PERSONAL IDENTITY AND PERSISTENCE OVER TIME
THE HYBRID VIEW WITH REGARD TO HYLOMORPHISM

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BY

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DECLARATION

This thesis has been composed by me and is entirely my own work except where I indicate otherwise by the use of quotations and references. No part of it has been submitted for any other degree or professional qualification.

Note on Publications

Parts of Chapter 2 have been published as: Keles, S. (2016) "Personal Identity and Persistence Over Time: An Aristotelian Interpretation", *Arkhe-Logos*, vol. 1, pp. 11—28.

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ABSTRACT

This thesis is concerned with the concept of personal identity. It aims to identify a simple formulation of what it is for a person *x* at time t_1 to be the same as person *y* at time t_2. In pursuit of this aim, it addresses several metaphysical questions: What are we? Do we have a persistent identity? If so, how does our identity persist? In contemporary debate, there are two established ways of answering these questions. Advocates of biological continuity answer that we are essentially *human organisms* and that our persistence over time is reducible to biological continuity. Advocates of the rival, psychological view answer that we are essentially *persons,* whose persistence is reducible to our psychological continuity. Against both of these mainstream views, certain recent works have pointed to the possibility of a new account of personal identity that brings the rival accounts together in a hybrid notion of personal identity. This thesis elaborates and argues for such a hybrid theory of personal identity.

The thesis is divided into four chapters. Chapter 1 begins with an inquiry into the historical roots of the problem of personal identity. It addresses the metaphysical questions of personal identity drawn from early modern philosophers and from contemporary discussions. Chapter 2 builds on Aristotle's pre-modern, hylomorphic theory to suggest that the hybrid notion of identity is best grounded in Aristotle's metaphysics and embedded in his substance ontology. Chapter 3 proposes that the most reasonable conception of what we are and how we persist is based on non-reductionist aspects of identity. This chapter draws on and extends Chapter 2's Aristotelian account of identity by focusing on how the principle of individuation functions within contemporary debate. It argues that constructing and using Aristotle's non-reductionist model warrants a contemporary hylomorphic view of identity, which renders the hybrid conception plausible. Chapter 4 brings both Eric Olson's animalism and Lynne Rudder Baker's constitution view into consideration, arguing that their theoretical innovations can be accommodated by the hybrid view.

The hybrid view proposes that we are essentially embodied, thinking beings. It is thus both non-reductionist and non-dualistic. This thesis supports the case for this view by moving from its Aristotelian foundations to contemporary debate, and by arguing for the view's rational superiority over its philosophical rivals.

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INTRODUCTION

When we think about ourselves we must contemplate numerous related-yet-distinct subjects that are included in inquiry into personal identity. This examination starts with the first metaphysical question of what we are; biological beings, or immaterial entities, or both? Or perhaps we are entirely distinct sorts of beings, something like an immaterial entity. It is equally crucial to know what types of changes our bodies and minds can undergo without causing us to become a new person (if that is possible), or to cease to exist.[1] This inquiry also includes various conditions, where the body remains alive, but the brain permanently terminates its high functions in cases, such as is the case of a persistent vegetative state, dementia, a brain-swap thought experiments and so on.

Second set of metaphysical questions could be directed under the limitation of whether we have a persistent identity. In contemporary debate, there are two established ways of answering these questions for those who favour the idea that we have a persistent identity under certain conditions. These two ways presuppose that we have a persistent identity through time. In order to limit the scope of our inquiry here I take this assumption as a constraint marking the boundary between those who reject the idea of a persistent self altogether, such as neo-Humeans[2] who strictly follow the neuroscientific explanation of the self, and those who agree that there is a notion of personal identity to a certain extent and this identity traits are taken to be persistent to a certain degree. The latter presupposition is represented as the initial premise of both reductionist and non-reductionist accounts. And so, it will be the initial statement of our concern.

Persons are natural objects. We live in a physical world, and we are material and physical objects, just like any other living beings exist in space and time. Undoubtedly, we believe neuroscientific explanation in principle

[1]In this thesis I treat death as the end of a person's existence, the end of biological life. This is an Aristotelian standpoint and also excludes the notion of resurrection and after life in the discussion of the persistence of personal identity.

[2]Churcland (2013), Dennett (1996;2014) and Metzinger (2003). Parfit is also a neo-Humean from one perspective, yet he does not reject the idea of the self altogether; rather, his argument is significant in terms of survival and this is what matters.

could account for human nature, or we can promote the exclusivity of identity relations when we are prompting the continuation of self and identity. This almost amounts to describing the notion of human nature at different levels. Here, what we mean by "levels" is crucial. Human beings not only explain things and what happens to them, but also understand them and relate to them as a part of our conscious lives. We can use different concepts in order to understand a single object or event. Understanding our nature is similar to understanding concepts not entirely conceivable through scientific theories, such as the concept of freedom or of free will. We may find difficult to translate the terms "personal identity", "free will", "responsibility" and "accountability" into scientific terms. Therefore, neuroscientific findings may remain controversial while these terms require more insight.[3] Looking from this specific angle, it is not difficult to see that the question of what we are could be treated as a metaphysical problem, and the persistence conditions for our existence through time are directly related to this question. This thesis does not directly answer the question of what we are; rather, it proposes a new way of understanding our nature.

As much as the question of persistence presents a demanding starting point for our investigation, the inquiry into the question of "What are we?" remains pressing in the debate and we must still address the challenge directly. If we are animals, a kind that Olson defends, or psychological continuers, as reductionist neo-Lockeans assert, then why do we still concern with persistence in every day cases and hypothetical scenarios, such as fusion and fission? What does happen when we apply this fusion to dogs, for instance? One might say that the dog goes with the brain, or more specifically, the dog goes where the cerebrum goes. This inquiry is more about any creature that has a sufficient psychological capacity, and provides enough evidence for us to distinguish the dog's persistence conditions. Dogs are animals in an obvious and perfectly good sense, and to

[3]For instance, one may be quite critical of the exact role of consciousness in decision making. However, Dennett (2014, p.355.), who is critical towards the idea of self and a continuous identity, believes that making any sort of decision requires consciousness in most stages. He says that the current work in neuroscience supports the conceptions of free will, human agency and moral responsibility.

a certain extent, we are animals in the same sense as dogs. There is no doubt that if we talk about the persistence conditions of a dog, and if our concern is about whether the dog I saw a week ago is the same dog that is sitting next to me now, then we know that this inquiry is substantially different than asking how does a person and a person's identity persist over time.

Personal identity requires a revision, and the implications of prudential concerns are highly demanding for us to question our views of ourselves and of what matters. Regardless how some philosophers develop their identity claims as a transitive and possibly as a branching relation[4] (or for some there is no self or identity as such to ascribe human beings), plausible alternatives could still maintain the significance of identity relations, which are mainly categorised into two major groups: psychological continuity defenders[5] (such as neo-Lockeanism) and biological continuity defenders[6] (such as animalism) who claim that we persist iff we have *either* psychological continuity *or* biological continuity. Taking a wider perspective, we also have the hybrid view in the contemporary debate, which affords a whole new approach to personal identity. How does the unifying notion of the hybrid view bring two major groups of identity claims together? How is this view a sort of challenge to any identity theory that purports to preserve a tight reductionist relation between identity and continuity conditions? The hybrid view's rational superiority over its philosophical rivals on these particular questions will be detailed in Chapters 3 and 4, along with the contemporary defenders of the view, which will be discussed in Chapter 4. For now, we can touch upon the general trend within these accounts.

The hybrid view has been defended by Wiggins,[7] McDowell,[8] Langford[9] and Noonan[10] (in more of a neo-Lockean trend) most recently. As

[4] Parfit (1970) and (1984).
[5] Defenders of this approach include Lewis (1976); Parfit (1984); Shoemaker (1984); and Unger (1990).
[6] Defenders of this approach include most notably Olson (1997); Snowdon (1990); and Van Inwagen (1990).
[7] Wiggins (1967; 2001).
[8] McDowell (1997).
[9] Langford (2014).
[10] Noonan (2003).

my inquiry unfolds, I will conclude that these theories of personal identity introduce a similar paradigm to non-reductionist hybrid view, which can successfully propose an account that embodies an idea of a persistent identity through time regardless the changes may occur in a person's life. There is also a perspective that brings Aristotelian hylomorphism and the hybrid view together. Wiggins, in particular, uses neo-Aristotelianism to articulate his metaphysics of persons, and he explores the unity of a person by differentiating the terms "substance sortal" and "phase sortal".[11] He approaches the explanation of human nature by using the framework of phase kinds and substance kinds, which will be explored in Chapters 3 and 4.[12]

Following from this specific outlook, the task of this thesis is to identify our substance kind (our essence), to which all human beings belong. If we take this terminology into consideration, then the defence of a substance kind rests on the claim that the concept of a substance signifies exactly what the object is and determines the persistence conditions that apply to all members of the same kind. *Prima facie*, our substance kind represents the unity of being a human animal (human being) and having certain rational capacities. Accordingly, person is the concept that best answers the question of what we most fundamentally are. Hence, personhood, as well as being a human, is a substance sortal. We are persons in the most fundamental and simplistic way. Yet, we know that the notion of being a person no longer falls under a simplistic description. We begin to exist in the womb as human organisms, where we are potentially persons if no distractions arise during growth, then we actualise this potential and develop certain capacities that classify us as persons, and finally we cease to exist at some point. These points in life at which personhood starts and ends are extremely puzzling, and they require a deeper understanding towards the

[11] Wiggins (2001).

[12] Roughly, substance kinds determine when the entity begins and ceases to exist, whereas phase kinds determine the accidental features that are subject to change through time. Someone could go from being a non-trainer to a trainer and back to being a non-trainer. In that sense, being a trainer is a phase kind, as nothing could go from being abstract to being concrete or vice-versa, the entity itself that goes through changes is a substance kind.

nature of human beings, especially when we attempt to establish a functional account for the persistence conditions of personal identity. Nevertheless, we can assert quite confidently that giving up on the claim that "We are fundamentally biological organisms of a certain kind" (where "a certain kind" explicitly refers to being a rational animal) certainly faces some major obstacles. Theoretical challenges arise for some neo-Lockeans who rejects the idea of a "thinking animal" entirely and claim that we are essentially thinking parts.[13]

So, how exactly are we supposed to make sense of a view about our persistence conditions, where we are told that personal identity is either a biological or a psychological issue? What should we consider to have a clear understanding of how this identification is supposed to explain our complex nature? How do we comprehend the underlying principle of our being and its continuant existence? To answer these questions, we ultimately can develop a new form of understanding, which I refer to as "the hylomorphic model of identity." The hybrid view I defend derives from the hylomorphic model, where the sufficient requirements from both continuity views are combined within a hybrid unity. The hylomorphic model originates from terms, such as essence, substance and ontological dependence. Both the account of essence and that of substance are the best candidate for a persistent identity, which does not solely rely on one view, contrary to the general perspective in the field.

The hylomorphic notion of identity has been recently discussed by some academics,[14] but how the view is supported has not been explored much further. Toner,[15] for instance, develops a Thomistic hylomorphist technic to defend his animalist approach. By contrast, the hylomorphist Hershenov[16] takes a new approach and states that hylomorphists do not need to endorse animalism or the psychological criterion. Their identity claim, which will be discussed extensively in section 3.5, offers a middle way

[13] Parfit (2012).
[14] See Hershenov (2008), Langford (2014) and Toner (2011).
[15] Toner (2011).
[16] Hershenov (2008) and (2011).

between animalism and neo-Lockeanism, and offers an extended clarification that is based on the notion of intuition.

Bringing the conceptual framework of hylomorphism motivates us to investigate why we suppose that the persistence of identity requires a necessary and sufficient condition. Along the same lines, the hybrid view I attempt to articulate as a new or emerging understanding purposes a third way that we can conceive of identity as a unity of what animalism and neo-Lockeans claim to be the exclusive criterion for persistence. In return, this method advocates the unity (a unity of animalist and neo-Lockean aspects of identity) and individuality of human being as a person.

I speculate that a possible perplexity over the transitivity of these terms (hylomorphism and the hybrid view) can only grow as that suspicion is progressively adjusted to the thought that they indicate different concepts and require different analyses. I have chosen the term "hybrid" for the view I have defended over the term "hylomorphic" only because in the contemporary debate, the hybrid identity is represented as the third way of explaining the persistence conditions for personal identity, although how this hybrid unity is generated has not been clarified. I claim that a more convincing interpretation of hylomorphism represents a unique model to articulate this third way by bringing the discussion of substance into our inquiry, and it shows how the hybrid identity view can be plausibly established. My hybrid view applies hylomorphism to several long-standing questions of personal identity, such as the way we come into existence and the changes we can survive. It might seem as if I am introducing a new substance kind, yet the superiority of my claim depends merely upon the idea that both being animals and being neo-Lockean persons *together* within a unity comprises our substance kind, even though these components are claimed to manifest themselves (independently from each other) as phase kinds.

Furthermore, I offer a better understanding of hylomorphism without committing myself to several claims, such as the idea of a persistent identity is intuitive and based on common sense, or the notion of soul in our discussion of a person and personhood is permissible, or the claim that

personal identity could be something that survives after death. The advantage of my thesis over other hylomorphist accounts is that my thesis combines the fundamental features of the neo-Lockean view and animalism, and it avoids the pitfalls that are unescapable for those who defend the power of intuitive reasoning, eternity of soul, and resurrection, which are unfounded and vulnerable to a severe criticism. I endorse hylomorphism as it is indicating the basic relation between body and mind. However, I believe the most plausible interpretation of how hylomorphic notion of identity should be read is profoundly an omitted subject. The reason is that in the case of human beings or persons the soul is only to be taken as activity, which includes mental activities of various kinds. In that sense I agree with Williams' supposition that "hylomorphism might be better expressed by saying that there was no such a thing as *the* soul at all."[17]

How human being persists through time can be interpreted within the formulation of "x is at t_1 is the same being with y at t_2 iff (i) x is biologically continuous with y, and (ii) x is psychologically continuous with y *in virtue of* biological continuity". I will examine the importance of "*in virtue of"* and its implication to personal identity and brain transplantation cases in Chapters 3 and 4, extensively. For now, we can declare that this strand of the view suggests that hylomorphism may seem as materialist (according to Williams Aristotle is a "polite materialist" even if he is a non-reductionist in nature).[18] At this point, we will see that animalism is favoured by these hylomorphists (see Hershenov, Toner). Whereas the psychological continuity view is the idealised view among most philosophers, yet it is incompatible with animalism in various ways. Neo-Lockeans' intended goal is to capture the idea that one could persist as a non-animal (such as a brain-in- a vat). Most neo-Lockeans deny that we are animals and stress that our substance kind is that of a Lockean person: We are rational and conscious beings. As such, neo-Lockeanism implies that we begin to exist when human animals become rational and conscious and cease to exist when those qualities are lost. I explore the proposed

[17] Williams (2006) p. 219.
[18] See Williams (2006), especially Chapter 14.

application of animalism and neo-Lockeanism in the fetus problem and the vegetative state puzzle in Sections 4.2.1 and 4.4.2**.**

In order to justify the suitability of this reasoning, I will here explain the terminology I use in different chapters. In Chapter 1 I raise the mind-body distinction, as personal identity has been widely discussed in the context of this particular distinction (of lack thereof), along with the biological and psychological connectedness or continuity, consciousness, memory, and so on. In Chapters 2 and 3, however, I use the Aristotelian concept of the individual, and in order to discuss the notion of an individual, his ontological terminology is useful, including his distinctions between the relations of soul and body, form and matter, and potentiality and actuality, as well as the notion of essence and the relation between substance and subject as *ousia*. In Chapter 4 I turn back to the contemporary lexicon.

Throughout the thesis, I use the terms "person", "self"[19], "subject", "individual" and "underlying subject" interchangeably. The reason for this terminology flexibility is that these terms, as I use them, all indicate the same thing, and they all are referring to different aspects of a human being. This multiplicity is a presupposition of the condition that a human being is a person[20], individual, subject and the self. Specifically, however, the ongoing debate concentrates on the distinction between the terms "human being" and "person". Undoubtedly, these two terms refer to the same being, while how we use them varies based on the context (in terms of associated qualities for the term "person" attributes are dictated by the things outside of the individual herself, and for the term "human being", qualities are purely scientific variables).

I aim to set up an analogy between the mind-body (matter-form) relation and the relation between psychological and bodily continuity. This project draws attention to contemporary issues in the personal identity debate in which the unity of persons inevitably requires an interpretation,

[19]In the Lockean terminology, the term "self" represents exclusively the holder of psychological states, such as having a continuant consciousness, memory traits and first-person perspective.

[20]It applies when we indicate that certain qualities contribute to the variables that allow a human being to be referred to as a person.

and this project thus employs the neo-Aristotelian solution of such a dualism. The hybrid theory I defend not only accommodates the most supported neo-Lockean claim that the causal relation of psychological states is sufficient in a person's life, it also entails that a human being starts as organisms (as a non-rational embryo) in the womb, and if she happens to be in a vegetative state after severe brain-damage, she will remain the same person, regardless of the disconnectedness of her psychological states. One significant implication of the hybrid view that seems appealing is that undoubtedly such severe brain damage results in a remarkable change in a person's life, but it does not entail that the person ceases to exist. In the hybrid view, one can accept that both claims are true. In that sense, what is sufficient for a neo-Lockean in accounting for personal identity and what is sufficient according to the animalist are both true. Where both sides err is in their insistence that their premises are necessary. If we accept the sufficient conditions and reject the necessary conditions, we are committed to a result in which we can accept both views.

To support the hybrid view is to accept the sufficient conditions for a case in which at a later stage a later person who is connected to an earlier person by the sufficient psychological conditions, and there is a later person who is connected to an earlier person by the sufficient biological conditions. While both animalism and neo-Lockeanism appeal to a certain degree, we will see in the following chapters that neither view is completely clear in drawing distinctions between persons and animals (in Olson's case), or persons and human beings (in Baker's case), as they tend to differentiate these concepts in their terminology. I propose that we are both human animals and neo-Lockean persons, and the unity of these views constitutes our substance kind.

One may claim that bringing the substance kind into our persistence question creates a worry about the hybrid view, as it might create an utterly mysterious outlook for a person. As I will point out extensively in the following chapters, facts about the substance kind that hylomorphism and the hybrid theory assign follow from neo-Lockean persons and Olsonian animals. The hybrid view employs the hylomorphist method to assert how

these reductionist accounts could be combined within a non-reductionist unity. Accordingly, at the beginning, we exist as human animals, then grow into Lockean persons throughout our lives. We could cease to be persons in a neo-Lockean sense, yet it does not follow that our self, the subject itself, ceases to exist altogether.

With this reasoning in the background, in Chapter 1 I outline the questions of personal identity, how we should direct certain questions, and the ways of categorising leading contemporary accounts. After outlining Parfit's distinction between reductionism and non-reductionism (he points it out as the distinction between the simple view and complex views), I dedicate a substantial amount of space to the historical background of the discussion. In doing so, we gain insight into the historical background of the topic, but we also clarify why it is frequently assumed that the personal identity debate only begins with Locke. The argument of this section is that empiricists like Locke and Hume offered a new insight about the notion of personhood, especially after Descartes. Prior to their discussions, there was Descartes' substance dualism, in which he assumed that persons have a primitive conception. Although Descartes has no precise discussion of personal identity, his substance dualism causes – but also avoids – complications that the later empiricist philosophers raised.

Later in the chapter, I point out historical objections to Locke and Hume, and show how their concerns created a debate over the notion of personhood. Subsequently, I review several representative accounts of personal identity that relate to the distinction between reductionism and non-reductionism, suggesting that each view clashes incompatibly with plausible views about our existence through time. Proponents of these views claim that these counterintuitive results are worth the cost of the theoretical advantages their views provide. I widely outline and justify my position in the second and third chapters. Within the scope of the first chapter, I highlight my interpretation, in which I conclude that due to the discrepancies they indicate, these accounts do not capture the persistence condition on their own. This identification of gaps these theories have, is the

initial concern of this project. Avoiding any means of intuitive reasoning and adopting a specific scientific explanation (such as the one that claims there is no persistent notion of personal identity) seems preferable in the contemporary debate, but given how these accounts radically differ from each other does not pay credit to their value either. In Chapter 2, I focus mainly on Aristotle's metaphysics[21] and evaluate the foundations of the hylomorphic account of personal identity within the Aristotelian conception of individuation, identity of substance and essence. I highlight that there is nothing more substantial in a person's being than her being *per se*. That is to say, a person is a person *in virtue of* herself and her essence. Aristotle does not explicitly address the questions of personal identity, but fortunately, a neo-Aristotelian reconstruction of this matter is possible. This task requires a realisation that there are historical divergences in concepts, such as mind, individual, and the persistence of identity. These challenges allow us to think about the notion of a person in a wider perspective.

The project of this thesis is the result of an attempt to understand why such an inquiry should not be considered controversial and what exactly it means to explain our own existence within a hybrid notion. The degree of resistance with which the hybrid view has been met really merits some investigation. The real advantage of this interpretation is to afford straightforward link between the mind/soul–body/matter distinction and the relation between psychological and biological traits of personal identity. I dedicate an entire chapter to the possibility of employing the ontological status of an individual in order to account for the persistence conditions for a person as a hybrid unity due to one's being as *ousia*, and how this substantial being undergoes change and alteration, yet persists to exist as the same person in virtue of being considered within the relation of actuality and potentiality.

First, I look at how neo-Aristotelianism sets up the notion of hylomorphic unity and how I further this as a non-reductionist approach for

[21] I follow Barnes (1991) for English translations of Aristotle's texts.

the issue of ontological dependence, suggesting that devoting ontological independence to the unity of form and matter does not commit a controversial claim. Rather, it classifies the essential notion of a composed unity. Furthermore, I contrast mainstream views regarding their struggle to explain the principle of individuation. There is an on-going debate regarding neo-Aristotelian notion of individuation, whether the individuation principle for a human being is matter or form. The commonly held interpretation claims matter to be the principle of individuation. Yet some commentators grant form as the principle of individuation. More radically, some even may suggest that there is no such a principle, so an adequate notion of identity cannot be found in Aristotle's works. This view has been unsuccessful to attain a satisfying result through its failure to provide an answer for our concern about personal identity. I develop an interpretation that does not suffer from such an unnecessary dispute over the notion of universality and the particularity of forms, and the difficulty of whether either matter or form is the individuating principle. First, I argue that Aristotle was a non-reductionist, in principle. Nevertheless, for him there was no one type of solution to the problem of persistence and individuation. The ontological alignment of a unity with its parts was set and fixed. Yet, it was impossible to account for the persistence of the unity without the continuity of its components. This feature enables me to endorse the mutual ontological dependence between psychological and biological continuity in the explanation of the notion of personal identity.

In Chapter 4, I discuss objections, as these oppositions capture the basic resistance raised against both biological continuity and psychological continuity views. I take Olson's animalism – and his biological approach – and Baker's constitution view as stand points. Some reasons behind this method are that both represent the unique aspect of the category which they fall under. Olson's defense of animalism relies on the claim that the term "animal" is more appropriate to define human beings than the term "person" to tell us what are we and what determines our persistence conditions. Baker's constitution view, on the other hand, accepts animalism's initial not

as a determinate relation, but only as a constitution. She suggests that our first-person perspective is constituted by an animal. Their reductionist methodology is unique on their own merits in terms of determining personhood as only a condition at some point of a human being's existence. I must admit that I agree with both accounts in terms of their theoretical schema, yet their strategies are not the sole and sufficient way to figure out the criterion of personal identity, if we consider the supposition that persons have a continuous self. My divergence from psychological and biological continuity theorists and my arguments for the advantage of the hybrid theory I defend will be the focus of the final chapter of this work. After reviewing the above accounts, I come to the conclusion that animalism and the constitution view do not seriously undermine the hybrid view. On the contrary, once the general picture is made clear for the biological approach and the constitution view, the debate between the two dissolves. In this final chapter, I sketch out some of the significances that acceptance of my interpretation would have. I argue that the hybrid view does not entail the acceptance of any specific theory regarding metaphysical questions, so this new emerging interpretation can be accepted without favouring any particular side. The hybrid view gives the expected consequences in typical situations, and also it is comparable to the views of its competitors, as it provides more plausible results in everyday cases, such as the fetus problem and dementia, and finally in hypothetical scenarios, such as split-brain cases, duplication, and teleportation.

The initial outcome of a hybrid composition for the survival in the Parfitian sense will be touched upon, yet it is not within the scope of interest in this thesis. One reason for this delamination is that the continuity and persistence conditions of one's identity are prior to our interest. Hierarchically, these criteria are fundamental in comparison to any consideration upon survival of identity and even to discussions of resurrection. Nevertheless, I use theories in the contemporary literature as a sort of tool to show that neo-Aristotelian idea of personal identity can explain or at least can give some insight into the issue at hand. To canvass

the field of philosophical contributions to such a topic would far exceed the scope of this thesis, and the scope is set in the interest of keeping exegesis manageable and limiting the discussion of prior issues to only those sections in which it is necessary for our context. If my suggested approach, which is the strategy of defining identity using hylomorphism, is ultimately successful, it should impart the added bonus of an account of persistence through time that entertains identity within the hybrid notion and is free of the dispute between mainstream views and the resulting debates.

Chapter 1: Problems of Personal Identity and Initial Questions

At the most fundamental level, my concern is to scrutinize the notion of numerical identity, specifically a second metaphysical question: What does it take for the person *x* at time t_1 to be the same person as the person *y* at time t_2 if there is a continuous identity relation between *x* and *y*? Any answer must provide not only a way of determining whether *x* and *y* are the same persons, but of explaining what we are and the persistence conditions for one to remain the same person through time. According to some, the nonaligned way of examining the term person and the persistence conditions of a person might seem quite delusional. I will consider such a possibility within Hume's and neo-Humean explanations in particular, yet an inquiry for criteria of personal identity over time is a chance worth taking, if it gives us more insight.

For most philosophers after Locke, the term "person" rests on a forensic and moral meaning. Accordingly, persons are rational agents, who are committed to achieving the rationality. The focus here is rather on the properties that make an individual a morally responsible agent who stands in a relation to that agent and to the other. The person is someone who has specific capacities. This type of explanation has some certain limitations, as individuals with dementia or a severe brain damage, for example, are thought to possess a lesser degree of personhood than a healthy person. This line of argument makes it hard to explain persistence, just because those who are entirely incapacitated would not be forensic persons. Of course, this explanation contradicts our common sense.[22]

Another type of explanation for the term "person" comes from neuroscience in identifying "self" and "person" along with several questions, such as What does make us persons rather than mere organisms? or When a person has gone through remarkable mental changes, should we treat that person as the same person as before? What are the moral implications of such a radical change in one's mental states? Neuroscience

[22] By common sense, I mean the ways the term "person" is employed in everyday language without implying that the commonly held view is better or worse than other explanations.

agrees that persons are more than organisms, yet having a human body and a certain degree of connectedness in psychological states are necessary parts of being a person. If it were possible to conclude that an individual with a severe dementia or a person in a vegetative state were less a person than a healthy individual, clinicals would still have to treat that individual properly without reflecting the degrees of personhood. Crucially, one may imply that "neuroscientists do not need to employ the notion of personal identity in order to work in the field of neuroscience"[23]. In philosophy, the notion of person requires specified concepts. Of course, if we apply the discussion of personal identity to clinical cases, we need to connect the pathological process of the brain with the changes in psychological states that we observe. If this application requires an account in which some properties of a person cannot be fully explained within the biological terms, then we need a further explanation of identity and persistence conditions. Advances in neuroscience may or may not affect philosophers' theories, yet undoubtedly, this is where philosophical theories have much to draw from neuroscience without having to submit to the notion that the self is an illusion.

In more detail, the most significant aspect of metaphysics of personal identity that is still debatable between neuroscience and philosophy is the persistence of identity. Why does the question of persistence arise in the first place? What is the reason for our inquiry into whether we are the same person over time, or whether one survives after transplant cases, such as fusion or fission? At first glance, these metaphysical concerns create a dynamic between our philosophical interests and recent developments in neuroscience in terms of determining the link between the brain and the person. In current literature terms "person" and "self" are investigated by several approaches. Neo-Humean bundle theorists[24] advocate that there is no

[23] Mathews, D. J. H., Bok, H., Rabins, P. V. (2009), p. 4.

[24]Churcland (2013); Dennett (1996;2014); Metzinger (2003) are the defenders of eliminative materialism (neo-Humean bundle theory of the self) claim that the subject of all experience is the only condition to have those experiences. The idea of self as a unity is a mere illusion, and more precisely, it is created by functions of our brains. The idea of self is a first-person disposition of experiences and it stems from the causal relation between experience and the brain, which is represented by the activation of certain brain networks. Namely, the self is a product of the complex physical operating of the brain. The concept of

continuous notion of self that owns the unity of our experience; rather the unity is constructed out of continuities in our mind. This line of the argument is out of our interest in this paper due to several reasons. First of all, the aim here is to investigate the motives behind the psychological and biological continuities, which are already presuppose that persons hold identity as the subject of experience. Secondly, the constructive claim of the hybrid view truly accepts the unity of identity over time, as the unity is constructed out of continuities. Still, these continuities occur not only in one's mental life, but also in one's material being, the body, where one constructs a sense of identity with its own distinctive characteristics. The hybrid view I favour accommodates the persistence of a human being as something rather relative, which is applicable to both psychological and biological continuities. This is a hybrid perspective, grounds the point that identity of a person has more than one aspect.

Moreover, some neuroscientists have claimed although there this thing called self, neurotechnologies as a whole challenge our sense of a persistent identity/self under several circumstances.[25] This group presuppose that there is this notion of the self that is identical to the material we are composed of at a particular time. The experience of the self is naturalised as a physical entity rather than conceptual construction, and characterised as a phenomenal experience that could be caused by several sources, such as cognitive functions, neurons, or certain properties that arise out of the relation between brain and experience, and more importantly the experience emerges from the direct interaction with the outer world, rather than introspection. Hence, they do not reject personal identity altogether, yet claim that the notion of self emerges from a causal relation between subjective conscious experience and neuronal activity.[26] This could also

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self only appears through conscious experience, which represents a phenomenal self as an ongoing process, rather than something exists in this world.

[25] See, Illes and Racine (2005) p.10. Some neuroscientists suggest that in cases of severe amnesia and dementia, for instance, the loss of memory causes a distraction in the persistence of personal identity. See Clark (2010) and Klein and Nichols (2012).

[26]Therefore, personal identity as a subjective experience is the result of a process by which information from outer experience goes beyond nonconscious processing and gains access

mean that personal identity is characterised at each moment of experience as a succession of earlier experiences that are inherited from past momentary occasions. Personal identity shifts through life as a collection of temporal parts.[27] This account, however, could be taken to the extreme as if it suggests that if I am shown a picture of a little girl who others claim is me, my respond could be, "No, that's not me. I was never a little girl. I only began to exist a moment ago, and I will cease to exist a moment from now". Accordingly, there is no "self" as such that continuously persists through time as a unity. Therefore, there is no causal relation between two states of the self through time.

However, Allhoff and Buford[28] claim that it is even debatable whether the implications of personal identity and the idea of self might reasonably be thought to follow from neuroscience. This approach contributes to our understanding of the mental representations of personal identity.[29] This outlook contends that contrary to popular critiques, neuroscience poses no threat to the persistence conditions of identity in the

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to consciousness thanks to the transition by the existence of a subjective experience. (See, Compiani (2019).

[27] Persons, as all other material entities, are kinds of four-dimensional space-time worms composed of temporal parts related to each other. Their persistence conditions through time represent some specific relations, which unify determinate temporal parts into an individual persisting person. See D. Lewis (1971).

[28] Allhoff, F. and Buford, C. (2005) pp. 34–36.

[29] One reason could be that even if we bring the biological continuity into our persistence question and claim that the persistence conditions of a person requires more than a causal psychological relation between A at t_1 and B at t_2 - in a condition in which A and B are the same person if and only if A at t_1 stands in a certain relationship to B at t_2 - than according to Allhoff and Buford neuroscience will be *completely* irrelevant to this metaphysical debate. More to that, Allhoff and Buford raise their scepticism for the metaphysical implications that neuroscience supposedly contains: "It is even debatable whether neuroimagery could confirm psychological connectedness since it could at best identify neural activity associated with the cognitive process of remembering, not the contents of the memories themselves. So how could neuroimagery show whether two people in fact had memories with the same contents? We could try to show them pictures which represented the content of some memory and see whether the "memory recollection centre" of the brain was activated. But now problems of underdetermination would be profound as would could not tell, for example, whether the stimulus (e.g., a red car with a certain license plate) triggered the same memory or not (e.g., A might have owned the car and B might have seen it, thus both would "remember" it, but the context of the memories would be different). Obviously, we would try to control for alternative interpretations of similar stimuli, but the pragmatics would be onerous to say the least. Ultimately, then, we think it is probably impossible for neuroimagery to disconfirm diachronic identity claims, and highly unlikely for it to confirm them". Allhoff, F. and Buford, C. (2005) p35.

way that the defenders of persistence suggests. As such, there is no conflict between the manifest image of a persistent identity and the findings of neuroscientific disciplines. Although neuroscientific explanations are dominating the debate, metaphysical competence is also demanding. The neuroscientific portrayal of persons may seem easily manipulatable, object-like beings misses much that we each know of the interior life of the mind. On the one hand, there is an explanation, which is highly scientific and dominated by biology and neuroscience; on the other hand, there is a humanistic theory, which focuses on reasoning and lived experience as well as naturalistic explanation. Bennett and Hacker[30] discuss the necessity of philosophical inquiry within the neuroscientific approach of understanding the human nature. According to them, the neuroscientist's desire to understand neural phenomena, their relation to psychological capacities, and having a deliberation towards the conceptual schema greatly matters; "For irrespective of the brilliance of the neuroscientist's experiments and the refinement of his techniques, if there is conceptual confusion about his questions or conceptual error in the descriptions of the results of his investigations, then he will not have understood what he set out to understand."[31]

Now we can examine several questions that arise after the above discussion. It has been always tempting to ask, If we suppose that we have a persistent identity what constitutes it? Is it our body or the causally related mental states of our minds, or are we constituent of some sort of immaterial substance, which could underlie our persistence through time? To what extent can our minds or bodies undergo changes without causing us to cease to exist? What does happen to our identity in between various conditions, for instance in cases where the body remains alive but the brain permanently stops functioning?

There are also questions which are not directly related to personal identity, but whose concerns seem to depend on the issue of personal identity, such as, To what extent is it appropriate to hold one responsible in

[30] Bennett and Hacker (2003).
[31] Bennett and Hacker (2003) p. 46.

the present for one's past actions? This question alone can be directed either backwards, for the past actions or forwards to the future possibilities. Undoubtedly, there is a need for the idea of a person who took the action in the past to be responsible for that action, and presumably the crucial elements of this person's identity must thus remain unchanged.

The main aim of this chapter is to investigate this crucial aspect of identity, which underlies every possible condition and, in its basic form, could allow us to articulate a coherent account of the persistence through time. The persistence conditions always encourage philosophers to ask what exactly makes one the same individual one once was and will become. The identity condition will characterise what constitutes a person's persistence over time within a certain formulation that we could apply to any identity claim: "an earlier individual is continuous with herself as a later individual if and only if the identity is linked by the same *x*". The term "continuity" here implies the identification question and the relation of past selves to our present selves. The term also postulates a way to determine whether one's past self and future self are united under the same identity. In other words, our continuity conditions can be informative in determining what constitutes our identity, as the question of what constitutes our identity can be about our continuity conditions. Therefore, at a fundamental level, the search for the criterion of personal identity is to develop a theory to answer these questions and to develop a structure for a criterion that determines our persistence conditions and finally pursues the above line of inquiry.

In that sense, the problem of personal identity initially concerns the following questions: What constitutes a person? What makes our identity the same from one moment to another, which for an individual, is to exist as the same being at different times? The assumption that "we are persons" still remains as the problem of what it is to be the sort of thing that we are. Methodologically, developing an account of our identity, which is initially concerned about "what we are", is a metaphysical question from a certain perspective as I have discussed above. This creates a central difficulty in characterising the problem of personal identity. The difficulty first occurs when we try to determine whether we are human beings (rational animals),

or whether there is something more to our existence, our being as a "person", which also highlights our rationality. In order to avoid this difficulty, the discussion in this thesis is carried out under the assumption that all human beings are persons, at least at some point in their life.[32] If the term "person" is taken only as a synonym for the term "human being" in a biological sense (human beings as human animals[33]), then the persistence conditions of persons are related to only the continuity of human animals, whose identity conditions are determined by the same type of criteria as those of other animals. Undoubtedly, denying that we are human animals would amount to an absurdity, so is not a plausible option to pursue. However, the term "human being" is not the only sense of "person" to take into account. The term "person" can be understood in an inquiry that ascribes more to the term "person" along with the biological explanation: being a person is determined not only by membership in a species – in the Olsonian sense, where he claims we are nothing but human animals – but also by having a certain capacity for rational thought and consciousness. By the relevant interrogative, "What makes person x at time t_1 the same person as person y at time t_2?" we refer the term "person" in a metaphysical sense (along with the questions "What are we? And "How is personal identity persist?). It cannot be assumed that the answer to the question necessarily follows the continuity conditions of animals, because personhood does not only have to do with being a human animal, but with possession of particular rational faculties. Some conditions, such as whether these rational faculties and consciousness are persistent in persons, or whether the mental states alone or being an organism in its simplistic meaning is the sufficient condition for the persistence of personal identity are highly problematic for many cases in the debate, yet do not pose any general problem for our understanding of the notion of persons.

There are some initial questions which they form a basis for a general inquiry into the notion of personal identity: Who am I? What is it to

[32] There are cases that not all human beings are accounted as persons, but I will give more insight about the topic in the last chapter.
[33] Olson (1997) in particular.

be a person? What makes me now the same person who presumably existed in the past? In order to avoid contributing an almost circular explanation for our initial formulation – "An earlier individual is continuous with herself as a later individual if and only if they are linked by the same *x*" – we should presume that the metaphysical question of what we are is closely associated with the continuity of our identity, and further to that, being linked by "the same *x*" throughout time. If it were possible to determine what we are without reference to the continuity, then it would be reasonable to define the continuity condition on the basis of what we are from a biological perspective exclusively. If the only way to answer the philosophical question of what we are is to refer to our continuity conditions, then in return, the continuity conditions can also define our assumptions about what we are.

1.1 Contemporary Approaches: Conflicts in The Mainstream View

We can discern a conflict grows out of the distinction between two main identity accounts: reductionist (complex) and non-reductionist (simple) views. The contemporary philosopher Parfit, who has made vital contributions to the debate, presented his fullest account of identity in his book *Reasons and Persons* and introduces these categories, around which certain questions and concepts of personal identity revolve. Parfit summarises the debate by claiming that all identity theories can be categorised as either reductionist or non-reductionist.[34] Reductionist approaches reduce personal identity to the collection of mental states or the persistence of a biological body. According to reductionism, an earlier individual is continuous with a later individual iff the same psychological states or the same physical parts link them together under the same individual. From the reductionist perspective, there are inevitable difficulties in claiming that a person's identity over time consists only in the holding of certain qualities, *either* mental states or physical parts of the body.[35] In other words, whether or not biological or psychological continuity is maintained

[34] Parfit (1984) pp. 209–12.
[35] Parfit (1984) p. 209.

to a sufficient degree, within the reductionist framework these qualities are described without presupposing the persistent identity criterion of personhood, which underlies the mental states and physical properties of a human. Yet, such an approach comes with certain difficulties. Since, the continuity of identity is limited to the persistence or sameness of certain qualities, such as memory, consciousness, character, and intention. Therefore, there is a sense in which the continuity of these qualities is prior to the continuity of a person's identity.

Whereas the non-reductionist view represents a claim where it is true that personal identity refers to the continuity of those properties mentioned above, it also contends that the essential criterion of identity, which is also described along with the psychological properties of a person, is non-reducible. Therefore, the initial properties of a person are not reducible to any further examination. For non-reductionism, Parfit claims, "personal identity does not only consist in these continuities, but it is a 'further fact'", which does not just consist in the physical and psychological continuity of a person.[36] Thus, non-reductionism manifests two types of criteria for persistence: the idea of a separately existing entity and a "further fact"[37], which, Parfit argues, both seem unknown to us.

