning, or the trees as physical phenomena? Rainbows do not exist for me, and as far as a tree is concerned, I do not look at one and say it is great in "size" as Mr Nagel would like to suggest it objectively is. I look at a tree, and I think about great amplitudes and low frequencies - oh, how my favourite bat poet puts it, "My favourite tree is also my favourite piece of music".

The need to imagine a bat responding in such a manner is the fact that it is not obvious at all that intelligent bats or Martians will simply take "size" or "three dimensions" to be functional or describable terms for the objective world. Neither is it obvious that somehow, despite the radical difference in phenomenologies, the epistemologies of a Martian or a bat would find refuge in the Objectivity of Man. The only reason we take it as granted for this to be the case is because we do not truly understand the richness of the bat's own world.

Striking parallels can be drawn between bats and humans, with the bat's way of existing in the world being appreciated, along with the way the world reveals itself to the bat, if we engage with the literature while having some sympathy for the otherness of the winged mammal. Where Man might say he sees a tree, a bat would shriek that it hears a tree. For Man, the tree is a picture. For the bat, it might be music. Low frequencies are obstacles, and worms are mere high frequencies. Distances are temporal cavities, and the identity of objects extends into time instead of space.

Let us keep philosophical reflection aside and consider a comparison with humans who use visual aid: Huntergatherers coordinate when on a hunt, where one should not come in another's line of sight, and cues are received from the other's gaze on where to move next. Some follow without knowing where the prey is, for they believe the one who is followed knows. Bats species such as Pipistrellus pygmaeus, M. daubentonii, Rhinopoma hardwickei (Habersetzer, 1981), Tadarida brasiliensis (Gillam et al., 2007) or Noctilio sp. (Barak and Yom-Tov, 1989) hunt in a similar fashion while they drown in a sea of sounds and echoes (Moss and Surlykke, 2001). Supposedly, it should be impossible in certain environments to do so since calls from all the bats make it impossible to map out where exactly the prey is (Moss and Surlykke, 2010). Yet, the bats make careful alterations in the spectral characterisation of the calls while flying with other bats and competing for a

¹⁶ This need not be accurate, since stereophonic perception of sound is still conceived in a spatial manner. The point merely is merely to imagine Bagel's cognitive faculties as so different from ours that it would come up with terms equivalent to "Three dimensional" but in the Auditory realm.

single prey item (Chiu et al., 2009). This alone is a display of the sheer effectiveness of the bat's perceptual system.

Furthermore, the magnitude of these alterations depends on the baseline similarity of calls produced by the individual bats when flying alone. Adjustments of up to 8 kHz are made when two bats fly closely together (Surlykke and Moss, 2000), aiding target detection (Bates et al. (2008). Similar to how hunting practices differ in two-legged visual beings, free-tailed bats Tadarida brasiliensis, prevent mutual interference of calls by avoiding the emission of sounds at the same time (Jarvis et al., 2010). Sometimes, as human hunters mistake rustling leaves to be a predator, the bats get tricked as well, believing the sudden movement of small pebbles to be an insect (Griffin, 1958). The human realises that it is not a snake or a boar but withered leaves under the spell of the wind. The bat, as well on repeated occasions does not respond to the movements of pebbles as it recognises intelligently the difference between artificial movement and an insect buzzing around (Griffin et al., 1965).

When hunting individually, bats focus their calls, akin to how eyes bring specific objects into focus in one's field of vision, selectively sampling echoes from their environment. Phyllostomid bats can move their nose-leaf - a fleshy structure at the base of their nose - akin to adjusting one's gaze to independently steer their call beam towards specific objects (Weinbeer and Kalko, 2007). Other bats control the direction of their call beam and the space they investigate by moving their heads. Constant Frequency bats employ a distinct strategy to distinguish echoes from vegetation and insect prey, listening for Doppler shifts created by prey wing movements (Schnitzler and Flieger, 1983; von der Emde and Schnitzler, 1986, 1990; von der Emde and Menne, 1989). Such is the diversity of bats and the variety of echolocation solutions to the perceptual challenges that arise in a complex acoustic scene.