However, adherents of the non-reductionist approach, such as, Butler and Reid, and more recently Swinburne, Chisholm and Madell, argue that in Parfit's examination of the persistence of a person, he was not very clear whether this "further fact" requires deeper analysis or not. Since, the essential criterion of identity might indicate a metaphysical question regarding the persistence of an independent entity – which could also be a sort of immaterial substance – and the notion of an independent entity might refer to the idea of a subject, which can provide suitable foundations for the essential conditions of a person. The identity of a subject might be independent of any attribution to the mental and physical events, yet forms a basis for these conditions. However, when we consider Chisholm, Swinburne and Madell's formulation of the persistence criterion, we will see

[36] Parfit (1982) p. 227; (1984) pp. 209–10.
[37] The further fact and separately existing entity subjects will be extensively discussed in *4.3.*

that their adoption of the persistence of identity solely rely on a "soul-identity" criterion. The claim recognises our being as essentially souls, which is classified as the acceptance of sort of a supernatural substance that constitutes persons and determines their persistence conditions.[38]

1.2 Reductionism vs. Non-Reductionism

When we look at the debate between reductionism and non-reductionism more closely, we see that the most prevalent form of reductionism is the view that our identity traits are largely based on empirical theories, in which the identity of a person represents a composite notion.[39] This composite is made up of certain properties and qualities, which are the basic constituents of a person, such as the states of consciousness, memories, character traits, intentions, and the physical parts of a person's body, held together by causal relations. Within the general framework of the reductionist view, the continuity of these constituents is divided into two major accounts: the psychological continuity view and the biological continuity view. Psychological continuity indicates that there are causal connections between earlier and later stages of a person, such as remembering past actions, forming intentions and holding beliefs over time.[40] These states represent a causal relation between a person's psychological states at t_1 and t_2. Therefore, the question of personal identity entails a search for whether these states of the same person at different times are directly connected. If they are, this sameness raises the question of whether personal identity is definable over time as something reducible to an appropriate relation of causal dependence between these states.

Before pointing out what physical continuity (also known as the biological approach) amounts to, I would like to draw attention to Parfit's category of relations. Parfit combines relations in one unity. He calls it "Relation-R", where psychological connectedness (i.e., having direct psychological connections as a matter of degree) and psychological continuity (i.e., having an extended strong psychological connectedness) is

[38] Chisholm (1976), Swinburne (1984, 2012).
[39] Parfit (1984) pp. 210–11.
[40] Parfit (1984) pp. 206–208; G. Gasser and M. Stefan (2012) p. 7.

syndicated into one type of relation. Thus, the two relations are together known as Relation-R.[41] Psychological connectedness is in this sense associated with various connections of psychological states, which are included in memories, intentions, beliefs, and so on, and psychological continuity consists in extended strong psychological connections through time. The degree of connectedness between the person at t_1 and t_2 depends on the number and significance of the direct psychological connections between the person's identity at different times.

For illustrative purposes, I can easily say that the degree of closeness I have with my yesterday-self is greater than my closeness to my years ago-self. This difference is explained by the number and strength of the psychological connections between myself now and myself at those two different times. This account does not rule out the possibility that I am the same person now as I was ten years ago. For Parfit, the reason for the possibility of this continuity is that there are intermediate selves between myself at different times, which are psychologically connected with each other in the right way (i.e., only if we suppose that I still hold my short time memory). There is a continuous chain of intermediate selves from t_1 to t_2 that are all connected together to form one person as the unity of these causal relations.

Following Parfit's reasoning I can only allege that I am the same person from t_1 and t_2 if the degree of continuity is strong, and only one existing person has this strong connection. If the degree is weak, or if more than one person can legitimately claim such a connection, then obviously I am not that person. There is another important characteristic as a result of Relation-R that we should note here, which is that psychological connectedness, in particular, is non-transitive, which means if there is a psychological connectedness between *x* and *y*, and *y* and *z*, then it does not necessarily follow that *x* and *z* are psychologically connected with one other. Parfit admits that Relation-R does not directly indicate personal identity,[42]

[41] Parfit (1984) pp. 206–207.

[42] Parfit also claims that if a person is walked into a teleporter and duplicated and then the duplicate destroyed right after the duplication takes place, then the duplicate, even for a split second, would have the same psychological connectedness and continuity as the

yet he is quite certain of the claim that it does not matter whether Relation-R attains the continuity as a result of physical continuity. Parfit believes that

> Physical continuity is the least important element in a person's continued existence. What we value, in ourselves and others, is not the continued existence of the same particular brains and bodies. I believe that what fundamentally matters is Relation R, even if it does not have its normal cause.[43]

For him, what matters is the continuance of a psychological life through the continuation of Relation-R, irrespective of the cause of this continuation.

The physical continuity view, on the other hand, maintains that personal identity is constituted in the continued existence of one's physical body, being the same individual regardless of one's continuous psychological traits through time.[44] The term "same" here can indicate either being the same individual over time, or two things that are qualitatively identical respect to their physical qualities (accidental qualities of a person, such as colour, height, size, or intentions, values, etc.). Yet, these qualities can be both psychological and biological. The relation of sameness, in terms of numerical identity – which can only be held between a thing and itself – might indicate a unique empirical criterion. However, it is needless to consider a person's being as the same at different times in virtue of one's qualitative features. Undeniably, some qualities of a person may change drastically over time. However, there must be some certain conditions that are required for the particular sameness relation in order to hold the person physically identical to herself. Therefore, the claim "the composite notion of a person holds the continuity of identity over time, as the continuity of certain properties and qualities classified differently in biological and psychological accounts" is not obscure altogether to put forward.

According to reductionism, personal identity through time only consists in certain facts about properties and qualities. So the identity of a

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original person, then Relation-R holds between the original person and the duplicate, even though continuity of the physical traits do not hold any causal relation, and therefore there would not be any continuant identity.

[43] Parfit (1984) p. 217.

[44] Parfit (1984) pp. 203–4.

person is reducible to these qualities, which are necessary and sufficient for persistence conditions. Parfit describes these properties as they represent direct psychological connections and direct causal relations between experience and memory.[45] There is nothing more in the identity of a person further than causal interrelations between physical and mental events. As Parfit states:

> I believe, that certain views must be held together. We cannot defensibly believe that our identity involves a further fact, unless we also believe that we are separately existing entities [which involves the possibility of an immaterial substance that could lead us to the idea of an underlying subject], distinct from our brains and bodies. And we cannot defensibly believe that our identity must be determinate, unless we believe that the existence of these separate entities must be all-or-nothing.[46]

By now, the general trend in reductionism should be apparent. The ultimate criterion of continuity is reducible to either psychological or biological traits. Either of these traits is necessary and sufficient to accommodate a person's persistence through time. However, a suspicion arises as to whether any empirical evidence can be given to support the claim that one now is the same person who was in the past. Could this evidence be given from a first-person perspective and with reference to states of consciousness, or perhaps the persistence of physical parts and the physical connectedness of the body through time? More specifically, the question is whether empirical evidence related to personal identity is necessary and sufficient for applying the continuity criteria to the notion of personal identity.

This analysis leads us to tackle more specific questions, such as what are the necessary and sufficient elements of being a person? Is numerical identity a necessary component of our continuity? Regardless of any sort of change in psychological and biological continuity, could we still hold onto the claim that *x*, who exists at t_1, is continuously identical to herself as *x* at t_2? Is there a single property – mental state or capacity – that explains the

[45] Parfit (1982) pp. 227–41.
[46] Parfit (1982) p. 231.

persistence of a person through time? Or is it a set of properties that might contingently belong to the same individual?

The reductionist view attempts to determine our persistence conditions as empirically evidential and reducible to empirical evidence. Now, a reductionist should be able to successfully account for the question of evidence, in which the empirical conditions of being the same individual through time directly refers to the question of whether the person is in the present the same as the one who was in the past. It is within the reductionist reasoning that the identity of a person is reducible *either* to the first-person perspective (or memory) alone, or one's physical continuity through time. These conditions should be accountable as evidence when we determine the persistence conditions for identity. If we raise the persistence question in terms of the memory criterion, then the formulation will be as follows: x at t_1 is identical to y at t_2 if and only if y at t_2 remembers experiencing events at t_1.

As it will appear clearly in the following sections of the current chapter, certain mental states of a person, such as the states of consciousness and memory, bear evidential truth about one's identity. Consciousness and memory are empirical conditions of a person's identity and might describe how one remembers, or seems to remember, completing a particular action in the past, or seem to remember, or whether this person really performed the action. According to the defenders of biological continuity, one's physical continuity – whether x at t_1 is physically or spatio-temporally continuous with the same person y at t_2 – remains as a source of evidence for one's identity through time. However, it is important to point out that physical evidence of one's persistence cannot explain what it takes for one's identity to persist over time. In general, any empirical evidence of the continuity of one's identity – either through the continuity of mental states or physical aspects – can be conclusive in describing what is it for a past being to be the same person as existing in the present. As such, then, an identity claim should (i) identify the persistence conditions of a person, (ii) clarify the mystery surrounding the metaphysical question of what we are, and makes it more comprehensible, and finally (iii) successfully accounts

for the continuity of a person's identity along with the notion of being the same subject through time.

At face value, the distinction between reductionism and non-reductionism offers a basis for a further enquiry into personal identity, which revolves around the problem whether the initial conditions of identity are analysable into a combination of factors that make up psychological and physical continuity. Or it might be simple and unanalysable. A number of difficulties arise in both accounts and will be introduced in due course. At this point, however, the overall conflict between two accounts is simply intended to indicate the extent to which we sympathise with non-reductionism. Moreover, a "further fact", which is assumed as some sort of underlying subject, remains under scrutiny. The following sections of this chapter will show how we can take this "further fact" to be, to some extent, compatible with the metaphysical question of "what we are", as it does not take the identity beyond empirical conditions and remains as mysterious.

1.3 Historical Background of the Problem of Personal Identity

In order to maintain a ground for personal identity, any valuable discussion should initially address the historical significance of the problem, showing how the contemporary discussion has developed from an extended series of philosophical debates that arose in the early modern period. The early form of the discussion was characterised by Descartes' dualism, Locke's psychological continuity criterion and Hume's bundle theory. Examining these philosophers' treatment of the problem will expose a less specialised, yet more focused approach. Not only it is valuable to discover the outcome of the historical discussion, but it also forces us to reconsider the initial problem of personal identity as posed in Descartes, Locke and Hume. This exercise will be a valuable exercise, as their prominence of these thinkers in the literature makes them ideal candidates for determining whether a view that calls for the continuity of an underlying subject of our experience can satisfactorily fit with our inquiry into what we are.

The discussion in the next sections of the current chapter will examine historical and contemporary theories and clarify the merits of each

account in characterising the notion of an underlying subject – essentially non-property-based – in which the persistence conditions of our identities are constituted. An examination, as such, will elucidate how these philosophers in the early modern period had attempted to characterise problems of personal identity.

1.3.1 Descartes on Substance Dualism and Personal Identity

Although Descartes has no explicit discussion of personal identity, his discussions on dualism and *res cogitans* (the soul, the mind and the self as essentially a thinking thing) remarkably differentiate him from the traditional Aristotelian scholastic doctrine. Descartes' terminology in his *cogito*[47] is significantly important to the notion of personal identity for two reasons. Firstly, the idea of a *res cogitans* is the prime example of an underlying subject within the conception of personal identity, raising the central question of this thesis I am aiming to find out. Supposing that every thought demands a thinker, Descartes presupposes a clear example of a separately existing entity that is distinct from the physical properties of a person. Secondly, although Descartes inherited the idea of a human as a union – in virtue of neither parts of this union on its own being able to constitute a human being – he separated mind (soul) and body as two independent and essentially distinguishable categories, by which the concept of a person is described both as the union of mind and body (the experience of the union of mind and body is always combined with our thought) and an independent complete substance.

In the Scholastic tradition, the term "person" was regarded as a rational being in essence, which is a composite of body and soul in nature.[48] Under the Aristotelian influence, this composite was understood in terms of the hylomorphic union of form and matter, in which form and matter are unified in a single substance.[49] Descartes adopted the Aristotelian notion of

[47] Descartes' famous proposition "I am thinking, therefore I exist" is regarded as the *Cogito* Argument.
[48] For Descartes there is a strict distinction between our essence, which belongs to us by being an incorporeal substance, and our nature, which refers to the set of laws that is ordained by God.
[49] See Aristotle's Metaphysics *Zeta* and Physics I.

the unity of mind and body, yet distinguished himself by presenting the idea that soul and body are related not like as form is related to matter, but as two distinct substances are brought together into one union. Descartes believed that we would not face any difficulty in terms of explaining the notion of an immaterial substance, such as soul or mind. This explanation is possible only as long as we think that the principle of thinking and the principle of human nature (which is the principle of nourishment and growth) are distinguished in a sense that we use the term "mind" not as a part of soul, or something attached to it, but as a *res cogitans*, a thinking thing.[50] He contrasts his use of the term mind with the Aristotelian scholastic tradition's treatment of the term "soul", which applies to nourishment and thinking principles.[51] However, Descartes says:

> I by contrast, realizing that the principle by which we are nourished is wholly different - different in kind - from that in virtue of which we think, have said that the term 'soul', when it is used to refer to both these principles, is ambiguous. If we are to take 'soul' in its special sense, as meaning the 'first actuality' or 'principal form of man'[52], then the term must be understood to apply only to the principle in virtue of which we think; and to avoid ambiguity I have as far as possible used the term 'mind' for this.[53]

Allowing the term "soul" to represent such a distinct feature – being a thinking thing – Descartes places great importance upon the role of a thinking thing, which is clearly a complete substance in itself. Less importantly, the body of a man is something that is attached to the self, to which it is closely joined.

By examining the nature of *res cogitans*, Descartes investigated the relation between the mind and body in the second and sixth meditations. The fundamental difference between the mind and body is supported by the belief that the mind (soul) is an immaterial substance, which is not extended in space, whereas the body is a material substance that the self merely "has".

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[50] Descartes (1984) *The Philosophical Writings of Descartes, Volume II*, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch, pp. 246:356.
[51] Descartes (1984) *The Philosophical Writings of Descartes, Volume II*, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch, pp. 246:356.
[52] Terms are derived from Aristotle *De Anima,* 11:2.
[53] Descartes (1984) *The Philosophical Writings of Descartes, Volume II*, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch, pp. 246:356.

The mind–body relationship requires a detailed search for what we can know with certainty beyond doubt. Descartes' eagerness to search for certainty is rooted in his thought that the scholastic philosophy was suffering from the opinions, uncertainties and multiple and diverse views: he thus became convinced that only doubting could lead him to certainty.[54] For Descartes, the soul is not the form of man but a complete, individual, and independent substance.

Descartes' argument results from the method of doubt, by which he questions everything that allows the slightest cause to doubt until there is something remains indubitable. His examination starts with determining one thing that he cannot doubt. He claims that our beliefs about the experience of the external world can be doubtable, as everything can be a mere deception. However, he continues, he cannot doubt the fact that he is doubting, which implies that there is something that thinks and doubts. This means "I existed without doubt, by the fact that I was persuaded, or indeed by the mere fact that I thought at all."[55] This is a sign of awareness that our conscious experience requires a *res cogitans*, thinking thing, by which we are also aware of ourselves as thinker. It is a persisting and underlying subject of thought that can be known with certainty: "But what, then, am I? A thing that thinks. What is a thing that thinks? That is to say, a thing that doubts, perceives, affirms, desires, wills, does not will, that imagines also and which feels."[56] This introspection illuminates clearly that Descartes cannot doubt his own existence. The thought of his existence leads him to the assumption that he necessarily exists under one specific condition, "I am, I exist, is necessarily true whenever it is put forward by me or convinced in my mind".[57] His notion of "I", as a *res cogitans*, is the mind, intelligent, intellect or reason, which also doubts, understands, affirms,

[54] Descartes (1968) Discourse on Method and the Meditations, trans. by F. E. Sutcliffe Introduction pp. 15–6.
[55] Descartes (1968) Discourse on Method and the Meditations, trans. by F. E. Sutcliffe Introduction pp. 15-6. p. 103.
[56] Descartes (1996) *Meditations on First Philosophy*, ed. by John Cottingham, pp.18–19:27,28.
[57] Descartes (1996) *Meditations on First Philosophy*, ed. by John Cottingham, p.17:25.

denies, imagines and perceives.[58]

His findings from the first step of realisation allow him to go on to a further search, which involves the notion of a subject as a unity. There are, clearly, various aspects of the unity of a human being. Surely, Descartes claims, *res cogitans* cannot only identical with the body, however, he claims "I am not that structure of limbs which is called a human body".[59] His real being, his essence, cannot be attributed to his bodily characteristics, which are, after all, subject to change. This "I", whose essence is *only* thinking, is clearly a thing that has mental states and can exist without the body. Since the body is not essential to the notion of *res cogitans*, insofar as bodies are extended, non-thinking things. The question of "how minds could exist without bodies?" was Descartes' main motivation behind his emphasis on the mind's ability to interact with the body. Accordingly, "I am not merely present in my body as a sailor is present in a ship, but I am very closely joined and, as it were, intermingled with it, so that I and the body form a unit".[60] There is a causal interaction between the mind and body, two distinct substances. This interaction justifies that there is no means of a subject without the capacity to experience. The body, posits Descartes, is only contingently associated with the person. A person will continue to exist as the same being if and only if she is connected by the same soul, mind, or self. No human being who can exist continuously unchanged unless her body is united with the same soul or immaterial substance.

Now it is clear from the above argument that, for Descartes, the essence of our existence is that of a thinking thing, yet strictly speaking the essence is not the thought itself. As Descartes points out, "I do not observe that any other thing belongs necessarily to my nature of essence except that I am a thinking thing, I rightly conclude that my essence consists in this alone, that I am a thinking thing, or a substance whose whole essence or nature consists in thinking."[61] In the *Sixth Set of Replies* he explicitly

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[58] Descartes (1996) *Meditations on First Philosophy*, ed. by John Cottingham, pp.18–19:27,28.
[59] Descartes (1996) *Meditations on First Philosophy*, ed. by John Cottingham, p.19:28.
[60] Descartes (1996) *Meditations on First Philosophy*, ed. by John Cottingham, p. 45:81.
[61] Descartes (1968) Discourse on Method and the Meditations, trans. by F. E. Sutcliffe, p. 156.

defines a human being:

> I have never seen or perceived that human bodies think; all I have seen is that there are human beings, who possess thought and body. This happens as a result of a thinking thing's being combined with a corporeal thing: I perceived this from the fact that when I examined a thinking thing on its own, I discovered nothing in it which belongs to body, and similarly when I considered corporeal nature on its own I discovered no thought in it.[62]

At this point, it is tempting to pose one crucial question: What exactly makes a person the same individual she was once and will become? Within the Cartesian perspective, being the same person or the same self from one moment to another is associated with the mind's capacity to think continuously. The essence of being the same person is constituted by the persistence of a thinking being. In other words, the continuity of a person's identity depends on the ability to think and the persistence of this ability. Even, Descartes adds, "it might perhaps happen, if I ceased to think, that I would at the same time cease to be or to exist."[63] As a result, a thinking thing (soul – mind – self), for Descartes, is complete and continuous as the same substance. Hence, regardless of the cases in which drastic changes may occur, human bodies also remain the same "so long as they are united with the same soul".[64] In that sense, the persistence condition for personal identity seems quite clear for Descartes. It is the underlying notion of a thinker, a subject that continuously exists from one moment to another. Referring back to the modern formulation of the persistence condition, Descartes' characterisation is something like, "An earlier individual is continuous with the same person as a later individual if and only if they are linked by the same *res cogitans*." There is a sense in which one could argue that Descartes seems to be offering a sort of reductionist view, by virtue of claiming that the continuity in a person's identity is reducible to one's thinking being. However, his notion of a thinking being applies to an

[62] Descartes (2006) *Meditations, Objections and Replies*, trans. and ed. by R. Ariew and D. Cress, p. 179:444.
[63] Descartes (1968) Discourse on Method and the Meditations, trans. by F. E. Sutcliffe, p. 105.
[64] Descartes (1968) Discourse on Method and the Meditations, trans. by F. E. Sutcliffe, p. 54:78–79.

immaterial substance, adopted as a separate entity by non-reductionism.

Nevertheless, Descartes' postulation leads us to contemplate further issues, which Descartes' dualism could not possibly clarify. First of all, his thesis of the incorporeality of the self (or mind), and its distinction from the body allows him to realise his ability to think about the essence of a person, as it is distinct from the primary attribute of a corporeal substance, *res extensa*. The metaphysical question of what I am is thus answered: I am a substance, whose whole essence is to think. Here, the question arises as to whether the supposition of the continuity of a *res cogitans* without a body (*res extensa)* is coherent and satisfactory. First of all, Descartes thought that as long as he distinguished himself from the Aristotelian scholastic tradition, his method of doubt on its own successfully leads him to the proposition "I am thinking, therefore I exist",[65] which indeed shows that the essence of "I" consists *only* in thinking. However, there is still a need for further qualifications whether the body, after all, is essential for our thoughts to occur. Even Descartes himself explicitly raises some doubts in *the Fourth Set of Objections*:

> [If] the body is not unconditionally excluded from my essence, but only insofar as I am precisely a thinking thing, it seems there is good reason for fear lest someone entertain the suspicion that perhaps the knowledge of myself insofar as I am a thinking thing is not the knowledge of something completely and adequately conceived, but only inadequately and with a certain abstraction on the part of the understanding.[66]

Secondly, as mentioned earlier, Descartes inherited the idea of the unity of mind (soul) and body, yet he regarded the human mind as something that is incapable of forming a union of two distinct substances, which involves comprehending their unity and distinctiveness.[67] In his letters to Princess Elizabeth, Descartes admits that "Everyone feels that he is a single person with both body and thought so related by nature that the thought can move

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[65] Descartes (1985) *The Philosophical Writings of Descartes, Volume I*, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch, p. 127:32.
[66] Descartes (1985) *The Philosophical Writings of Descartes, Volume I*, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch, p. 120:203.
[67] Descartes (1991) *The Philosophical Writings of Descartes, Volume III*, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch, Anthony Kenny, p. 227:692.

the body and feel the things which happen to it."[68] On the one hand the Cartesian system and the proposition of a *res cogitans* represent a concern about the distinction. On the other hand, Descartes attempts to reconcile this distinction by claiming that, our nature, as human beings, is the unity of mind and body.

How Descartes explains this unity by referring to the substance theory shows that a "substance can be complete or incomplete insofar as it is referred to some other substance in conjunction with which it forms something which is a unity in its own right. The mind and the body are incomplete substances when they are referred to a human being which together they make up."[69] Normally, this statement is taken to be highly paradoxical. Descartes claims that by "substance" we are to understand something that needs no other thing for its existence. Although this independence commitment has to undergo some qualification (i.e. that all substances are dependent on God), it seems that a substance cannot be both independent and incomplete. What Descartes realises is that instead of regarding human beings, as they are incomplete substances, he embraces what is unique about a man, which is the union of extended matter with a mind. Descartes acknowledges that demonstrating the interrelation of mind and body after the manner of with the relation of form and matter is impossible. Instead, each must be independently conceived as substances in their own right.

Nevertheless, for Descartes, the distinction is quite clear. By their nature human beings are the unity of mind and body, whereas "I", the subject of the question of "what I am", refers to a thinking thing, which is the bearer of mental qualities and properties, such as thinking, memory, consciousness, and first-person perspective. In that sense, we are inclined to consider that Descartes was able to exclude some certain problems about personal identity (such as the persistence conditions of self and being the

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[68] Descartes (1991) *The Philosophical Writings of Descartes, Volume III*, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch, Anthony Kenny, letter of June 1643, p. 228:693.

[69] Fourth Set of Replies, (2006) *Meditations, Objections and Replies*, trans. and edited by R. Ariew and D. Cress 222; (1984) *The Philosophical Writings of Descartes, Volume II*, trans. by John Cottingham, Robert Stoothoff, Dugald Murdoch II: 157.

same person over time) from his discussion of the persistence conditions of an underlying subject. Otherwise, Descartes' intention to insist on articulating the *cogito* argument in the *Meditations on First Philosophy*, even though he offers more controversial arguments elsewhere,[70] would be quite paradoxical. Locke and Hume introduce strong criticisms of Descartes' theories in their empirical philosophy. It has been addressed that the conclusions of dualist theories, as with that of the *cogito* argument, move beyond the realm of empirical evidence.

1.3.2 Locke on Psychological Continuity

It was with Locke that the explicit debate concerning personal identity was taken as an independent and significant deliberation in its own right. His empiricist position diverged from the notion of immaterial substance. Rather, he focused on the significance of memory and consciousness in describing the problem of personal identity. Throughout his work, for Locke substance is something entirely immaterial and unknown to us. While his theory can avoid the problems created by the concept of immaterial substance, it generates other kinds of issues regarding the continuous notion of identity. Nevertheless, his account of the memory criterion of identity highly influenced his successors Reid and Butler. Locke's idea of consciousness and memory have a crucial role to play in the discussion of personal identity. His ideas have become some of the most influential contributions to the debate. In his book *An Essay Concerning Human Understanding,*[71] Locke developed a fundamentally differentiated theory from the Cartesian solution of the mind–body problem, regarding personal identity as something exclusively empirical.

Locke begins his examination with the claim that the appropriate criterion of identity – that is, a search for what constitutes identity over time – depends on the type of being we are addressing. If we are considering the matter of a single indivisible unit, a non-living thing, then the identity of this particle, at any rate, simply refers to its matter. So long as this single

[70] In his letters to Princes Elizabeth.
[71] Especially Book II Chapter 27.

indivisible unit is continuous in existence, it will remain self-identical through time.[72] In other words, *A* at t_1 and *A* at t_2 represent the same unit of matter iff there is a continuous history connecting *A* at t_1 and t_2. A lump of clay, for instance, has the same body of matter over time if and only if it is the same collection of particles, the same unity, even if the lump is arranged differently compared to its initial condition. If we suppose that this particular lump is divided and that different parts of the lump had a distinct history for a limited time, then when the lump is reconstituted, it would not be the same lump of clay as it was in the beginning. Since the divided parts would not share the same history, as they might be combined with different particles. Locke applies this "continuity of history" criterion to the persistence of the identity of material things, as there is a strict identification in spatio–temporal continuity between various stages of the same thing over time.[73]

Locke's explanatory point in the case of living things carries exclusively empirical implications but nothing else. What constitutes the persisting identity of an entity is the organisation of its parts in one coherent body, in which these parts partake of a common history.[74] Locke believes that any change in the matter of a living thing, even if the change is a major shift, does not change its identity. That is to say "in the state of living creatures, their identity depends not on a mass of the same particles, but on something else. For in them the variation of great parcels of matter alters not the identity".[75] The reason for this dependence, Locke acknowledges further, is that "in these two cases of mass of matter, and a living body, identity is not applied to the same thing".[76] For a living body, the identity is connected through the continuity of the same history.[77] To illustrate this reasoning, we can illustrate the case of a tree. Although the mass of a tree changes from year to year, it continues to hold the same common life and

[72] Locke (1690/1964) II, 27:3.
[73] Locke (1690/1964) II, 27:4.
[74] Locke (1690/1964), II, 27:5. Locke sees no difference between the identity of plants and animals. Book II, 27:5.
[75] Locke (1690/1964), II, 27:3.
[76] Locke (1690/1964), II, 27:3.
[77] Locke (1690/1964), II, 27:4.

preserve its identity. One point that is fairly obvious here is that the logic of statements follows: (i) all living things – including human beings – necessarily and without exception change their properties over time in systematic ways, and (ii) their identity is continuous and they preserve this continuity over time, or at least their identity through times stands in an explanatory relationship from one moment to another.

A further distinction Locke underlines a further distinction between the terms "man" (i.e., a human being or human animal) and "person", along with the distinctions between being the same man and the same person over time. According to Locke, "it is not the idea of a thinking or rational being alone that makes the idea of a man in most people's sense; but of a body, so and so shaped, joint to it; and not shifted at all at once, must, as well as the same immaterial sprit, go to the making of the same person".[78] Along the same line, he adds, at this stage – in terms of being a living body or animate object – that man remains identical with a biological body. The reason why Locke distinguishes the term "man" from "person" is quite clear. He attempts to account for the immaterial aspects of humans – if there are any. Here, Locke agrees with the Cartesian notion of man that is partly a biological body. He also agrees with the Cartesians on the notion of a person that is a thinking intelligent being. Yet, Locke clearly distinguishes his view from the Cartesian account by virtue of not equating persons with immaterial substances, since Descartes uses the terms "person", "soul", "mind" and "thinking thing" interchangeably. Locke holds onto the claim that persons have an identity of the same kind as other living things in virtue of their continuous life history.[79] He opposes dualists and claims that even though the term "person" is something that belongs to the notion of immaterial substance and persons that are characterised under this conception, its nature depends only on itself. As such, persons exist through time as one and the same as long as they carry the same consciousness. Thus, "person" is a term that he uses interchangeably with the term "self",

[78] Locke (1690/1964), II, 27:8.
[79] Locke (1690/1964), II, 27:6.

which is "a thinking intelligent being that has reason and reflection."[80] Persons can consider themselves as the same thinking beings at different times, which is possible only through consciousness.[81] It seems that the term person (self) is associated with the continuity of mental states, mostly with memory, and this continuity is supposed to be causal.

This relationship clearly shows that Locke's theory refers to persons as non-substantial psychological entities. Since, from his empiricist perspective, the question of whether consciousness is composed of a single thinking substance seems unproblematic. It is irrelevant to the question of personal identity and it does not pose any general problem for the persistence conditions of persons. So long as the consciousness is continuous as one and the same, the same consciousness can unite persons into the same person. Therefore, consciousness, but strictly speaking not the other sort of substances that are supposed to underlie consciousness, (such as the physical body or an immaterial thinking substance) can truly present what we are. The criterion of persistence ultimately depends on how we are to understand persons within empirical terms. According to Locke's proposition "an earlier individual is continuous with the same person as a later individual iff they are linked by the same consciousness". Locke's emphasis on consciousness as the criterion of identity makes him truly reductionist: Locke would claim that the continuity of a person's identity is reducible to the continuity of consciousness.

There are several aspects of this theory to note here. Firstly, the way Locke attempts to solve the problem of personal identity seems exclusively related to the empirical attributions of a person (such as consciousness and memory, since experience is the only way to be aware of ourselves as conscious beings), due to our restricted knowledge about the identity of substances. This reductionism explicitly amounts to the claim that Locke takes identity (such as the identity of living organisms and human beings) as a problem by virtue of holding the same question of what makes one's earlier self continuous with one's later self, but the technique he uses to

[80] The term 'reflection' in particular can be interpreted as indicating memory.
[81] Locke (1690/1964) II, 27:9.

define the notion of personal identity is rigorously empiricist. Secondly, Locke not only denies that persons are substances, he is also unwilling to accept that persons are identical with an immaterial substance or underlying subject, such as the Cartesian self, *res cogitans,* or soul. The term "person" in the Lockean sense and the Cartesian account of *res cogitans* could both indicate the same entity, as they constitute "a thinking intelligent being".[82] By excluding the Cartesian notion of immaterial substance, Locke aims to assert that the nature of substances cannot be known well enough to equate persons with immaterial substances. While this particular point seems to be widely accepted in philosophical inquiry, yet it still requires a great deal of justification as to why it is the case.

In this regard, the question arises quite naturally: If the notion of immaterial substance cannot differentiate the concept of "person" from that of "man" or "human being", what defines the notion of personhood? As mentioned above, the Lockean idea of a person refers to the self that presents an immediate awareness of its own knowledge, and is also distinguished from other selves. This explanation also shows how Locke accounts for individuation. Accordingly, "it is always as to our present situations and perceptions: and by this everyone is to himself that which he calls self; since consciousness makes everyone to be what he calls self, and thereby distinguishes himself from all other thinking things."[83]

Initially, it seems as if Locke uses the term "self" as a criterion of individuation or self-identity. His understanding on the term "self" arises for two reasons. On the one hand, the term "person" may apply to another man (another body), as it appears in Locke's thought-experiment of body

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[82] As Descartes states "from the fact that I know that I exist and that at the same time I judge that obviously nothing else belongs to my nature or essence except that I am a thinking thing, I rightly conclude that my essence consists entirely in my being a thinking thing. And although perhaps (or rather, as I shall soon say, assuredly) I have a body that is very closely joined to me, nevertheless, because on the one hand I have a clear and distinct idea of myself, insofar as I am merely a thinking thing and not an extended thing, and because on the other hand I have a distinct idea of a body, insofar as it is merely an extended thing and not a thinking thing, it is certain that I am really distinct from my body and can exist without it."(Descartes, 1996 *Meditations on First Philosophy*, edited by John Cottingham, pp.43–4:78). And in the *Essay* Locke explicitly defines person as "a thinking intelligent being, that has reason and reflection, and can consider itself as itself, the same thinking thing at different times and places." (Locke 1690/1964, Book II, 27:9.)

[83] Locke (1690/1 964), II, 27:9.

exchange between the prince and the cobbler.[84]Persons are self-knowers, possessing the knowledge of their selves: Locke contends, " [person] as I take it, is the name for this self, whenever a man finds what he calls himself, I think, another may say is the same person."[85] On the other hand, what Locke means in the background of this quotation (*Essay*, Chapter 27, passage 9) is that one's self from another's because of the unique way in which one has direct access to one's own part and memory. Locke states, "had I the same consciousness I saw that Ark and Noah's flood, as that I saw an overflowing of the Themes last winter I could no more doubt that 'I' that saw the Themes overflowed last winter, and that viewed the flood at the general deluge, was the same self."[86] The above discussion suggests that Locke thinks that he is able to avoid the unempirical and unknown concept of immaterial substance by explaining the distinction between man and person.

Locke proceeds to the endpoint of his characterisation, where the persistence condition of a person appears to be explained in the light of psychological continuity. Since the notion of consciousness is inseparable from thinking and, in a way, consciousness is central to thinking. It is underspecified with respect to each of its features. As he points out, it is through consciousness that one comes to know the self. The indication of this notion of the self in Locke's account is possible only through thinking and experiencing. In that sense, the idea of self has an empirically observable attribution, as we can know the self empirically within the unity of certain perceptions at the conscious level, such as seeing, smelling, tasting and feeling. As Locke states, "It is always as to our present sensations and perceptions, and by this everyone is to himself that which he

[84] I will discuss this thought experiment extensively in the last chapter. Briefly, Locke states that "For should the soul of a prince, carrying with it the consciousness of the prince's past life, enter and inform the body of a cobbler, as soon as deserted by his own soul, everyone sees he would be the same *person* with the prince, accountable only for the prince's actions. The body too goes to the making of the man, and would, I guess, to everybody determine the man in this case, where in the soul [mind or self], all his princely thoughts. To everyone but himself he would be the same cobbler, the same man." (Locke 1690/1964, II, 27:15.

[85] Locke (1690/1964), II, 27:26.

[86] Locke (1690/1964), II, 27:16.

calls self."[87]

Referring back to the difference between person and man, as Locke assumes, we can say that although a man can have one body and although the same human body can never make two men, persons are conjoined by consciousness (or memory), and if the consciousness is somehow divided – as appears in the thought experiment of the prince and the cobbler – there is no absurdity involved in thinking of two different selves within one and the same man. Although Locke attempts to explain the continuity conditions of personal identity by bringing consciousness (as a mental state) into question, there is an apparent contradiction in his discussion of what is meant by "Socrates" and "the same individual man."[88] First of all, Locke claims that if one loses some parts of his past history, then one would not be the same person, yet one is the same man.[89] In the same vein, "If Socrates' [as a man] awakening does not partake of the same consciousness as Socrates sleeping, they are not the same person."[90] This claims presents a rejection of the idea that a man's conscious self can be continuous with the same man's later conscious self regardless of the gap that may occur between these two mental states of the same person. Here, Locke rejects the role of both physical continuity and the continuity of an immaterial substance as the components of one's identity.[91] The result, Locke concludes, is that being the same man is constituted only by having the same consciousness, and what makes one the same person as she was in the past is to have continuity of consciousness mediated by memory.

In that sense, on the one hand, Locke seems to be taking a position, by which he claims that the phrase "the same man" is the unity of the same body and the same thinking thing. As he states elsewhere in the *Essay* "Everyone finds himself, that his soul can think, will, and operate on his body, in the place where that is; but cannot operate on a body, or in a place, an hundred miles distant from it. No body can imagine, that his soul can

[87] Locke (1690/1964), II, 27:9.
[88] Locke (1690/1964), II, 27:21.
[89] Locke (1690/1964), II, 27:21.
[90] Locke (1690/1964), II, 27:19.
[91] Locke (1690/1964), II, 27:21.

think, or move a body at Oxford, whilst he is at London."[92] On the other hand, for the account of the "same man", Locke claims, "it is impossible for personal identity to consist in anything but consciousness, or reach any further than that does."[93] Here, the distinction Locke attempts to draw between the concepts of "man" and "person" is not very clear. Apparently, one of the reasons for this ambiguity is that what is for a man to bear the same identity at different times is for that man to have the same manifestation of the same unity – regardless of slight changes in their properties. It will be the same man as long as it partakes of the same unity (the unity of particular body and particular consciousness). In making this assertation, Locke clearly denies what he says earlier in his thought-experiment about the prince and the cobbler. Another reason for the ambiguity is that Locke asks the reader to believe that it could be possible for a man to exist without a person existing. I will discuss this possibility extensively during my consideration of person-without-animal and animal-without-person Chapter 4. For now, it seems Locke would admit the difficulty in separating persons from substances, as he claims that a person might survive after a change of immaterial substance, and "that cannot be resolved but by those who know what kind of substances they are that think; and whether the consciousness of past actions can be transferred from one thinking substance to another."[94]

Locke still claims that the term "person" (or self) has a constant interaction with substance, but this link is only contingent, not necessary. In that sense, from Locke's point of view, any attempt to explain the identity of a person through time could depend upon the idea of an underlying subject, which is the ultimate subject of all predicates, and yet such a definition would face the reduction of the notion of persistence to the unity of consciousness. As Locke argues,

> It is plain, consciousness, as far as ever it can be extended—should it be to ages past—unites existences and actions very remote in time into the same person, as well as it does the existences and actions of the immediately preceding moment:

[92] Locke (1690/1964), II, 27:20.
[93] Locke (1690/1964), II, 27:21.
[94] Locke (1690/1964), II, 27:13.

> so that whatever has the consciousness of present and past actions, is the same person to whom they both belong.[95]

Therefore, it follows from the fact discussed above that *x* at t_1 is the same person as *y* at t_2 iff *x* at t_2 remembers the past actions of *y* at t_1. Despite its underspecified nature in its prototypical sense, the idea Locke proposes highly influential among the proponents of the neo-Lockean reductionist approach. That being said, the question remains as to what type of condition holds in a case where a person could embrace the required amount of Relation-R for a persistence of identity, yet could not meet the requirements of physical continuity? I think it is safe to consider these one-sided requirements to be empirical conditions, rather than ontological ones, but the question remains as to whether they are necessary and sufficient conditions for one's identity to persist over time.

The forensic notion of identity appears to be as problematic as the concerns I have noted above. When Locke announces that "person" is a forensic term,[96] he uses a legal term to explain pragmatic and moral considerations of reward and punishment. For Locke, punishment should apply to the person but not the man, as the person has consciousness and commits the action. Thus, it should be the person who is responsible for past actions. However, for practical reasons, Locke's idea of holding persons (exclusively) responsible for their past actions does not seem convincing due to his distinction between man and person. The question of whether the same "person" is identical with the "same man" will remain unanswered, as consciousness can only presuppose identity, rather than identify it.

If personal identity is the successful succession of conscious states, then the self must have a concern about its own actions in the past, and that will naturally create a kind of awareness concerning responsibility for past actions. In that sense, responsibility is linked to the self, regarding the recollections of past events or actions that one's memory represents as it owns. The question then arises, however, of how can the self or its own consciousness can distinguish true beliefs from false ones, which might be

[95] Locke (1690/1964), II, 27:16.
[96] Locke (1690/1964), II, 27:26.

represented in memory? Apparently, memory can apply to false beliefs and may not convey ta true representation of past events. However, Locke claims, whether the belief about past events is true or false, the main aspects of memory also remain the same. As a result, our concern with past events will remain the same. In that sense, our attitudes towards past actions are shaped without regarding factual events, as memory directs the present self to respond. At this stage, however, there might yet be no sign of responsibility, because there will be a lack of relation between past events and memory of the present self, and even a lack of a persisting subject that endures through every possible change in memory.

In the way Locke addresses the problem above, responsibility for past actions is described using subjective terms from a first-person perspective[97] as far as consciousness reaches. By that means, persons become accountable for their thoughts and actions only to the extent that they can remember. However, a first-person perspective or testimony clearly does not seem credible if we consider the possibility that personal testimony can be based on false beliefs. The primary objection here is that the self can be deceived about the accurateness of its own memory, and can thus create false beliefs about past events.

Inevitably, addressing personal identity and its continuity requires a further criterion. Locke's account depends primarily on the continuity of psychological states, in particular consciousness that is certainly subject to change over time – as one may face memory loss or have false beliefs about past events. As discussed above, the continuity of consciousness (and reducing personal identity to the continuity of mental states) may not provide an accurate understanding of persistence over time. It would seem then, that in order to consider the history of a person, we must shift the empirical criteria of unification. This shift is required because addressing the criterion of personal identity by relying upon changing and possibly inaccurate properties will bring more difficulties. One could miss the crucial

[97] I will discuss the term "first-person perspective" in Chapter 4 extensively under Baker's characterization of her neo-Lockean account. For the purpose of the current section, I use the term "first-person perspective" as self-awareness or self-consciousness.

point according to which these properties apparently may not be analysable even by a first-person perspective.

As a result, some significant conflicts in Locke's account of securing a definite theory of personal identity were enough to convince Hume to deny the notion of self and personal identity completely. Personal identity, for Hume, "had become so great a question in philosophy, especially of late years in England, where all the abstruse sciences are studied with a peculiar ardor and application."[98] Before stating the main criticisms of Reid and Butler, I will briefly present Hume's discussion of personal identity.

1.3.3 Hume's Bundle Theory

Hume's treatment of the problem of personal identity is remarkable for two reasons. Firstly, Hume was sceptical about the possibility of a definite criterion of identity. For Hume the idea of a persistent identity can only be a creation of imagination, something like a perception of a continuant self, which is nothing but the unity of our sense perceptions. His concern was about our imagination and the reason why we think that our self continuously exists from one moment to another. Secondly, he explicitly admits his confusion over the issue. Hume made a very crucial contribution to the personal identity debate, as his rejection of an immaterial, non-property-based idea of self fits into none of the personal identity accounts neither reductionist nor non-reductionist.

In the opening paragraph of section IV, book I in *A Treatise of Human Nature*, Hume addresses the traditional accounts of personal identity. He starts his treatment of the topic by criticising his contemporaries, who claimed that we are, one way or another, aware of our self. As noted earlier, Descartes held the belief that the nature of the self is accessible through self-observation, and Locke claimed that the self holds the relation of continuity of consciousness and that a person has a continuous, conscious and reflective self, which is constituted by thinking and experiencing. Hume gives an explicit explanation of what is involved in

[98] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.15.

providing evidence for the existence of self. As others traditionally believed, Hume accuses, "it must be one impression, that gives rise to every real idea. But self or person is not any one impression, but that to which our several impressions and ideas are supposed to have a reference. It cannot, therefore, be from any of these impressions, or from any other that the idea of self is divided; and consequently, there is no such idea."[99]

Hume insists on the idea that the self is neither a Cartesian immaterial substance nor the continuity of certain mental states as asserted by the Lockean account. Instead, the idea of a self is a kind of illusion, which we supposedly have through the continuous sense of perception. In the case of a total removal of these perceptions (such as pain, pleasure, grief and joy, or passion and sensation[100]) there will be nothing left, but annihilation or non-entity.[101] The resemblance of the objects, Hume contends, creates an apparent illusion about the idea of immaterial substance. In fact, he posits, there is no empirical justification to support the concept of immaterial substance – the idea of an underlying subject as the subject of predicates.

Unsurprisingly, Hume, as an empiricist, suggests that the idea of self remains beyond any empirical evidence. For him, merely apprehending the empirical evidence suggests there is an equally a good reason to believe that we are talking about the self. Hume states that there is a kind of compromise condition here. The idea of "self" is understandable only through regarding our sense perceptions.

To explain briefly, perceptions are for him always present to the mind, and each perception differs from others. There is a causal connection between perceptions, rather than a logical one, in which one perception necessarily entails the other. It is imagination that perfectly separates

[99] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.2.
[100] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.2.
[101] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.3.

perceptions and conceives each perception as it separately exists.[102] Depending on their force and vividness, perceptions are either impressions or ideas, as impressions are the most forceable and violent impressions, while ideas represent only the fainter perceptions. Impressions are related to feeling or sensing, whereas ideas are linked to thinking. Hume divides impressions into those of sensation that is derived from our senses, and those of reflection originating from our experience of our mind, such as emotions. In contrast, ideas are less forcible and faint copies of impressions.[103] Impressions and ideas can be simple and complex in turn. Complex perceptions consist of other perceptions as their parts, and simple perceptions are derived from a relevant simple impression.[104]

In his denial of the idea of a continuous self, Hume claims that the self has no continuous perception of a simple and identical impression. In the *Appendix* to *A Treatise* he ultimately suggests that:

> When we talk of self or substance, we must have an idea annexed to these terms, otherwise they are altogether unintelligible. Every idea is derived from preceding impressions; and we have no impression of self or substance, as something simple and individual. We have, therefore, no idea of them in that sense.[105]

There is, also, no idea of a self that is corresponding to substance. Since, all ideas are derived from our impressions, the concept of a simple and identical self can be derived only from continuous simple and identical impressions. In fact, Hume argues, there is no contradiction in claiming that it is impossible to locate such an impression.

By appealing to the idea of a self that does not have a continuous existence, Hume means that the self ceases to exist during the periods of deep sleep, unconsciousness, and death. It is not surprising to the reader that Hume's initial rejection of the self is supported by the above assumption,

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[102]Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1, 4.5.5.
[103] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton 1.1.1.1.
[104] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.1.1.1-8.
[105] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, App, 11.

which allows the self to exist only intermittently – as far as our perception of the self reaches. The idea of a person that ceases to exist seems quite controversial here, however, compared to the notions of Descartes and Locke's accounts. Hume's motivation for his discussion on this topic was quite different from other reductionist accounts. Hume considers the idea that removing our perceptions from the mind causes its annihilation, yet the mind can function only as long as particular impressions and ideas are present in it. Therefore, he concludes, there can be no idea of identity or self-existing over and above perceptions.[106] These perceptions seem to be more like mental occurrences. Hume's theory thus becomes strikingly radical compared to Descartes and Locke. Especially in *Abstract 28* in *Treatise*, where he criticizes Descartes for accounting thoughts as the essence of mind. Hume states, "it must be our several particular perceptions, that compose the mind, I say, *compose the mind, not belonging to it."*[107,108] For Hume,

> Setting aside some metaphysics of this kind [any idea of immaterial substance] I may venture to affirm of the rest of mankind, that they are nothing but a bundle or collection of different perceptions, which succeed each other with an inconceivable rapidity, and are in perpetual flux and movement.[109]

Much of his criticism stems from what he considers to be confusion about the logic of misleading considerations. The passage above suggests that the collection of different perceptions that constitute what is called self can only temporarily present as a bundle of relevant impressions. According to Hume's bundle theory, the self is simply a bundle of separate perceptions, which are unified by imagination. It is the imagination's faculty to represent the bundle of sense perceptions. As Hume suggests, "identity is nothing really belonging to these different perceptions, and uniting them together;

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[106] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.3.
[107] My emphasis.
[108] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, Abstract 28.
[109] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.4.

but is merely a quality, which we attribute to them, because of the union of their ideas in the imagination."[110]

Hume's acceptance of the Bundle Theory shows that the idea of self is understandable by regarding its notion along with the principles of contiguity, causation, and resemblance, which are the uniting principles of our perception of self:[111]

> Our notions of personal identity, proceed entirely from the smooth and uninterrupted progress of the thought along a train of connected ideas, according to the principles above-explained. With the principle of resemblance, memory discovers an identity among past perceptions, and contributes to its production (which is the continuous idea of identity).[112]

However, within the relation of causation, memory unites perceptions and offers the idea of a temporarily extended being. According to the relation of causation, certain impressions create certain ideas. These ideas then produce other impressions, and this chain causes perceptions to influence each other. Hume claims that a philosophically respectable idea of the human mind should be able to hold different perceptions and existences as they bear relations of causation.[113] These causally linked perceptions "mutually produce, destroy, influence, and modify each other."[114] In the same manner, Hume claims, a person can have divergent character traits over time, and her impressions and ideas change accordingly, without the loss of her identity.[115] In this respect, memory is a phenomenon that contributes to the idea of persistent identity. In the absence of memory, there will be no relation of causation or the chain of cause and effect. Since, the mind

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[110] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.16.
[111] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.16.
[112] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.16:18.
[113] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.19.
[114] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.19.
[115] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.19.

inhabits perceptions, which are all connected by causal relations.[116] The relation of contiguity is necessary for one to conceive the idea of a single self, in which the same subject holds the knowledge of successive perceptions. However, Hume disregards the role of contiguity relations, as perceptions can exist only in space and time[117], and as there is no notion of a principle that is accountable for something beyond our experience.

For Hume, it was tempting to ask, Why do we form the idea of an enduring self in the first place, if self is just a bundle of separate perceptions? What is the reason for attributing the notion of sameness and persistence to the bundle of ideas? Our tendency to trust the notion of identity is the result of perceiving certain connections. Superficially, this account looks too simplistic. Firstly, Hume suggests, we must have a strong inclination to consider things around us, as they persist over time. There are cases, such as the alteration of a piece of matter, in which we attribute features to things and their continuant identity, even though things are combined together as a set of different impressions. Hume explains such cases, one of which, he says, is reconstruction of a church:

> Which was formally of brick, fell to ruin, and that the parish rebuilt the same church of free-stone, and according to modern architecture. Here, neither the form, nor materials are the same, nor is there anything common to the two objects, but their relation to the inhabitants of the parish; and yet this alone is sufficient to make us denominate them the same.[118]

Another case is the replacement of the parts of a ship:

> A ship, of which a considerable part has been changed by frequent reparations, is still considered as the same; nor does the difference of the materials hinder us from ascribing an identity to it. The common end, in which the parts conspire, is the same under all their variations, and affords an easy transition of the imagination from one situation of the body to another.[119]

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[116] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.19.
[117] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.5.
[118] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.13.
[119] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.11.

The same rule applies in living organisms, too. Accordingly,

> The effect of so strong a relation is, that those everyone must allow, that in a very few years both vegetables and animals endure a total change, yet we still attribute identity to them, while their form, size, and substance are entirely altered. An oak, that grows from a small plant to a large tree, is still the same oak.[120]

The identity of self "which we ascribe to the mind of man, is only a fictitious one, and of a like kind with that which we ascribe to vegetables and animal bodies."[121]

At face value, Hume's treatment of the problem of personal identity and persistence through time seems ambiguous for several reasons. First of all, in the *Appendix* of *A Treatise,* Hume expresses his struggle boldly: "upon a more strict review of the section concerning personal identity, I find myself involved in such a labyrinth, that, I must confess, I neither know how to correct my former opinions, nor how to render them consistent."[122] Secondly, as a result of his scepticism, Hume denies that a person can ever have the knowledge of a permanent self, which can be an underlying principle of our experience. Therefore, Hume leaves no room for the possibility of a subject – not necessarily in a Cartesian sense, but something at least which constitutes our idea of a persisting self – which is a thinking rational being. Although Hume rejects the idea of the persisting self, which stands beyond what one can know from experience, it is needless to say that he is a reductionist, as he thinks that what we mean by "self" is a collection of memory experiences.

Under the guidance of Locke and Hume's identity theories, further developments of their arguments attempt to modify the identity criteria as something objectively empirical. Defenders of modern reductionism[123] –

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[120] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.12.
[121] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, 1.4.6.15.
[122] Hume (1738/2000) *A Treatise of Human Nature*, edited by D.F. Norton &M. Norton, App 10.
[123] The most striking example of Modern Reductionism is undoubtedly Parfit's Survival Theory (Parfit, 1984) - where he claims that what matters in identity is nothing but survival, as there is no actual sense of a continuant self - explicitly resembles Hume's Bundle Theory

they can be classified as the successors of Locke and Hume – attempt to advance an identity claim in which personal identity is considered to persist along with changes through time. The form of continuity through change must be either real, as it persists and is constituted by the essence of a persisting self, or it is imposed and constructed. The role of objective criteria and the value of empirical evidence become the primary focus. The aspect of personal identity evolves into a matter of qualitative concern. The reductionist view postulates the principle of personal identity as it is constituted by the list of qualities and properties – the continuity of physical parts, or the unity and continuity of conscious states and the connectedness of memory, as Locke claims. I think one will plausibly suspect that there is a failure of the reductionist view to indicate the gap between the properties of identity and the identity of a person. Since, these qualities and properties remain only as factual evidence for identity. Thus, it is insufficient for us to know the causal relations of these qualities and properties in determining one's persisting identity. It is equally not sufficient for identity to persist through time as the same as if we were trying to account for the identity claim just by merely reducing identity to psychological states or causally related impressions and ideas of self. This is where the notion of non-reductionism emerges in the debate, offering rather a satisfactory explanation of how a definition of an underlying element of identity, without committing to reductionism, can be posed. I here begin to explore the non-reductionist view by considering historical oppositions to Locke's reductionist reasoning.

1.3.4 Objections to Locke and Hume

In opposition to Locke and Hume's accounts, predecessors of the non-reductionist view such as, Reid and Butler hold the belief that the account of identity through time can only be explained by a criterion that is beyond empirical properties. This view is clearly defended in Reid and Butler's criticisms of Locke's identity theory. The belief that memory is the main constituent of personal identity is challenged by Butler's critique that

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as a series of overlapping perceptions that belong to the same life.

memory does not constitute personal identity, yet presupposes it. Reid and Butler both think that remembering having a certain thought or taking a certain action does not entail a necessary and sufficient condition for seeing ourselves as the person who owns the thought or takes the action. Reid states, "That relation to me which is expressed by saying that I did it, would be the same though I had not the least remembrance of it."[124] Butler also agrees with Reid, affirming that conscious states of past memories do not form a necessary and sufficient condition for one's personal identity to be the same person involved in action and thought.[125] What is important here is not the ability to remember, but the notion of a relation between the person and the thought or action we are taking into account. This relation represents a greater consideration in terms of accounting for the persistence conditions of persons, independently of their memory.

A further consequence for Reid is that Locke's account of memory and personal identity leaves no room for the transitivity of personal identity. According to Locke, if a person cannot remember past actions or thoughts she acquired in the past, then she will not be identical to the person who performed the actions or thoughts. Locke's description, Reid argues, creates a confusion that "a man may be, and at the same time not be, the person that did a particular action."[126] Accordingly, the person at t_2 could recall certain memories from t_1 through she could not recall the same event when she is at t_3, yet at t_3 she could remember events from t_2. However, her consciousness will remain uninterrupted throughout these states. The person at t_2 will be connected to both persons at t_1 and t_3, even though the person at t_1 is not connected to the person at t_3. Consequently, Reid states, according to Locke the person at t_2 would be the same person with both at t_1 and t_3, yet the person at t_3 would not be the same person as that at t_1.[127]

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[124] Reid (1975a) p. 110.
[125] Butler (1975) p. 100.
[126] Reid (1975b) p. 114.
[127] Reid expresses his concern for the transitive notion of identity in the Brave Officer Paradox, where he supposes " a brave officer to have been flogged when a boy at school, for robbing an orchard, to have taken a standard from the enemy in his first campaign, and to have been made a general in advanced life: Suppose also, which must be admitted to be possible, that when he took the standard, he was conscious of his having been flogged at school, and that when made a general he was conscious of his taking the standard, but had

Reid and Butler, as Locke, put emphasise on the notions of consciousness and thought. However, they reject the reduction of notion of self to the continuity of consciousness, as it cannot reveal the real notion of identity through time. According to their claim, a person is a subject, who is the centre of experience and action and is what individuals think is essential about who they are.[128] Any definition should attribute strict identity to persons rather than an identity based on objective qualities that fluctuate over time. Hence, the reduction of the persistence of personal identity to consciousness can be unreliable. As Reid says,

> Our consciousness, our memory, and every operation of the mind, are still flowing like the water of a river, or like time itself. The consciousness I have this moment can no more be the same consciousness I had last moment. Identity can only be affirmed of things, which have a continued existence. Consciousness, and every kind of thought, are transient and momentary, and have no continued existence.[129]

In the same vein, Reid claims, if remembrance is the only evidence of identity, there is a need for an underlying subject, which owns these properties. In this view, the difference between what makes persons and the changing properties of persons is strong. Therefore, the identity of a person is separable from that person's properties. This separation can be made because, argues Reid, if any accidental property or quality belongs to persons, it would be tentative and subject to change.

By the same token, Butler claims that we have a direct experience of ourselves, and that direct experience imparts direct knowledge of the self's identity, in which no further evidence is required to justify the experience-independent characteristic of identity. As Butler says, "one should really think it self-evident, that consciousness of personal identity presupposes,

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absolutely lost the consciousness of his flogging. These things being supposed, it follows, from Mr LOCKE's doctrine, that he who was flogged at school is the same person who took the standard, and that he who took the standard is the same person who was made a general. When it follows, if there be any truth in logic, that the general is the same person with him who was flogged at school. But the general's consciousness does not reach so far back as his flogging, therefore, according to Mr LOCKE's doctrine, he is not the person who was flogged. Therefore the general is, and at the same time is not the same person as him who was flogged at school." Reid (2002) 3.5:276.

[128]Reid (1975a) p. 103.

[129] Reid (1975b), p. 116.

and therefore cannot constitute, personal identity, any more than knowledge, in any other case, can constitute truth, which it presupposes."[130] In this regard, there is an immediate awareness of a persisting self, which carries the implications of self-awareness beyond the phenomenon of consciousness to the essentially non-property-based self, since empirical evidence can only support the continuity conditions of a person. Yet Butler's arguments yield obscurities, as it seems Butler is suggesting that what could give a strict feature to the idea of an enduring self is that of being an empirically unknowable subject of experience.

Last but not least, we see another objection raised by Butler, where he opposes Locke by stating that although memory can reveal our identity as persons who experienced some past event, the memory does not make these persons who or what they are. Thinking otherwise would lead us to circularity. If we suppose *x* has a so-called memory trait other than *x*'s own, then quite naturally we think that this trait is not a real memory of *x.* A real memory can only be *x*'s own memory. If, let's say, the person *y* has this memory trait, it would still not be a real memory of *x*, as the subject of the experience who causes a memory trait is *x*.[131]

In short, Butler and Reid both agree that only a continuous state of consciousness, which is constituted in continuous uninterrupted existence, allows us to define a "person" as a persisting self. At the same time, this continuous state allows us to know what constitutes personal identity.[132]

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[130] Butler (1975) p.100.

[131] Shoemaker introduces an objection against Butler's memory critique through what he calls 'quasi-memory' (Shoemaker, 1999), which represents real memory traits but does not count on identity. It involves taking a quasi-memory of an experience in virtue of remembering such an experience, even though the experience happened to someone else. Can we say this is different from only thinking to remember if the experience is caused in the way as it supposed to be? This part is quite vague and left unclarified by Shoemaker, yet we can suppose that quasi-memory requires the cause of such a memory and, strictly speaking, the experience must be connected to the experience itself rather than connected to something else. Advocates of the Memory Theory thought that they are able to avoid Butler's objection about circularity. So, for them it is definitely non-circular to suppose that the person who has the memory must already be the same person as the one who experienced the event in the first place. That means if 'x quasi-remembers doing the action a, then it does not necessarily follow that x is the same person with the person who acted upon the action a. Since, Shoemaker's quasi-memory does not require x herself for the continuity of identity, but requires x only to point out that someone did a, and quasi-memory was caused by the experience itself. (Shoemaker, 1999).

[132] Reid (1975a) p.109; Butler (1975) p. 100.

Their interpretation of Locke's personal identity theory reveals that it is the idea of an underlying subject that plays a fundamental role in addressing one's identity. This subject hears, perceives, and thinks. These psychological or even intentional predicates require a subject, which essentially represents a persisting being to which states of consciousness are attributed. Therefore, it seems clear under the guidance of the above discussion that for Reid and Butler there should be no effort to reduce a person's identity to her properties. The debate over the criteria of identity will face the demand for a fundamental and persisting idea of identity. Any theory that is inclined to reduce personal identity to the flux of properties would be rejected.

1.4 Contemporary Objections to the Mainstream View: Is Non-Reductionism Credible?

Modern non-reductionism[133] is highly influenced by Descartes' intuition-based account of personal identity, which rejects the idea that identity consists in the persistence of the same physical (biological) or psychological continuity. The initial claim of this view is that the reductionist view fails to accommodate our beliefs about past and future selves. The self, the subject, seems to be more than the collection of properties. It captures the sense of identity as something real. One contemporary philosopher, Chisholm, proposes a similar view, claiming that certain perceptions are initially accommodated within the subject. In his critique of Hume's treatment of personal identity, Chisholm's concern is directed to the subject, who is the bearer of impressions and perceptions:

> Our idea of 'a mind' (if by 'a mind' we mean, as Hume usually does, a person, or a self) is not an idea only of 'particular perceptions'. It is not the idea of the perception of love or hate and the perception of cold or warmth, much less an idea of love or hate and of heat or cold. It is an idea of that which loves or hates, and of that which feels cold or warm (and, of course, of much more besides). That is to say, it is an idea of an *x* such that *x* loves or *x* hates and such that *x* feels cold or *x*

[133] Defenders of the modern non-reductionist view are Chisholm (1976); Lowe (1996; 2009; 2012); Madell (1984); Swinburne (1984).

feels warm, and so forth. [134]

A non-reductionist would claim that we can have a direct experience of the subject from a first-person perspective, as we are aware that we are active in doing the action and aware of changes (within the Cartesian idea of introspection). This state of awareness can hold the idea of self, which suggests the existence of an underlying subject and its persistence through time. As a defender of the non-reductionist View, Swinburne agrees with Chisholm's criticism adding that there is a constant recognition of this awareness that we are related to our self not only through experience, but also by being the bearers of experience.[135] For Swinburne, the unity of experience warrants the enduring feature of identity, which is constantly aware of this unity, and thus aware of the underlying subject.

Within the reductionist frame, psychological continuity defenders describe consciousness as something essentially subjective, initially requiring a first-person perspective. At the same time, according to the non-reductionist account, it could be the case that the practical aspect of identity – being responsible for past actions – is decided only by a first-person perspective. If this is the case, then how far can we rely on the possibility of the fallibility of testimony? As mentioned earlier, a person can be mistaken about past memories and fail to accommodate appropriate feelings of responsibility for past actions. Furthermore, regardless of any memory loss or possible character change, the notion of responsibility is something that must be fixed. Since the action has been done irrespective of whether the person has true or false beliefs about her past actions. Therefore, the person will take responsibility for her actions regardless of the truth conditions of memory, as these actions are already attributed to the person. Such a view, non-reductionists claim, will also allow us to account for the persisting notion of identity, which forms the foundation for the responsibility of past actions.

It is also clear that there is an inclination among non-reductionists to believe in the successive notion of present and past selves. A direct

[134] Chisholm (1976) p. 39.
[135] Swinburne (1984) pp.43–7.

interaction with memory could impart a true belief regarding the person's past and justify our knowledge of subject and self. However, there is a need for a further consideration. The subject is in a direct interaction with experience. In the meantime, however, non-reductionism presupposes that its existence is independent of the awareness of direct knowledge. In the reductionist view, the persistence of the subject is reducible and limited to consciousness. In this respect, personal identity is nothing but the unification of experience.

Swinburne is against this view and claims that the subject's direct knowledge of experience yields strong evidence for the existence of an underlying subject or self. Nevertheless, it cannot properly generate the idea of identity. The subject is the cause of experience and precedes it. If this is a plausible claim, the next non-reductionist argument should follow quite naturally, namely that certain changes in the subject's properties are only comprehensible with reference to the current state of consciousness. Yet, it remains tempting to look for evidence of a subject that succeeds in persisting independently of knowledge of experience. Any knowledge of experience must be strictly related to the subject, which precedes and affects experience.

As a defender of the non-reductionist view, Madell advocates the same point, claiming that without a direct knowledge of the subject, any attribution to its properties remains meaningless. The idea is that the notion of a persisting subject must be independent of the subject's self-awareness. As Madell claims, "I can only know myself to be that one and the same person to whom these various descriptions apply, if I have knowledge of myself, an awareness of myself, which is independent of those descriptions."[136]

It seems, hence, that the subject is taken to be separate from any properties attributed to it. Here, the crucial question may therefore be whether is it possible to account for a self that is independent of its psychological and biological states? For Swinburne, Madell, and Chisholm such a distinction is possible. Contrary to the reductionist view, Chisholm

[136] Madell (1984) p. 24.

asserts, "The sentences in which we seem to predicate properties of appearances can be paraphrased into other sentences in which we predicate properties only of the self or person who is said to sense those appearances."[137] Thus, Chisholm remarks, characterising experience, as something necessarily related to the possibility of an underlying subject, is vital. Along the same line, Swinburne agrees that the unity of experiences gives an awareness of the self as a subject. Accordingly, "the only way to bring out the sense in question in which the experiences are not distinct is to say that they are experiences of a common subject. One person is having both experiences. And he is often aware of doing so."[138] Based upon this line of reasoning, there is a need for the idea of a subject, which is known directly, derived from our experience of it, and which does not require any further consideration to know its existence. In his recent paper Swineburne expresses that a person at earlier time is the same person with a person at a later time regardless of any condition, such as whether the person holds the same metal or physical properties, or whether the body is possessed by each person at different times. A person may not hold a causal relation in her mental states, she may not have the causal relationship in her memory traits. A person possibly may have different character traits, or even may have entirely different body and different brain. Nevertheless, Swineburne adds, continuities as such are not necessary for personal identity.[139] This sort of immediate apprehension would present a method of knowing the self without reference to its properties. In this regard, persons would be aware of themselves as having the non-reducible property of being a subject and they will be directly experiencing it. As Swinburne states, "It is something of which we are often aware without our knowledge of it depending on our knowledge of anything more ultimate."[140]

Notably, the type of self with which non-reductionists are concerned is indicated without its properties, strictly speaking. They make no reference to personal identity given biological and psychological considerations, as

[137] Chisholm (1976) p. 50.
[138] Swinburne (1984) p. 47.
[139] Swinburne (2012) p. 105.
[140] Swinburne (1984) p. 42.

these considerations are necessary and sufficient for the persistence conditions of identity. Considering Chisholm, Swinburne and Madell's soul-identity accounts of persistence, Lowe's non-reductionist account represents a substantialist approach on the contrary what Chisholm, Madell and Swinburne defend. Lowe denies any necessary and sufficient conditions of personal identity over time without referring to any separately existing entities (transcendent entities, such as soul). That is being said, for Lowe, in our ontological scheme, personal identity should be something so basic (essentially a simple entity) that is primitive and nothing more informative can be said about.[141] Persons are simple substances who are basic sort of subjects of experience.

The terms Lowe uses here represent something substantial and being different expression of the same idea. However, adds Lowe, the self (person) is both the object and the subject of experience. So, it cannot be separated into parts. A simple substance that belongs to our phenomenal world with its bodily continuity, is also a psychological substance: "a person is a substantial individual belonging to a natural kind which is the subject of distinctive psychological laws, and governed by persistence conditions which are likewise distinctively psychological in character"[142] The version of non-reductionism Lowe offers is distinctively not dualist and precisely not mystical approach. Nevertheless, his conclusions about the persistence are quite circular. When we talk about ordinary objects, Lowe says, the persistence of the entity consists in the persistence of its sufficient portion of its component parts. The persistence is a matter of the continuity of constituent parts. Yet, what amount of portion is sufficient for the persistence remains debatable.

Personal identity, however, is subject to a different degree of consideration. In his reasoning, the conditions of a diachronic identity cannot be provided in personal identity over time. As simple ungrounded substances without proper parts (biological and psychological continuity),

[141] Lowe (2012), p. 152.
[142] Lowe (1996), p. 32.

persons have a persistent identity due to having the identity itself.[143] He concludes that "the identity consists in nothing but itself" by employing a further argument, where he claims that identity persists over time without being ungrounded.[144] Undoubtedly, Lowe's argumentation is a strict version of non-reductionism, where the absence of criteria for persistence is a consequence of self's being unanalysable into its parts.[145] The denial of any criterion as such is thought to be independently from any property of a person in question.

Although denying the possibility of a reductionist approach seems to be affirming to influence the idea of essential properties of a person, which persist along with identity, the idea of essential properties is left aside without a proper examination (especially by Lowe). So, the shift of non-reductionists' attention from the notion of an anti-persistence condition approach to the possibility of essential properties makes their inquiry of personal identity over time quite problematic and hard to pursue. The reason is that by using the term "essential properties" in their premises without actually rationalising the term through what are these essential properties might be, they commit to characterising the persistence condition as something extremely puzzling.

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[143] Lowe (1996), p.43.

[144] "… it would clearly be futile to expect the concept of the self to reveal upon analysis an account of the self's identity over time which did not implicitly presume the very thing in question". Lowe (1996), p.42. See also Lowe (2009), p. 140.

[145] The strict version of non-reductionism is also defended by Merricks: See Merricks (1998) and (1999). On the contrary what Lowe's non-reductionism suggests, according to Merricks, it is the impossibility of any criteria providing analysis of identity through time for any entity (whether it is an object or persons) appears negatively, yet expresses the fundamental independence of persistence from any criteria. He explicitly rejects reductionism and the possibility of any criteria (and criteria analysis) of identity over time. Instead, he affirms that the persistence of a thing is independent from any criteria of persistence. In that sense, things (and persons) persist regardless of any criteria attributed to them. Since any criteria will represent an external factor, which could be either the psychological continuity or biological continuity.

1.5 Conclusion: How Do We Account for the Metaphysics of Personal Identity?

The essential notion of the subject and the self certainly continues to exist and we are able to know its existence through our physical and psychological states. The transference between mental states does not necessarily entail the inevitable dependence on properties and conscious states. Nevertheless, there must be, at least, an empirical possibility of such a belief. What the defenders of the non-reductionist view attempts to show above is that after a critical examination, the idea of a subject seems to be preceding biological and psychological properties. Most non-reductionists, such as Swinburne, Chisholm, Lowe, and even Merrick, take persons as individual substances and individual beings, who are ontologically fundamental and persist *in virtue of* their essence (being a substance, self and person). Their existence depends on nothing but their endurance over time without referring to any necessary and sufficient condition. The motivation given by Swinburne, Chisholm and Lowe is clear, but I do not think that their accounts are convincing at this point. First of all, they claim that the substantialist notion of persistence conditions are consistent with our commonsense and everyday language. For them one should accept that in our everyday life we denote persistence to persons as enduring individual substances. What I suggest in the following chapters is that our commonsense, intuitive considerations and premises we use in our everyday language are not entirely credible grounds for a metaphysical inquiry. In fact, we do not know what sort of commonsense or intuition involves in the substantial approach of personal identity. Though, what we know is that the grounds suggested above will always remain unknown to us.

The reason for that, at first glance it seems rather uncertain whether it is possible to know intuitively that there is something more fundamental – beyond the dependence of biological and psychological traits of a person – to identity than its properties. Categorically, terms such as "subject" and "self" should remain utterly fixed and unchanged, and thus essentially capable of surviving in their pure form. This notion requires a further distinction between having certain properties – as it has been discussed

above, in the Lockean terms these properties refer to consciousness and memory – and being these properties itself. One may argue that explaining identity as something understandable along with certain properties is a circular exercise that cannot propose an account of the practical aspects of personal identity, as the states of consciousness appear to us only through subjective experience. While what we are can be known directly through consciousness, however, it can be also true that we are aware of ourselves directly through conscious states. The subject can underlie these states, but even this feature can be attributed to identity, as its existence is necessary for the existence of certain psychological states.

The careful analysis above may suggest that the notion of the subject can represent more than an abstract conception in order to generate identity, in which a person can exist in an actual sense. As mentioned earlier, describing identity without attributing its certain properties would be meaningless in practice. Nonetheless, if any property is required, then it can only be the subjectivity of a person that is the persistent unity of properties. Although the implications of non-reductionism successfully support the unified notion of a subject, which exists and persists without being reducible to its properties, it remains unclear what counts as the subjectivity of a person and how the idea of an underlying subject is separable from the states of consciousness or self-awareness. Furthermore, we should also be able to point out exactly why the idea of an underlying subject is not reducible to any property and is not analysable into further components. Apparently, this is the absence of an argument, from which the idea of an underlying subject emerges. Such a non-reductionist notion of identity is something not entirely dependent upon what reductionists are strictly insisting on. In other words, something that is not entirely dependent upon only the experience of conscious states and properties. In that sense, defenders of the non-reductionist approach clearly offer reasons why we should think that the subject may plausibly be distinct from its properties, but they also fail to show to what extent the persistence condition is actually separable from these essential properties.

So far, enough has been said about the general problem of personal identity within the historical and contemporary considerations. I would like to conclude this chapter with a briefly summary of the concerns and objections recited above from various opponents of the reductionist view. One may think of reducing identity to psychological or biological continuance, or both, as the continuation of a single unity. Initially, though, the kind of unity we are talking about here must be clarified. This interrogation should reflect upon what psychological and biological aspects we are to favor when we consider what kind of unity is relevant to our persistence conditions. Fundamental deliberation is required concerning what aspects are essential for the persistence conditions of identity. Such a reflection will include the psychological and biological aspects of a person that we regard as essential to the unity that we are. This reflection will initially concern whether we persist as the same beings through time. Being motivated by the above discussion, we can now reformulate the metaphysical question of personal identity in two ways. First of all, to what extent can a person be separated from its properties (such as conscious states and self-awareness)? Secondly, if such an approach can be successfully addressed, how can it be related to the continuant identity regardless of changes in that identity?

Chapter 2: Hylomorphic Account of Personal Identity in Aristotle's Metaphysics: Individuation, Identity of Substance, and Essence

Formulating a notion of a person, including questions of what a person is and how a person persists throughout time and over change, is primarily a way of forming an account in which each person has been individuated via their particular properties. The metaphysical question of personal identity is "what is *x*?" In a broad sense, this question takes the identity claim as a relation and name, both of which identify the individuality of a thing. An important and mostly overlooked consideration in personal identity literature, is to assess the persistence criterion. In this chapter, the problem of personal identity will be scrutinized within the scope of Aristotle's thoughts on ontological dependence, where there is a sense of order or an ontological hierarchy between what something is and how it persists over change. There is a possibility of interpretation that has received less attention since the Cartesian revolution of the mind–body distinction.

Consistent with the Aristotelian thesis, in order to originate an account of the identity of an individual and its persistence conditions through time, there is a need of a plausible explanation of individuation, in which the conditions of continuity have been secured. The main criterion of identity over time and the question of the nature of persons are distinct in thought and should be accounted for separately, yet these two questions lead us to the same information. Aristotle's philosophy offers a salutary explanation by which to understand the notion of an individual. Consideration of what a person is in particular terms and how that person exists over time requires the same perspective on these notions. Thus, it would be a mistake to conceive that a sharp distinction can be made between personal persistence conditions and individuation. Since, the description of the conditions for the continuant existence of a person as a member of species is also the consideration of conditions for being a person as a member of species. To a large extent, the reasoning above is what

differentiates one from others.[146]

These are the criteria of identity, which also account for the principle of individuation. The principle of individuation determines the relation between persons. On the one hand, it articulates the individual essence of a person. For instance, if A and B are members of the same species, and if organism A is distinct from organism B, then A and B have either distinct matter or distinct form. It is a matter of how a member of a species is numerically distinct from another, but also how any members of the same species can be identified as a distinct particular. On the other hand, the principle of individuation identifies objects through their properties. At one time and one place, an object possesses certain properties, whereas at a later time and another place it possesses different properties.

2.1 Aristotle's Metaphysics of Persons

Aristotle's view of the nature of individuals is undoubtedly a challenging one, especially his account of substance (*ousia).*[147] Characterising the grounds for identity is not an easy task to take. Fortunately, Aristotle's conceptual project of substance (*ousia*) and its persistence conditions were his distinctive way of solving some major problems of continuity over time.

To broach the problem, it is important to begin with the concept of *ousia,* since this will take us directly to the concept of identity. I will examine the notion of *ousia* by focusing on the nature of an individual, which consists of a primary and unchanged underlying thing (*hypokeimenon*),[148] a further fact. This further fact determines an individual's persistence conditions through time along with the persistence of material being. Aristotle formulates an extensive account of the term substance (*ousia*), which has the primary meaning "being". The term "being" is derived from the present participle of the word "to be" (*einai*). It means something "which is not predicated of any subject, but of which

[146] Broady (1980) pp. 3–6
[147] Greek translations of the words are cited from Buchanan (1962).
[148] *Hypokeimenon* means subject, the underlying substratum of existence, it is undoubtedly the subject of change which remains one and the same through all changes and modifications.

everything else is predicated." Aristotle also characterises *ousia* as *energeia*, where he says, "Being is actuality". Since "to be" is "to exist", and "*to ti en einai*" means "what is it for each thing to exist, which is the first principle or "*arche*" of each thing."[149] In *Metaphysics, Zeta*, Aristotle articulates three possible definitions of *ousia*, which is preeminently something separable (thisness) and definite. *Ousia* is: (i) the composite of the form and the prime matter, (ii) *to ti en einai* (what was/is it to be) – the essence or formula, and (iii) *energeia*, which is the fundamental and comprehensive mode of activity of an individual. The key point to note here is that in its primary sense, substance (*ousia*) refers both to essence and the unity of form and matter.[150]

There is a distinction between primary and secondary substances pointed out in *Categories* but abandoned in *Metaphysics*. The division is made in *Categories*:

> A substance—that which is called a substance (*ousia*) most strictly, primarily, and most of all—is that which is neither said of a subject nor in a subject, e.g. the individual man or the individual horse. The species in which the things primarily called substances (*ousia*), and the genera of these species are called secondary substances. For example, the individual man belongs in a species, man, and animal is a genus of the species; so these—both man and animal—are called secondary substances.[151]

Accordingly, secondary substances, such as shape (*morphe)*, are not in the subject of which they are predicated. Differentiae are not present in the subject either: "And as for secondary substances, it is obvious at once that they are not in a subject. For man is said of the individual man as subject but is not in a subject: man is not in the individual man. Similarly, animal also is said of the individual man as subject, but animal is not in the individual man."[152] Even though man is a two-footed animal, being a two-footed animal is a predicate of man, and this predicate is not something "in" the man. In that sense, differentiae imply what a thing is and how we can describe it.

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[149] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1050b2-3.
[150] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1037a29-30.
[151] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Categories*, 2a13-18.
[152] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Categories*, 3a 9-13.

In *Metaphysics*, the discussion of the notion of *ousia* is carried out around the distinction between universal predicates and things. According to Aristotle, "The essence of each thing is what it is said to be in virtue of itself. For being you is not being musical; for you are not musical in virtue of yourself. What, then, you are in virtue of yourself is your essence."[153] He carries on to say "But perhaps the universal, while it cannot be substance in the way in which the essence is so, can be present in this, e.g. animal can be present in man and horse."[154] Aristotle is quite determined here to validate his point, in which substance belongs to nothing but only to itself and to that which has it, of which it is again the substance itself. The question remains whether one's underlying thing can be in many things at the same time. His answer is straightforward, he claimed that "no essence can be in many things at the same time but that which is common [a universal form, such as a human form] is present in many things at the same time."[155] What he is trying to communicate here is that no universal form can exist separately from the individuals.

Based on the discussion above, it is clear that the essence of a thing cannot be its shape or form in something else. I want to suggest caution at this point for it is clear that what is true for the one is not necessarily true of the other. For instance, in the case of a bronze statue, the essence of a statue is not its being in a statue form, but its matter, which is a genuine subject. But this case does not apply to the definition of human beings:

> If in defining the essence of white one were to state the formula of white man; another because something else is added to it, white man is white indeed, but its essence is not to be white. For the essence is what something is; but when one thing is said of another, that is not what a 'this' is, e.g. white man is not what a 'this' is since being a 'this' belongs only to substances. Therefore, there is an essence only of those things whose formula is a definition.[156]

Namely, Aristotle's argument is that the essence of a person is what a

[153] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1029b13-16.
[154] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1038b16-19.
[155] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1040b24-27.
[156] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1029b23-1030a7.

person is *in virtue of* herself (*kath'hauto*).[157]

Aristotle's *aporia* in *Categories* and *Metaphysics* is set for substances (*ousia*). Substance is the only the subject of predicates. Further to that, substance is the ultimate subject of everything called substance (*ousia*) in a strict sense.[158] Therefore, the principle of substance is thought to be primary and basic. Accordingly, things that are formed naturally can be qualified as primary substances (*ousia*): "While some things are not substances, as many as are formed naturally and by nature, their substance would seem to be this nature, which is not an element but a principle."[159] The prime example of things that are formed by their nature is living things. Accordingly, "natural comings to be are the comings to be of those things which come to be by nature; and that out of which they come to be is something which exists naturally; and the something which they come to be is a man or a plant or one of the things of this kind, which we say to be substances if anything is."[160] Aristotle takes all living things as potential substances.[161] Consequently, he seems to suggest that all living things have ontological status.