Let us also bring our attention to how the world itself is structured in ways which can only trouble a bat. The neotropical vine Mucuna holtonii, relies on phyllostomid bat Glossophaga commissarisi for pollination, guiding these bats to its fresh flowers using a tiny concave structure that functions akin to an acoustic cat's eye. This structure reflects a significant portion of the bats' echolocation calls back to them, effectively directing their attention to the virgin blooms, thus making it quite difficult for them to discriminate between plants (Helversen and Helversen, 1999). Like natural caves, which only make sense to be used as "shelter" by human beings or still-ponds serving the function of natural "mirrors", these flowers can literally be thought of as mirrors for the bats, blinding them temporarily.

Now that we have somewhat of an idea of the complexity of the bat's world, we can try discussing how this sophistication must be necessarily different from ours if bats were to exist as essentially hearing beings. Think about the dependence of our objective conceptions upon spatial extensionality as a basis. Categories such as distance and motion, even shape and size, are conceived only in terms of spatial extension. They involve the stretching out of space, voids which are filled, directions which are traversed. This would not make sense in the case of Auditory perception, for it entails intensity instead of extension.

Here is an example that would make this clear: Imagine a car that is approaching us on the road while we stand on a sidewalk. It closes in, finally stands in our vision for a brief moment in front of us, then takes off, receding into the horizon. In objective terms, we would speak of the car as having followed a line of motion, with each point upon this line distinct from the one prior and also from the next. The size of the car increases in the space it occupies in our vision as it closes in on this line of motion, reaching a maximum when it is right in front of us, then shrinking away as it races past. These are the qualities which Nagel terms to be primary and thus objective in VFN as discussed earlier. However, there is no way of conceptualising them in the bat's auditory perception. We could imagine this if we were to close our eyes as the car approaches us while it honked continuously - take this to be an analogue of what the bat does to survey its surroundings (Griffin, 1988. Pereboom, 1994, Simmons, 1989). In this case, we would hear a sound with increasing intensity, which, after a point, would reach a maximum, and then get slowly numbed. The experience of the car would thus not be based in extensionality in the spatial sense, rather, it would be a matter of intensity as one is able to recognise.

The car as a sound does not "move". It only piles up upon itself while we are oriented towards it; sounds fold upon sounds resulting in more sound. If the bat were to exist in a world as such, it would be confounded by the claim that it was supposed to understand its subjective experiences as physical phenomena. The reason we find physical phenomena to be a natural way of explanation and understanding is that we are dominated by ocular faculties of understanding, and so, we immediately reduce the car-as-sound, situated in an auditory field, understood as an intensity rather than as spatial extension, to categories such as size, motion, shape, and distance, resulting in an understanding of the car no different than if we were to see it¹⁷. For, Bagel, however, a sophisticated sense of frequency and decibels would be equivalent to a primary quality like size or motion since it will not reduce the former to the latter given its sensitivity of auditory cognitive capacities. And so, the world of the bat as described above, if the bat were to be an auditory being, would be entirely based in intensities instead of extensionality in the spatial sense.

¹⁷ In fact, so dominant are these visual faculties of understanding, that in human echolocators auditory cognition takes place partly in the calcarine cortex (also called V1) which, in sighted individuals, is responsible for vision (Thaler et al. 2011).

Consider again the point raised earlier in section 3.1. It could be the case that we conceive of some qualities of the world as so-called primary qualities. Since, for a fact, they would be for us the most general and centerless point of view to represent the world. At the same time, it could be the case that the bat embodies a world draped in an entirely different set of primary qualities which, for it, are the most general and centerless way of viewing the world. This, although it goes against Nagel in a significant capacity, still retains his conception of objectivity.

"It is quite suspicious as well, Mr writer-of-this-essay" Bagel could go on to say, "that Mr Nagel conceives of the world as centerless, not belonging particularly to a human point of view. Yet, somehow, he only seems to imagine the most objective ways of viewing the world as always accessible to the human". Indeed, I would agree with Bagel. There is a tension in Nagel's own intuitions. At points, he expresses that limitations always harrow objectivity and that there is a world that extends beyond it; perhaps one that cannot even be accommodated within it (refer to VFN, p. 14 and 91). But then he writes statements such as "Even if we acknowledge the existence of distinct and irreducible perspectives, the wish for a unified conception of the world doesn't go away" (VFN, P. 17), and that "The aim of such understanding [in the context of Mental objectivity], the deeper aim it shares with the reductionist views which I reject, is to go beyond the distinction between appearance and reality by including the existence of appearances in an elaborated reality. Nothing will then be left outside" (VFN, p. 18). This should make clear that on some occasions, Nagel wishes to negate the hegemony of the objective impulse, on others, he gladly admits to it. It seems that he revokes the privilege of omniscience from the individual only to cleverly preserve it in the role that the individual - that is Man - can take up¹⁸.

Bagel articulates it better as he experiences a moment of self-realisation -

The monarchy of Bats had an absolute leader once. Then one day, the dictator stepped down from his position and said, "You know what, it is time for the common man to choose his leader. We shall now have democracy in this country!" And then continued to rule by winning the elections every five years or so because no one else would dare step up for presidential candidacy. Thus, he still retained his power by displacing it outside himself. Mr Nagel's subject, that is Man, is not supposed to be at the centre of every worldview. Yet, he, like our dictator who by happenstance keeps on winning,

¹⁸ In the chapter "The Incompleteness of Objective Reality" (See VFN, p. 25-27) Nagel does consider possible points of view which we still cannot take up. But he greatly undermines them by considering the example of possibly never knowing how "scrambled eggs" taste to a "cockroach". He then acknowledges the same issue with knowing the values, goals, and more "subjectively" important features of life as well. I would like to point out here that the most dreadful kind of incompleteness of objectivity still remains unaddressed by Nagel. Not the kind which is objective but seemingly not important at all (the former), neither those which are subjective and so pose no real threat to the paradigm of objectivity anyway (the latter), but those which are objective and still inadequate. It is to overlook this, that makes Nagel ascribe physical conceptions of the world to an entirely alien being.

can always take up any Objective point of view. For Man to truly not be the centre of the world would be for an objective point of view to exist which he cannot even take up, but can only be taken up by a radical other; an entire representational aspect of the world to which certain beings have access to while Man remains excluded from it. Such an imagination, unfortunately, does not strike Mr Nagel, so he does injustice to our world, just as I, in my naivete, did injustice to the worm's.

For this reason, I wish to call for the consideration of the possibility of ways to conceptualise the world - objective ways, I must say - which are not accessible in the least to the Human, not even in describable terms. At times, Nagel acknowledges this only till he does not, which is the case in the bat paper. The result is the acknowledgement of the bat's otherness and its world, but conceiving the latter in a particularly human conception of objectivity - in a realm of abstraction that can only be reached, in a movement undertaken by understanding, through the Ocular as its starting point.

Nagel's blunder - if the accusation is deemed valid - is that he acknowledges so emphatically the radical nature of the bat's subjective world, but concerning what underlies it, that is, the bat's own conception of the world, he does not consider the bat at all, simply ascribing to it a physicalist vocabulary in the first excerpt and even claiming that it would understand physical phenomena in the second. Thus reducing the unfamiliar down to the familiar. Nagel could have furthered the same sense of caution that he unravels in the context of his attack on reductionist methods of studying consciousness; one human - a neuroscientist - cannot say to another, "You are neurons firing inside your skull", expecting the other human to conceptualise their reality the same way (See also, Churchland 1988). However, in the case of a human and the bat, he uncritically ascribes to the latter our own sense of objectivity without considering that it might just disagree with us. Of course, it could be difficult to imagine how exactly they would disagree, but a lack of imagination does not indicate a lack of possibility. Another articulation of the same would be as follows: If bats spoke one day (uncritically, we, of course, imagine if they spoke, they would speak English, not Swahili), and insisted upon the validity of an entirely different epistemic framework - something akin to physics but based in auditory phenomenology - there would be no way for us to claim the primary qualities of our world to be more objective than theirs. A brief consideration of the bat's world is undertaken in section 4, which might make one sympathise with a disagreement of this kind.