Two key points of Aristotle's idea of identity conditions can be mentioned here. In such a position Aristotle is compelled to the claims that "all living things are real substantial beings" and that "all living things are composites of matter and form"; "And when we have the whole such and such a form in this flesh and in these bones, this is Callias or Socrates; and they are different in virtue of their matter (for that is different), but the same in form; for their form is indivisible."[162] This passage is where Aristotle's *aporia* is set for the notion of substance (*ousia*). Since, according to his classification of substance, the primary substance (*ousia*) is something that is basic, fundamental and does not have any parts. However, can we say that Aristotle seems to create a contradiction by generating the hylomorphic idea

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[157] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1029b13–16.
[158] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Categories*, 2b35–3a1; *Metaphysics,* 1028b33–1029a1.
[159] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics,* 1041b28–30.
[160] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1032a15–20.
[161] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 104ob5–19.
[162] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1034a5–8.

of beings, namely claiming "all living things are composites of matter and form"? Living things represent a unity in their hylomorphic nature. This unity may call into question whether such a qualification creates a sense in which matter and form are distinct, as is the case after the Cartesian tradition. In *Metaphysics* book 8, *Eta*, section 6, Aristotle is concerned with the issue of composition in order to determine the nature of the composition of form and matter:

> To return to the difficulty which has been stated with respect to definitions and numbers, what is the cause of the unity of each of them? In the case of all things which have several parts and in which the whole is not, as it were, a mere heap, but the totality is something besides the parts, there is a cause of unity; for as regards material things contact is the cause in some cases, and in others viscidity or some other such quality. And a definition is a formula that is one not by being connected together, like the Iliad, but by dealing with one object. —What then is it that makes man one; why is he one and not many, e.g. animal—biped, especially if there are, as some say, an ideal animal and an ideal biped?[163]

The discussion of the essence of a living thing, whether it is only the form or the unity of form and matter, will be discussed in further details in the following chapter of this thesis.[164] For now, the crucial question for now is this: Is it Socrates' form that survives after certain changes occur, or is it the unity of Socrates' form and matter? Which one qualifies the criterion of being an "underlying thing" in Socrates' being to maintain the sameness of identity? In order to seek an appropriate explanation, we need to look at the notion of change in Aristotle's metaphysics.

2.1.1 Aristotle on Change and Persistence

We can now raise a further question: How does the process of change cause the persisting entity to add or lose properties in physical aspects, while the identity of this entity remains numerically identical through time?

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[163] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1045a7–17.

[164] For the debate over the notion of substance see Ross (1949) and Burnyeat (1979) both claim that Aristotle's focus is on a man as a composite. Whereas, Gill (1989); Halper (1989) and Lewis (1994) claim that the focus is on the unity of form.

Aristotle's approach solves this problem[165] in *Physics* book 4, section 11. He focuses mainly on the problems of change and persistence by claiming that a moving thing always has the same features. Although our main concern here is the persistence of substances, we can first analyse Aristotle's example of the persistence of states of affairs:

> The 'now' in one sense is the same, in another it is not the same. In so far as it is in succession, it is different (which is just what its being now was supposed to mean), but its substratum is the same; for motion, as was said, goes with magnitude, and time, as we maintain, with motion. Similarly, then, there corresponds to the point the body which is carried along, and by which we are aware of the motion and of the before and after involved in it. This is an identical substratum (whether a point or a stone or something else of the kind), but it is different in definition—as the sophists assume that Coriscus' being in the Lyceum is a different thing from Coriscus' being in the market-place.[166]

For Aristotle, substances and states of affairs persist in distinct ways through time. What Aristotle means here is that states of affairs do not affect Coriscus' substratum. As a moving thing, Coriscus himself has the same substrate, but has different definitions at different times. It is only a matter of the plurality of accidental unities by which Coriscus has been accounted for.[167]

In *Metaphysics* book 6, Aristotle examines the topic of becoming as a part of the discussion and asks whether "Coriscus in the market place" is the same person as "Coriscus in the Lyceum".[168] The sophists advocated that "Coriscus in the marketplace" becomes[169] "Coriscus in the Lyceum",

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[165] There is a similar puzzle called the Growing Argument, which poses a challenge to those who take material composition as a part of their account of persistence. Accordingly, the identity of an individual is nothing more than its material existence in a unity. Hence this material unity of a body is in a successive relation through time, and if this is the case, then the identity as a whole should be in a successive relation too.

[166] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics,* 219b13–21.

[167] Elsewhere Aristotle raises a puzzle about Coriscus to the Sophists: "For the arguments of the sophists deal, we may say, above all with the accidental; e.g. the question whether musical and lettered are different or the same" (*Complete Works of Aristotle*, trans. by Barnes 1991, *Metaphysics,* 1026b15–18.)

[168] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics,* 1026b15–18.

[169] Here "becomes" as a verb is *gignetai*. There is a distinction between "the thing coming to be" is *to gignomenon*, which is "that which becomes", and "what it becomes", which is *ho gignetai*. In *Physics to gignomenon* can be used in different contexts, the initial object

which means "Coriscus in the market place" is being replaced by "Coriscus in the Lyceum". Therefore, according to this logic, even a simple change in place should result in a new person. The reasoning behind this casual connection is the indiscernibility of identicals. Accordingly, if a person is identical to herself in different time and different places, then for every property she has at different times and places, she is identical to her future self iff she has the same property as she had before. In this case, Coriscus at time t_1 has the property of being in the marketplace and Coriscus at time t_2 has the property of being in the Lyceum. Therefore, Coriscus at time t_1 cannot be identical to Coriscus at time t_2, as Coriscus at time t_1 has a property, which Coriscus at time t_2 does not have.

Aristotle's solution to this puzzle holds on to the claim that the propositions "Coriscus in the market place" and "Coriscus in the Lyceum" are both true of Coriscus and that he is identical to himself in both places in terms of substrate but not in definition: "[Coriscus], with respect to [his] substrate, is the same, but in definition it is different."[170] The idea of being one in substance but differing in definition is Aristotle's solution to the problems that entail a notion of unity and being the same individual in a variety of time and places. The same reasoning is applicable to the problems of change and persistence. In *Generation and Corruption*, book I, he writes: "Perhaps the solution is that their matter is in one sense the same, but in another sense different. For that which underlies them, whatever its nature may be is the same; but it's being is not the same."[171] He also uses the same tool in *De Anima,* book 3, section 2, where he claims that the person who completes the action and the one who perceives it are unified on the one hand, but differ, on the other hand.

By considering this relative notion in terms of the identity claim, Aristotle expands this idea of unity in *Physics,* book 3, section 3, where he gives a descriptive example of the road from Athens to Thebes. This is

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that undergoes the change, or resulting object from the change, or the underlying thing (*hypokeimenon*) persists through the change.

[170] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 219b13–21.

[171] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Generation and Corruption*, 319b3–7.

numerically the same as the road from Thebes to Athens, but the roads themselves are not the same in definition. Accordingly, "the road from Thebes to Athens and the road from Athens to Thebes are the same. For it is not things which are in any way the same that have all their attributes the same, but only those to be which is the same."[172] They are the roads defined by ones who are either in Athens or Thebes, thus, "any more than it follows from the fact that there is one distance between two things which are at a distance from each other, that being here at a distance from there and being there at a distance from here are one and the same."[173] We can employ the same reasoning to Coriscus' example: "Coriscus in the market place" and "Coriscus in the Lyceum" are names for the same person but they identify the same person in different states of affairs.

In *Physics* book I, sections 7 and 8, Aristotle regards another puzzle about change. In his treatment of the case, he implies the same sort of change in three different ways:

> We say that 'one thing comes to be from another thing, and something from something different, in the case both of simple and of complex things. I mean the following. We can say the man becomes musical, or what is not-musical becomes musical, or the not-musical man becomes a musical man. Now what becomes in the first two cases—man and not-musical—I call *simple,* and what each becomes—musical—simple also. But when we say the not-musical man becomes a musical man, both what becomes and what it becomes are *complex.*[174]

Regarding the problem of continuant identity, what is important here is that in the second and third cases, there is a substitution of the thing, which is replaced by the thing it becomes: the not-musical man becomes a musical man. In the second case, the not-musical is substituted by the musical, and in the third case, the not-musical man is substituted by the musical man. In the same respect, the not-musical and musical man relation pair might seem analogous to the relation between "Coriscus in the market place" and "Coriscus in the Lyceum". Since both are about state of affairs and

[172] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics,* 202b14–17.
[173] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 202b15–18.
[174] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*,189b34–190a4.

accidental unities. More importantly, in the first case, in which a man becomes musical, Aristotle explicitly suggests the idea of the unity of an underlying thing (*hypokeimenon*)[175], which persists through change:

> One can gather from surveying the various cases of becoming in the way we are describing that there must always be an underlying something, namely that which becomes, and that this, though always one numerically, in form at least is not one. (By 'in form' I mean the same as 'in account'.) For to be a man is not the same as to be unmusical. One part survives, the other does not: what is not an opposite survives (for the man survives), but not-musical or unmusical does not survive, nor does the compound of the two, namely the unmusical man.[176]

Accidental properties, such as being-in-the-marketplace or being musical and not-musical are accidental unities, and they are formed with substances. They occur in different states of affairs or circumstances, in different places or times, but the man or Coriscus is the entity or substance (*ousia*), as one continuant being, which is regarded as identical through time *in virtue of* having an underlying element.

The point of contention here is clearly holds the idea that persistence conditions of identity do not hold between accidental attributes, such as Coriscus' being in the marketplace at one time and being in the Lyceum at another time. In the same vein, being not-musical at one time and being musical at another time indicates only the degree of knowing one's accidental predicates. Instead, these conditions hold between instances of an underlying thing (*hypokeimenon*): for instance, Coriscus himself is a person *in virtue of* himself when he is stripped away from his accidental attributes. A state of affairs is meant to give a person something like the notion of what we can think of as contingent attributes. These accidental properties are not parts of substance (*ousia*), but they are only parts of a context, in which the potentiality of a substance emerges. In addition, these properties (such as a person being in one place at one time and being in another place at another time) do not conflict with each other, and there is no contradiction here in

[175] *Hypokeimenon* is the subject that undergoes change and survives after the change occurs.
[176] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 190a14-22.

claiming that Coriscus *in virtue of* himself is identical over time.[177] Since as in in the not-musical/musical example, one is acquired actually, the other is acquired potentially.

However, Aristotle explicitly admits, "although this solution is adequate as a reply to the questioner, as an account of the fact and explanation of its true nature it is inadequate."[178] Aristotle's confession here stresses the idea that even in being identical to himself, Coriscus may still be susceptible to further changes over time. Aristotle yet needs to give a credible account to explain the foundations or criteria that hold Coriscus' identity *in virtue of* him as the same person over time, regardless of any possible change in his accidental properties. The question arises for Aristotle of the notion of the criteria that hold one's identity *in virtue of* herself. In order to find out, in *Generation and Corruption,* book 1, at the end of section 5, he discusses the topic of growth. This is where Aristotle asserts that the form (*morphe*) of a living body persists through time during growth, just as the particular shape of a duct persists after being inflated:

> The form is a kind of power in matter—a duct, as it were. If, then, a matter accedes which is potentially a duct and also potentially possesses determinate quantity, then these ducts will become bigger. But if it is no longer able to act just as water, continually mixed in greater and greater quantity with wine, in the end makes the wine watery and converts it into water—then it will cause a diminution of the *quantum;* though still the form persists.[179]

In contrast, in *Physics,* book I, sections 7 and 8, he seems to suggest that what persists through time is matter. Nevertheless, in *Physics* book I, section 7 it seems as if Aristotle is trying to establish the ultimate principle of identity, which indicates an underlying thing (*hypokeimenon*) as a being persisting through time regardless of any change. A man is the example of

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[177] "Plainly then, if there are causes and principles which constitute natural objects and from which they primarily are or have come to be—have come to be, I mean, what each is said to be in its substance, not what each is accidentally—plainly, I say, everything comes to be from both subject and form." (*Complete Works of Aristotle*, trans. by Barnes 1991 *Physics,* 190b17–20.)

[178] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 263a15–8.

[179] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Generation and Corruption*, 322a29–34.

this underlying thing (*hypokeimenon*), and it is substance (*ousia*) which can either be form or matter,[180] or both, depending on the perspective we consider: namely, "we speak of 'becoming that from this' instead of 'this becoming that' more in the case of what does not survive the change."[181] As Aristotle says, "by that which is opposed, I mean the ignorant of music, by that which underlies, the man; and shapelessness, formlessness, disarray are opposed, the bronze, the stone, the gold underlie."[182] In the subsequent paragraph, he also posits, "the underlying thing, however, though one in number, is two in form. On the other hand there is the man, the gold, and in general the measurable matter; this is more of a this thing here, and it is not by virtue of concurrence that the thing which comes to be comes to be from this."[183] However, *in Generation and Corruption*, book 1, section 5 this "underlying something" (*hypokeimenon*) seems to be the form regarding the biological growth: "Those, then, who construct all things out of a single element, must maintain that coming-to-be and passing-away are alteration."[184] Here Aristotle still insists on assuming that unity over time requires continuity of form. The form survives from one moment to another in growth, as the process of growth happens gradually. Hence, the gradually changing matter constitutes a form from one moment to another without any gap. After all, it persists through substantial change.

Therefore, one way interpreting *Physics* book I, section 7 and *Generation and Corruption* book 1, section 5, is that what Aristotle means by the word "substance" (*ousia*) could be the unity of form and matter, which persists through growth – matter persists through growth only by

[180] There is a very crucial point in this particular paragraph I would like to mention it here again, where Aristotle claims that "one can gather from surveying the various cases of becoming in the way we are describing that there must always be an underlying something, namely that which becomes, and that this, though always one numerically, in form at least is not one." (*Complete Works of Aristotle*, trans. by. Barnes (1991) *Physics,* 190a13–16.) He indicates the form as the same as in account. This point becomes very close, on my view, to revealing that Aristotle searches for the notion of an underlying thing, which is not openly spelled out as the matter or form alone.

[181] *Complete Works of Aristotle*, trans. by Barnes (1991) *Physics*,190a31.
[182] *Complete Works of Aristotle*, trans. by Barnes (1991) *Physics*,190b13–17.
[183] *Complete Works of Aristotle*, trans. by Barnes (1991) *Physics*,190b23–27.
[184] *Complete Works of Aristotle*, trans. by Barnes (1991) *Generation and Corruption*, 314b1–2.

means of the relation of potentiality and actuality[185] – and alteration. Another way of interpreting Aristotle's account of identity in this particular discussion is that the individual unity of Coriscus' form persists through change, and the criterion of persisting identity will be the underlying feature of Coriscus, yet what makes him *in virtue of* himself must be this underlying thing (*hypokeimenon*). Indeed, it might be argued that Coriscus' identity, as a unity of his form and particular matter, persists over time iff

(i) We take persistence comprise be overlapping chains. The underlying element (*hypokeimenon*) of his being continues to exist as overlapping chains without any gap; and

(ii) Coriscus' biological and psychological connectedness – the unity of his matter and form at different times – are linked by one uninterrupted history.

Undoubtedly, for Aristotle, the continuity in spatial extension and temporal duration is the condition of diachronic identity. However, it is tempting to pose another set of questions. To what extent is Aristotle's idea of connectedness relevant to the genesis of living organisms? What is it about the substance that remains numerically identical over change?

2.1.2 The Direction of Change

Aristotle's discussions of how changes occur in substance (*ousia*) in order do not require any specific reference to time. His remarks regarding the growth of a boy into a man appear in *Metaphysics*, book 5, where he describes what it is to be prior when it comes to biological development. Accordingly, "other things are prior in change; for the things that are nearer the first mover are prior (e.g., the boy is prior to the man)."[186] On the one hand, the term "prior" might be understood as indicative of prime mover, which is the prior and the final cause of all change. On the other hand, it is a fact that the boy is prior to the man.[187] In *Metaphysics*, it is clear that this

[185] "The same things can be spoken of in terms of potentiality and actuality." (*Complete Works of Aristotle*, trans. by Barnes 1991 *Physics*, 191b29.)

[186] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics,* 1018b19–21.

[187] The same remark has been given in *Generation of Animals* regarding the boy is prior to the man through time: "Now we speak of one thing coming from another in many senses; it

order cannot be always taken as a temporal succession:

> For one thing comes from another in two ways; (a) as the man comes from the boy, by the boy's changing, or (b) as air comes from water. By 'as the man comes from the boy' we mean 'as that which has come to be from that which is coming to be, or as that which is finished from that which is being achieved'; on the other hand, coming from another thing as water comes from air implies the destruction of the other thing. This is why changes of the former kind are not reversible, —the boy does not come from the man (for what comes to be from the process of coming to be is not what is coming to be but what exists after the process of coming to be; for it is thus that the day comes from the morning—in the sense that it comes after the morning; and therefore the morning cannot come from the day); but changes of the other kind are reversible.[188]

Aristotle draws our attention to a very crucial distinction that we will scrutinise extensively in the last chapter. For now, according to his categorisation we can imply two types of connectedness between entities. The first category represents temporal succession, which is irreversible in order and in this succession entities are connected in one single history, like the relation between boyhood and manhood. In the second category, entities are connected to one another in a reversible relation in theory. Hence, when one thing comes into existence, the other ceases to exist. Aristotle uses the water or air example to demonstrate this reversible relation. For example, air is produced from water if we start boiling it. Upon reaching 100°C in temperature, water ceases to exist and the air comes into existence, and vice versa, by through cooling and condensation.

In the first category, even though the boy precedes the man in succession, Aristotle's concern is rather teleological, regarding the relationship between boyhood and manhood. In other words, the connectedness of boyhood to manhood represents one single history of a person's identity. Apparently, identifying the man as "that which has come to be" and "that which is finished" and the boy as "that which is coming to

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is one thing when we say that night comes from day or a man becomes man from a boy, meaning that the one succeeds the other; it is another if we say that a statue is made from bronze and a bed from wood." (*Complete Works of Aristotle*, trans. by Barnes, J. 1991, *Generation of Animals*, 724a22–3.)

[188] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 994a22–994b3.

be" and "that which is being attained" is to say that the man is something complete and the boy is something in progress and incomplete. Thus, manhood is the goal of the boy's development. This, for Aristotle, means that there is a relation between these two stages, which takes this form: "the boy is potentially the man."

The basis for the order of change is represented by Aristotle's concepts of nature and potentiality.[189] In *Physics*, Aristotle states that having a nature means having the principle of a certain kind. Basically, it is the principle of things, in which they are things *in virtue of* themselves. He expresses the relation "*in virtue of*" clearly with the term "according to nature", which is applied to all things and also to the attributes which belong to them in virtue of what they are: "for instance the property of fire to be carried upwards—which is not nature nor has a nature but is by nature or according to nature."[190] In *Metaphysics*, Aristotle argues that the nature of the form or essence, which is the primary principle undergoing change, is essential in natural substances. In *De Anima*, book 2, he classifies the form of person as soul, and asserts that soul is the efficient cause of one's actions. Therefore, soul could be the boy's nature; namely, it could also be his form or essence, but also it could be the innate impulse, which drives the biological development.[191] Nevertheless, this notion of innate impulse is only partly relevant to the relationship between potentiality and actuality. Since, in such an interpretation the essence of a person is the form realised through the process of one's development. The boy's nature consists not

[189] For more detailed discussions of nature *Physics*, II, 1 and *Metaphysics* book 5, section 4.
[190] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics,* 192b35–193a2.
[191] Similarly, in *De Anima* III, 9, Aristotle raises similar points about the different faculties of the soul, such as the appetitive and the imaginative or the rational faculties. Each faculty is applicable to the notion of soul, yet these faculties are relative regarding the perspective we are taking into account. In *De Anima*, II, 1, Aristotle identifies soul as substance, and the definition of soul contains form and actuality. In the same chapter, he classifies the soul as it involves in first and second actualities. Accordingly, the first actuality is identified with the essence, which is its ability to do or actualize it. The second actuality is its actuality of doing it. For instance, in human beings the soul is first actuality, because it does not disappear in conscious or unconscious states. Aristotle also gives examples of an axe (if we think of an axe as a natural body) and eye, an axe's essence would be it's being an axe, and an eye's essence is sight, respectively. In these examples, Aristotle acknowledges soul as the essence of a thing, yet from another corresponding degree the soul might be taken into account in terms of its hierarchical functions or activities, such as growth/nutrition, locomotion/perception, and intellect/thought. Nonetheless, the soul has a capacity to engage in all these activities as a unity.

only in his human form or soul, but also in his body is also the subject of growing into manhood. The notion of essence as the unity of form and body is obvious here. For instance, "Socrates as a boy" at t_1 and "Socrates as a man" at t_2 represents two phases that change through time, and they always stand within the normative order of biological development. When Socrates at t_1 becomes Socrates at t_2, the connectedness of his two phases is accountable only *in virtue of* his nature. Yet, there is no harm in considering this connectedness from the teleological perspective, as much as the relation between potentiality and actuality requires.

2.1.3 Change as the Relation of "A Is Potentially B"

The formal relation between these two states is the relation of "A is potentially B", which is transitive, asymmetric, and connected.[192] For Aristotle, in the statement "A is potentially B" are two stages of change; the latter is the stage of *ousia* in actuality, which is to say that A is incomplete compared to B. Here, A as an incomplete actuality has a *telos* to become B. Thus, within the teleological framework, the notion of becoming B is identified by the stage that leads B to a specific *telos:* "change is thought to be a sort of actuality, but incomplete, the reason for this view being that the potentiality whose actuality it is incomplete."[193]

Recalling his arguments on the notion of substantial nature, Aristotle takes substantial changes to be teleological in *Physics* book 2, section 1,[194] where he divides the category of substance into two. These are natural substances, such as animals, plants and the simple entities in nature, and artefacts. Natural substances possess an essence, which is also the actualising principle, whereas artefacts do not. Aristotle claims that actions

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[192] The relation is transitive: If A is potentially B, and B is potentially C, then A is potentially C. This transitive notion of the relation holds the identity persistent through time. The relation is asymmetric if A is potentially B, then B is not potentially A; is connected for every A and B, if $A \neq B$, then either A is potentially B or B is potentially A. Regarding connectedness, the question arises whether or not B in "A is potentially B" is always the goal of the change process. In the example of Socrates' process of becoming a man, "Socrates-as-a-man", there is no stage left out. Aristotle says that there is an absolute necessity between two phases of Socrates' being, which is incapable of being otherwise. (*Complete Works of Aristotle*, trans. by Barnes, J. 1991, *Metaphysics*, 1006b31–2.)

[193] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 201b31–33.

[194] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 192b9–23.

of natural substances are always goal oriented, and all substances essentially carry a particular sort of *telos* and characteristics of the kind of substance that it belongs to, such as the statement "man is biped animal". Therefore, if something is a natural substance and subjected to a natural change, then it has certain specific goals. If A and B are the stages in the change or growth of a substance, then the direction of the relation between A and B is necessarily ordered by the relation "A is potentially B". Hence, due to their connectedness, the relation "A is potentially B" holds these stages in relation.

This line of the argument has been developed further in *Physics* book 3, section 1, where Aristotle gives the definition of change as the actuality of what exists potentially.[195] This approach explicitly applies to natural substances, and it is also related to his point in *Physics*, where the claim "no process of change is infinite" has been established.[196] This claim indicates that every change, regardless of contraries,[197] is a change from something to something; namely, it is becoming the latter in the process of change.[198]

2.2 Alteration vs. Genesis on Identity of Subject

Judged by the criteria pointed out in the previous section, we can now conclude that the matter–form relation applies to sensible substances, and according to Aristotle, this relation can be explained through the elements of generation (becoming) and the generation of substance (*ousia*) after change. It has already been highlighted that in *Physics* book I, section 7, he indicates that to consider something as changing in terms of characteristics, attributes or elements is to take this thing as it "comes to be" one thing from something else. This process was exemplified above, where Aristotle uses the example of a man becoming musical, in a sense that a man "comes to

[195] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 201a10–1.
[196] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 241a26–b12.
[197] "Increase and decrease; of what can come to be and pass away, coming to be and passing away; of what can be carried along, locomotion." (*Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics,* 201a13–14.)

[198] Whereas, alteration is always dependent upon contraries.

be" musical from being non-musical. The same example can be considered again, and apparently, a man survives the change and remains the same man when he becomes musical after having been not-musical. In this case, one of the contraries does not survive the change.

These contraries, says Aristotle, are accidental elements of the subject and come from the appropriate contrary.[199] When one of the contraries replaces the other, what remains is what lies under (*hypokeimenon*) the accidental predicates, even though changes can occur in the body of a man. For instance, Socrates' body can be subject to several changes from one state of affairs to another, the same substance (*ousia*) – the same subject – remains as the same composite[200] of substance and a new accident. In that sense, gaining a new characteristic can be described as the genesis of substance, as happens also in the case of alteration. Accordingly,

> Things which come to be without qualification, come to be in different ways: by change of shape, as a statue; by addition, as things which grow; by taking away, as the Hermes from the stone; by putting together, as a house; by alteration, as things which turn in respect of their matter. It is plain that these are all cases of coming to be from some underlying thing.[201]

Elsewhere, he characterises this notion of change as an extraordinary difficulty:

> In one sense things come-to-be out of that which has no being without qualification; yet in another sense they come-to-be always out of what is. For there must pre-exist something, which potentially is, but actually is not, and this thing is spoken of both as being and as not-being. These distinctions may be taken as established; but even then it is extraordinarily difficult to see how there can be unqualified coming-to-be.[202]

These are two passages, in which the notion of genesis and its distinction from alteration or modification are explored. This explanation makes Aristotle's point clear, namely that alteration belongs only to things in

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[199] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics,* 188b1–3.
[200] This does not rule out the fact that Socrates remains as the same person through changes over time.
[201] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 190b5–10.
[202] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *On Generation and Corruption*, 317b15-–9.

themselves (*kath' hauto*), in which change occurs only through perceptible objects. Aristotle announces his point that alteration cannot belong to form (*eidos*), as gaining or loosing shape and form is not subject to alteration. Here, the question arises as to whether the matter (material parts) or the substance (*ousia*) is being shaped or re-arranged. If the process of genesis is being distinguished from the process of alteration, the subject of change – a new substance or what is being made – could not be the matter until the process of genesis is completed. For one thing, it could be suggested that it is not a question of existence or non-existence coming into being; rather, the question concerns the type of subject we take into account. The progress of genesis is related to the relation between potentiality (*dunamis*) and actuality (*energeia/entelecheia*) in the sense that if we think about a bronze statue (a famous example of Aristotle) to which the sculptor, who gives the form of a statue to a piece of bronze, is related only to the properties of bronze, as he designs his unique piece of art. He is making a bronze statue, which is not an instance of bronze, but something that is being shaped and formed. Therefore, the processes of alteration and genesis are related to the relation of potentiality and actuality, which also indicates the relation of matter and form. Since the alteration of bronze is necessary in the process of making a statue, alteration is a potential genesis.

According to Aristotle's argument, the genesis of a bronze statue is not equivalent to a lump of bronze coming to have a shape in it. There is a distinction between the processes of genesis and those of alteration. Since statues receive predicates in a different mode than bronze composes receives predicates. If we apply this argument to all beings – living and non-living - then it is true that anything that comes-to-be has not been altered into being. Although in each thing, what comes-to-be is the matter that has been altered (or heated or cooled), anything that comes-to-be is not altered. Yet what is undergone in the process of genesis cannot be matter. There is no alteration with respect to shape or form. It is only the alteration of shape or form as the underlying thing (*hypokeimenon*) of new qualities. Whatever is said in accordance with shape or form is also a different sort of subject from matter, which comes to have shape or form in it. This distinction recalls Aristotle's

crucial paragraph in *Physics*: "These distinctions drawn, one can gather from surveying the various cases of becoming in the way we are describing that there must always be an underlying something, namely that which becomes, and that this, though always one numerically, in form at least is not one. (By 'in form' I mean the same as 'in account'.)" [203]

To speak of the underlying subject of a bronze statue seems quite peculiar. Thankfully, Aristotle is aware that the application of the progress of genesis and potentiality to non-living things like statue is quite obscure. In this respect, in non-living objects his argument concerning alteration applies to the properties or qualities of the object. By contrast, in living things – for our purpose, human beings – the potentiality–actuality relation applies to. The underlying thing (*hypokeimenon*) cannot be thought of as something that has been modified.

What is remarkable here is the relation between alteration and genesis. When matter is being informed by alteration, it becomes intelligible through actuality. Nevertheless, in the case of genesis, matter is changed and altered into the genuine parts of substance (*ousia*). The actuality of matter is now in the form. Nevertheless, neither its material substratum nor its shape on its own can account for the idea of subject (*hypokeimenon*), as a genuine bearer and possessor of qualities.

2.2.1 Identity as the Relation of "A Is Potentially B"

Now let us return to consider whether the relationship between potentiality and actuality might apply to the unity of form and matter, and whether applying this notion allows us to talk of essence as the ultimate principle of identity. Aristotle uses the relationship between potentiality and actuality to demonstrate the unity of matter and form as a substantial unity. In *Metaphysics,* book 8, *Eta,* he uses the notion of potentiality and actuality in order to describe what makes man one:

> Why is he one and not many, e.g. animal—biped, especially if there are, as some say, an ideal animal and an ideal biped? Why are not those Ideas the ideal man, so that men would

[203] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics,* 190a13–16.

> exist by participation not in man, nor in one Idea, but in two, animal and biped? And in general man would be not one but more than one thing, animal and biped. Clearly, then, if people proceed thus in their usual manner of definition and speech, they cannot explain and solve the difficulty.[204]

Yet, he suggests the difficulty dissolves "if, as we say, one element is matter and another is form, and one is potentially and the other actually, [then] the question will no longer be thought a difficulty."[205]

Although the unity of form and particular matter (Socrates' body is a particular matter distinct from Callias' body) may not seem to account for strict identity at first glance, Aristotle treats the potentiality–actuality relation as an adequate explanation of the composite: "What then is the cause of this—the reason why that which was potentially is actually, —what except, in the case of things which are generated, the agent? For there is no other reason why the potential sphere becomes actually a sphere, but this was the essence of either."[206] The cause of the difficulty appears especially in the substantial unity if one thinks that matter and form have distinct causes. Still, in *Metaphysics* Aristotle claims that for each individual the unity of matter and form can be explained through the notions of potentiality (matter) and actuality (form). Accordingly, "the proximate matter and the form are one and the same thing, the one potentially, the other actually. Therefore, to ask for the cause of their being one is like asking the cause of unity in general; for each thing is a unity, and the potential and the actual are somehow one."[207] A similar view is articulated in *De Anima*, where Aristotle says "Hence the soul must be a substance in the sense of the form of a natural body having life potentially within it. But substance is actuality (*entelecheia*), and thus soul is the actuality of a body."[208] Along the same line, he claims "the soul is the first grade of actuality of a natural body having life potentially in it."[209] At the same time, soul is the principle of body, and cannot exist without it. Soul (form) and

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[204] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1045a15–20.
[205] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1045a22–24.
[206] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1045a30–33.
[207] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1045b17–20.
[208] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Anima*, 412a 19.
[209] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Anima*, 412a 27.

body form a unity or composite in the same way that the composite of form and matter apply to a single unity of a being.[210] "What is potentially" and "what is actually" are one, and they indicate a unifying mode of conception, rather than a mere synthesis of form and matter. For this reason, there is a substantial priority of actuality over potentiality.[211] Aristotle's hylomorphism explains how the persistent identity of an individual, which is not merely a continuity of form and matter individually, is explicable through the relation between actuality and potentiality. The following passage may be taken as a solution from Aristotle, which is offered in *Metaphysics* concerning the problem of how the idea of composition is possible:

> Clearly, then, if people proceed thus in their usual manner of definition and speech, they cannot explain and solve the difficulty. But if, as we say, one element is matter and another is form, and one is potentially and the other actually, the question will no longer be thought a difficulty. For this difficulty is the same as would arise if 'round bronze' were the definition of cloak; for this name would be a sign of the definitive formula, so that the question is, what is the cause of the unity of round and bronze? The difficulty disappears, because the one is matter, the other is form.[212]

This is arguably the most crucial point of the discussion; that is, Aristotle's solution is related to the distinctions of matter and form, and potentiality and actuality. There is only the relation between potentiality and actuality if each thing is taken as a unity of form and matter, then the potential and actual are somehow one.[213] By following Aristotle's relational explanation, we can now persuasively argue that we might think of the relation "A is potentially B" as it is applicable to the persistence condition of identity through time. If A and B are in different times and places, and if A is potentially B, then A is identical to B in substratum, because the relation connects the person to herself in different state of affairs. For instance, "Socrates as a boy" and "Socrates as a man" are identical in substance, which is teleological. "Socrates as a boy" is potentially "Socrates as a man", where "is" might

[210] Spicer (1934) p. 35.
[211] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1049b10.
[212] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1045a21–31.
[213] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1045b16–21.

seem tenseless. Since it might be used to identify all the stages of change that Socrates has gone through. This "tenseless is" is key to the problem, as the question of "what/who is Socrates" implies something, which underlies his being and remains identical through time. This is Socrates, individual man and substance (*ousia*). Furthermore, there is a sense in which the essence of Socrates is a non-predicable subject of qualities. The essence of Socrates cannot be predicated universally and does not represent universal properties. In addition, a form as actuality implies that natural substances (such as human beings) are not a mere synthesis of matter and form, but basic and primary unities. This is where the foundations of Aristotle's hylomorphism are based, which I take to indicate the notion of hylomorphism in its simple form. The implications of such considerations are pointed out in *Physics*, where he states:

> This then is one principle; one is the form or definition; then further there is its contrary, the privation. In what sense these are two, and in what sense more, has been stated above. The principles were three; our last statement has elucidated the difference between the contraries, the mutual relation of the principles, and the nature of what underlies. Whether the form or what underlies is the substance (*ousia*) is not yet clear. But that the principles are three, and in what sense, and the way in which each is a principle, is clear.[214]

Despite this explicit acknowledgement of three principles, the obvious candidate for the principle of identity needs to be strong enough to entail the substantial theory of identity.

2.3 Possibility of Particular Forms and Individuation

Aristotle's idea of form outlines the relation between "what it is to be you" (*to soi einai*) and "what it is to be Socrates". There is a sense, in which Aristotle allows the idea of particular forms, which are not shared by the members or individuals of the same species. At first glance, Aristotle might seem as if he is advocating the formal particularity of individual forms. In *Metaphysics*, book 7, *Zeta*, section 8 he explicitly claims that "when we have the whole such and such a form in this flesh and in these bones, this is

[214] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 191a13-21.

Callias or Socrates; and they are different in virtue of their matter (for that is different), but the same in form; for their form is indivisible."[215] Clearly, Socrates and Callias do not have individual forms, but they have similar forms. But why would we still think as if there is a scope for the ontology of particular forms in Aristotle's view of substance (*ousia*)? Neither in *Metaphysics*, nor in other books has Aristotle satisfactorily answered this question. However, in *Metaphysics* his attention is fixed on the claim that no universal can be substance (*ousia*). We also know for certain that Aristotle takes form to be substance (*ousia*). He writes, "by form I mean the essence of each thing and its primary substance."[216] It is clear from these two claims that Aristotle is setting high standards for the idea of particular essences (forms), according to which forms or essences are not universals. On the one hand he treats essence as a particular thing; on the other hand, he claims that two individuals share the same form. It is fair to point out the distinction here that Aristotle gives quite unintentionally, which is that individuals have two sort of forms that one is a species form and a part of the unity. Although Aristotle does not spell out this distinction explicitly, what follows is that if forms or essences are not universals, then they should be particulars. Thus, forms are particular.

The motivation behind the claim "no universal is substance" is quite clear if we also look at *De Interpretatione,* section 7, where Aristotle posits, "Now of actual things some are universal, others particular (I call universal that which is by its nature predicated of a number of things, and particular that which is not; man, for instance, is a universal, Callias a particular). So it must be of a universal that one states that something holds or does not, sometimes of a particular."[217]

2.3.1 Individuation: Particular Substance as a Causal Relation

The question that remains is, To what extent are Callias and Socrates' essences distinct and particular? First of all, I would like to point out that for Socrates to have a direct awareness of himself and the idea of his persistent

[215] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1034a5–8.
[216] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1032b1.
[217] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Interpretation*, 17a39–17b2.

identity, he has to have an individual concept of himself. Individuating a person requires a criterion that is true of that person as one and exclusively, but of no one else. We should be able to differentiate Socrates not only through his empirical features, but also through something more substantial that enables us to pick Socrates out among other individuals. The profound way to meet such an inquiry is to say that before individuating Socrates we should be able to locate him among certain species. We should differentiate the members of that class and specify the ways in which each person is related to other members in a unique way. To individuate Socrates is neither to relate nor to compare him to Callias, even though such a comparison might be the only way we can ever have. Undoubtedly, our concern here is to individuate Socrates *in virtue of* Socrates, thus, the identity of Socrates is determined only *in virtue of* Socrates.

The relation of an individual as subject or substance (*ousia*) with its parts (his body and form, or more to our concern, his physical and psychological continuity) may be conceived as the unifying causal relationship. The logic of this explanation is to understand what kind of causal principle can explain the notion of an individual's substantial being. In *Metaphysics,* book 7, *Zeta*, section 17, Aristotle makes a new start, where he examines the question of why substance (*ousia*) is a sort of cause and principle, which exist separately from perceptible substances.[218] To seek a causal principle is to give an answer to such a question as "Why is Socrates Socrates?" or "On what account is Socrates Socrates?" For these questions to be intelligible, we can direct them in a form of "Why does one thing belong to something else?"[219] In the explanation that something is the case – Socrates is Socrates – Aristotle claims, we already presuppose that something is the case; namely the answer has been decided. Since, he expands, "each thing is indivisible from itself that it is being one".[220] There is always a brief and common answer to a question like "Why is Socrates himself?" However, in order to avoid the regress, Aristotle argues that the question, "What is a man?" seeks the substance or the essence of something,

[218] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1041a10.
[219] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1041a11–12.
[220] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*,1041a18–19.

and the question seems to be asking why one thing belongs to another, such as Socrates' identity (his essence, what it is to be Socrates) belongs to something (to his being the subject of predicates), which makes Socrates identical to himself through time. What has been sought in both questions, then, is the causal principle of his identity, which underlies his accidental predicates – such as, being white or musical, being-in-the-marketplace at t_1 and being-in-the-Lyceum at t_2. The reason to seek an underlying thing (*hypokeimenon*) as a further element in his identity – even though one might presume the fact that "this is Socrates and something possesses his body" – is to look for something more substantial, which is the substance (*ousia*) or essence.

However, one may be concerned about how the principle or causal relation between accidental qualities or properties and the unity of man – the composite of form and matter – can represent a substantial unity within the individual subject. In order to articulate an account of the subject's "thisness", Aristotle draws our attention to two types of causes. First is the final cause, which represents "for the sake of which", and the second is the efficient cause, which indicates the first mover.[221] Here, the relation between causes and the essence of a thing remains unclear. However, Aristotle identifies final and efficient causes with essences:

> This is the essence (to speak abstractly), which in some cases is that for the sake of which, e.g. perhaps in the case of a house or a bed, and in some cases is the first mover; for this also is a cause. But while the efficient cause is sought in the case of genesis and destruction, the final cause is sought in the case of being also.[222]

There is a sense in which the questions of what something is and what or who made this thing need to be distinguished. Nevertheless, Aristotle uses final and efficient causes in order to draw attention to form (*eidos*) and essence.

In several passages of *Metaphysics,* Aristotle describes the relation between efficient cause and essence with an analogy, in which efficient

[221] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1041a28–32.
[222] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1041a 28–32.

cause is the form of art and the essence is something rather than the artist. He says, "each thing is caused by itself" and "each thing is one and the same thing with its essence." [223] If each thing is caused by itself, then these causes are the substance of each thing, namely, the principle of Socrates' identity is indeed Socrates himself.[224] Accordingly, "So that, just as in reasonings, the substance is the principle of all things. For reasonings proceed from the 'what it is', and in these cases the geneses do as well."[225] If the substance (*ousia*) of a person is treated as a universal predicate (as a quality) in its application to its matter, then there will be a need for a separate unifying cause. For Aristotle, the substance (*ousia*) of Socrates determines his body, and his body is itself in actuality only if it is in his non-universal form, which is an individual essence.

One way of articulating an account of the subject is described in *Metaphysics* concerning the type of substances (*ousia*) we are taking into account, either matter or body, or nature or form (*eidos*). Aristotle calls form a "this".[226] But how can the nature of form indicate the sort of a particular notion? The form is the principle in itself – "into which" or "towards which" - and also the principle of a particular individual, such as Socrates and Callias. Yet, Aristotle was aware of the fact that the form of the individual on its own cannot represent the principle of identity. In *Metaphysics*, book 7, *Zeta*, section 11, Aristotle raises an issue regarding whether the particular individual is analysable as a universal mode of the unity of form and body. There is a good reason to think that Aristotle was seeking separable individual natural substances. If, Aristotle says, the essence of Socrates – what it is to be Socrates, what it means to be Socrates – is his *psyche*, which is the form of the living human being that captures both its biological and psychological nature, then apparently he was aware that *psyche* cannot

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[223] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1032b13; 1034a24.
[224]Aristotle seems to envisage a unity of final efficient and formal causes in order to explain substance: "But while the efficient cause is sought in the case of genesis and destruction, the final cause is sought in the case of being also" (*Complete Works of Aristotle*, trans. by Barnes, J. 1991, Metaphysics, 1041a31-32.) "Since, then, substance is a principle and a cause" (*Complete Works of Aristotle*, trans. by Barnes. J. 1991 *Metaphysics*,1041a8–9.)
[225] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1034a31–33.
[226] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1017b23–25.

apply in the sense of species form as a universal property that attaches to his body, but rather in the sense of being a separable form, which is the actuality of his body. Therefore, Socrates' essence is the efficient, final, and formal cause at the same time, which is not a universal predicate, but "this" (*tode ti*), this particular body and particular form or essence. Some further distinctions may be made as to whether particular forms or the unity of form and body represents the idea of identity as one operating principle. I think taking Aristotle as being in favour of particular forms for the sake of announcing the notion of personal identity might be helpful here. Yet for the purpose of this thesis, we are mainly interested in the broader conception of the unity of form and matter.