One last concern in regard to the first excerpt: It could be the case that one finds the schematic ascription to be unproblematic since Nagel is merely utilising human categories of recognition to describe the bat's perceptual apparatus, not claiming that the bat itself would think of its perception that way. If the bat were an object we

were describing - something that exists en-soi - my objection would indeed be uncalled for. Since objects cannot have an alternate set of descriptions for themselves. In contrast, an intelligent bat, or the Martian - which exists pour-soi - would have a means for self-recognition. It is this self-recognition we deny when we ascribe to their perceptual apparatus physicalist terms. An intuition pump for this concern would be a scenario where a group of colonisers - think of the original Europeans who set foot upon American soil - choose a certain description for the native inhabitants - the "Indians". We would find it frustratingly annoying if the Europeans were to say, "Well, this is a mere functional description we have for them because we see them as so and so", even though, we recognise that for the Europeans, this description would make sense for they think they sailed east instead of west. It would also not be a problem if what they called the "Indians" were objects existing ensoi. However, this is not the case. The "Indians" might have their own set of descriptions for themselves and might seek recognition through that instead of what the Europeans ascribe to them. The casual attitude of recognising the native Americans as "Indians" is thus dangerous, for the Colonisers risk conceiving of this representation in a way that corresponds to reality or mirrors it when the ascription is, in fact, purely practical. The point here is not a suggestion against describing the bat's perceptual apparatus as "three-dimensional" or "forward" but a suggestion against an attitude that merely for the reason of this being a physical description which is objective for us, it an aspect of the bat which is "familiar" instead of "unfamiliar". The danger schematism of this kind poses has nothing to do with the extent of their functional utility but with the kind of intuitions they reinforce; in Nagel's case, the intuition that a bat or a Martian will understand physical phenomena to be the objective case in the world. When, in reality, even if the bat were to as familiar as hearing sounds just like us to make sense of the world, differing only in its radically different conception of the world, it might still conceive of an abstract centerless and general world quite differently than us.

Alternate objective descriptions are not to be found only in inter-species conceptions of the world. Think of Newtonian physics and Einstein's relativity. Both are objective ways to describe the world, yet for certain predictive (The orbit of Mercury) and conceptual reasons (Action from a distance), we prefer the latter to be "more" objective. It is almost certain that we are still to find - if we do - an objective description that is physical, which reconciles Quantum physics with Macroscopic physics (Powell, 2015). The question of what exactly physicalism is - whether the world is particles or waves, pure energy (whatever that would mean) or matter, or both, or nothing, or all of it, or something entirely else - is itself also not clear (See, Stoljar, 2023 in the SEP). Thus, we must ask ourselves, if we ourselves are not sure as to what an objective description of our world is, how are we so sure that an alien being would agree with our one-out-of-a-hundred-different-possible-description of a world that it might not even share in the first place? Nagel mildly addresses something similar

when he talks about the "seeds of objection" being present in successful cases of reduction. He writes, "For in discovering sound to be, in reality, a wave phenomenon in air or other media, we leave behind one viewpoint to take up another, and the auditory, human or animal viewpoint that we leave behind remains unreduced. Members of radically different species may both understand the same physical events in objective terms, and this does not require that they understand the phenomenal forms in which those events appear to the senses of members of the other species. Thus, it is a condition of their referring to a common reality that their more particular viewpoints are not part of the common reality that they both apprehend. The reduction can succeed only if the species-specific viewpoint is omitted from what is to be reduced" (1974, p. 445). A subjectivist response would be one which points out that the Objective facts themselves are imbued with certain attitudes, although this is a line of reasoning that has been avoided in the essay. I would only point out in the end that given the diversity of Objective descriptions in the Physical realm itself, why can we not consider another type of objectivity, finally recognising the bat as the alien thing that it really is? And more importantly, perhaps, recognise how alien the world of the alien is as well.