The picture I have been drawing in previous sections with broad strokes is based on the hylomorphic unity of form and matter, and the concept of unity that I have been trying to draw the reader towards regards where we think of the description of essence and form as roughly corresponding to the thisness of Socrates when it comes to personal identity and persistence conditions.

2.3.2 Essence as the Subject of Predicates

By and large, it seems hard to deny that the criterion that constitutes Socrates' identity – and the persistence conditions of his identity – have now been answered. The unity of identity is Socrates' essence (his thisness), namely "what was/is to be Socrates". As noted earlier, Aristotle describes essence through the formula *(to ti en einai* – "what was/is it to be", "what it means to be"), which is considered *in virtue of* being the ultimate subject of predicates. There are sections in *Metaphysics*, in which Aristotle clearly identifies the essence or form as the ultimate subject of predicates. Firstly, the claim appears in the following passage: "we must first determine the nature of this; for that which underlies a thing primarily is thought to be in the truest sense its substance (*ousia*). And in one sense matter is said to be of the nature of substratum, in another, shape, and in a third sense, the

compound of these."[227] Accordingly, the composite of form and matter as substance is the primary unity. Secondly, he adds "about the essence and about the substrate, of which we have said that it underlies in two senses, either being a 'this' – which is the way in which an animal underlies its attributes – or as the matter underlies the complete reality."[228] Namely, the essence of a person, what makes Socrates Socrates, is substratum, not just the material substratum, but unity, which is the subject. Moreover, in *Metaphysics,* book 8, *Eta*, he states that:

> The substratum is substance, and this is in one sense the matter (and by matter I mean that which, not being a 'this' actually, is potentially a 'this'), and in another sense the formula or form (which being a 'this' can be separately formulated), and thirdly the complex of matter and form, which alone is generated and destroyed, and is, without qualification, capable of separate existence.[229]

In this sense, the essence is the primary substance[230] and the substance (*ousia*) of each thing, not in the way that matter is the subject of predicates, but in the sense of a subject in its own right. Accordingly, "the essence of each thing is what it is said to be in virtue of itself. For being you is not being musical; for you are not musical in virtue of yourself. What, then, you are in virtue of yourself is your essence."[231] So the essence of a person is not what is said attributively[232] or a shared attribute in common with other members of the same species.[233] The essence formula (*to ti en einai*- what was/is it to be) is in a way seeks the fundamental (substantial) characteristics of the subject, such as when we ask, What characteristics does Socrates have in order to be Socrates? The being of Socrates is his

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[227] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1029a2.
[228] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1038b4–6.
[229] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1042a26–30.
[230] In *Metaphysics* the primary substance is described as "what is not spoken of as one thing being in another, that is, in a substratum as its matter" "By form I mean the essence of each thing and its primary substance" (*Complete Works of Aristotle*, trans. by Barnes, J. 1991, *Metaphysics* 1032b2–3.)
[231] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1029b13–16.
[232] "Nothing, then, which is not a species of a genus will have an essence – only species will have it, for in these the subject is not thought to participate in the attribute and to have it as an affection, nor to have it by accident" *Complete Works of Aristotle*, trans. by Barnes, J.1991 *Metaphysics*, 1030a13–14.)
[233] "It is plain that no universal attribute is a substance, and this is plain also from the fact that no common predicate indicates a 'this', but rather a 'such'. (*Complete Works of Aristotle*, trans. by Barnes, J. 1991, *Metaphysics* 1038b34; 1039a1.)

being as the ultimate subject of his characteristics. Socrates' primary substance, which is the composite of his form and body, expresses the actuality of his being as the subject. Therefore, Aristotle claims, Socrates' being as the subject of predicates cannot be explained by universal or common predicates; rather, his essence is "this" (*tode ti*), which is an individual thing.[234]

Still, it may remain unclear what Aristotle means in *Metaphysics* by claiming that "what it is to be" is *per se* or *to be virtue of* itself?[235] According to Aristotle, the essence of a thing is *in virtue of* itself and differs from "what it is" (*ti esti*) so long as it is excluded from the accidental predicates of a subject. Indeed, the formula of "what is it to be that thing"' (or whatness) is elucidated by universal and common predicates. However, Aristotle gives more weight to the individual essence of a thing, as it has a specific individual and particular meaning. This individuality will also indicate Socrates' individual properties, which are separate, continuant, and always present in him and in who he is. The crucial question may therefore regard to what extent does being *in virtue of* itself, *per se* (*kath' hauto*), applies to essences. Aristotle explicitly states that the essence of a thing belongs to the thing itself, which is not expressed according to participation, quality or attribute.[236] In the following paragraphs of this particular section in *Metaphysics*, the conception of essence, namely the essence of persons, is evidently directed to the notion of individual form and matter, upon which the identity principle of an individual is precisely based. Therefore, Aristotle concludes, *in virtue of itself* must have several meanings:

> It applies to (1) the essence of each thing, e.g. Callias is in virtue of himself Callias and the essence of Callias; (2) whatever is present in the 'what', e.g. Callias is in virtue of himself an animal. For 'animal' is present in the formula that defines him; Callias is a particular animal.—(3) Whatever attribute a thing receives in itself directly or in one of its parts, e.g. a surface is white in virtue of itself, and a man is alive in virtue of himself; for the soul, in which life directly resides, is a part of the man.—(4) That which has no cause other than itself; man has more than one cause—animal, two-

[234] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1030a28–32.
[235] "Each being is said to be by itself".
[236] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics,* 1030a13.

> footed—but man is man in virtue of himself.—(5) Whatever attributes belong to a thing alone and *qua* alone; hence also that which exists separately is 'in virtue of itself'.[237]

Apparently, the conception of particularity in form and matter adopted here is much more in line with what Aristotle had in mind. That is to say, there is nothing more substantial to a person's being than her essence.[238] It is quite clear for Aristotle that one cannot consider otherwise cannot be the case. Because the notion of essence is fundamental to any attribute. In this regard, the essence is the subject, which is definite and underlies accidental and essential predicates, in the way of being a causal principle of these predicates. As Aristotle puts in *Metaphysics,*[239]

> The essence and the individual thing are in some cases the same; i.e. in the case of primary substances, e.g. curvature and the essence of curvature, if this is primary. (By a primary substance I mean one, which does not imply the presence of something in something else, i.e. in a substrate, which acts as matter.) But things which are of the nature of matter or of wholes which include matter, are not the same as their essences, nor are accidental unities like that of Socrates and musical; for these are the same only by accident.[240]

The role of essence is primary here. It neither belongs to universal predicates, nor species form (genus), but it is a primary substance as it underlies accidental and essential properties, not as a material substratum, but as something specifically "this". To have a particular form denotes both necessary and sufficient conditions to the being in order to be an individual. It is also quite hard to see how an individual, such as Callias or Socrates, is identical with the particular form that indicates how the form of a man is identical with Callias or Socrates. In *Metaphysics* book 7 *Zeta* sections 6 and 11, however, Aristotle claims that only those things, which are said *in respect of themselves* (*kath 'hauto*) are identical with their essences, which are things that include individuals like Socrates.

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[237] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1022a25-36.
[238] "Clearly, then, each primary and self-subsistent thing is one and the same as its essence." (*Complete Works of Aristotle*, trans. by Barnes, J. 1991, *Metaphysics*, 1032a4-5.)

[239] The same remark is stated in *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Posterior Analytics* 73b7 "what is not predicated of a subject as substance."
[240] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics,* 1037b2-8.

2.4 Conclusion

Undoubtedly, the essence formula – what it is to be Socrates – invites the notion of universal predicates. Aristotle is quite straightforward and redirects our attention to understanding the essence of persons. Namely, it is the principle of one's identity away from universality and towards something much more in touch with how we normally think of individuals. This line of interpretation of Aristotle's notion of particular essence is due to the fact that the principle of Socrates' identity is the actual primary "this" and another thing that exists potentially. The universal causes or forms do not *exist.* The *individuality* itself is the source of individuals.[241] Still, the metaphysical question of "what we are" seeks clarification of attributes to the ultimate subject of predicates, which is, strictly speaking, non-universal and not common among the other members, and more importantly, it is continuous as one and unchanged unity through time. For instance, if we take the essence formula "what is it to be Socrates" as being wise, it might be, somehow, distinct to Socrates' being and represent one of his essential qualities, and we tend to refer to all the characteristics of Socrates in the same vein. However, the essence is the subject as a principle, which determines the meaning of universal predicates.

The essence of Socrates, then, is not a subject without attributes, but is the underlying principle and ultimate subject of these attributes. Therefore, the essence of Socrates cannot be conceived either as an independent or ideal entity of his form, or his body, but the actuality of his body. Thus, there is no reason to think that Socrates can be stripped away from his accidental properties, such as being musical, non-musical, a white man, biped animal, and so on. Form is a "this" (*tode ti*), not in itself, but rather *by virtue of* being consisted in a particular body.[242] Here, Aristotle's concern is not whether Socrates has these essential or accidental predicates; rather, it is how Socrates' essence as a subject could have these predicates. Although Socrates' wisdom, which is a fulfilment of his nature, might be a criterion of his identity, it does not answer the question of how wisdom

[241] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1071a24-26.
[242] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Anima*, 403b5-11.

belongs to Socrates. If what matters is how Socrates' essence could have these predicates, it then becomes clear that (i) the substantial form (not a species form) of Socrates is particular, (ii) the essence of Socrates is his substantial form, and (iii) for the sake of continuity of identity through time substantial form is particular; therefore, (iv) individuals are particulars.

This interpretation of Aristotle is not entirely new,[243] where substantial forms are numerically different within the members of the same species, yet all members share a single definition. By contrast, the advocates of universal form have taken another approach, in which they are against the attribution of particular forms. They have indicated the substantial number of paragraphs in *Metaphysics,*[244] where Aristotle reminds us that "the universal is thought to be in the fullest sense a cause, and a principle."

As the debate over the nature of form, and the role that is as a principle and a cause plays in fixing the context of one's beliefs, is quite far-reaching, it is no surprise that there are quite distinctive variations of interpretations on Aristotle's formulation of the relation between form and body. My understanding of the relation centres on the possibility of particular forms in virtue of the dominant view in *Metaphysics*. My

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[243] For proponents of such view see, e.g., Frede, M. (1987); Frede, M. and Patzig, G. (1988); Witt, C. (1989). Whereas, Scaltsas, T. (1994) has a sort of content-based interpretation stays between the conflicts of two different refinements. Scaltsas' middle way offers the concept of substantial forms to be particular in existence (actuality) and universal in thought (abstraction). It is more like the object of thought illustration, where we think of one determinate entity like human and but not various particular human beings. Socrates is a particular human being that ceases to exist while our thought of human beings and what constitutes human beings persist. What we are thinking in actuality has to be an abstraction and a separately existing paradigm. His twofold explanation of substantial forms is extensively differentiated from the hylomorphic notion of hybrid features of persons.

[244] There are passages in *Metaphysics*, however, which are thought to represent an opposite interpretation of particular substantial forms "Therefore the ultimate substratum is of itself neither a particular thing nor of a particular quantity nor otherwise positively characterized; nor yet negatively, for negations also will belong to it only by accident." (*Complete Works of Aristotle*, trans. by Barnes J. 1991, *Metaphysics* 1029a24-26.) "As the substrate and the essence and the compound of these are called substance, so also is the universal. About two of these we have spoken; about the essence and about the substrate, of which we have said that it underlies in two senses, either being a 'this' – which is the way in which an animal underlies its attributes - or as the matter underlies the complete reality. The universal also is thought by some to be in the fullest sense a cause, and a principle" (*Complete Works of Aristotle*, trans. by Barnes J. 1991, *Metaphysics* 1038b1-7.) For advocates of universal forms see, e.g., Burnyeat (1979); Halper (1989); Lewis (1991); Loux (1991).

adaptation of this reading is best understood by evaluating it within the unity of form and body as an underlying element (the principle, substance) of one's identity. It is critical for the discussion carried out above that we should recognise, as Aristotle mostly has, that defenders of particular forms are, in a sense, also prone to accept that persons are best to be understood as a whole within the hylomorphic unity.

I propose that the views argued in this and the subsequent chapters resolve rather serious problems with current formulations of the notion of an individual. Hence, the discussion in this chapter was really an attempt to adjudicate the benefits of the moderately hylomorphic view as formulated by Aristotle implicitly, if not explicitly. It will be argued in the next chapter that any reductionist approach, an approach that reduces the principle of identity to either form or matter, is better prepared to handle a rather serious problem, which contemporary commentators of personal identity face inevitably. Enough has been said about the possibility of particular forms; now, in order to stick to the original intention of this thesis I will try to focus my investigation exclusively on Aristotle's hylomorphism and how I can develop a hybrid argument of identity by engaging Aristotle's hylomorphic idea of substances presented in *Physics* and extensively advanced in *Metaphysics*.

Chapter 3: Maintaining the Hylomorphic Unity

This chapter will demonstrate how Aristotle's hylomorphism sheds light on the intuitive and theoretical character of personal identity and persistence conditions. The main issues with the problem of mind–body dualism have been persisted into the present since the early modern era, and carried out within the Lockean tradition as pointed out in the first chapter. In this chapter, I claim that taking Aristotelian hylomorphism into account not only provides an insight into understanding of the relation between mind and body, but also affords hybrid approach through which to comprehend the notion of a person as a unity and individual both in psychological and in biological terms. As Christopher Shields puts it bluntly, "[Aristotle's] hylomorphism does provide a framework for thinking about soul–body relations which succeeds in acknowledging the full complement of phenomena we should wish to explain."[245]

Given that the main problem remains mysterious in considering the notion of an individual as a composite, it has become imperative to discuss several concerns. Firstly, do we actually understand what the essence and form of a person is? What consequences does hylomorphism offer for the unity of matter and form, and for the individual that these components compose? Aristotle's metaphysics enables us to grasp their functions in his hylomorphic theory, yet a hylomorphic account remains questionable whether there is the possibility of reading some passages in Aristotle's text according to which either form or matter can be acknowledged as the nature of individuality and identity. Moreover, since the relation between matter and form and the relevancy of this relation to the unity of a composite remains debatable, I attempt to determine why employing the Aristotelian model of hylomorphism is sufficient for understanding the persistence conditions of personal identity, considering a variety of both reductionist and non-reductionist approaches. The hybrid approach I propose will demonstrate the possibility of interpreting the notion of personal identity as a complete unity of psychological and biological traits by advancing the

[245] Shields (2009) p. 307.

unity of form and matter.

In the previous chapter, I presented a detailed outline of Aristotle's characterisation of form (shape/*morphe*) and matter, which are the essential components of primary being. Here, I will attempt to demonstrate the main argument behind the relation between a hylomorphic compound and the persistence conditions of identity. Furthermore, I will assess which tools are needed to explain Aristotle's hylomorphic analysis within the contemporary discussion of the subject at hand. I claim that the principle of unity, in which something is composed of distinctive parts, defines an individual. I also claim that the principle of individuation, which makes an individual distinct from other members of the same species, is going to be the ultimate tool of this project. In order to explain the identity claim, I argue that both principles are necessary and sufficient to account for the notion of an underlying principle, which supports both diachronic and numerical perspectives of identity. Let us first look closely at Aristotle's hylomorphism and highlight its roles in treating the problems of personal identity.

3.1 The Aristotelian Hybrid View of Individuals

Aristotle's notion of hylomorphism marks a major shift from *The Categories* to *Metaphysics* in characterising the notion of a subject. In *Metaphysics,* he explains substance as a subject, where substance is that of which attributes are predicated. The shift pointed out in the subject becomes more apparent in determining the matter as substrata, which is primary and revealing the unchanging empirical structure of an individual. Substance emerges as a principle, cause, and definable thing.[246] Nevertheless, in explaining the nature of substance he puts more weight on form when he describes the causal force of the soul in *De Anima*, where he states,

> What has been said in the case of parts must of course be understood as applying to the whole living body. For there is an analogy: as one part is to one part, so the whole perceptive faculty is to the whole of the body which is capable of

[246] *Complete Works of Aristotle*, trans. by *Metaphysics* Barnes, J. (1991) *Metaphysics*, 1028a32;1031a1.

> perception, insofar as it is capable of perception. The body which has lost its soul is not the one which is potentially alive; this is rather the one which has a soul.[247]

His point comes very close to revealing an identity relation, as he claims,

> The soul is the cause or source of the living body. The terms 'cause' and 'source' have many senses. But the soul is the cause of its body alike in all three senses, which we explicitly recognize. It is the source of movement, it is the end, it is the essence of the whole living body. That it is the last is clear; for in everything the essence is identical with the cause of its being, and here, in the case of living things, their being is to live, and of their being and their living the soul in them is the cause or source.[248]

This statement quite openly captures the weight of hylomorphism on living things, including persons. The figure of form as a cause and principle seems more adequate than its being a mere shape (*morphe*), as the relation is widely explored in the bronze statue example, where in order to achieve that task, Aristotle accounted artefacts in the same theoretical agenda, as they more appropriately apply to living things and to persons. The ontological role of form is more reflective, where the form is an actuality of body, and essentially, what is it to be for a body, as Aristotle argues in *De Anima*.[249]

However, within Aristotle's metaphysics, a description is still required for identity and its ontological status as a unity without reducing it to components. It is then that we can describe the individual by emphasising either her material or formal nature. This consideration underlines the non-identical aspect of matter and form as one of the strands of his hylomorphism. Matter and form are neither identical to each other, nor to the individual that they compose. Since, if we think that matter and form are identical to each other, and to the individual, then we are forced to accept that there is no principle of individuation – and persistence of identity – maintained either through material or formal aspects. This controversy leads us to a tautology, in which on the one hand either matter or form is the principle of individuation and the principle of one's identity simpliciter,

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[247] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Anima,* 412b20–27.
[248] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Anima*, 415b9–13.
[249] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Anima*, 412b4–12.

while on the other hand, neither matter nor form on their own can be the source of individuation and identity. If we maintain that either the form or the matter of an individual is identical to the individual, then the main argument of this chapter (and throughout the work) advocates the claim that both form and matter are non-identical (a) to each other and (b) to the individual. The possibility is worth pointing out that matter is non-identical neither to form nor to the individual, and also matter itself fails to be the individual, such that the matter of a human being, nonetheless, is indistinguishable among human beings, so it is only enough to count as a part of the unity.

In *Metaphysics*, Aristotle describes "what is it to be Socrates" with essence, which is defined as a primary substance, what was/is to be the thing itself both in the present and the past. This captures the specific feature of persistence conditions of living things.[250] The essence of Socrates reveals a connection between what or who Socrates is and how we can describe him. Claiming that the essence of Socrates and his characteristic attributes are not only accidently connected to him means these attributes require a unity and connection between his essence and the continuity of his identity through time, since determining the essence of Socrates allows Socrates to act according to his characteristic features. Aristotle's way of structuring the composite unifies the meaning of substance and essence, which are interconnected in the composite itself. It is the unified account of the way in which Socrates comes to be, who he is, and how he manages to survive accidental changes. These accidental changes include changes in his physical and psychological traits throughout his lifetime.

3.2 Ontological Dependence and the Critique of Reductionist Approaches

One may still ask, whether form is the actuality and principle of body, then to what extent is form or matter prior to the composite? In other words, is there any part of the composite prior to any other component? Answering this question allows us to interpret how hylomorphism proposes a claim

[250] For our purposes in this thesis, it is the persistence conditions of persons.

against reductionist accounts of identity (psychological and physical accounts in particular). In this section, I employ the hylomorphic unity in order to explain the persistence conditions, as they are nothing but the unity of psychological and physical attributes.

We see in *Metaphysics* book 7, *Zeta*, that Aristotle uses the term "part" with several meanings, such as to measures another thing regarding its quantity, or in the sense that parts are the components of which substance consists.[251] Form and matter are not intuitively parts of the individual, yet they are not mereological parts of the component. This is because in the ideal sense of hylomorphism, an individual could lose her arm, for instance, yet still persist through her loss. By contrast, she cannot persist after the loss of any primary component. We see a similar claim in *De Anima* that Aristotle posits, where he says,

> Suppose that the eye were an animal—sight would have been its soul, for sight is the substance of the eye which corresponds to the account, the eye being merely the matter of seeing; when seeing is removed the eye is no longer an eye, except in name—no more than the eye of a statue or of a painted figure. We must now extend our consideration from the parts to the whole living body; for what the part is to the part, that the whole faculty of sense is to the whole sensitive body as such.[252]

If, Aristotle states, one organ – although perhaps not a major life-depending organ such as the brain or cerebrum alone – is removed from the body, or when a human dies, the organ is no longer an organ except in name.[253] Organs are described according to their functions. If the organ is removed, the part of the body, which was the functioning organ before, ceases to be an organ, so it cannot function as that organ anymore. The organ must be in unity with the body, which is composed with the form. Regarding the form, the organ is subordinate in the account, so the form determines the function

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[251] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1034b34–36.
[252] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Anima*, 412b18–24.
[253] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1035b24–25; *De Anima*, 412b20–22. Undoubtedly, identity is related to linguistic aspects, as we cannot identify entities without referring to their linguistic features. Such as, when we talk about identity and persistence conditions of an organ we refer to the organ as identical to itself, yet when it is removed and stopped functioning as the same organ as it was used to be, it cannot be identified as the same organ as it was attached to the body.

of this organ within the larger picture. For Aristotle, the whole lacks none of its parts, so it is complete,[254] and remains as a unity even though it loses some parts after mutilation.[255] This view leads us to another question: Do the identity and unity of composites accordingly depend upon their parts?[256]

Several aspects of ontological dependence that are appropriate to consider here. To clarify the claim that "Socrates is ontologically dependent upon the unity of his form and body", first we notice that if Socrates depends ontologically upon the composite, then his form and body represent the necessary condition for Socrates' existence and his identity. If the composite exists, then Socrates also exists. It may be equally valid to argue that his form and body are the components of Socrates. Whenever Socrates exists then the composite exists. Nevertheless, the fact that his form and body once existed does not mean that they exist for the sake of Socrates to continue to exist. Consider a feature by which Socrates exists as Socrates in the way he is; Socrates is ontologically depending upon the unity of his form and body. Aristotle makes a similar claim: "For they [parts of a body] cannot even exist if severed from the whole; for it is not a finger in any state that is the finger of a living thing, but the dead finger is a finger only homonymously."[257] Yet, for Aristotle, the composite includes the parts of Socrates as long as he exists. Since his form and body are the components of Socrates, the ontological dependence upon his form and body must be mutual for Socrates to be unified. What constitutes Socrates' identity and persistence conditions is his essence, namely the unity of form and matter.

In his discussion of the notion of substance Wiggins gives a similar understanding of the ontological dependence/independence. He notices that when it comes to dispositions of ontological dependence, the notion of

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[254] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1023b26–8.
[255] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1024a16.
[256] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1024a15: 1024a22-25.
[257] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1035b23–28. The same remark is emphasized by Munzer, who pointed out "under [Aristotle's] functional account, there seems to be an interval in which the transplanted part is not an organ, or is only homonymously an organ. A promising contemporary approach to this question makes identity of deoxyribonucleic acid (DNA) a necessary condition of the identity of natural organs over time." Munzer (1993) p.110.

substance as a unity is prior to its parts, and this is what underlies the unchanging fact about our identity. Wiggins states that "Something that has this autonomy may be causally dependent on other things in the way in which the infant depends on the mother; but ontologically speaking, it is still independent"[258], which in return offers a sort of hybrid unity. The reason Wiggins takes these parts and unity relation in favour of the independence of substantial unity is that, for him, we are both organisms and persons, as these two terms refer to the same entity. However, we use the term "person" only in order to refer to the organism in *virtue of* psychological properties, which are not essential to the organism. These psychological properties are not fully present when a human being born and they may cease to exist in later life. A person is not a distinct substance, but only a stage in a human's life. So, personhood, adds Wiggins, is not a substance sortal but a phase sortal.

If we employ the hylomorphic model I articulated above, it could be concluded that neither Socrates' form (actualising principle/psychological traits), nor his matter (body/physical traits) is prior to Socrates himself as a unique individual. The composite of his substantial form and body denotes the same entity with himself, Socrates. If his form were prior to his body, then Aristotle's argument, which he extensively articulated in *Metaphysics* book 7, *Zeta* – "form is not universal" – would be disregarded. Along the same lines, if his body were prior to his form, then again, Aristotle would not talk about form as the actualising principle of body, which makes the body a certain kind and what it is.

Following the Aristotelian theory, in order to discern what the essence of an individual is, which determines what it is *to be* for a certain individual, we refer to components, matter and form. As Aristotle points out "therefore to bring all things thus to Forms and to eliminate the matter is useless labour; for some things surely are a particular form in a particular matter, or particular things in a particular state."[259] As pointed out earlier Aristotle argues that both form and matter determine the character and

[258] Wiggins (2001) p.242.
[259] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1036b22–24.

identity of an individual.

With the understanding of this type of ontological dependence in the background I suggest that in the unity of a person, neither part is initially prior to the other. Since, both matter and form are equally prior as a unity. In initialising this argument, I will try to clarify the ways in which we can understand the hylomorphic claim.[260] Accordingly:

> (i) the whole is made of elements,
>
> (ii) parts of the component are dependent upon the whole, yet
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> (iii) there is a mutual dependence between the whole and its parts: "The elements in the formula which explains a thing are parts of the whole; this is why the genus is called a part of the species, though in another sense the species is part of the genus."[261]

Aristotle opens up the discussion by claiming "that which is true of a whole class and is said to hold good as a whole (which implies that it is a kind of whole) is true of a whole in the sense that it contains many things by being predicated of each, and that each and all of them, e.g. man, horse, dog, are one, because all are living things."[262] Hence, certain parts of substances are prior and some are posterior, yet some exist simultaneously with the composite. This, Aristotle suggests, leads us to conclude that "if then matter is one thing, form another, the compound of these a third, and both the matter and the form and the compound are substance, even the matter is in a sense called part of a thing, while in a sense it is not, but only the elements of which the formula of the form consists."[263] If the unity of an individual requires both of these elements simultaneously, then form or matter neither pre-exists, nor persists in the absence of the other. Considering this statement, we can suggest that form and matter are both contingent, yet necessary, as neither can exist in the absence of the other.

In *On Generation and Corruption,* Aristotle explains how alteration

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[260] The notion of hybrid view in this thesis is now differentiated from Wiggins', by pointing out that there is a mutual dependence between the whole and its parts. Whereas, in Wiggins' reasoning there is only one type of dependence relation between the whole and its parts, which is the parts are ontologically dependent on the whole, strictly speaking.
[261] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1023b23–25.
[262] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1023b29–36.
[263] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1035b3.

in properties occurs while their form and matter remain: "For in that which underlies the change there is a factor corresponding to the definition and there is a material factor. When, then, the change is in these factors, there will be coming-to-be or passing-away; but when it is in the thing's affections and accidental, there will be alteration."[264] The thing's affections and accidental changes are determined by form's predication of matter. These changes are essential to the composites but cannot be constituents of it.

For all changes and alterations at hand, this notion of essentialism, in which matter and form composes individual essence, requires individuation and identity claims. The difference in their matter or form between Socrates and Callias is necessary and sufficient for the principle of individuation. That is to say, according to the principle of individuation, no two objects can have the same components in the same way. In *Metaphysics*, book 7, *Zeta*, section 8, Aristotle explicitly states that Socrates and Callias are different in virtue of their matter but the same in their from, as their form is indivisible.[265] A mainstream interpretation of this particular passage, which is also adapted by the followers of reductionist and physicalist accounts of identity, indicates that two members of the same species share the same form (as species form is universal), and the only individuating principle is their matter. What defines one's identity is merely their matter. However, in later passages Aristotle also claims that "the causes of different individuals are different, your matter and form and moving cause being different from mine, while in their universal formula they are the same."[266] This passage is interpreted as underlining the priority of form that distinctiveness of matter is posterior regarding the unity and distinctiveness of form. The passage also shows why the identity claim in hylomorphism is more accountable than essentialism regarding the principle of individuation and

[264] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *On Generation and Corruption*, 317a23–26.
[265] "And when we have the whole, such and such a form in this flesh and in these bones, this is Callias or Socrates; and they are different in virtue of their matter (for that is different), but the same in form; for their form is indivisible." (*Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1034a5–8.)
[266] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1071a27–29.

distinctiveness. Since, here, essentialism will not solve the puzzle, instead relying on the fact that form and matter are essentially composed within the unity of an individual. To clarify the notion of an underlying thing (*hypokeimenon*), we need to consider it within the distinctive nature of an individual as a unity and composite. There is a passage in *Physics* book I[267] references the identity claim that denotes the meaning of *hypokeimenon* as something persistent through coming-to-be:

> Now we distinguish matter and privation, and hold that one of these, namely the matter, accidentally is not, while the privation in its own nature is not; and that the matter is nearly, in a sense is, substance, while the privation in no sense is. For the one which persists is a joint cause, with the form, of what comes to be—a mother, as it were.[268]

The hylomorphic unity is the principle of individuation and identity of an individual that is non-identical to either of parts of the component. If we suppose that the composite or the unity of form and matter itself are identical to the individual whose composite it is, then claiming that the composite itself is the principle of individuation and identity cannot suggest more than that the individual herself is the principle of individuation and identity. Therefore, by tautology, there will be no principle of individuation and identity at all.

We are therefore motivated to search for the principle of individuation and identity in distinctive sources of hylomorphism, which can be done with less strain than is required of followers of the mainstream

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[267] In *Physics* I.8 (191a27–31), Aristotle sets out the aporia about things coming-to-be or ceasing to be. Aristotle describes the aporia that his predecessors attempted to clarify: "So they say that none of the things that are either comes to be or passes out of existence, because what comes to be must do so either from what is or from what is not both of which are impossible. For what cannot have come to be (because it is already), and from what is not nothing could have come to be (because something must be underlying)." The premises are carried out as follows: If coming to be is impossible, then;

(i) Things must come from either what it is, or what is not,
(ii) Both possibilities are incorrect,
(ii) If these are the only possibilities, then there is a contradiction that coming-to-be is impossible.

The dilemma here is about how coming to be proceed from what is or what is not? Another ambiguity is also crucial here whether "what is" is being itself, or a being. Nevertheless, the main thing concerns us here is Aristotle's term of *hypokeimenon*, more specifically, an underlying thing as a subject that proves the operative notion of the identity claim in Aristotle's metaphysics.

[268] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 192a4–14.

view.[269] After adopting Aristotle's account of ontological dependence, again we might ask our initial question concerning the principle of individuation and identity. This question will require a further investigation of whether the identity of an individual is reducible to its parts.

3.2.1 Matter or Body as The Principle of Individuation and Identity

In the previous section, I have pointed out that there is strong textual evidence in Aristotle's works to explain how matter and form are not identical to each other or to the composite itself. A famous passage in *De Anima* refers to the soul (form)-body unity: "Hence too we should not ask whether the soul and body are one."[270] Here, he claims that the unity of form and matter emerges from the fact that the body of Socrates and Socrates himself are one, and we do not need an explanation for the unity of Socrates' form and body.

In *Physics*, matter is the primary substratum of each thing and it persists non-accidentally through change and generation.[271] What's more, for Aristotle matter is a significant individuating principle regarding numerical diversity among the members of the same species.[272] One remarkable passage in *Zeta* explicitly classifies the principle of

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[269] Who claim that either form or matter is the principle of individuation and identity.

[270] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Anima* 412b6–7. Aristotle indicates a great deal of hylomorphic unity of persons, a third thing (triton ti in Greek), the terms used in Plato's Sophist, where he states being must therefore a *third thing*, apart from motion and rest, not the sum total of those two items either), where he says "sensible *ousia* is changeable, between contraries or their intermediates, but there must be some third thing (*ti triton*) underlying the contraries [or intermediates], something enduring." (*Complete Works of Aristotle*, trans. by Barnes, J. 1991, *Metaphysics,* 1069b3.) Aristotle offers appositive account on his analysis of soul and body, as the unity of those two is indeed *ti triton* in his hylomorphic middle way.

[271] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Physics*, 192a31–33.

[272] "Again, some things are one in number, others in species, others in genus, others by analogy; in number those whose matter is one, in species those whose formula is one, in genus those to which the same figure of predication applies, by analogy those which are related as a third thing is to a fourth." (*Complete Works of Aristotle*, trans. by Barnes, J. 1991, *Metaphysics*, 1016b31–32.) "Some parts are neither prior nor posterior to the whole, i.e. those which are most important and in which the formula, i.e. the substance, is immediately present, e.g. perhaps the heart or the brain; for it does not matter which of the two has this quality. But man and horse and terms which are thus applied to individuals, but universally, are not substance but something composed of this particular formula and this particular matter treated as universal; but when we come to the individual, Socrates is composed of ultimate individual matter; and similarly in all other cases." *Complete Works of Aristotle*, trans. by Barnes, J. 1991, *Metaphysics*, 1035b24-31.)

individuation and identity as specified by matter: "And when we have the whole, such and such a form in this flesh and in these bones, this is Callias or Socrates; and they are different in virtue of their matter (for that is different), but the same in form; for their form is indivisible."[273] Some commentators have interpreted these passages as if Aristotle were holding the idea that the distinctiveness of two individuals is possible only through their distinct matter.[274] These commentators can be categorised as the followers of the traditional view, in which matter is the principle of identity. How can they account for the possibility of such cases in which the individual's identity, for instance, at t_1 could consist of matter (in this case, it is a body in whole or in parts) different than the same individual at t_2? I claim that they cannot explain how matter alone could be the principle. Accordingly, if advocates of the traditional view are correct, then Socrates' identity is accountable by a distinct parcel of matter at t_1 and t_2. Thus, if Socrates and Callias' identities are accounted for and individuated only by the distinct parcel of matter, then their matter stands as the principle of individuation and identity. Their substantial form is universal and supposedly it gives sufficient reason for us to believe that form is universal and common in all members. Nonetheless, supporters of this view should accept that neither Socrates nor Callias' identity would be accountable to their matter, as it is subject to change through time.

However, what Aristotle maintains in *On Generation and Corruption* is that individuals' identities do not change even though matter changes, the identity of matter as a component is secured by the unity that it already has. If we take our initial claim "the identity of unity is not dependent on its components" into account, then the argument that "the identity of matter does not depend on the identity of an individual" is indeed comprehensible. However, it remains difficult to understand how the identity of matter is secured by something else apart from the individual through the process of change and growth. Although the principles of unity and individuation are closely related to the principle of identity, the

[273] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1034a5-8.
[274] Halper (1989); Lewis (1992); Montgomery (2007); Wedin (1984).

defenders of the traditional view cannot clarify how matter, as an initial principle, can be the principle of identity through time.

3.2.2 Form as the Principle of Individuation and Identity

In the same vein, followers of the non-traditional view,[275] who believed that the form is the principle of individuation and identity, adopt the idea that parts of the formula or definition are prior to the whole. The individuating principle is form, which is somehow particular. This particularity can be interpreted as the form of Socrates being non-identical with the form of Callias and form as a definitional part being prior to the composite.[276] Other parts of the composite are posterior in the unity of the composite itself. In that sense, form (and so actuality) is prior to matter and that the unity of form explains the unity of the composite. Supporters of this view interpret what Aristotle says in *Metaphysics* book 8, *H*, section 6, in the way that the unity of Socrates' form and matter is explained in terms of the unity of the form. There is a fundamental attribute to the human form, such that the form is not a collection of dispositions of a body. Socrates' being and his persistence conditions exist only in virtue of his form, and his being and unity of the body is derived from the form (and first actuality, which is the soul in *De Anima*).

Forms are somehow diverse in all living things, including human beings. Therefore, supporters of this view suggest that we do not need any further individuating principle, as long as we accept the claim that forms of individuals are diverse. One might still ask to what extent form can be the only principle which holds diachronic and numerical strands of individuation and persistence. One plausible explanation can validate this approach only if species form can secure the persistence, and if the individuation of matter in different organisms persists through the lifetime of an individual.

After all, these two views try to construct the individuating principle of identity in persons along with the hylomorphic theory. However, neither

[275] Pointed out by Whiting (1986), pp. 359–77.
[276] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics,* 1035b14–20.

the traditional nor the non-traditional views in their own right can clarify whether matter or form alone would be sufficient to explain persistence. In a way, it might be plausible to think that anything that is one and a continuous unity possesses one particular form and a distinct parcel of matter. Similarly, in *Metaphysics* Aristotle identifies the unity of a thing in four ways:

> Things that are one in number are one in species, while things that are one in species are not all one in number; but things that are one in species are all one in genus, while things that are so in genus are not all one in species but are all one by analogy; while things that are one by analogy are not all one in genus.[277]

As we can clearly see in the passage above, if form and matter are said to constitute one individual, then the persistence of matter does not entail the persistence of form. It is explicitly pointed out in this passage that the unity in number cannot be explainable regarding the continuity of matter, since this unity entails oneness in form. It is obvious, then, that the advocates of form have not much difficulty in clarifying the explanatory and individuating power of form. This power has been described as a descriptive and causal factor. Aristotle gives a similar account in *De Anima*, where he claims,

> Now the soul is the cause and principle of the living body. Cause and principle are spoken of in many ways. The soul is a cause in three of the ways already distinguished. For the soul is a cause as the source of motion, and as that for the sake of which, and as the substance of ensouled bodies. That it is the cause as substance is clear; since for all things the cause of their being is substance, and the being for living things is their living, the cause and principle of which is soul.[278]

However, I claim that Aristotle's hylomorphism still appeals to the view that the unity of form (the soul in *De Anima*) and matter employs this power in order to compose the individual's identity, which is the underlying subject (*hypokeimenon*).

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[277] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1016b35-1017a2.
[278] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Anima*, 415b9-14.

3.2.3 Critique of Both Views: The Hybrid View as a Third Option

In the passage in *Metaphysics,* book 7, *Zeta*, Aristotle says "And when we have the whole, such and such a form in this flesh and in these bones, this is Callias or Socrates; and they are different in virtue of their matter (for that is different), but the same in form; for their form is indivisible"[279]. This statement strongly justifies the view that Aristotle is affirming the idea of a qualitative difference between Socrates and Callias as being only composed of a qualitatively different matter. The above reading might avoid any objections that have been raised by the supporters of the non-traditional View, but both the traditional and non-traditional views fail to explain whether matter is individuated by form or vice versa. The passage indicates that their bodies can describe the individuation of Socrates and Callias. One way or another, Socrates' body is a proximate matter and formed by appealing the form, which denotes the notion of form as a unifying and individuating principle. In favour of the non-traditional view, Whiting echoes the same claim:

> Proximate matter (or the ensouled body) is individuated by form (or soul) and so survives only as long as it is informed (or ensouled). This is the body of which the soul is the form or the essence (DA 412bll, 415bll). The body as proximate matter is the same at t_1 to t_2 only insofar as it embodies the same form (or soul) continuously from t_1 to t_2"[280], and adds "Socrates and Callias are distinct (at a time) because each of them has or embodies a numerically distinct individual form or soul.[281]

Therefore, I claim that followers of the traditional view have a difficulty when they conclude immediately from the famous passage in *Metaphysics* book 7, *Zeta*, where Socrates and Callias are said to be distinct individuals, and yet the persistence conditions of their identities from t_1 to t_2 are supposedly guaranteed by their proximate matter. Their proximate matter will be the same in kind (flesh and bones), but still we have to appeal to their matter in order to learn about their individuality. This process will lead us to a regression that centres the discussion of whether or not their matter is

[279] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1034a5–8.
[280] Whiting (1986), p.368.
[281] Whiting (1986), p.369.

a prime matter, which is pure substratum without essence. Yet again, this interpretation would not take the discussion out of the regress, even though it easily implies that the individuation of Socrates and Callias depends on the spatio-temporal distinctiveness. If Socrates and Callias' matters were prime matter, then their individuation and identity problem could not be solved and would be still unknown to us, as their prime matter would be pure potentiality, and matter without actualising principle is just mysterious and unknown. Furthermore, spatio-temporal distinctiveness is the accidental predicate of a being, as I pointed out earlier in a previous chapter.