4. Conclusion

The unfamiliar is sometimes more unfamiliar than the ways we imagine it. To pursue the ways in which an auditory being could be alien, we imagined it as familiar at the same time as it was alien since we have access to the realm of the auditory, but cannot cognize the world through it with much sophistication. Given that we conceive Objectivity as Nagel conceives of it - explicated in section 3.1 - we were able to contemplate the possibility of the radical alterity of an auditory being or a Martian not just in regard to its subjective point of view but also the objective point of view. There is no reason to think that there must be one means to represent the world objectively - something with which Nagel also seems to agree. However, he seems to ascribe physicalist vocabulary to the Martian and the bat, as if they would simply share this conception of the objective world with us, just as Bagel in the prologue does with the worm's phenomenology.

Discerning this tension in his intuitions and bringing them to the surface, we argued for the possible case where Nagel, in his desire towards - which he admits to - a "unified conception of the world" from which "nothing escapes", attempts to revoke the privilege of omniscience from the individual human only to cleverly preserve it, albeit unintentionally of course, in the role that the individual can take up. Thus, the accusation is articulated

of which one may be the judge: both Nagel and Bagel recognise the alien in their world but fail to recognise the world of the alien. This, I hope, is now clear in the case of both Bagel and Nagel.

We also explored the complexity and diversity of the bat's world, unravelling at least one way, that is, the difference between the Auditory and the Physical in terms of Intensity and Extension, as to how the objective conception of the world for an auditory being must be necessarily different. Furthermore, we inquired into - a little too briefly, I admit - the internal struggles of physical objectivity itself, something which Nagel seems to discuss at length in VFN (see the section on physical objectivity) but does not pay much heed to in the bat paper.

We did all of this while taking for granted other aspects of Nagel's discourse, such as his idea of Objectivity, the conception of Objectivity as limited, and the vocabulary of the Subjective and the Objective point of view. Disagreements with Nagel's idea of Objectivity itself were kept aside. At the same time, arguments and examples refrained from positing a positive conception of objectivity, which differed from Nagel's. The result of this, I hope, was an analysis built within Nagel's discourse that still managed to raise important questions concerning his ascription of physical objectivity, that is, Physicalism, upon alien - or as the bat is imagined in this essay - partially alien beings.

Epilogue - Cognitive capacity expressed as Cognitive contents

One could accuse the essay of still imposing humanistic conceptions upon the bat. "If we cannot ascribe ocular categories onto the bat, why ascribe auditory categories as well? The bat could be even more alien than that! Not residing in this sense but very comfortably and conveniently still within the other". Sure, the bat's echolocation could be considered a different sense altogether. I have merely imagined the bat as an auditory being to point out how there exists already within our grasp a world that is quite alien to us. We could have done this by taking up any other sense that we possess, it just so happens that we find in the world a creature which uses, apparently, what we perceive to be one of our underprivileged senses to navigate through the world and does it just as efficiently as we do with our dominant sense, that is vision. It is this empirical leverage of the bat's echolocation that makes it a special example to argue for alien phenomenology; the alien is present in our familiar gaze but with a possibly quite unfamiliar world of the alien, which we must not mistake to be familiar at all. If the bat is an auditory being, and imagines the world as comprised of sounds, good. If it is even more

alien than that, which I believe it is, even better! After all, this is what Nagel thinks as well, keeping aside the physicalist ascriptions of course. It is in this way that he is right after all, however, my aim throughout has been to show that his own intuitions do not do this conclusion proper justice. The aim of the essay, then, is to convince someone of this final conclusion in light of more appropriate intuitions, aided by the mediation of the auditory and its imagination. The latter is thus not a point that is argued itself, but what helps the point to be argued.