The non-traditional view would also face a fair amount of criticism through the omission of Aristotle's point, where he says form is not "this" but "such".[282] Therefore, it is only the individual that can be "this", in which the numerical unity is guaranteed. Although the form is the principle of this unity, it does not follow that the individuality of Socrates is determined by his form (regardless of whether we count it as a particular or species form), but only the unity of Socrates' form and matter; namely, "Socrates as an individual". Another set of criticisms is directed at the non-traditional view, as it holds on to the claim that the form of each individual is numerically distinct from that of other individuals, and it is the only way to account for the distinctiveness of individuals. The non-traditional view is not without criticisms of its own when we ask to what extent forms can be essences. As articulated in the previous chapter, members of the same species have the same definition that determines what the individual's essence is. According to the non-traditional view, members of the same species have a form that gives individuals their essences, which is not distinctive and individual in the first place. If the form is an individuating principle, then quite expectedly supporters of the non-traditional view should be able to explain how distinct individual forms are related to individuals with the same essences. We know that having distinct forms does not necessarily entail that two members of the same species are different in kind and definition. However, the non-traditional view would still face questions in supposing it is the metaphysical question that is being raised, whether individuals can

[282] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1033b 22-23.

have their own definitions, as Socrates and Callias fall under a single kind and share the same definition, but not otherwise. Therefore, if the definition of form differs in each individual, then the definition of the individual herself also differs, and Socrates and Callias cannot share the same definition. What Aristotle tells us explicitly is that the definition of Socrates and Callias are the same and that their forms are not different in kind: "Now we have stated that the question of definitions contains some difficulty, and why this is so. Therefore, to bring all things thus to Forms and to eliminate the matter is useless labour; for some things surely are a particular form in a particular matter, or particular things in a particular state."[283] Yet, Aristotle adds,

> It is clear also that the soul is the primary substance and the body is matter, and man or animal is the compound of both taken universally; and Socrates or Coriscus, if even the soul of Socrates is Socrates, is taken in two ways (for some mean by such a term the soul, and others mean the concrete thing), but if he is simply this particular soul and this particular body, the individual is analogous to the universal.[284]

In that sense, Socrates and Callias share the same definition, and if their form is interpreted as the principle of individuation, then Socrates and Callias' forms are supposed to individuate them, and their forms are supposed to be the same in kind. If this was the case, just as the followers of the non-traditional view suggested, we would accept that Socrates' identity is Socrates' form exclusively, only because the form of an individual would be itself that the individual in particular. However, for Aristotle, regardless of whether Socrates and Callias possess the same or distinct form, the individual is a unity and hylomorphic compound, in which "the soul is primary substance and the body is matter, and man or animal is the compound of both taken universally."[285]

In order to account for the universality of species form, proponents of the non-traditional view must appeal to form as the individuating principle, and the only way to do so is to apply the distinction between

[283] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1036b21-24.
[284] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1037a5-1037a9.
[285] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1037a5-6.

higher and lower order forms. Higher order forms are those possessed by each individual, namely each individual form. Others are shared by every member, which is species form, such as the form of human being. Hence, individual forms include specific matter and it is sufficient for form to be the principle of individuation. However, the idea of a two-level-form seems quite problematic. Firstly, if the individual form of Socrates represents the name of the form, then the individual form itself would be part of Socrates' form, which seems implausible because the idea of a two-level-form remains unclear why Socrates' form should accommodate another level of form. Since, according to supporters of the non-traditional view the form of Socrates is identical to his individual form, and therefore both Socrates' numerical distinctiveness and his diachronic identity are secured. Whiting, for instance, explains this individuation of the form by employing a casual connection:

> We might allow that the appeal to individual forms resembles (or even involves) a causal criterion in the following way: x at t_1 and y at t_2 are numerically the same if and only if they have (numerically) the same individual form and the individual form of y at t_2 is numerically the same as that of x at t_1 if and only if the individual form of x at t_1 is causally responsible (in the appropriate ways) for the existence of the individual form of y at t_2. These causal connections may of course be mediated by the matter which (as I argue elsewhere) belongs to these forms. The idea is roughly that if the form in this matter (i.e., this individual form) at t_1 is causally responsible (in the appropriate ways) for the existence of the form in this matter (i.e. this individual form) at t_2, then these forms existing at t_1 and at t_2 are numerically the same and they are what make the individuals to which they belong, numerically the same.[286]

Here, Whiting emphasises how Aristotle concedes the existence of particular forms and how these forms show similarities in the same species: "For the individual is the source of the individuals. For while man is the cause of man universally, there is no universal man; but Peleus is the cause of Achilles, and your father of you, and this particular b of this particular ba,

[286] Whiting (1986), p. 378.

though b in general is the cause of ba taken without qualification."[287] Is there really a possibility of individual form in Aristotle's metaphysics as the essence of Socrates indicates the numerical distinctiveness of him from Callias? Followers of the non-traditional view are missing a very crucial point here. If there was a causal connection between two levels of forms as Whiting claimed, then there would be a challenge for us to comprehend how different forms could be universal in terms of explaining an individual form when we read Aristotle, since he claims that Socrates and Callias are the same in species form but individuated by their individual forms.

If we follow the non-traditional view, when we say that Socrates' species form is a component of his unity, then we are inclined to accept that the form of Socrates has a form, which leads us to absurdity because of the fact that it is impossible to sustain the difference between these two aspects of forms. In addition, Socrates' species form cannot be the essence of Socrates, as Aristotle insists that essences are not universal. However, if Socrates' essence is his individuating form as the supporters of the non-traditional view suppose, then Socrates and Callias do not share the same definition, and the fact that they fall under the same species form cannot be explained. If this is the case, then there is no means of accounting for Socrates and Callias' individual forms, as they are of same in kind. This account obviously raises a contradiction for the supporters of the non-traditional view, since Socrates' form cannot be both his essence and the realisation of species form. Aristotle's passage in *Metaphysics*, in which he points out "the causes of different individuals are different, your matter and form and moving cause being different from mine, while in their universal formula they are the same",[288] can be interpreted as asserting that Socrates and Callias have their individual form and individual matter along with their individual moving causes. In the same vein, this passage also reminds us of a similar claim Aristotle makes earlier in the same book, maintaining "when we have the whole, such and such a form in this flesh and in these bones, this is Callias or Socrates; and they are different *in virtue of* their matter

[287] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1071a26–29.
[288] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1071a26–29.

(for that is different), but the same in form; for their form is indivisible."[289] Throughout section 8 in *Zeta*, Aristotle discusses the notion of form and the objects that are generated from form. However, at the end of the section he states the passage I quoted above about individuation that is considered within the notion of matter.

It is clear from the latter passage that Socrates and Callias are distinct individuals in virtue of their matter without the need for any further explanation. Since the term "in virtue of" gives us causal evidence, which is not to be taken in a strong sense. Otherwise, matter would be the necessary and sufficient condition that individuates Socrates and Callias along with the persistence conditions of their identity. Socrates' form is a "such" but not a "this", yet it does not justify the claim of the traditional view that Socrates and Callias are individuated in *virtue of* their matter. In that sense, we should read the use of "*in virtue of*" as something does not add extra value on matter, something like an individuating principle. Yet, it is a necessary part of the explanation. Socrates and Callias are diverse individuals regarding the components of which they have been composed, and in the passage, Aristotle suggests that *at face value* matter is the individuating principle, but not form. Undoubtedly, Socrates and Callias are individuated *in virtue of* their matter, but the overall passage strongly suggests the unity of matter and form. By taking this detail into account, both supporters of the traditional and non-traditional views may consider that what individuates Socrates and what differentiates him from Callias are the same thing. It is, undoubtedly, the notion of composition. Aristotle explicitly states that matter is neither separable, nor a "this", but only a potentiality, which is actualised by form, by which these two components initiate the functional unity of an individual body. Although matter is something in its own right, it cannot be differentiated until it is actualized by form. We can thus say that this actualisation is the only way in which unity becomes numerically distinct in each member of the same species, and again the unity becomes accountable for the persistence conditions of identity. In this sense, Socrates' identity is necessary and sufficient to be numerically

[289] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1034a5–8.

distinct from Callias' identity, in the way they are both formed by distinct unities. To avoid the strains both views face, I will defend the hybrid view, in which hylomorphism finds its non-reductionist interpretation of the principle of individuation and the persistence condition of identity.

3.3 The Non-Reductionist Account of the Hybrid View

The main purpose of this section is to claim that while both views engage in a reductionist way of explaining the principle of individuation and identity, instead of dealing with an individual as a composite at a time and its persistence and continuity conditions as a unity over time, the non-reductionist approach will certainly satisfy not only one of these requirements – as supporters of traditional and non-traditional views argue either matter or form is the principle of individuation and identity – but also shows, in fact, that Aristotle himself does not wish to reduce the principle of identity to either of these components. Instead, Aristotle takes them as components of a particular individual, and these components are accountable only if they have been correctly considered as the matter and form of that particular composite. The identity and distinctiveness of matter and form themselves are in a way secured by the unity of that composite, but not the other way around. Considering that less attention has been devoted to the non-reductionist account, my aim in this section is to endorse the view that we have reasons to accept the reductionist approach of both views. I also aim to introduce the idea that there is a third hybrid way of maintaining the continuity and individuation principles of a person, in which I am concerned with the way that it leads us naturally to appreciate hylomorphism, as it still accommodates a non-reductionist solution to the modern problem of personal identity and continuity.

I have claimed that the principle of persistence and continuity of an individual's identity is strictly bound to the principle of individuation. This view is profoundly a non-reductionist interpretation of the Aristotelian expression of an individual as a unity, and referring to its kind. Whiting emphases the same point:

> Matter has to make up one thing before it can be the same

> as (or different from) another individual at a time. It also has to make up one thing at each of t1 and t2 in order for it to be the same (or a different) thing at each of t1 and t2. In a way, this priority of unity should be obvious. For we are asking when one individual (i.e., a unity) is the same as or different from other individuals (i.e., other unities) both at and across times. There is thus a conceptual connection between unity and individuation.[290]

What's more, Aristotle explicitly states in *Metaphysics, Zeta,* section 13 that "if man and such things are substances none of the elements in their formulae is the substance of anything, nor does it exist apart from the species or in anything else; I mean, for instance, that no animal exists apart from the particular animals."[291] In this passage, Aristotle clearly highlights that the way of being one and being a substance is to be a human being, and yet to be this particular human being is distinguished from being this particular dog or horse. The unity of Socrates' being is associated with the category of being a human, as the term "being" on its own cannot be accountable as one and the same. Yet Socrates' species form, or the category to which he belongs to, should not be different from Callias' nature. Aristotle recognises this challenge by acknowledging the fact that Socrates and Callias differ "*in virtue of* their own nature", or in other words, "*in virtue of* otherness of the genus":

> For by genus I mean that one identical thing which is predicated of both and is differentiated in no merely accidental way, whether conceived as matter or otherwise. For not only must the common nature attach to the different things, e.g. not only must both be animals, but this very animal must also be different for each (e.g. in the one case horse, in the other man), and therefore this common nature is specifically different for the two things. One then will be in virtue of its own nature one sort of animal, and the other another, e.g. one a horse and the other a man. This difference then must be an otherness of the genus. For I give the name of 'difference in the genus' to an otherness which makes the genus itself other.[292]

This otherness of an individual would be lacking a complete unity unless it

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[290] Whiting (1986) p. 362.
[291] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics,* 1038b30–33.
[292] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1058a1–8.

is accompanied by a genus or species, which is something universally shared by Socrates and Callias. What the non-reductionist approach promises here is that the level of explanation for unity and individuation cannot be less than the genus or species level. Otherwise to explain the individuation and identity of Socrates and Callias by referring to their matter and form, which belong to the specific level of genus or species, would be to determine their individuation under the substance kind to which they belong to. In this case, the reductionist approach of both the traditional and non-traditional views account for the individuating principle, which for both views is either matter or form which differentiate Socrates from Callias independently of Socrates' unity. In the same vein, if the individuating principle is differentiated independently of Socrates' unity, then it must be identified independently of Socrates.

If we suppose that either matter or form has a unity independent of the kinds in species, then the statement contradicts Aristotle's claim, which is that the identity of matter and form are secured by the identity of one unified substance, and this oneness is lacking the completeness without reference to universally established categories. On the contrary, we cannot also suppose that the individuating principle of Socrates' unity has some kind of universal level entirely, such as referring to Socrates' unity as something like the unity of animal. The fact that the unity of a composite taken universally contradicts Aristotle's initial claim that Socrates' unity at the universal level is secured at the level of being a member of a species. Again, if the individuating principle is unified independently of species, then it contradicts the parallel between individuation and unity, as well as Aristotle's claim that "all things that differ, differ either in genus or in species."[293]

I now suggest that no further claim is required to explain that Aristotle's explanation of Socrates' identity and unity is fundamentally considered within Socrates' being as a member of a species at a more generic level, rather than reducing his identity to either matter or form. If the hybrid view I suggest is understood within the framework of hylomorphic

[293] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1054b27–28.

interpretation, we can reach the non-reductionist explanation of personal identity. Similarly, reductionism can explain neither what differentiates Socrates from Callias nor how Socrates' identity persists as Socrates himself through time. Their individuation is considered *in virtue of* them being diverse individuals or substances considering that for Aristotle all individuals are substances in their own right.[294] If he were suggesting a reductionist account of individuation and identity, as the followers of both views insist, then the individuating principle of a person – supposedly either matter or form – would be prior to the unity of Socrates. However, as pointed out earlier, neither of the components can be prior to the unity itself. If so, could they be posterior? There is no textual evidence in Aristotle's writings that supports the idea of a component being posterior. Namely, if matter or form were posterior to the individual and originated the individuating principle from it, then the individual cannot have its individuality as something equivalent to the unity of an individual. In other words, according to both views, either Socrates' matter or form serves as an individuating principle prior to the individuality of Socrates.

As I have claimed earlier, individuality and unity are bound. Socrates and Callias can only be different individuals if the persistence of their identity is tied up with the unity of matter and form. On this conception, if the individuality of matter or form is prior to the individuality of Socrates, then the unity of matter or form has to be prior to the unity of Socrates. The relevant structure of explanation of both views faces difficulties in accounting for whether the unity of Socrates' matter or form is prior to the unity of Socrates. The unity of Socrates then faces an exegetical dilemma, as Aristotle strictly claims that no substance is composed of substances. Therefore, if both views are right and accountable for an identity claim, then a genuine difficulty rises concerning how Socrates' unity can be a substance in its own right. From here, we need to treat the hybrid view from a strictly non-reductionist strand of hylomorphism, in which the irreducible unity of Socrates is something

[294] Aristotle explicitly states in *Categories* (2a13–15) that "A substance—that which is called a substance most strictly, primarily, and most of all—is that which is neither said of a subject nor in a subject, e.g. the individual man or the individual horse."

inevitable for his persistent identity through time. Once this interpretation is correctly framed we can justify it through Aristotle's hylomorphism, where the individuality of Socrates and Callias are primary.

3.4 Personal Identity as a Hylomorphic Unity

In the following sections, more details are offered for a better understanding of the hylomorphic model. In hylomorphism form and matter compose an individual without ruling out the explanatory picture of the unity of an individual. We need to make some progress in clarifying whether or not Socrates' being is a particular composed substance – in other words, being a plurality of distinct substances – that somehow threatens the unity of Socrates. It is the argument[295] I would like to investigate whether the individuality and unity of Socrates' matter and form are prior to the individuality and the unity of Socrates as one complete substance. I will claim that the only way to get out of this circularity is to give credit to what Aristotle insists in the claim that "one" cannot be fully explained unless this explanation is specified by universal species form. He further explains Socrates' unity with reference to his being, which is a composite of distinct components.

What would be confusing here is if, instead of accounting for the components as a unity, we take the unity of Socrates' matter and form as a plurality of prior unities, in which the components are also taken as one substance. The solution is to maintain the relationship between the unity of an individual and the unity of matter and form within the scope of the primary notion of Socrates' unity, which is irreducible to any of its components. The main reason to hold onto such a claim is to adhere to what Aristotle explicitly identifies in *Categories* along with similar points he makes in *Physics* and *Metaphysics*. Accordingly, an individual man is a complete substance that neither is said of a subject nor in a subject, since he,

[295] The argument has been pointed out by Gill (1994) and Scaltas (1994). Accordingly, being a substantial unity is incompatible with being the unity of distinct components. If this is the case, then the fact of the individuality of Socrates, one way or another, would not be compatible with the unity of Socrates' matter and form.

himself, comprises a complete substance.[296] In this way, we can articulate a plausible account in which, on the one hand, the irreducible notion of identity is necessary and sufficient to explain the individual's persistence conditions, and on the other hand, this way of treating the persistence problem is compatible with hylomorphism. According to the model I have been suggesting, hylomorphism will be able to support the non-reductionist unity of persons. The crucial claim of this view of persons rests in the articulation of a non-reductionist vision, where the unity of Socrates' form and matter cannot be prior to his unity, but Socrates himself as a unity is prior to his components.

To clarify my point, I will attempt to identify what Aristotle specifically claims about the numerical identity of the unity in *Metaphysics*. Accordingly, one type of unity is continuous by nature, prior to other types of unities (more specifically the unity of matter or the unity of form) and non-reducible. The other type of unity represents the whole individual, to whose matter is causally related to its form by nature and who has a continuous identity. These components are indivisible in space and time, which means Socrates at t_1 in x place is numerically the same person as Socrates at t_2 in y place.[297]

In that sense, we can conclude with a fair amount of confidence that Socrates is numerically identical to himself through time and has a higher-order unity than does Socrates' body (matter), in which Socrates' identity persists through time only if his body is a continuous piece of matter. Nonetheless, Socrates' body is not continuous by its own nature. Recalling the causal force of the form, Aristotle claims that Socrates' form as a human being has a human form, that in itself is the internal principle and the cause of the continuity – yet not the only initial principle - of his identity. Hence, the unity of Socrates' body[298] itself does not have the continuity principle by itself without the unity of his form, as the telos of his

[296] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Categories*, 2a13–15.
[297] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1052a19–28.
[298] Again, we can employ the strict sense of hylomorphism here when we draw attentions to the unity of Socrates' body, by claiming that even if we divide Socrates' body into units, into specific organs, which differ in functions and are directed by their own telos, the unity of his body as a whole is still ontologically prior to the unity of his organs.

bodily parts is derived from the irreducible telos of his unity of individuality as a whole. The non-reductionist notion of the hybrid view is expressed by the non-derivative notion of the continuity of Socrates' identity, in which the persistence conditions of his identity are neither derived from, nor reducible to the parts of his bodily components.[299]

Thus far, I have pointed out that the hylomorphic unity of Socrates as an individual is the principle of his numerical identity and that this aspect uniquely diversifies him from other members of the same species. If Socrates' bodily parts derive their unity from the unity of Socrates as an individual, then this derivation might make one wonder whether the unity of an individual is prior to the alteration of an individual's body, in which we can say, either that the unity of Socrates' body at t_1 is prior to the body at t_2, where his body does not exist as the same body at t_1 – therefore, as not the same person anymore, which is contrary to what Aristotle would say about the persistence of matter after generation or alteration – or that his body at t_1 persists at t_2, but cannot represent the same unity which it represented in the first place.

Individuality does not follow these possibilities, where supposedly the unity of individuality holds the identity of Socrates' body through time, and strictly speaking his body alone cannot hold the persistent conditions of his identity. This is because by the principle of individuality, in terms of Socrates' body we can characterise the unity of his bodily parts, which can be distinct at times t_1 and t_2, yet still be continuant. Nevertheless, even the unity of his body alone cannot have or represent the persistence of his unity and identity by itself, because of the non-reductionist notion of unity. Although bodily parts compose his individuality, and although he is constituted by the unity of his bodily parts, the unity of these parts on its own cannot explain the persistence conditions of these parts, particularly if these parts have undergone some sort of change. It means that the unity of individuality as it is composed is the principle of identity and continuity, but

[299] With this argument in the background, the hybrid notion of hylomorphism will be able to resist the objections of contemporary competitors in the following sections, such as Animalism and the Constitution View, and more generally thought experiments about personal identity.

not the persistence of his body (or bodily parts).

In the previous chapter, I have already discussed how the bodily parts of each person can undergo certain changes during alteration without undermining its unity. Even if Socrates' body defines the persistence of Socrates' identity regardless of changes that his body undergoes, it is only because of the presupposition that Socrates at t_1 becomes Socrates at t_2. Therefore, any of his bodily parts gains its identity by having a functional role within Socrates' unity, as all his bodily parts potentially constitutes his body as a whole. Between time slices t_1 and t_2, Socrates' body is counted as numerically the same – just so, his identity – as before, regardless of the change or alteration (and even generation) it had undergone. Since the change or alteration occurs in accordance with his nature of being a human. Hence, it is evident that all these changes occur within the teleological life cycle of persons; thus, neither his body nor his identity ever loses its persistence and continuity. All sorts of interpretations of hylomorphism should consider the explanatory role of the persistence problem of identity in this regard. The idea that either Socrates' body or his form[300] is prior to the unity of Socrates is not compatible with this account of personal identity.

3.5 Hylomorphism in Contemporary Debate

Undoubtedly, hylomorphism contains some dualistic aspects by proposing that each individual has a form, which is classified as a thinking substance in dualism. Yet, Aristotle was aware that each individual is a living organism. For the purposes of this chapter I claim that hylomorphism explains why the identity of a person, and so the persistence conditions, cannot be reducible to either aspect exclusively, either to form, or to a living body. From the Aristotelian perspective we can acknowledge that the reductionist approach is not strong enough to hang on to any kind of substantial theory. Though, we might look at the ways in which two sides of the description come together and perform as one explanatory solution to

[300] Or his psychological connectedness/memory in our contemporary discussion of personal identity in the preceding and following chapters of his project.

the problem of personal identity. Although there may be some further distinctions that can be made between reductionists, I think the hylomorphic model and the possibility of a hybrid approach can be very appropriate to explore here.

The hylomorphic notion of identity has been represented by several hylomorphists in contemporary discussion. Before exploring where the original problem has its roots in the biological and psychological continuity views, I would like to give an overview on hylomorphic accounts, who combined the psychological view with one of the other two views. Accordingly, person A at t_1 and person B at t_2 are numerically the same person iff person B is either psychologically continuous with A, or B is composed of the same substance as A, which means B either has the same soul as A, or has bodily continuity with A.

Hershenov takes hylomorphism within the Thomistic notion. He claims that the hylomorphic approach is appealing as it allows us to consider ourselves as animals while justifying our responses in the intuitive manner for thought experiments. When he explores the notion of the hylomorphic theory, he takes the Catholic philosophical tradition into account and argues that "the proper Catholic construal of our animal nature is that we are contingently animals, i.e., we are living creatures but can still exist without being alive."[301] This claim accommodates both bodily continuity and the persistence of eternal soul. A person's identity is connected by the continuity of body when the person is alive. The claim goes beyond the connectivity of living organisms and after that, he states, the identity would still persist after death by the continuity of soul.

Toner's account offers a hylomorphic version of Animalism[302]. Accordingly, persons are individual substances with a rational nature, yet in the meantime Toner ascribes rationality to angels as well, by claiming that a rational nature is something that we share with angels. The only distinguishing feature between persons and angels is having a sensation. Namely, we are rational animals and angels are not animals, but they are

[301] Hershenov (2008) p.3.
[302] Toner (2011).

pure intellect. Also, he defenses the Thomistic approach for the idea of survival after death. He thinks that we are rational animals and we survive our death as disembodied beings. The soul itself is not identical with the animal, it constitutes or composes it.

Hershenov and Toner share the same thesis of two continuity conditions that personal identity is related to: the embodied identity and disembodied identity. The weak point of both views is that in their hylomorphism both embodiment and disembodiment are only contingently true for the persistence conditions. That is to say the disembodied human animal could exist in an unnatural state as a separated soul regardless of the lack of sensation.

As I noted earlier in previous chapters, the soul as a disembodied entity and resurrection are religious explanations which are out of interest in this paper. What is worth noting here is that trouble will arise for these hylomorphists not only when they commit such a claim that we have separate souls in our substance kind, but also this soul has a causal connection between the states of embodiment and disembodiment. As we can conclude from this brief but ample glance at different versions of hylomorphism, their approach requires reductionist soul-identity persistence involving processes. The common deadlock these accounts will face is that whether there is a bodily continuity present or not, both personal identity and the principle of continuity are established on the ground of an eternal soul. It is important to note, then, it is not just these hylomorphic accounts which are vulnerable to "the further fact" objection, but any account of personal identity involves in reducing the persistence conditions to indeterminate sources (the persistence of soul-identity or the criterion of identity that is based on common sense) will experience a severe criticism.

What hylomorphism teaches us instead, on the contrary of what Cartesian substance dualism (and the contemporary advocates of such a view, such as Swineburn, Chisholm and Lowe) takes persons as precisely mental-immaterial substances. In the hylomorphic approach I defend persons represent being "selves" in their own merits, which amounts to being a subject of experience and substrate of reality, rather than being

mysterious, immaterial, unknown beings.

There are two contemporary interpretations of persistence of identity advocated by animalism and the neo-Lockean constitution view,[303] which can be related to the hybrid view that I have adopted from the hylomorphic model I laid out earlier. By doing this, I will have the opportunity to examine these contemporary approaches thoroughly by using the tools that I have been advancing in previous chapters. I choose these two approaches in particular because they are plausible in their own merits, and particularly because each view strongly represents different elements of the unity of a person. These views are concerned with the objections raised against both biological continuity and psychological continuity views, and, in return, they raise objections against the hybrid approach, given that it combines elements of each view.

3.6 Conclusion

From here, through the proper consideration of what has been determined of the unity of identity, the other aspect of numerical identity through generation can also be re-established. According to Aristotle, the implications of different principles of an individual through a lifetime might shift from one to another, and what causes the continuity of numerical unity could require a repeated explanation.

Let us say we are considering the numerical identity of an individual from the Aristotelian perspective. This process starts from the moment she is in her mother's womb and continues towards her adult life. Prior to the process of generation of this individual, the principle of the unity of her continuity had a functional role before she was born. It is a fact that she will be the same person potentially as she grows right after birth. Although the unity of her identity was derived from her mother's unity of individuality, she can exist after birth as *potentially* the same individual as she will be as an adult, unless she undergoes some changes contrary to her nature. The teleological argument here requires the fulfilment of an individual's *telos*

[303] In its best explanation, neo-Lockeanism is a theory that categorizes the individual to persist through time by having the appropriate connections and causal relations between various mental states.

and the persistence of an individual's identity regardless of temporal shifts. These temporal shifts can be recognised as the actualisation of the individual's form, which is potentially present in the embryo from the beginning. Yet, her body's growth and development in later stages will identify her persisting unity and continuity. Her identity will remain persistent through time. From one perspective, one may object that Aristotelian idea of *telos* here represent a kind of unknown deterministic nature, which is causally directed to one certain unchangeable direction. However, the aim of bringing the potentiality–actuality relation into our consideration is to draw our attention to a bigger picture, where Aristotle is more tolerant about the notion of form and the unity of form and matter.

In this sense we can argue with some confidence that a numerically identical body endures through change, which does not undermine the numerical identity. For Aristotle these types of changes demonstrate that predicates can also compose the unity of identity, as he argues that movement of matter is one and the same in time and place.[304] This characterisation will be reflected in the next chapter, where I am considering several interpretations of the fetus problem. For now, we can conclude that the unifying principle of matter and form and the relationship between actuality and potentiality make the unifying principle plausible within hylomorphism. Therefore, the identity of an individual remains the same through time within the scope of the cause of unity in general.[305] Namely, the individual becomes the cause of unity. On the contrary what some hylomorphists suggest, no other cause (something like the eternal soul) is needed to explain persistence conditions. The persistence condition is only applicable to material substance but nothing else. This reading of hylomorphism is persuasive for several reasons. In contrast to some hylomorphists just described, one possible reading of hylomorphism I have been pointed out is inspired by the nature of causal dependence between parts and the whole. The parts are dependent on the substance for their continued existence. Whereas in Hershenov and Toner's reading of

[304] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1052a21–26: 1052a36–1052b1.
[305] *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *Metaphysics*, 1045b17–1.

hylomorphism, identity could still exist without embodiment. On the contrary what Hershenov and Toner describe persistence conditions to be, one notable feature of hylomorphism is that it does not dissolve the relation between the unity and its parts. Hence identity is unified not because it can persist without its parts, but because its parts cannot exist apart from it. This understanding will shed light on transplantation cases and other problematic cases of persistence, such as a vegetative state case and fetus problem, etc. The suggestion in the next chapter is that in accepting that in principle humans could undergo a sort of disassembly (as in transplantation cases), or loss in their psychological states (as in a vegetative state case), one should not necessarily commit to a view, in which the unity of identity is corrupted and the persistence condition is dependent upon being integrated into either biological continuity or psychological continuity.

Chapter 4: The Hybrid View in Contemporary Discussion

This chapter divides into three sections. Firstly, I will introduce contemporary defenders of the hybrid view and indicate how their accounts motivates the hybrid approach to our persistence. Secondly, I will consider the persistence conditions falling under two headings as animalism and the constitution view (as a representation of neo-Lockeanism). The claim of the chapter will be that both these continuity conditions are relevant to our persistence. And finally, I will describe how to make the hybrid view fit with hypothetical transplantation and everyday cases regarding persistence.

Langford's account shows resemblance to the hybrid view and he seems implicitly to offer two suggestions. Firstly, he defends the notion of a non-reductionist disjunctive approach for the persistence conditions.[306] Accordingly, the continuity of a certain kind is sufficient for our persistence in non-branching cases.[307] In his critique Langford suggest that these continuity defenders only argue for the sufficiency, yet they do not claim in favour of the necessity:

> Agreeing that you were once a foetus implies biological continuity is enough for your persistence. It doesn't imply that you couldn't persist *without* biological continuity. *That* idea goes beyond the example. Likewise, agreeing that you could survive the inorganic-continuer example implies psychological continuity is enough for your persistence. It doesn't imply that you couldn't persist *without* a psychological continuer.[308]

For him we are bio-psycho-continuers, which indicates that "being able to persist by having a biological (but non-psychological) continuer is consistent with being able to persist by having a psychological (but non-biological) continuer."[309] The term "bio-psycho-continuers" gives room for the possibility of our being; (i) that is not able to have the continuity condition biological and psychological continuity defenders can obtain

[306] Langford (2014).
[307]The branching problem occurs when A's cerebrum transferred into B's body, leaving A's original brainless body alive in a vegetative state, and if both continuity relations are sufficient for A's persistence, then there will be two A's in one place.
[308] Langford (2014) p. 357.
[309] Langford (2014) p. 358.

independently, and (ii) that is able to persist through some means other than the biological or psychological continuity, such as A could become a wholly inorganic entity. Langford presents an ample example of the hybrid view. On the face of it, he takes the case of A was once a fetus, then A develops into a conscious adult, and finally A could survive as a cerebrum in a vat as one and the same entity. This might allow A to persist through some other kind of physical (maybe not as a whole body) or psychological entity. In that case, our biological and psychological continuity conditions exist only contingently. In that sense, our identities persist regardless of the degree of connectedness in any case, which remains as a highly theoretical point. I agree with him on the contingency of continuity conditions, yet due to a possible interruption between biological and psychological persistence one may not survive after disassembling certain parts of the body. In Langford's approach we may not have to submit to either conditions exclusively, but his reasoning of the continuity conditions embraces any sort of case, including fission and fusion. I will examine their theoretical possibility in the following sections.

As a defender of non-reductionism, Noonan[310] offers a similar view to those who defended non-reductionism, the notion of unity and persistence over time. In his book *Personal Identity*, he explicitly sympathies the hybrid model of persistence conditions. His approach suggests that we are animals whom persistence conditions are partly biological and partly psychological:

> The Hybrid Approach is obligatory for anyone who believes that each of us 'is' an animal in the sense of being identical with one, but accepts the deliverance of the Transplant Intuition and also accepts (what seems undeniable on any view) that psychological continuity is not a necessary condition of identity for human beings. It is therefore the position the biological theorist must move to unless he can reject the Transplant Intuition.[311]

For Noonan, non-reductionism entails that the persistence of personal identity consists only in identity itself. That means, *x* is whether identical to

[310] See Noonan (2003).
[311] Noonan (2003) p. 201.

y or not, there will be no other option to consider for persistence, as identity is determinate regardless of any indeterminate identity statements.[312] Thus, we have either a persistence or non-persistence, simpliciter. The fallacy the reductionist view falls consistently is that whether persistence is determinate or not, the criterion of identity (either biological or psychological) may not be satisfied entirely in every situation.[313] He also warns us to be cautious about how soul-identity defenders (Swineburne, Chisholm and Lowe) consider non-reductionism. According to them, identity goes where the soul goes and this position applies to non-trivial and non-redundant constraints on personhood. Noonan's critique is persuasive. Soul-identity defenders trap themselves into an ambiguity, where we do not know whether we can have the same soul over time or not. No informative sufficient condition can be given to confirm the idea of a persistent soul. In that sense, his critique can be directed to both ends. His critique applies also to those who defines themselves as reductionists. Noonan's account is a sort of intermediate between non-reductionist and strong reductionist accounts (such as Olson, Baker and Shoemaker represent). What is more controversial but seems almost equally certain, is that for Noonan, there is no so-called guaranteed condition of a person who is existing at one time is identical with the one existing at another time. This, as Noonan calls, is the unoccupied position, which is a non-reductionist complex view: "there are informatively specifiable necessary conditions of personal identity over time, but no informatively specifiable sufficient conditions."[314]

What Noonan tries to establish here indicates very similar attributes to those what Aristotle would have in his mind regarding the specifiable sufficient conditions. When he talks about change in *Physics,* Aristotle points out explicitly that contrary properties being instanced at different

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[312] According to the determinacy thesis, "if it is true (a) that there is just one person in place p at time t and true (b) that there is just one person in place p' at time t′ then either it will be definitely true that the person in p at t is identical with the person in p′ at t′ or this will be definitely false." Noonan (2003) p.104.

[313] Noonan (2003) Chapter 6.
[314] Noonan (2003) p. 97.

times is not sufficient for change. We still need a substance to persists through time regardless of change in properties. Noonan does not talk about substantial change, or the difference between substances and their accidental predicates, yet in the same vein with Aristotle, he suggests that any changes occur in psychological and biological continuities does not affect the persistency in personal identity. What persists through change is neither soul-oriented identity, nor the criteria-based variables just like reductionists claim. It is rather the identity itself, which is depended upon the condition where *x* is either continuous with *y*, or not. Ultimately, Noonan's aim is to establish an account which complements the logical gap between denying what Swineburne and Chisholm supported, and committing a form of reductionism.[315]

Exploring the non-reductionist hybrid view further, we can mention McDowell's account as well, who also suggests that a person has to be conceived as an embodied entity within the realm of reason. His hybrid idea of the self recognises the inseparability of one's consciousness from the body. He constructs an idea of one's personhood that cannot be isolated from one's body and one's psychological (also intellectual) stages. Reasoning, for him, may not require identity.[316] Since, the self is represented through formal states. If the persistence is something similar to substantial persistence (persistence of immaterial substance), then we would commit to a self that is similar to a Cartesian Ego. For McDowell this could be an extreme end for a substantial explanation. His thinking of the identity of a substance is similar to Wiggins', where Wiggins claims that personal identity does not consist of either mind or body exclusively, but the subject represents essence, which is not reduced to mind or body, but both (and this condition would not be reductionist). Wiggins insists that the idea of personhood is required in persistence. It is true that we are animals when we born, and then become persons by attaining conceptual capacities and moral sensibilities. McDowell explicitly asserts in his book *Mind, Value, and*

[315] Noonan (2019) p. 21.
[316] McDowell (1994) pp.99–100.

Reality that in order to avoid circularity, we could accept a characterisation for the persistence condition(s), where the continuity is considered "in terms of spatio-temporal continuity under a substance concept".[317] Hence, within its spatio-temporal process persons are the natural maturations of human beings (and the artefact of culture)[318].

In his critique McDowell treats reductionism (reducing identity to a continuous consciousness) as it is much less fundamental than the idea of a continuous immaterial substance (the Cartesian substance). What is more, he also believes that the self-contained notion of consciousness, as appears in neo-Lockeanism, is definitely Cartesian. As a subject of experience, a person experiences her life through her continuous consciousness (a first-person perspective in neo-Lockeans terms), which is "suppose to be what Locke really intended to remind of us, something tailor-made to seem entertainable, like the Cartesian *cogito*, without objective propositions."[319] This is a notion of consciousness that has its contents independently of any objective context.[320] Whereas, the supporters of non-reductionism, who favour the idea of identity as a further fact, have a plausible reason to think that the question whether a person exists and whether a certain life is still in progress have more determinateness than any construction out of psychological and bodily continuity could give on their own.

McDowell is quite straightforward when he is presenting his hybrid view. Accordingly, we are neither separately existing entities, nor our identity is reducible to a further fact. Rather, he asserts, "Not that a person should be identified with his brain and (the rest of) his body, any more than a house should be identified with the bricks, and so forth, of which it is composed; but there is no commitment to some peculiar extra ingredient, which would ensure determinateness of identity."[321] Persons are equipped

[317] McDowell (1998) p.360.
[318] McDowell (1998) p.360.
[319] McDowell (1998) p.364.
[320] McDowell (1998) p.366.
[321] McDowell (1998) p.378.

with a notion of rationality, as what he calls it as a second nature.[322] Our interpretation of the unity of psychological and bodily continuity is the reflection of our understanding psychological continuity in its essential relation to the continuity of an embodied being[323]: "the idea of a subjectively continuous series of mental states is just the idea of a singled out tract of a life."[324] This interpretation explicitly indicates the notion of a hybrid identity that is continuant as one and only individual through time.

I have mentioned Wiggins in section 3.2 already, yet it seems also appropriate to point out Wiggins' metaphysics here. His perspective illustrates a connection between our animal and rational sides that are essential to the being that we are. Personhood, he suggests, is an enhancement of the mode of activity[325] of a human being, which means, an infant is potentially entitled to be a person and has the potential for developing reason. Our interpretation of identity and its persistence conditions, Wiggins adds, should reflect on the reciprocity between our animal nature and reason. This foundation of unity is entitled under the intimate connection between our personhood and our animal nature.[326] This intimate connection will escalate our perspective to a wider picture, where the nature of our bodily presence in the characteristic activity of a particular human form is vital to our identity.[327] The "human being principle" that he has developed in his works (particularly in *Sameness and Substance* and *Sameness and Substance Renewed*) manifests his divergent from other non-reductionists.

Wiggins's position is hybrid, since he explicitly defends the claim that we are fundamentally both persons and human beings. Although he is aware of the requirements of the term "person" and "human being"

[322] McDowell (1994) p.103.
[323] Bakhurst (2005) p.468.
[324] McDowell (1994) p.103.
[325] For Wiggins mode of activity (or mode of being) is something that substance attains as a sortal kind. It is universal for members of that particular kind, and from which persistence conditions of a person may be derived.
[326] Bakhurst (2005) p.467.
[327] Wiggins (2001) pp. 208-9.

provokes different explanation for their persistence conditions, devoting a unity to the conditions of individual in that sense is a sort of relativity of identity. Our understanding of personhood and what we acknowledge when we are considering the persistence conditions of human being are somehow intertwined. As he explicitly suggests in *Sameness and Substance Renewed,* "the concepts person and human being assign the same underlying principle of individuation to A and B and that that principle, the human being principle, is the one that we have to consult in order to move towards the determination of the truth or falsehood of the judgement that A is B."[328] By taking the term "person" and "human being" within the conceptual agreement, Wiggins' human being principle represents a hybrid notion, and accommodates insights of both animalistic and neo-Lockean idea of personal identity. Although by taking *Sameness and Substance* into consideration Olson thinks that Wiggins is a neo-Lockean, as he defends that there is no circularity or absurdity in Locke's criterion of consciousness[329], Wiggins has affirmed that memory alone cannot provide a basis for identity criterion[330], and in *Sameness and Substance Renewed* (after Olson published *Human Animals*) he distanced himself from his former position, which has been interpreted as he is sympathetic to the Lockean notion of identity exclusively.

For Wiggins, neo-Lockeans devote an exclusive emphasis on psychological continuity, yet they should not omit the importance of biological persistence conditions, and we should still defend the biological aspects of our nature, not against neo-Lockeanism, but along with neo-Lockeanism. Wiggins' concern has always been to endorse a positive thesis of our spatio-temporal continuity that is understood only through accepting

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[328] Wiggins (2001) p. 194.

[329]"Whereas my view is that psychological continuity is completely irrelevant, except derivatively, to our persistence, Wiggins insists that certain broadly mental capacities – sentience, desire, belief, motion, memory and others – are part of what it takes for a person to remain alive, and so to continue existing." (Olson, 1997, p. 20.) "Wiggins argues that memory is '*crucially relevant* to our choice of continuity principle for determining the biographies of persons'... Although there is much in Wiggins's work that I do not understand, his view seems to me to be a sophisticated version of the Psychological Approach." ((Olson, 1997, p. 20.)

[330] See Wiggins (1976).

the fundamental notion of being a human animal. Yet, he also pulls himself away from the scrutiny of any possible interpretation in which he has been referred as an animalist. Wiggins sympathises animalism due to our human nature, but he criticises the animalist denial of the neo-Lockean idea that we are essentially persons. Therefore, we can conclude from above discussion that Wiggins' treatment of personal identity and persistence conditions presents a significant resemblance to the hybrid theory implicitly, if not explicitly. This is simply because Wiggins' human being principle approves both animalism and neo-Lockeanism.[331]

The hybrid view's exposition of personal identity is insightful. Reading personal identity and persistence conditions within the hybrid notion presents a series of convincing arguments that reveal an inseparable relation between the term "person" and "human being".

4.1 Objections to Animalism and the Constitution View

This emerging thought of the hybrid view on what a person is and how a person's identity persists manages to accommodate constructive features form both neo-Lockeanism and animalism. This union draws our attention to two mainstream views from each side. The first objection addresses how Olson's animalism primarily focuses on the definition of human animals. The next objection deals with issues inherited from psychological continuity views, in particular Baker's constitution view. Specifically, the questions that psychological continuity defenders direct whether physical continuity is required for our continuity. I give a brief outline how these approaches are evaluated, and then I claim that these views within their own perspective are

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[331] "A person is, *par excellence* (and as a presupposition of all the traditional questions in the philosophy of mind), the bearer of *both* M-predicates *and* P-predicates, where M-predicates are predicates that we could also ascribe to material objects and P-predicates are predicates that we could not possibly ascribe to material objects and comprise such things as actions, intentions, thoughts, feelings, perceptions, memories, and sensations: and that 'a person' is a type of entity such that both predicates ascribing states of consciousness and predicates ascribing corporeal characteristics are equally applicable to an individual of that single type." (Wiggins, 2016, p.76.)

reliable and each affirm their favoured continuity relation. Yet, their resistance to accept to go beyond what their favoured continuity relation has got to offer and not being in a position to see why a middle path way may be tempting, are the challenges they have to face. Having said that, the contribution of the hybrid view is quite clear. Plainly, it adopts these two contemporary accounts by combining them, and it supports a third way, which supposedly avoids the objections that these two accounts of identity have to face. In the final section, I consider the broader question of whether the hybrid view promises the best fit for everyday cases (the fetus problem and permanent vegetative state) and thought experiments. After giving this brief outline, now let us first look at the initial aspects of Olson's animalism as a criticism to the hybrid view.

4.1.1 Olson's Animalism: A Biological Approach

According to the animalist approach, all persons are identified with animals. In our animal nature, there is nothing beyond the biological interest of science. Therefore, there is nothing further that we can associate with a persons' identity and persistence conditions through time. What matters in identity is precisely a work of biology. Eric Olson, who has developed a remarkable account of animalism, brought a breakthrough change in drawing a line between the aspects of a person and contemporary biology.

There are certain positive implications of the biological approach, of which Olson takes advantage of while contrasting his account with other reductionist accounts of the bodily criterion. According to Olson, the bodily criterion supposes that we are identical to our bodies, which means that the main principle of identity is the continuity of the physical parts of a body. So, "If *x* is the person at time *t* and *y* exists at *t*, x = y* if and only if the thing that is *x*'s body at *t* is *y*'s body at *t**."[332] The bodily criterion identifies persons with their physical bodies by claiming that although a person has gone through remarkable physical changes in her lifetime (especially considering the fact that the human body regenerates most of its cells approximately every seven to fifteen years), she will be identical to herself

[332] Olson (1997) p. 142.

only if her past and future selves hold the same body, the same organism. This approach seems to define what a human body is, yet, Olson suggests, it is commonly agreed that a body is difficult to define as the same entity through time. Olson is right in that sense, since human beings undergo innumerable physical changes through their lifetimes. Yet taking the bodily criterion's initial argument into account and defining a person as the same one who was in the past seems very challenging, unless, claims Olson, our initial concern is the function of body parts. This is apparently a problem for the bodily criterion, since this approach seems only concerned with the physical parts of a body.

In his critique of the psychological continuity view, Olson claims that the biological approach to personal identity is advanced enough to explain what makes a person persist through time within biological terms. Claiming that we are human animals, Olson argues, does not mean that the human body itself is an animal, or that a human animal constitutes our identity. Our self is numerically identical with an animal. Since, Olson adds, being essentially a person matches our criterion for being an individual among other members of the same species, yet what defines our substance concept and what we are essentially are only explainable through accepting that we are nothing more than human animals:

> We are *essentially or most fundamentally* animals. We are essentially animals if we couldn't possibly exist without being animals. It is less clear what it is for us to be most fundamentally animals, but this is usually taken to imply at least that our identity conditions derive from our being animals, rather than from our being, say, people or philosophers or material objects – even though we *are* people and philosophers and material objects.[333]

Being a human animal theoretically encompasses all means of living and functioning as a human person through time:

> When you look in a mirror you see an animal. It is easy to believe that you and that animal are one and the same, and that is indeed the way it appears. That is because you are connected with that animal in a particularly intimate way:

[333] Olson (2003) p. 321.

> you and the animal are made of the very same atoms and occupy exactly the same region of space.[334]

This is a well-defined critique of dualism in the sense of characterising the "thinking being" as a human animal. Yet, for Olson, being numerically identical with a human animal does not entail that non-human animals can be persons. In his discussion, Olson claims that being a person requires certain psychological capacities, and non-human animals lack these rational capacities, such as self-consciousness and intelligence.[335] This is a vital divergence between human animals and persons, for Olson, that it is the first and foremost difference between human animals and non-human animals. It is likewise for the persistence conditions of a person. These conditions are certainly differentiated in non-human animals, which are able to hold their identities without having these mental capacities. According to the psychological approach[336], a human being who does not have these capacities, such as fetuses, would not be accounted as persons. Olson's counter argument sounds more plausible, where he claims that these organisms are indeed human animals.[337]

As a functioning animal, human animals survive as numerically the same from the cases where rational capacities are not appropriately developed, removed or mutilated, or may be completely destroyed.[338] Then one may ask, to what extent does a human animal remain as a person after mutilation? Olson's initial response will be that unless a human animal stops functioning as a living organism, we can still account the remaining entity as a human animal. Human animals still need to have these certain capacities in order to function as persons.[339] These considerations might

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[334] Olson (1997a) p, 95.
[335] Olson (1997a) pp. 103–104.
[336] The followers of this approach claim that having certain mental capacities is necessary and sufficient for identity to persist through time.
[337] Olson (1997a) pp.110–111. (1997b) pp. 95–97.
[338] Here Olson uses the example of the vegetable case, in which a human animal ceases to exist in the case when its psychological capacities are destroyed and replaced by a numerically different human organism – which is analogous to transplantation example. Olson, (1997a), p. 112.
[339] This is a quite controversial interpretation of Olson's account when we consider David Degrazia's argument in "Are We Essentially Persons? Olson, Baker and a Reply", (2002), where he rightly claims that regarding the persistence conditions, Olson sets the

make one wonder whether we are human animals or persons regardless of a materialist or immaterialist point of view. For Olson, we are living human animals, which are identical to human persons, and strictly speaking, a thinking animal and a thinking person are numerically identical. The notion of numerical identity has similar implications for the conditions of persistence. Although the continuity of animals depends strictly upon their bodily continuity, for animalism what matters in survival is the continuity of the brain's life-maintaining functions, the continuity of the brainstem in particular. The brain, in this sense, has a priority over other life-maintaining parts of the body.

Olson and Aristotle's accounts of "becoming" are quite similar in the sense that an individual remains as the same through both her biological growth and her accidental changes. Socrates, from his childhood at t_1 becomes an adult at t_2, and at t_2 Socrates ceases to be a child, as he aged, yet he cannot be separated from the child at t_1. Socrates is identical to himself in two different times t_1 and t_2. For a moment, if we put the substantial continuity aside, we can still claim that although Socrates' accidental properties cease to exist (including his psychological properties) his essential properties – for Olson especially Socrates' physical properties – survive from t_1 to t_2.

For animalism these conditions are necessary and sufficient conditions for Socrates' identity to persist through time. Since for Olson, Socrates is an animal before any other attribute is attached to his being, including being a person and persisting through time as being the same person. What matters for Olson is whether the same animal persists through time. Snowdon directs a relational question very openly, which is appropriate to mention here. He asks, What is the relation between an animal and its body?[340]

For an animalist like Snowdon, an animal is identical with its body, as bodily continuity is sufficient for an animal's persistence. It is the same relation for an individual to persist through time; no further causal relation

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psychological continuity conditions aside entirely so that our essential features are nothing to do with psychology.

[340] Snowdon (1990) p.71.

is needed. There are two main types of cases that represent the possibility of being identical to the animal. One is an animal-without-person case, in which we are inclined to think that the animal still exists regardless of any psychological changes. As a result, one might say that the person no longer exists. For instance, when a person loses her mental capacities and goes into a vegetative state, the animal remains alive, breathing, and not dead. However, certain personal traits would no longer exist. Can one say that this human being is not the same being who existed before? The being in a vegetative state was the being who had interacted with the world in her own unique way, and she was holding her characteristic traits along with her essential properties, such as memory, the perception of self and the perception of others, and so on. If we consider the possibility of this theory and claim that the being in a vegetative state is no longer the person who used to be, then from the ethical perspective the result may create a conflict between the family of a patient and professionals regarding the treatment decisions (according to one qualitative case study of the professional perspective in moral case deliberations, conflicts occur between families and physicians concerning several themes, such as organisitional aspects, communication, feelings and attitude, impact on relationships, and family's wishes for treatment, and so on).[341] Nevertheless, we are inclined to recognise the person and recognise that the person is still the same human being.

Unlike Olson's rigid animalist explanation of the relation between the terms "human animal" and "person", for Snowdon, it should be a practically undisputed point that there is no such a thing as a human animal without a person. The same reasoning is present in Toner's animalist hylomorphic account, where he claims that being in a vegetative state and undergoing a cerebrum transplant operation, or remaining as a cerebrum-less animal body, does not affect a human being's persistence condition in substance terms. Namely, there will not be any change in the original

[341] Conny A.M. F. H. Span-Sluyter, Jan C. M. Lavrijsen, Evert van Leeuwen, and Raymond T. C. M. Koopmans (2018).

substance as long as there is no interruption in a human's life. Accordingly, "This is very strong evidence for the human being's survival. But if it has survived – if it has not undergone a substantial change – then it must still be the same kind of thing it was prior to the surgery/accident. It also means, of course, that it is still rational, in sense one."[342]

The second stage is to investigate whether there is a possibility of a person without an animal. This option could be scrutinised under the possibility of a brain transplant. The brain is removed from the original body but can continue to function as it was used to. The assumption here is that the personal traits and mental characteristics of a person after the operation would be located within the brain. The most common inclination would say that the identity is constituted by the brain, and what is left without brain is nothing but a body. Yet, there is a possibility that the animal left behind could be kept alive, if a certain amount of brain remains, or if the animal body is connected to an artificial life support machine. If we take the animalist perspective into account, the brain-transplant operation would not be much different than a heart-transplant case. Although the heart is a vital organ, we do not think that the identity of animal moves with the heart after the operation takes place. Similarly, for animalism it is not the case that the brain takes the whole animal with it. Rather, the animal left behind is the same animal without the crucial organ. The animalist argues that if identity goes with the brain, then not only do we reject the identity relation between person and animal, but also, we give credit to the psychological continuity view, which no animalist would wish to be the case.

How can animalism make sense of such a case without something radical, like a brain transplant, taking place? If the person and animal can come apart, then the animal and the person are not the same thing. What psychological properties does the animal itself have? An animalist needs to ascribe more mental properties to human animals than we do normally for other animals, such as mammals. Human animals think and they are psychologically equipped as persons. If, animalism claims, one still thinks

[342] Toner (2011), p. 76.

that we are not animals, we should accept that there is one highly psychologically advanced animal, and there is the person as well. An animalist will argue that the claim that persons are distinct from animals is highly paradoxical. In this argument, however, what specific type of physical continuity we have to regard as the principle of identity, remains unclear, as biological continuity is essential for the persistence of the same human animal through time.

According to Olson, strictly speaking, not our mental properties, but only our bodies (and functions of our brains) separate us from other animals as *Homo sapiens*. There could be persons who had no bodies or who had non-organic bodies. From the hybrid perspective, such an explanation remains limited and cannot explain what we are. Although certain potential similarities can be detected between bodies and non-organic bodies in terms of mental properties, individuals are separated due to their organic bodies. Olson's argument is quite straightforward here. For him, "regardless [of] the possibility [that] someone could have a partly or wholly non-organic body – one even might have a complete robotic body – no animal body [and so human body] could be entirely non-organic."[343] Olson goes on to argue;

> It may be possible to replace all of your parts, including your brain, gradually and piece by piece, with inorganic prostheses in such a way that your mental capacities were preserved throughout. The result would be a wholly non-biological – person with rationality, consciousness, free will, the works – who was both psychologically and physically continuous with you. Nevertheless, according to the biological approach that being would not be you, for you are a biological organism, and no organism could come to be a non-organism.[344]

According to Olson, even though the whole body of an organism is replaced with non-organic parts (including the brain) piece by piece, as long as the brain carries out the same functions after the replacement takes place, the animal would be the same animal. For Olson, whether organic or non-organic, as long as the brain functions properly as it used to, its persistence

[343] Olson (2003) p.321.
[344] Olson (1997a) p.125.

is guaranteed. On the other hand, the biological approach emphasises that the human body is itself the principle of identity. On this approach, one's identity is reduced to their biological organism only (but in particular reduced to the continuity of brainstem), so the persistence formulation posits that the person at t_1 is the same person at t_2 if and only if she is the same biological organism (and has the same brainstem) at t_1 and t_2. Namely, what persists through time is a certain sort of biological entity. Our persistence conditions determine what type of changes happen to our bodies, yet we will still have the same bodies and remain as the same persons. These biological changes can be major ones, including being pregnant, giving birth, growing, and certain kinds of organ transplantation. However, the crucial condition of persistence, being the same person through time, requires more than a particular type of organism as an explanation. For Olson, in its basic form, the person at t_1 is identical to the person at t_2 iff that person has the same brainstem at both times, regardless of other changes to the body or psychological states:

> But even here, for that thousandth of a second during which you have no brainstem, there is nothing to direct your life-sustaining functions. Even if those life-sustaining functions – heartbeat, respiration, digestion, and so forth – continue in the interval, your capacity to direct them is destroyed. So for a thousandth of a second there is no self- directing event that coordinates the activities of your parts in the unique way that biological lives do there is no living organism there, but only a corpse so fresh that its heart is still beating.[345]

Although Olson follows the biological approach, in his many writings he eventually excludes most of the body in support of isolating the functioning brainstem as the main principle of identity, since the brainstem is the source of all our fundamental functions. It keeps the body operating in a way that it is alive. Hence, his approach is ultimately reductionist in the same way as the proponents of the biological view. Yet, Olson claims that there is a good reason for reducing the principle of identity to the persistence of the brainstem, which I will evaluate in due course.

[345] Olson (1997a) p. 141.

On the face of it, Olson seems to make the principle of identity strictly dependent on biological and material considerations, rather than something further, such as mind or self.[346] These physical and material considerations define essentially what we are. In the light of this definition, the most natural interpretation indicates that Olson would not take any hybrid explanation of identity into account. His claim seems extremely straightforward: *Only* the biological features are essential to our persistence conditions, rather than the psychological parts and their continuity conditions. He writes "The Biological Approach is intended to be compatible with a 'dual-aspect' or 'property-dualist' theory of mind, according to which psychological properties are in some sense non-physical properties."[347] which means that he does not believe that biological organisms are merely biological.[348] He further posits that if anyone claims that two individuals are not only differentiated by their organisms but also by properties that can be non-biological properties, such as being famous or wise, then their view is compatible with his account of animalism, unless if they mean that two individuals have parts that are not parts of any living organism. In that case, Olson claims, it is puzzling how the supporters of such a view could still claim to favour the biological approach.

However, Olson's argument here is not quite satisfactory. To a certain extent, it is not hard to see that human animals are essentially physical beings. It is almost needless to say that as rational beings we must have further aspects to our animal nature that differentiate us from other animals. While Olson's approach may not require a hybrid view of identity, such a view might improve his argument for persistence conditions, at least in not taking psychological continuity as a mere "property", which is almost equal to seeing it as an accidental property.[349] The biological approach

[346] It is very apparent that in most of his works he avoids using the term "self".
[347] Olson (1997a) p.126.
[348] Here in the following line Olson also rejects the idea that biological organisms are "purely physical" regarding the things that do not have certain properties, such as linguistic competence. At any rate, Olson seems to commit a falsifiable claim here, which does not compatible with the notion that he has been defending in the first place.
[349] There are, of course, some parts of psychological continuity that can be treated as an accidental property, which is temporary and not directly accountable to memory traits.

supports the idea that the persistence of a particular organism is ultimately dependent upon biological traits, which may not necessarily maintain the same psychology.[350] This idea explains what makes us human animals and how individuals persist. At first glance, there may not appear to be any problems. What seems to be a problem for the biological approach is the issue of the connection between the parts.[351] If the individual as a unity depends upon its parts, then how can these parts work together as one? How is the causal connection between these parts facilitated? The biological approach, on its own, does not have a plausible avenue to follow without questions, as it itself already requires a broader ontology to explain the problem of personal identity and persistence conditions.

Another sort of objection we can explore here, within the scope of the present discussion is raised against the conditions under which the principle of identity is considered within Olson's claim. It is called the "too many thinkers" or "too many minds problem".[352] It is agreed that brains think and are parts of bodies. This is where the objection arises wherein the thinking body appears to exist simultaneously with a thinking mind. The problem here is a dilemma or more like a mereological fallacy, which involves in ascribing attributes to parts rather than the whole itself (as the whole is the composite of those parts). Either the body cannot think, which means thinking does not belong to the body, or the brain does not think, or psychology is not necessary. Here is how Olson understands the dilemma:

> Consider what it would mean if you were something other than the animal. The animal thinks. And you think. So there would be two beings thinking your thoughts: the thinking animal, and you, a thinking non-animal. More generally, every human person would share her thoughts with an animal numerically different from her. Every thought would have two thinkers.[353]

Nevertheless, the whole picture of the hybrid view accounts for psychological continuity of an individual as a necessary part of the explanation.

[350] What I mean by these traits is that our essential psychological features, such as the unity of consciousness, a first-person perspective, the connectedness of memory to a certain degree, etc.

[351] Here, by parts I mean the compounds of the unity. For personal identity, parts represent the compounds of the unity of personal identity, psychological and physical continuity.

[352] Shoemaker (1997) p. 499; (1999) p. 79.

[353] Olson (2007a) p.45.

There is a joint view that is expected to give an appropriate response, yet cannot answer the question of what we are. For instance, as a proponent of the psychological continuity view, Shoemaker attempts to avoid this dilemma with an applicable methodology, in which he claims that animals do not think, since animals do not have minds in the same way that human beings do. Persons are not identical to animals. Instead, persons are constituted by animals. As such, there is no duplication of the thought problem here.

In contrast, the way in which Olson tries to avoid the dilemma is credible only to a certain degree, since he sets several premises for his argument for animalism and establishes a plausible defence. Accordingly, if we assume that there is a human animal sitting in your chair, we can immediately say that the human animal in your chair is thinking in order to be you, and the unavoidable conclusion that follows from this premise is that "you are the thinking being sitting in your chair, which means the only thinking being sitting in your chair is you, a thinking human animal".[354] Therefore, Olson concludes, we are essentially human animals, because we are human animals *simpliciter*.[355] After accepting that we are material beings of some sort, for him it seems quite obvious that we are mere living animals. For a human animal to persist, it needs life-sustaining functions, which provide biological life.[356] To be a living organism is to have the capacity to direct these life-sustaining functions that keep the body biologically alive. Olson explains:

> By "life-sustaining" functions I mean those that sustain life in the biological sense: they are those functions that keep an organism alive in the sense in which not only human beings,

[354] Olson's approach is very similar to the one Aristotle explicitly manifests in *De Anima*: "to say that the soul is angry is as if one were to say that the soul weaves or builds. For it is surely better not to say that the soul pities, learns or thinks, but that a man does these with his soul." *Complete Works of Aristotle*, trans. by Barnes, J. (1991) *De Anima*, 408b12-15. It is a mistake to ascribe attributes to the mind that are ascribable to the person as a whole.

[355] Elsewhere Olson gives an explicit example for how to avoid the Too Many Thinkers problem - sometimes called the Over Population problem. (Olson; 2001b). Accordingly, in our identity we carry some properties in a derivative sense. For instance, "We are tattooed in so far as our skin is tattooed." (Olson; 2001a) p.76. In that sense, Olson's conclusion would be that I am not something further than a human animal, which thinks. There is nothing beyond that animal being which/who does the thinking for me. Two entities are not existing as a thinking animal on the one hand and thinking mind on the other.

[356] Olson (1997a) p. 112.

> but also cockroaches and cabbages, are alive. There are certain features that distinguish biological organisms from non-living things.[357]

Thus, what matters to a human animal's identity is life-sustaining functions and nothing further. Accordingly, in the metabolic process, these functions occur organically in their different forms. They proceed to what makes the body persist through time, and this persistence is what determines the identity of a body. Olson claims that these functions are necessary and sufficient to characterise the identity and persistence conditions of persons. The brainstem has a vital role here, as it controls all these functions. If it is removed from the body or stops functioning, then the animal would cease to persist regardless of whether other organs function perfectly. As Olson reasons, "As soon as your brainstem is destroyed, you lose the capacity to direct your vital functions. You cannot survive brainstem replacement for the same reason you cannot survive annihilation and replacement by a perfect duplicate."[358] A new human animal comes into existence, but definitely it will not be the same human animal as the one before.

For Olson, biological life is the only important unity for identity to persist through time, because we are human animals. Science defines what constitutes animal life, which is a particular group of functions that all living bodies accomplish, such as digestion, healing, and adjusting body temperature. Whereas, in human animals, the brainstem controls and monitors life-sustaining functions. When the brainstem of a human animal is destroyed – for Olson that could also be a gradual process – a brainstem's ability to coordinate its life-sustaining functions is also destroyed. Hence, the brainstem, which is the vital aspect of a body, is the main principle of identity and its persistence conditions.

As a result, similar to the Aristotelian claim, in his biological approach Olson allows natural processes to occur, such as the regeneration and replacement of dead cells. Apparently, Olson's approach allows bodies to change and perform bodily functions through time; in contrast, the bodily criterion has the difficulty of explaining generation and change because of

[357] Olson (1997a) p. 112.
[358] Olson (1997a) p. 112.

its exclusive focus on the physical traits of bodies. The main difficulty for the bodily criterion derives from characterising the identity strictly within the scope of pure physical matter of bodies without describing how bodies and their identities persist through change. Compared to the biological criterion's lack of responsiveness, Olson's approach seems more plausible, as it underlines the persistence conditions of a body while the processes of regeneration and replacement take place. According to the biological criterion, it is not the psychological continuity, but rather it is our bodies alone that are essential to our identity and persistence conditions. If it is the case, Olson argues, the biological criterion entails that "I am a material object of some sort (something called "my body"), and that what it takes for me to survive is what it takes for that object to survive."[359] In its simplistic form, the biological criterion denotes human animals as having more or less the same persistence conditions as artefacts. The biological approach Olson defends is in favour of animalism, by which Olson claims that physical bodies are essential to our identity and persistence conditions as long as we have animal bodies that function by brainstem. Assuming that we know what it takes for a person and a human animal to survive, Olson is not very clear in his approach concerning how exactly we can define persons, as they are essentially human animals. As he admits bluntly,

> Is there any way to find out whether some animal's life is your life without first knowing whether that animal is you? If not, the current proposal would be no better than this one: a person *x* picked out at one time and something *y* picked out at another time are identical just in case *x* and *y* are legally entitled to bear the same passport. While this may be true, it doesn't tell us anything about how to individuate people, because any evidence for the claim that *x* and *y* are entitled to carry the same passport would have to involve the claim that *x* is *y*.[360]

Yet still, Olson thinks, his biological approach is superior when we think about the compatibility of the psychological approach with the neo-Lockean view of persons. Recalling the context from Chapter 1, the Lockean view of persons is basically a collection of complex psychological states, and

[359] Olson (1997a) p. 143.
[360] Olson (1997a) p. 139.

therefore differences in psychological properties are the only distinguishing feature between human and non-human animals. Again, however, Olson does not use these differentiating features in his approach. He claims only that the principle of identity and individuation does not depend on psychological continuity or other psychological states, since psychological continuity alone is not essential to the persistence conditions of identity. It matters to us only in social and pragmatic contexts.

If, Olson asserts, we accept the Lockean view of persons, then regardless of their modal or dispositional properties, a person cannot fail to be a person in the first place. That means, persons are always necessarily persons, and there will be no condition in which persons fail to be persons. In such a case, the Psychological Approach would fail to account for the identity conditions of persons who might have gaps between their psychological states, or between mental contents, such as memories, beliefs, and desires. Namely, there could be a lack of continuity that is necessary and sufficient for being the same person through time, according to the psychological approach. The Lockean account also fails because the being in question cannot be a person that conflicts with the premises of the Lockean view. According to Olson, Locke claims that "any rational, self-conscious moral agent is a person; in this sense nothing could fail to be a person merely because of its historical or modal properties."[361] Olson claims, strictly speaking, that

> The Conjunction of the Psychological Approach and the Lockean Account, then, entails that every rational, self-conscious being must persist through time by virtue of psychological continuity. No such being could survive as a vegetable, or fail to go along with its cerebrum when that organ is transplanted.[362]

In order to avoid confusion here, Olson secures his account of the persistence of identity by claiming that the cerebrum alone is the central and exclusive feature that controls one's thoughts, memories and consciousness. Olson's biological approach neglects the remaining parts of the body in

[361] Olson (1997a) p. 108.
[362] Olson (1997a) p. 105.

order to isolate the functioning brainstem as the main principle of personal identity. Since as I highlighted already, for him, the brainstem is the cause of all vital functions and keeps the body alive through time.

There are two implications of Olson's reductionist approach. Firstly, from the hybrid point of view, animalism fails to capture the notion of the persistence conditions of our identity in some respects. For instance, an animalist believes that in some cases a person does survive, where the notion of our persistence cannot survive after change or alteration. In the same vein, there are cases where a person does not survive, where the notion of our persistence can survive after change and alteration. Let us say Socrates' cerebrum[363] is removed and transplanted into Callias' body, where it is properly connected without losing any of its proper function, and the remainder of Socrates' body (that also includes the remaining parts of his brain) are destroyed. Based on the basic interpretation of transplant cases, one could claim that Socrates partly survives. Since certain parts of his identity –such as initiating voluntary movements, reasoning and intelligence – is continuous with Callias' identity, where Socrates' cerebrum was transplanted. Yet, Socrates' identity will be constituted by Callias' identity. According to animalism, regardless whether Socrates' cerebrum is functional and intact in another body, he died when his brainstem ceased to existed.[364] A second conflict regarding the persistence conditions of identity occurs where the cerebrum is still functioning and healthy, while the brainstem is replaced with another brainstem or ceases to exist. According to animalism in those cases the individual dies.

Nevertheless, our reasoning in this thesis is based on the hybrid view of identity, in which we assume that an individual's identity remains continuous with individual through time. This is because, if the cerebrum is the obvious candidate for interpretation, initiating voluntary movements, reasoning, intelligence and so on (which could continue to occur in cases such as the replacement of the brainstem), one's conscious states would be effected along with one's basic bodily functions (breathing, heart rate, etc.).

[363] It even may be the whole brain is transplanted.
[364] Olson (1997a) p. 142.

As a result, one may have gaps in some of one's mental states. What I want to point out here is that Olson's animalist concern is rather biological, and there is a strong emphasis on the notion of basic bodily functions compared to states of consciousness. If animalism's concern is purely about the brain's function in identity claims, in the latter example, the healthy cerebrum continues to execute its functions as before. The results I drawn from these cases are not philosophically controversial, and are in some ways coincide with our reasoning.

Animalism claims that in some transplant cases, an individual's identity persists, even though the hybrid intuition considers the individual to cease to exist. For example, if Socrates' brainstem was removed from his head, and the rest of his body and brain were destroyed, then quite naturally, we would tend to think that he would not survive, which indeed is the case according to the hybrid view. Given the fact that his brainstem is undamaged, on the animalist view, we do not need any further evidence to prove that his identity still persists.[365] This being said, certain parts of a body are crucial for the survival of that a body in the same way that a brainstem is. The same reasoning applies to the transplantation of other organs as well. For instance, if *x*'s kidney is transplanted into *y*'s body after *x*'s death, this transplantation would be evidence of *x*'s kidneys continued existence, and thus of x's identity. In this regard, it is fair to say that the brainstem does have the sort of significance that other organs have for the body. It is simply a part of the composite that is separable from the body, and if it is transplanted into another body, it may operate it did in the original body. From the hybrid point of view, after the transplantation takes

[365] The brainstem discussion is something that I think Olson struggles to explain in the first place. In his paper "*The Role of the Brainstem in Personal Identity*" (Olson; 2016) he tries to clarify the misunderstanding over his claims about the role of the brainstem. Olson explicitly states two major statements about the role of the brainstem in defining persistence conditions: (i) There cannot be a human life unless there is a functioning organ of maintenance caught up in that life. (ii) The organ of maintenance in human beings is the brainstem. (p. 293) In his respond to Tzinman's criticism, after highlighting that we are the same animals as long as we have the same brainstem, he immediately suggests in brackets "Let's not worry about whether this would require a criterion of identity for brainstems." (p. 293) This line of argument is extremely confusing. On the one hand, Olson offers reducing persistence condition to the continuity of the brainstem. On the other hand, he suggests that our concern should be the brainstem itself in the context, not the continuity of it.

place it does not guaranteed that the individual's identity persists. Whereas Animalism claims the exact opposite: If one's brainstem is still operating, it continues to bear one's personal identity.

As is already clear, the hybrid view hinges on the fact that animalism and other kinds of biological approach are quite narrow in marshalling support due to eliminating the role of psychological traits all together. In his recent paper, Olson admits the defect observed in his treatment of transplant cases:

> I said other things about animal identity that may support the brainstem condition. But never mind: it appears that I was wrong to connect the brainstem with the continuation of a human life in the first place. The neurologist Alan Shewmon argues against [the statement "There cannot be a human life unless there is a functioning organ of maintenance caught up in that life", and "The organ of maintenance in human beings is the brainstem"]. First, he says, the brainstem is not the organ of maintenance in human beings – or not the only one. It does direct basic life-sustaining functions, but other organs do too. The brainstem is just one of several organs of maintenance.[366]

Olson eventually admitted that we must include life-depending organs into our ontology not as particulars, but in a more holistic manner. However, this concession was mainly the result of his larger biological approach, which is subject to alteration as long as the mysteries of the brain are fully resolved.

There is a crucial distinction here, which animalism seems to avoid accepting due to it's a broad reasoning. An individual's identity still continues to persist in such cases where the individual's brainstem is removed and placed into another body and the rest of her body is destroyed. It is true that a human animal can remain alive, yet the identity of the individual cannot persist. I will discuss the notion of transplant cases in the following sections more extensively. However, introducing this short critique of animalism seems informative here. The short critique can act as a guideline for later critiques, and I shall now denote the reasoning behind Olson's discussion of human animals, persons, and the continuity of identity, by which he presents a valuable interpretation of the relationship

[366] Olson (2016) p. 295.

between a person's identity and biological nature. His biological considerations serve as the guarantor of physical continuity. There are some major differences we can detect between Olson's animalist approach and the hylomorphic notion of the hybrid view I have been suggesting. Firstly, nowhere does Olson allow the idea of an internal cause that governs an organism's function, something that gives necessary and sufficient reasons to control the human animals' biological processes.[367]

What seems to emerge here, quite frankly, is that for Olson, organisms respond to their environment in a mechanistic manner, which leaves us with the claim that just like any other living organism, human animals are regulated by a governing mechanism. His reductionist physicalist approach is the subject of considerable dispute concerning whether human activities are governed by the complex mechanistic nature of the human organism or rather there is something more substantive that is explainable along with the biological phenomenon. Secondly, and most importantly, Olson leaves open the possibility of situations in which a person does not always persist as a person. Each person starts existing as an unthinking embryo and could be in a vegetative state later in life, and he adds, we do not count them as persons at those times.[368] An unthinking embryo could be a person potentially in the future, but apparently not a person in its fetus stage, or a human being in vegetative state could be a person in her early life, up until her required brain functions stopped processing. By contrast, from the hylomorphic point of view, fetuses are potentially persons, and we can apply the same relation in a chronologically reversed version[369] to someone in a vegetative state. Accordingly, persons could be in a vegetative state at later stages of their lives, yet this state would not mean that a person ceases to exist when she is in a vegetative state. Olson does not directly claim that persons cease to exist in a

[367]In the Aristotelian terms the actuality of form governs primary matter as a cause and principle.
[368] Olson (1997b); (2012).
[369]A quick reminder is needed here. The relation between potentiality and actuality is irreversible in nature. What I meant by "the same relation in reversed version" is that any person can be in a vegetative state in their later life. This is definitely out of her teleological context.

vegetative state, but he sees the continuity relation in a vegetative state as less persistent as in the transplant cases.[370] A substantial amount of work has been dedicated to responding to Olson's challenge to the sychological approach[371], and Lynne Rudder Baker offers a significant argument that has offered a methodological contribution to the neo-Lockean approach while accommodating our animal nature.

4.1.2 Baker on the Constitution View of Human Persons: First-Person Perspective

In her defence of the psychological approach, Baker addresses the difficulties in Olson's method of explaining persons as numerically identical to human animals.[372] For her, persons are definable only through certain psychological capacities, and these capacities are necessary and sufficient to explain the persistence conditions of persons. The relationship between person and body is not contingent, as in Cartesian dualism, nor necessary and sufficient as in Olson's animalism, but only constitutional. In other words, the identity of a human being is more complex and substantial than can be represented by reducing the persistence conditions to mere biological continuity conditions. Rather than referring to persons as human animals in biological terms, she states that all persons are human beings, and it is likewise from the biological perspective that all human beings are persons. Therefore, human bodies constitute – but are not identical with – persons, without being numerically identical to them:[373] "We are constituted by human animals, and when we say truly that we are human animals, we are using 'is' in the sense of constitution."[374] Baker gives an example elsewhere

[370] Olson (1997b), p. 109.
[371] Parfit (2012); Shoemaker (2008).
[372] For Baker's response to Olson see Baker (2001).
[373] Baker (1999) p.154; (2000) p. 7; (2007) p.67.
[374] Baker (1999), p. 57. Here, Baker clearly implies that we are animals. Therefore, quite naturally, we can conclude that having the same body through time is not a necessary condition. However, her constitution view underlines the idea that if persons are constituted by human animals, then persons can be regarded as human animals. It seems like Baker is suggesting a difference between a person's persistence conditions and those of human animals'. In other words, it is plausible to imagine a case where, if my first-person perspective is transferred to a sort of non-human organism, so to speak, a robot, then I would still exist regardless of not being constituted by a body or a human animal.

to make her assumption as clear as possible:

> A river at any moment is constituted by an aggregate of water molecules. But the river is not identical to the aggregate of water molecules that constitutes it at that moment. Since one and the same river—call it "R"—is constituted by different aggregates of molecules at different times, the river is not identical to any of the aggregates of water molecules that make it up. So, constitution is not identity. Another way to see that constitution is not identity is to notice that even if an aggregate of molecules, A1, actually constitutes R at t1, R might have been constituted by a different aggregate of molecules, A2, at t1. So, constitution is a relation that is in some ways similar to identity, but is not actually identity. If the relation between a person and her body is constitution, then a person is not identical to her body.[375]

This is what she calls "the constitution view". It is reduced to a "first-person perspective", which is, Baker insists, not a version of the psychological approach.[376] Accordingly, the formulation of continuity is " x at t_1 is the same person with y at t_2 iff x and y share the same first-person perspective".[377] Baker's version of the neo-Lockean answer to the question "What are the persistence conditions of person?" is straightforward: Having a first-person perspective, namely, self-consciousness. That means the principle of continuity is a first-person perspective. Here is how Baker states what she thinks the notion of first-person perspective is:

> A human person comes into existence when a human organism develops to the point that its brain can support a first-person perspective. To have a first-person perspective is not a matter of having a brain in a certain state. To have a first-person perspective is to have a conceptual ability; to exercise a first-person perspective is to exercise a conceptual ability. This conceptual ability is the ability to think of (conceive of) oneself as oneself. And it is an ability had by a person, not by a brain. A sufficiently developed brain is a materially necessary condition for having this ability.[378]

This is something that all human beings have in common, yet each human being has their perspective for themselves, such as I have the perspective of myself in a unique way and others have the perspective of themselves in the

[375] Baker (2004) pp. 99-100.
[376] Baker, (2000), p. 59; (1999), p. 154.
[377] Baker (2000), p. 132.
[378] Baker (2001) p.1.

same respect. In this way, persons are identified only with a particular perspective.[379] As she puts it elsewhere, "A person is a being with a first-person perspective essentially, who persists as long as her first-person perspective is exemplified."[380]

How do we know whether the first-person perspective is persistent or not, however? Baker claims that the essentiality of first-person perspective enables us to be aware of our existence. If we are having an experience, then there is no doubt that first-person perspective is involved in the process. It is impossible to think of any experience (both self-perception and outer experience) without the underlying feature of a first-person perspective, which is a transcendental apperception. In that sense, Baker would insist that the persistence of our first-person perspective is unquestionable, because having any sort of experience requires existence, and if I exist, adds Baker – like Descartes famously expresses "*cogito ergo sum"* – I have a first-person perspective that is unique to my being.

Even though a person is constituted by a human animal, as a subject of her thoughts, she can still think of herself as a human animal from a first-person perspective; yet, Baker suggests, there is no ontologically differentiated notion of a subject – something like a further fact or separate entity – underneath her first-person perspective. Her "self" is her body. Thus, "the relation between a person and her body is an instance of a very general relation",[381] which is simply a constitution. The human body

[379] The ontological nature of the explanation here can be derived from the distinction between a first-person perspective and a third-person perspective. I can describe myself by using identity terms about my race, age, physical features, which all explicitly distinguish me from other persons. I can also describe myself by only using the term "I", which indicates my first-person perspective. Apparently, other persons cannot use the term "I" to describe me. For instance, if I express, "I am feeling very well today", I have the authority to use the way describing myself, and there is no physical explanation that could be used. This authority of a first-person case is built into persons. It is not hard to see that this is also applicable to other type of human relations. Once we understand this notion, the relation between the self and the other escalates the explanation out of the biological realm. Baker gives a confirmatory example: "What one thinks from a first-person perspective cannot be adequately translated into third-person terms. To wonder how I will die is not the same as wondering how Lynne Baker will die, even though I am Lynne Baker. This is so, because I could wonder how I will die even if I had amnesia and didn't know who I was." Baker (2007), p. 69.

[380] Baker (2013) p. 149.

[381] Baker, (2000) p. 27.

constitutes the human person, Baker argues, "If *x* constitutes *y* at any time, then [strictly speaking] *x* is not identical to *y*."[382] As is perhaps already clear, this notion clearly reduces the constitution view to a sort of materialism, even though Baker claims that our brains are not sufficient for identifying the persistence conditions of personal identity.

The constitution view can agree with substance dualism up to a certain degree without suggesting the idea of immaterial souls.[383] The constitution view and substance dualism agree on the questions of whether a person is identical to her body and whether person can survive after a drastic change in her body. However, the explanation of the non-identity of person and body, and the way one interprets the possibility of swapping bodies or brain transplants in thought experiments diverge. I still argue that constitutionalism can be seen as a form of materialism. As Baker acknowledges, for those who are skeptical about the argument in favour of the view that persons are not identical to their bodies, we can claim that "although it may be empirically impossible for me to have a complete change of body, the constitution view raises no theoretical barrier to a human person's having a complete change of body."[384] We can only assure that unlike Olson, Baker is more accurate in elucidating the relation between complex psychological capacities and the human body. Baker claims that we have an immediate relation to our body. There is no temporal gap between physical occurrences of any pain or pleasure in our thoughts and our first-person perspective of these emotions and thoughts. We are, of course, the subjects of our thoughts, emotions, and the reflection of intentional states, yet Baker argues, only in the sense that we have the first-person perspective of our body. The relation between persons and their bodies is not contingent. Persons are enduring entities regardless of changes in their bodies – as long as the change is not drastic, such as loss of imperative bodily parts. However, it is also conceivable, Baker adds, that as long as a person has a continuous first-person perspective of herself and is

[382] Baker, (2000) p. 217.
[383] Baker, (2000) p. 217.
[384] Baker, (2000) p. 218.

embodied in an organism, in cases like body-switching or teleportation – such as in Locke's thought experiment of the prince and the cobbler – are convincingly intelligible.[385]

The constitution view uses more modernised version of Locke's thought experiment. In Locke's example, the soul (in contemporary terms, the consciousness) of the prince enters the body of the cobbler. Now, if we suppose that not only does consciousness move between bodies, but that they swap their brains too, the brain of the prince is in the body of the cobbler, and vice versa. In such a case, the person in the prince's body holds all conscious states (e.g., thoughts, beliefs, and memories) of the cobbler, and vice versa. It is commonly held that the prince and the cobbler have swapped bodies. If we take this position into account, Baker claims, both the identity of the prince and the cobbler have continued through the process, even though there was no bodily continuity for either the prince or the cobbler in their original bodies. It is true that they both still have bodies, but they are distinct from their original bodies. The term "continuance" here indicates some sort of continuing life. In this case, the continuance of the prince's body is the continuing life of two persons. So, we can also conclude that before the brain swap, the prince's life was only unique to him, but after the brain swap occurs, it is now the life of the cobbler. The same applies to the cobbler's body. In that sense, the following reasoning seems plausible for Baker: (i) If it is possible for the prince and the cobbler to persist in different bodies separated from their original ones, then there is clearly no continuance between bodies after the swap has occurred, (ii) Bodily continuance is not necessary for the persistence of personhood. (iii) Therefore, the identity conditions for persons are different when we take only those bodies alone into account, and it is possible for a person to exist in different bodies at different times.