The vocabulary of cognitive contents and cognitive capacities is equally problematic, if I had to argue independently of Nagel's paper, the point could very easily be made in section 2 itself. I considered throughout the exposition of section 2 only a third-person point of view, where we assume access to the minds of the individual subject to cognitive contents and cognitive capacities. However, this analysis could look very different from a first-person point of view, making it practically the case that the cognitive contents themselves differ from point of view to point of view. Consider the famous meme from 2015 "Is the dress black and blue or gold and white?"19 The majority thought the dress to be black and blue (b&b), and a considerable minority thought the dress to be gold and white (g&w). Scientifically, it was concluded that the dress "in fact" was b&b. We could thus ascribe to the experience of the dress the cognitive contents b&b and leave the cognitive capacities to interpret it however they so wish. The dress could, therefore, be interpreted by some as g&w or by others as a combination of colours x&y, and this would be on the part of cognitive capacities. But think about the person - I am one of them - who sees the dress as g&w. It is quite literally the case for me that my cognitive contents are not b&b. This could be for a number of reasons, which science cites; white balance, picture warmth, my predisposition to perceiving the picture and so on. All of these would be factored for by my cognitive capacities. But these cognitive capacities, for me, seem to be expressing themselves as a radical shift in the nature of Qualia - cognitive content - itself. So radical is this change, that if someone, say my friend Himanshu, were to wear the dress, he might wear black heels since he perceives it to be b&b, whereas I might fancy white or golden heels since for me the dress is g&w. And we would continue to argue how each of our fashion sense is incoherent. Yet, perhaps we were supposed to recognise - other than the fact that feminine clothing is probably not our forte in fashion- that b&b and g&w share some baser or substantial characteristic in common, that is, the concept "colour" and conclude that even though our cognitive contents seem so different, they are of the same kind in some way, with the difference being factored for by the cognitive capacities.

¹⁹ See, YouTube - The Famous Dress That Broke the Internet: A Scientific Breakdown

All of this sounds very vague, and I believe it is. There is no way, from a first-person point of view, to make sense of cognitive contents and cognitive capacities. To reiterate what has been explicated till now in another way, the cognitive content might be of the same kind and be posited as simply the same between the two instances from a third-person point of view. But, the change in constitution, revelation of hidden content, and shape-shifting of parts into a different whole, results in a kind of experience where the subject might as well say that there is nothing same at all from a first-person point of view. The latter is, of course, quite hard to imagine since we have a tough time believing that someone might experience "sound", which, to them, might seem as if it is "not-sound". Griffin seems to suggest something similar - albeit within the realm of the five human senses when he writes about human echolocators not even realising "that the information telling them of the proximity of obstacles comes through their ears" and when he writes, "Our brains are far from being specialized for echolocation, and when deprived of one of the principal sensory systems, it may be a natural tendency for information arriving by channels not normally exploited to be linked with mechanisms of perception ordinarily employed in vision or tactile feeling of objects. If so, bats or dolphins deprived of the ability to echolocate might imagine that they were detecting food by this, to them, predominant sensory channel when they were actually seeing or even tasting it" (Griffin, 1988). Griffin's reflections can be translated into the discourse of Cognitive Contents and Cognitive Capacities as follows: The cognitive capacities of vision in the case of human echolocators are so overbearing in their expression as cognitive contents that it would seem to the subject that its cognitive contents are constituted of the visual instead of the auditory. It goes the other way around in the case of bats, where the auditory cognitive capacities are so specialised that the bat might as well take its cognitive contents to be auditory instead of what it really is, that is, visual. This could be the case with the bat as well, where its cognitive capacities differ so much that for it, the "same" cognitive content, the same "kind" of qualia, could be very different; an experience of a sound could be X or Y; something entirely unimaginable and totally alien phenomenological, thus leaving us with the same conclusion. We have recognised the alien, the world of the alien, not so much. Hopefully, this will clear the ways in which we - in the context of this essay, Nagel - violate our own intuitions; the unfamiliar is rendered more unfamiliar than it was hitherto conceived.

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