I have already pointed out in Chapter 1 what kinds of difficulties appear in reducing the continuity of persons to psychological continuity conditions. In Baker's case the psychological continuity condition is the continuity of a first-person perspective. If we have a direct relationship to our body, as

[385] Baker, (2000) p. 141.

Baker suggests, the extent to which the particularity of one's body – "thisness"– is a necessary and sufficient condition for the persistence of one's identity remains ambiguous.

Baker seems as if she does not credit to any means of biological continuity, but what matters in her approach is embodiment. As long as our first-person perspective is embodied in a living organism, our identity remains determinable. Yet this account does not rule out the fact that persons are ontologically prior to the material world. By being material entities, persons are part of the natural world, but on the ontological level persons are of course different from animals. Hence, suggests Baker, personal identity cannot be reduced to the continuity of human animals.

Baker's reductionist approach leaves us with a mystery concerning how on the one hand persistence conditions are not reducible to physical conditions of body or brain. On the other hand, we have a direct relation to our bodies, in which, Baker claims, our first-person perspective has been developed and shaped. Nevertheless, my first-person perspective inevitably depends on my brain to function properly. So in that sense, her account struggles to show that a first-person perspective is more than a higher-order property of the brain. This is a constitutive relationship between brain and personal identity that inevitably bears some similarities with the biological continuity view of identity.

4.2 Was I Ever a Fetus?

Baker explicitly claims that there is no so-called "further fact" underlying our first-person perspective. What's more, in Baker's psychological approach, having a self-awareness is not a necessary condition for a human to be a person in its early stages of existence. Hence, our perspective about ourselves gradually comes into place. Undoubtedly, having a first-person perspective must be accompanied by more complex psychological states to merit the status of personhood[386] and this criterion even applies to newborn babies unavoidably. Specifically, Baker confronts this criterion and adds that newborns do not have a first-person perspective. They cannot grasp

[386] Baker, (2000) pp. 60–64.

their selves and the complexity of their psychological status, but they are potentially persons and remain in the process of developing a first-person perspective.[387] If this is the case, then, A at t_1 was an embryo and now A at t_2 is an adult human being, and A at t_1 is constituted by A at t_2. Although Baker admits newborns are potentially persons, she still insists that we cannot employ the same potentiality principle to fetuses, as they lack psychological properties entirely. According to her, "we do, in the ordinary course of life, regard fetuses and adolescents as different kinds of things. From the point of view of common sense, there is a deep logical difference between being a fetus and being an adolescent."[388] She adds elsewhere that "A human person is wholly constituted by a human organism, without being identical to the constituting organism."[389]

It is tempting to question Baker's argument here: What is the relationship between the person as an early form of fetus and the same being as a newborn, and eventually an adult in their later life? Baker could employ the same potentiality principle for fetuses as she does for newborns. Since after all, all fetuses (more accurately in their later stages) are potentially newborns, so far as all newborns are potentially persons. In her definition of the constitution view, Baker defends her account against Olson's claim, in which Olson shows that some philosophical problems occur with the theory by which a person is not numerically identical to herself when she was ever a fetus in its early term. The constitution view affirms that an early-term fetus continues to develop until it constitutes a person, so basically nothing happens to the organism that was ever a fetus. The fetus does not cease to exist, but that there is no evidence (or any philosophical strength) in embryology that shows an embryo and adult person are numerically identical. Since, there is no causal relationship (a causal relationship between psychological states) between a fetus and a first-person perspective that this fetus will potentially develop in its adolescent life.

The advantage of the hybrid view I defend for the fetus problem – and for the vegetative state case – is that by defending either sides of the

[387] Baker, (2000) p. 92.
[388] Baker (1999) p. 156.
[389] Baker (2005), p. 27.

explanation exclusively, both animalists and neo-Lockeans commit to the claim that neither was I once a fetus, nor before that was I an embryo – and if someone is in a vegetative state now she is not the same person as she was once. By adopting the hybrid unity and bringing the process of becoming actuality into the debate, we will be able to avoid the complications that the contemporary debate has created over the issue of persistence.

For the sake of maintaining a plausible principle, let's suppose that I was once a fetus, and all this development happens from being an embryo into being a fetus, then after birth into being an infant, then into a toddler, and so on. The principle out of this supposition follows that if an organism was once existed, it has never ceased to exist, so the organism still exists. Someone who supposes that a human being can exist once and not exist at a later time, without having ceased to exist in between, is beyond the reach of argument. The crucial question we should ask now is: Have I as an embryo ever died? This is a question to which the biologists can tell us the answer. My cells have divided, differentiated, and developed further. Nowhere in the continuous history have we seen anything we could identify as death or non-existence. In fact, the whole process is the very opposite of the process of death, but a process of growth. That embryo that was conceived nine months before my birth never died. It is true that it ceased to be an embryo, and at the end of the nine months (more or less) it ceased to be a fetus. This process is nothing like a death, but rather passing from one phase sortal to another, something like what Wiggins explains when he suggests the unity of an individual within the causal relationship between phase sortal and substance sortal. Passing from childhood to adolescence, or from adolescence to adulthood, by realising the same principle of activity, Wiggins assures, the fetus is identical to the adult it will later become. According to Wiggins, the principle of activity becomes realised at the moment of a human being is exist. It is when the zygote splits or settles down to develop as a unity.[390]

From the hybrid view's perspective, it also does not seem credible to say "fetus me and the adult me are not numerically identical". Since we can

[390] Wiggins (2001) p. 239.

easily establish the following line of reasoning by recalling the notion of becoming:

(i) I was fetus F at t_1,

(ii) F successfully *became* an adult-me A at t_2,

(iii) F became A, only if there was no significant interruption through my lifetime between t_1 and t_2.

(iv) F became A *in virtue of* F being potentially A.

(v) Thus, there is no good reason to reject the idea that F at t_1 is numerically identical with A at t_2, even though there is no causal relationship between F and the first-person perspective of A.

Hence, the main feature of identity is nothing more than the relationship between being a fetus once and an adult later in life. Here, I would like to borrow the reasoning of becoming. If we say that adult-me[391] comes from the fetus that I was once, then adult-me is something "which has come to be from that which is coming to be". This is the basic form of becoming. Fetus-me becomes an adult-me, and in the same vein, fetus-me is potentially the adult me, in which the persistence condition is preserved through time. It is certainly true that adult-me has the psychological continuity conditions, in which the unity of the first-person perspective is perfectly attainable. Nevertheless, fetus-me cannot be me entirely and does not have the biological development that human beings accomplish. Yet, these inabilities do not make fetus-me F less me than adult-me A, even though I have no psychological connectedness to my being as a fetus F. The potentiality relation is applicable to all stages without exception. Presumably, A at t_2 differs from F at t_1 not only in terms of psychological features, but in countless other qualities, such as physical features and the capacity to reason. In the light of these differences, one may question, How can enduring person A gain properties both in psychological and biological terms? There are many ways and causes persons gain and loose properties. For now, we can see clearly from the above example that there is no good reason for us to accept that F is not numerically identical to A, as F and A

[391] Subject "me" I argue here represents a conscious being, who attains a first-person perspective that Baker initialises as the criterion of identity.

can be diachronically identical. We can suppose that there are necessary and sufficient reasons to believe that fetus-me F *has become* adult-me A. There is no evidence to support the claim that fetus-me has become adult person B or adult person C. And again, there is no reason against to believe that fetus-me F has become adult-me A, but not otherwise. This feature does not rule out the possibility that F and A are numerically identical.

Now, if we take the view that identity consists only in having a first-person perspective at different times, then the result is noticeably circular, since the persistence condition of a person is defined neither by the biological view nor by psychological connectedness. Baker's suggestion that "to have a persistent identity is just to have a first-person perspective" seems fairly reasonable, but why is a first-person perspective the only persistence condition to consider is not completely clear. I believe she was also aware that what is needed here is a proper criterion for diachronic and numerical identity, one that appears to justify the identity relation of F at t_1 and A at t_2. I think both Olson and Baker's accounts on their own fail to bounce back from criticism. Fortunately, the notion of personal identity can be approached through the middle way.

It has already been pointed out in the previous chapter that the hybrid view is capable of reducing the identity relation into the formulation of *"x* is potentially *y*", which provides a criterion for diachronic and numerical identity. This basic formulation causally relates the single entity F at t_1 to A at t_2 without any condition. The identity criterion I offer here is based on an account that takes the identity relation as non-circular, definite, informative and fixed with no further requirements. I now identify the modes of non-reductionism and how other non-reductionist accounts treat problems of personal identity, along with the benefits of the hybrid view I have defended in comparison to other approaches to non-reductionist accounts.

4.3 Modes of Non-Reductionism and How Non-Reductionist Accounts Treat Persistence

By characterising the identity conditions within the scope of animalism and

the constitution view, we have come to the conclusion that the hybrid view offers a plausible third way to address a theory that embraces the idea that we are persons embodied in particular bodies with first-person perspectives. It is an adequate way of comprising the aspects of Animalism and the constitution view. Hylomorphism demonstrates a model, which harmonises these two approaches and gives room to both the physical and psychological states of persons, and initiates the hybrid way of understanding human nature. Accordingly, a person is not only a composite of two substances – as claimed in substance dualism – or a mere animal. Hylomorphism understands the term "human being" as one-individuated substance. From the non-reductionist perspective and based on the hylomorphic account of a person, the hybrid view has the unity of a first-person perspective and a living animal body, yet the identity conditions cannot be reducible to any of these notions alone. Regardless of whether we are human animals, human beings, or human persons, only one condition applies to the persistence condition: Essentially, persons cannot be reducible to their accidental properties, or their psychological states, but persons are identical to each of these features in a simple hybrid way, and identity itself is non-reducible. Now, I would like to consider different modes of non-reductionism, which afford a conclusion concerning the plausibility of the hybrid view of identity, which in return justifies the hypothesis of this project.

The first mode of non-reductionist accounts I would like to examine adopts the idea of being entities, in which the identity conditions can exist separate from bodies, brains and psychological continuance. The most well-known example of this non-reductionist account of identity, which was already discussed in Chapter 1, was Cartesian dualism. I take the Cartesian dualism here to be non-reductionist, only because Descartes did not reduce the identity conditions of a person to a material entity, nor he did not reduce the identity conditions to the psychological continuity, as Locke does. Cartesian dualism considers persons as mental and separate entities. The continued identity of a person either exists or not. Persons' continuity conditions through time are not determined by physical or psychological continuity. This is to say, the persistence condition of our identity is

accountable only if these conditions are non-reducible. Other possibilities have already faced the difficulties set by non-reductionist approaches, providing that non-reductionism is more acceptable.[392]

Now let's suppose that we are persons but some sort of separate entities from our bodies and brains, something like a Cartesian ego. Hence, persons are distinct from their brains or bodies, and particularly from their psychological states, and the persistence conditions of their identities are not ruled out by any of these strands. Accordingly, the identity formulation of the separate entity view is "*x* is at t_1 is continuous with *y* at t_2 iff they have the same Ego through time." With this definition in the background, we can assume that physical continuity and psychological continuity are neither necessary nor sufficient for a person's persistence. Just like any other non-reductionist view, the advantage of this view is significant if we take split-brain or brain transplant cases into account. Because when we split A's brain and put one half into B's body and the other half stays in A's body, we suppose that each half can perfectly contain A's original mental properties, such as thoughts, beliefs, memory, and so on, both bodies claim to be A by having A's psychological continuity. In such a case, not only will both A and B be psychologically continuous with A's pre-operation self, but also A and B will be materially continuous with A, as they both have half of A's brain.

This scenario, in which A has become A and B after the operation, is problematic for any reductionist account, as well as animalism and the constitution view. Since two hemispheres cannot be identical, A-before-the-operation cannot be identical with A and B-after-the operation. The non-reductionist notion of the Cartesian ego has a definite attitude for thought experiments, does not allow personal identity to split between the two at the same time and does not allow both resulting people to possess the mental qualities of the original person has before the split operation. Wherever the Ego goes, so too does the identity of the person. The Ego can only move from one body to another, but not split into two. The case is the same for

[392] These views differ in their claim about what persons are. But most of them favor the idea that persons are sort of non-material entity, something more like a soul or spirit.

transplant cases. The Ego is the bearer of the identity, which means if the Ego ceases to exist, then the personal identity ceases to exist as well, and therefore cannot be split into two.

By and large, these remarks about the Cartesian ego conclude that it accommodates our own continuity through time. Nonetheless, there is no evidence to show that personal identity behaves in the way Cartesians suggest. Not only do we have no reason to believe that persons have the same Ego throughout their lifetimes, but also we are left without a justification for the transplant cases in which an identity switches bodies. What happens in transplant cases and how personal identity shifts between bodies cannot be explained, and it prompts a circular reasoning. The question of how this separate entity responds to different problems of personal identity remains unanswered. One has to face this remarkable weakness if she favours the non-reductionist separate entity view of identity.

Another possibility for the non-reductionist claim I would like to examine is the further fact view. I earlier mentioned the possibility of a further fact, and in order to offer a subtler explanation, I left the examination of such a possibility to following chapters. What I meant in the first chapter by stating that personal identity can be explained by a further fact was that the persistence condition of identity needs a further fact, which is, strictly speaking, not reducible to any of the identity claims, such as the biological view or the psychological view.

One can still claim that the persistence conditions of identity consist in a further fact. As Parfit states, according to this view, we are not "separately existing" entities, but personal identity is a further fact, which consists not only in physical or psychological continuity.[393] The view is followed by some non-reductionists and denied by the reductionist view. Personal identity is not consisting in the holding of any other more particular facts which can be described impersonally, but personal identity is simply a further fact. This notion of identity does not require our identity to be distinct from our bodies. On the contrary, our identity conditions are

[393] Parfit (1984), p. 210.

always determinable and compatible with persistence conditions.[394] If this is possible, it is hard to see any reason why we could not consider the possibility of a further fact that underlies our identity conditions. However, difficult to conceive how one might be suspicious of the fact that there is a lack of evidence to support the further fact view that non-reductionism offers. Undoubtedly, the further fact intuition is required to provide appealing reasoning in order to tackle hypothetical cases of personal identity without committing circularity. The further fact intuition is also unsatisfactory. I think the sophisticated puzzle in question is raises an issue for the further fact view, similar to the issue I have examined in the separate entity view.

4.4 Defending the Hybrid View as It Addresses Cases of Personal Identity

4.4.1 Everyday Cases of Persistence

Endless examples can be constructed for this section, as these types of cases are related to everyday experience. I consider two main examples here, though: dementia and Alzheimer's disease, and the fetus problem the latter of which has been considered already in section 4.1.3. When we look at the fetus puzzle again, it should be a practically undisputed point that there is no simple solution to the fetus puzzle at hand for neither reductionist nor non-reductionist accounts can provide. What I suggest in this project is the simplest way to get a plausible result for this puzzle, which is first to be more flexible when it comes to the indiscernibility of identicals.[395] Accordingly, if fetus-me F once was me, and is numerically identical to adult-me A, then for every property P, fetus-me F has the property P iff adult-me A has the same property. This property, or the unity of properties,

[394] Parfit (1982), p. 227.

[395] This is one of the fundamental principles of personal identity that has been pointed out by Leibniz. Accordingly, two distinct objects cannot have the same properties. In that sense, these two objects must hold at least one differentiating feature between them. However, if there is a case where these objects cannot be differentiated in any way, then they must be identical. For the purpose of the subject we are dealing about the fetus puzzle here, counting fetus-me F and adult-me A as two distinct beings hardly does us any good if we have any interest in figuring out the principle of persistence.

persists through time, even from the very early stages of my existence to later periods of my being. In this particular example, however, there are neither physical nor psychological properties, or the unity of these properties, would persist from t_1 to t_2. Nevertheless, the hybrid formulation I propose here shows that F is potentially A through its life time without a gap, and this reasoning fits well with hylomorphism. The solution I offer for this puzzle is a neither reductionist nor "narrow" or "weak" form of non-reductionism, rather it is a form of hylomorphism. The lay out of the hybrid view's proposal for this particular example goes as follows:

First, we take our initial Aristotelian premise,

(i) Fetus-me F is potentially adult-me A without a gap through my lifetime,

and apply the formulation "A is potentially B" to each predicate:

(ii) F is *potentially* psychologically continuous with A, even though there is no direct causal relation between F and A's psychological stages,

(iii) F is *potentially* biologically continuous with A, and

(iv) F's *potential* psychological continuity with A is *in virtue of* F's *potential* biological continuity with A.

The reasoning I propose above is the foundation of the hybrid view and this view requires predicates (ii), (iii), and (iv) all together without any exception. The hybrid view's reasoning focuses on the problem generated by both reductionist and non-reductionist accounts of identity. The hybrid view is not only non-reductionist, but also claims that psychological continuity of identity is only accountable *in virtue of* biological continuity.[396] The hybrid notion of identity and persistence is perhaps most helpfully clarified in defending the idea that psychological continuity is in unity with physical parts. Namely, psychological connectedness is *grounded* in physical connectedness. In this regard, Olson was right to cite the cerebrum (or whatever part of the brain is responsible for the life-

[396] As I have pointed out in Chapter 3, the use of "in virtue of" does not add extra value to physical continuity, as it is the mere principle of identity, but just as a necessary part of explaining the unity of personal identity.

maintaining functions) at the centre of psychology, which is the case regardless of whether changes occur in other body parts. As long as there is no damage in the cerebrum, the unity of identity and persistence is secured.

Now, I will claim that the same adaptableness eliminates difficulties resulting from both the psychological and biological views of reductionist persistence conditions. I have already mentioned in previous chapters that the psychological continuity view requires transitivity in psychological connectedness, which is only ideal in theory, yet it is hard to see how it can be applicable to our practical life. When we talk about psychological connectedness, it is either strong, short-term connectedness, or long-term connectedness, such as happens over many years or even a lifetime. We know that our psychological states cannot be connected to each other strongly through our lifetime, which means even overlapping continuity would be sufficient for the person at t_1 to be psychologically continuous as the same person at t_2. Hence, there will be no strong connectedness between psychological states of a person through distinct periods of life.

The same understanding applies to the notion of the strong physical connectedness of a person, which consists of having approximately the same matter with a strong physical connectedness. Unless there is an interruptive disturbance occurring within a short period of time, we are physically continuous beings. For instance, I have a strong physical connectedness between my yesterday-body – or even two days ago – and my now-body. That means, I will have a strong physical connectedness to myself at different times within a short period of time. However, just as in the fetus-adult example, even if adult-me shares some physical features with fetus-me, such as having exactly the same DNA structure, the same blood type, and so on, it is also unquestionable that fetus-me F does not stand in a strong physical connectedness with adult-me A. Physical connectedness here, in terms of a body, is extremely low, yet the entity of which I consisted of when I was a fetus was *potentially* adult-me, and that connection reveals a great deal to justify the physical continuity between my being at vastly different periods of time.

Note that in this specific example, how much physical connectedness

and continuity are required for identity to persist through time is variable, and can present tight or loose connections. Admittedly, where personal identity begins in human life is not always clear, and there is this controversy regarding where precisely to draw the line. We often – in no philosophically complex way – recognise that our lives have a progressive feature. What I argue here is that regardless of the degree of physical connectedness through time, psychological continuity for identity has been secured, since the persistence conditions of a person are not limited to physical connectedness alone. This flexibility is the distinctive advantage of the hybrid view, in which both necessary biological and psychological conditions are united in the same person through time. The person A is the same being at t_1 and t_2, and A's identity persists through time as the same person iff A at t_1 is psychologically continuous with A at t_2 *in virtue of* being physically continuous with A at t_2. This formulation in the background, the hybrid view fits well with our everyday-life ordinary cases.

Another obvious example of an everyday case is related to suffering degenerative brain disorders, such as dementia and Alzheimer's disease. In these examples, the disease progresses by developing from short-term memory impairment to further memory loss. At first glance, there will be no difference in a patient's biological continuity. In further stages of the disease, psychological connectedness can no longer be fully accountable. May one claim that "personhood" ceases to exist, she is no longer accountable[397] as the same person, since she lacks the psychological connectedness (which represents a lack of connectedness in memory traits or a complete memory loss in cases of dementia and Alzheimer's disease) that the hybrid unity of identity requires?

Undoubtedly, memory is a fundamental component of one's identity traits and we should have a clear understanding of the notion of memory we are taking into account while we are considering the cases, such as dementia and Alzheimer's disease.[398] A neuroscientist Squire[399] has divided memory

[397] Accountability in identity is a forensic concept within the grounds of moral agency, and more substantial research should be dedicated to this single subject alone.
[398] Jungert (2017) p. 8–9.
[399] Squire (2004), pp. 171–177.

into two classes as declarative memory and non-declarative memory, and declarative memory has been divided into two categories as semantic memory and episodic memory. Squire identifies declarative memory as a capacity of which we consciously re-call about facts and events. Whereas, non-declarative memory represents traits that are categorised through performance, such as skills and habits.[400] The subdivision of declarative memory as semantic and episodic memory is within the concern of this paper. Semantic memory stands as a conceptual knowledge in which personality traits may or may not be represented, such as knowing capital cities, different types of food, function of tools, and so on. Whereas, episodic memory is event-based and is derived from lived experience and manifests itself as autobiographical memory with emotional attributes, which, in total, characterises the narrative of identity within a first-person perspective (a sense of subjective continuity of the self).

For a neuroscientist Davis[401], in the case of an amnestic disorder patients lose their sense of self, and this idea of loss could cause a disintegration. On the contrary, there are case studies[402] prove that even in the most severe cases of episodic memory loss, patients who are at the mild to moderate stage of dementia could still retain a sense of self-continuity through preserved knowledge about their personal traits and preferences.[403] Regardless of the common assumption – without memory there can be no self – [404] some neuroscientists suggest that to a certain degree, aspects of a persistent identity remain present even in the face of severe episodic memory impairment.[405]

Moving forward from the above discussion, we can conclude that a person with dementia or Alzheimer's disease will be only qualitatively different, but numerically the same person, in theory. Numerical identity is a worthy concern here, because it is the main requirement of the continuity of personal identity. We cannot regard psychological continuity as a qualitative

[400] Squire (2004), pp. 173.
[401] Davis (2004).
[402] Brown, C. H., Grillid, M. D., Hannad, J. A., Irisha, M. (2019), p. 4.
[403] Brown, C. H., Grillid, M. D., Hannad, J. A., Irisha, M. (2019), p. 4.
[404] See Downs (1997); Davis (2004); Fontana and Smith (1989).
[405] Brown, C. H., Grillid, M. D., Hannad, J. A., Irisha, M. (2019

feature. Since, not only both psychological and biological traits are the essence of an individual, but also these traits are necessary and sufficient components of an individual's unity. The person before dementia is continuous with the person after dementia *in virtue of* having the same biological traits.

Another aspect of a persistent identity in cases of dementia or Alzheimer's diseases stems from our everyday experience. We regard the person as the same being as before so long as she is alive, which I think, accords well with the conclusion of the hybrid view. Although her psychological traits are gone for good, she is still the daughter of her parents, or the sister of her siblings. Family relations are not based only on personal traits, but are also dependent upon biological attributes, may even be based on being a human animal in the Olsonian idea.

It would also be misleading holding onto the belief that the way hybrid view highlights the notion of persistence is nothing but a wishful thinking, a sort of validation that focuses on the intuitive reasoning. My first answer to this criticism amounts to not relying on the notion of intuition in any case, as our common beliefs and practices can be ambiguous, decisive, and sometimes scientifically falsified. My second answer is given that a person can become a human vegetable one day, and we are perfectly aware, I think, of the fact that a human being in a vegetative state is still a person. There will be a lack of psychological connectedness, yet she still holds her rationality, even though she cannot think or act upon it ever again.

Can anyone cease to be a person? There are no plausible grounds on which to believe that if the essential psychological qualities (consciousness and memory) that make the person who she is, are no longer exist, then we should accept that the unity of her continuity and her personhood have been interrupted. When attempting to accurately describe the condition of a human vegetable (the same rule applies to human embryos and human fetuses too), the hybrid view proposes a plausible position in this particular case. Accordingly, even though the personhood of a human who is in a vegetative state seems as if it was a phase sortal in her life and is now no longer available to her, we cannot deny who she is as long as her body

accomplishing the initial requirements for the legal protection of the right to live.[406] This is not an obscure notion altogether. One may claim that there may be sufficient reasons to believe that this person exists in a new form when she is in a vegetative state. This state is almost like a new person with a new self, in which the psychological connectedness of her previous self is no longer available, her thoughts, beliefs, memories, and so on are no longer connected. I do not think that there will be a new person in this particular example just because her psychological continuity ceases to exist after a non-reversible severe disease has occurred. Her psychological traits may no longer exist, but physical continuity does still exist.[407] We regard her as the same person before as long as she is alive, even in a vegetative state. I follow the Olsonian line of the argument in this particular case. A person's hybrid unity has been ruined, yet labelling her as a new person brings no plausible validation for the issue either.

These examples represent quite common everyday cases and make the point fairly clear all by themselves. We can gain more insight into the benefits of the hybrid view by looking at the ways in which the hybrid view I have favoured treats thought experiments.

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[406] Medical law may reveal controversial conclusions in different cases of vegetative state patients, where the law adopts brainstem death as the point at which life ends. Nevertheless, this debate within medical law should not affect the way we see a person in a vegetative state, who is still regarded as a person, even though she may not hold the psychological connectedness between the time when she was holding self-awareness and the time when she is in a vegetative state. Whether we say someone was once an embryo and potentially a person, or someone who is in a vegetative state, she is granted with moral values and legal status. Therefore, I suggest, it follows that on the contrary what scientists and neo-Humean philosophers would claim, we must have a plausible reason for why the explanation for the persistence of identity requires a unity.

[407] Regardless of the loss of some organs' functions.

4.4.2 Thought Experiments: Split-Brain and Transplant Cases

In the previous chapter, we saw that philosophers of personal identity deal with thought experiments, such as the very well-known case of the prince and the cobbler[408] and split-brain cases, and they try to internalise the outcomes. In this section I offer a more detailed investigation of thought experiments and how the hybrid view I have been defending responds to some crucial questions and puzzle cases. I claim that the hybrid view provides distinctively satisfying answers to these problematic cases.

The problematic notion of split-brain cases was introduced[409] in the 1960s, when there was no treatment for those who were diagnosed with epilepsy, apart from cutting off the *corpus callosum* between two hemispheres of the brain. In those patients, excessive signalling between the two hemispheres, caused by epilepsy, was prevented from spreading to the other half when the *corpus callosum* was separated. This procedure enabled patients to live a normal life after the operation, and the operations did not cause any noticeable change in personality and behavioural traits. Each half of the brain could still able to accomplish certain requirements after the operation, but one half did not have the information about what the other half had experienced or learned, and each half had their own memory. Causal investigations, severing procedures, and experiments on such cases carried out after this trial all had a great impact in the philosophical literature. Regardless of whether these procedures in specific cases are effective as a cure, the possibility of imaginary cases in philosophy, such as fission and fusion, remain debatable and open to scrutiny.

My aim is to motivate an inquiry in which the hybrid view I defend

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[408] A similar example is illustrated by Sydney Shoemaker in *Self- Knowledge and Self-Identity*, which is known as a body-swap argument. Accordingly, the brain of Brown is somehow accidentally placed in Robinson's body. After the brain-transplant operation takes place there will be the composite of Brown's brain and Robinson's body. Shoemaker suggests that the new functioning combination of the two is now Brownson. If we suppose that the transplant operation is successful, after the surgery Brownson claims he is Brown in Robinson's body, as Brown's identity has continued after the operation without his body. Because all his psychological states persist in Robinson's body. This is a prime example of psychological continuity supporters. Then again, it is not hard to see the argument here that the bodily continuity cannot be the only criterion for persistence.

[409] Sperry, R. (1975) pp. 30–33.

provides plausible grounds on which to investigate these cases. The idea that if during any period the brain is damaged or split into two hemispheres, and one hemisphere or both hemispheres are not intact in the original body, then the persistence of identity could be ruined. The same rule applies to cases in biological continuity as well. If any life-dependent part of the body is removed from the original body, the recognition of the original body is endangered. The hybrid view reflects psychological continuity *in virtue of* physical continuity. In that sense, if these continuity requirements are broken at any time, then the unity of persistence conditions is lost. Since, persons are genuine unities, owing to the causal power they have over their physical and psychological status. The persistence conditions in terms of priority require a condition in which organisms are real unities and parts of unities are ontologically dependent upon them.

There are imaginary cases in which these requirements cannot match. I will attempt now to identify imaginary cases in which personal identity either survives or faces non-survival according to the hybrid view.

4.4.2.1 The Problematic Possibility of Fission and Fusion

For any standard split-brain case, there are two versions of fission. The first version is a single transplant case in which we suppose that A's brain is split into two hemispheres and that each part maintains the complete content of A's mind. Furthermore, one hemisphere of A's brain is placed into a brainless body B, and the other hemisphere is destroyed. It can be said as a result there would be psychological continuity between A and the resulting person B. It is worth drawing attention to the question of whether the resulting person is continuous with A, or instead A and B are two different persons. If we agree that B maintains the complete content of A's mind, then we also have to accept that B is A. The second version is a dual-transplant case: the other hemisphere of A's brain is not destroyed, but placed into another brainless body C, at the same time the first half is placed in B.[410] As a result, there will be two persons B and C, and each would have

[410] Parfit describes a fission case in *Reasons and Persons* (1984), pp. 254-55, in which his

A's psychological content. Therefore, there would be continuity between the psychological content of B, C, and A.

Several questions are outstanding in fission cases. Does A survive after fission? If A does not survive, then to what extent is it a matter of concern that A is not identical with the post-fissioned person(s)? If A does survive, then which of the resulting person(s), if either, is A?[411] The condition has already been pointed out that there is no loss in A's mental content in either hemispheres of A's brain, and both hemispheres contain *enough* of A's brain content to represent qualitatively identical minds. The minds of B and C are also qualitatively identical to A's mind. The psychological continuity defenders conclude that as a result, both B and C are A; that is, B and C are numerically identical with A. This intuition seems logically impossible. Two distinct persons cannot be numerically identical with one person, for then they would be identical to each other. If this is the case, then is one of them A, but not the other? If so, which one is A and which one is not? Or why one as opposed to the other one? Is there any relevant reason to pick B over C, for instance? Or are neither of them A? If this is the case, therefore, we have right to assume that A ceases to exist and fission has killed A.[412]

It is not difficult to accept that at least in one way we would typically recognise a qualitative identity between distinct persons B and C. If the brain is split into two hemispheres and each is put into B and C, the result is two numerically distinct persons, but they are qualitatively identical with

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body has been fatally injured, while the brains of his two brothers are fatally injured. In the case of fission, Parfit's brain is divided into two hemispheres, and one hemisphere is transplanted into the body of each brother, and his functioning brain appropriately attached to his brothers' body, so Parfit's brain can function.

[411] There is a problem involved in drawing a bigger picture of the relationship between continuity and survival. The persistence of identity is secured, and any discussion of personal identity will have to include aspects that the kind of reasoning we are searching for, which is dependent on the predicate that personal continuity is possible. Throughout this project I have ignored the idea of survival without identity. As I have initiated in the first chapter, the persistence of identity is crucial and there is an underlying element of identity, in which the continuity is secured through time. Strictly speaking, if there is survival without identity, then there is no continuant identity. Thus, simply there is no means of survival without a continuant identity.

[412] Similar case is discussed by Parfit (1984) pp. 254–256; Parfit (2008) pp. 200–201; Perry (2008) 329–330; Shoemaker (1984) pp. 85 and 119–120; Williams (1957) pp. 238–239.

each other as much as they are qualitatively identical with A. We know that neither B nor C is numerically identical with A. We typically assume that one entity cannot be numerically identical with two distinct entities. Thus, strictly speaking, A cannot be numerically identical with both B and C. Does the failure of the second version of fission make the first version true? For the sake of fission cases, we are asked to suppose that the resulting persons are numerically distinct and qualitatively identical with each other, as well as that they are identical with A. Of course, this supposition would not make the first version more acceptable than the second version. Both versions seem problematic regarding persistence.

In fission cases, firstly, we should aim to find out which part of the brain is needed to meet the requirements of continuity if we insist on recognising fission cases as convincing. In single and dual versions of fission, we are asked to suppose that half of the brain – or can it be even less than half or a small portion – contains all the content of the original person's mind and consciousness. In this regard, one may still assume that removing parts of the brain may not violate its content, and the necessary and sufficient reasons remain consistent with the original self. There is only one way to examine whether the fission case fails the hybrid test. Accordingly, B and C are continuous with A if and only if:

(i) B and C are psychologically continuous with A,
(ii) B and C are physically continuous with A, or
(iii) B and C are psychologically continuous with A *in virtue of* B and C's physical continuity with A.

For any thought experiment and split-brain case, I will apply the same test to different variations, since the transitivity of identity in most transplant cases is not a plausible option for the hybrid view. One point that seems to be widely accepted is that it is not hard to realise how both single and dual transplant versions of fission fail the hybrid test, since they cannot meet the physical continuity requirements. If (i) is true, then for the sake of identity to persist, (ii) and (iii) must be true. Even though (i) can be a necessary requirement of continuance, (i) is not sufficient without (ii) and (iii) being fulfilled. It seems clear that neither B nor C would be continuous with A.

Hence, if they were continuous, each would be qualitatively identical with A and with each other, but they are distinct. Furthermore, B and C themselves do not stand in a relationship with one another either. Since, B and C are not physically continuous within themselves, and so they cannot stand in a continuous relationship with A according to the hybrid view. Thus, fission fails again.

However, there are imaginary cases in which fission perfectly matches with the hybrid model. Suppose we switch the possibility in favour of fission. Let's imagine a case in which B and C's bodies are made of some sort of exact duplicate of A's original body, and the two hemispheres of A's brain are split and placed in A's exact duplicate bodies B and C. From the hybrid point of view, it should be possible even for a split second (at least in theory) for the two hemispheres of A's brain to function perfectly in exact duplicate bodies B and C, and in theory we should allow psychological continuity *in virtue of* physical continuity. Therefore, this is a crucial criterion that must be met for fission to be acceptable for the hybrid view. What I mean by "acceptance" here is that regarding the criterion of persistence both psychological and biological continuities are sufficient for A's identity to persist in B and C's bodies. There can be a case in which it is possible to survive and have a persistent continuity with only half of a brain, only if B and C are psychologically continuous with A *in virtue of* B and C's physical continuity with A. Yet, there remains one condition that cannot be matched in any split-brain case: that is, even though B and C's psychologies could be exactly similar by means of A's qualitatively identical brain division into two hemispheres, B and C will begin to separate according to their experience right after this fission occurs. Subsequently, B and C will start to have different experiences and different psychological states as individual entities in virtue of having bodies separated from one another. In this case, regardless of whether B and C's identities are continuous with that of A, their identities are not continuous with one another. This is a branching problem that challenges the possibility of persistent identity altogether, as the identity relation between A, B and C is not transitive. Accordingly,

(i) B is both psychologically and physically continuous with A *in virtue of* being physically continuous with A,

(ii) C is both psychologically and physically continuous with A *in virtue of* being physically continuous with A, yet

(iii) B is not psychologically and physically continuous with C *in virtue of* being physically continuous with C.

No matter how much B and C are physically continuous with A and one another, as long as they become separate entities after fission takes place, their connectedness is interrupted. In the hybrid view, there must be a numerical identity between the entities we are investigating, and only then can the two beings be identical and their identity is persistent with one another. Apparently, the persistent identity of distinct individuals seems impossible for both cases of fission. The logic of identity limits the possibilities I have investigated. The hybrid view, in that sense, requires numerical identity, by which a person is identical to herself but to nothing else. If a person is identical to two other persons, these "two" must be identical to one another, which is again against the logic of numerical identity I have proposed above. If they are exactly similar, which means if they are both psychologically and biologically continuous with one another to a sufficient degree, it becomes impossible to discern one from the other. So, neither B nor C is A. Both are exactly similar to A, but identity is to be distinguished from the exact similarity. Therefore, fission fails again.

I now will consider fusion, another hypothetical problem of split-brain cases. In a fusion case, parts of two distinct brains are united in a single body and connected appropriately. The two distinct parts can work together as a single fully functioning brain. There can be even a case in which the parts come from the same brain. Even though our current technology does not permit such an operation to be performed successfully, as a hypothetical case, it is worth discussing within the scope of thought experiments. Accordingly, if we suppose A and B are two distinct individuals and both have their brains split into two equal parts, which means both A and B have the condition of hemisphere duplication, in both persons two parts of the brain are identical with no exception. This

specification allows the two to swap each other's brain parts. The left hemisphere of A's brain and the right hemisphere of B's brain are fused together and placed into a brainless body C to compound the brain to function properly. The psychological features of both A and B persist undamaged.

What should be noted here is that C's identity stands in a relationship with both A and B. In various fission cases I have concluded above, half of a brain is may or may not be sufficient for identity to continue in a brainless body, regardless of whether there was no loss of psychological features in the transplant of either hemisphere. Other non-reductionist accounts may not be as strict as the hybrid view. What I suggest, though, is that it is clear from both fission and fusion examples that psychological continuity holds *in virtue of* physical continuity by keeping half of the brain, yet there is no evidence that C has continuant identity traits with A and B. In the fusion case, according to psychological continuity defenders, A's identity could persist as only her left hemisphere is transplanted into C's body, and B's identity could persist as only her right hemisphere transplanted into C's body. According to the hybrid view, however, we can assume that A and B's brain parts can be perfectly compounded, and the reasoning that fusion advocates follows does not seem to acknowledge the condition in which A and B's identity traits are continuous with C's identity. Therefore, there is no theoretical justification to support the claim that after fusion both A survives as C, and B survives as C, regardless of whether C comprehends the content of A and B's consciousness.

I can see one crucial question that arises from this. Is C one person or two persons sharing a single body? I have advocated a view according to which A's identity cannot survive as C, and along the same line of reasoning, B's identity cannot survive as C, so both A and B's identities cannot be continuous with C's identity as one single individual. Not only can C's identity not hold two distinct identities, but also, even in theory, A and B cannot share a single body, as they both had their individual lives and consciousnesses before the operation. Furthermore, regardless of whether A's identity is continuous with C and B's identity continuous with C, the

result does not entail that C contains two identities instead of one. Thus, fusion fails.

One may object and ask to what extent we can claim that fusion fails for cases in which two persons share the same body, such as Siamese twins. This example, one may suggest, does not undermine the possibility that a single body can belong to two distinct individuals. I still insist on the claim that sharing most of the same body does not rule out two individuals having their own consciousness and experiences, and as a result will differ in their personalities. Given the fact that there is quite a bit of variation in both fission and fusion cases and what the essential characteristics of persons after split-brain operations are, any feasible idea seems as good as the other. As such, there is no burden upon us here to make use of any particular example. In fact, the goal here is to be able to find a case in which any of those transplant cases can be introduced for the hybrid view.

However, the hybrid view I suggest cannot adapt any of the possibilities have been explored above, neither the option of two identities in a single body, nor the possibility of one person's identity is continuous with two people. In the same vein, the hybrid view will not accommodate the claim that two hemispheres of the brain permanently remain within two distinct persons, and it will not affirm the claim that two persons may be combined into an individual at some point. Presently, I have not explained why the hybrid view requires numerical identity in split brain cases in which the proponents of psychological and biological continuity views seek for a plausible way to justify their reasoning. Addressing this matter will allow me to demonstrate the acceptance of hybrid view, which does not necessarily follow the acceptance of expected results of fission and fusion cases.

The hybrid approach seems promising for several reasons. First of all, there is no good reason in theory indicates that we should necessarily believe what psychological continuity defenders, such as Baker, Parfit and Shoemaker, argue. According to them, if A's perfectly healthy and functional brain – or part of a brain – placed in B's brainless body, for instance, A's psychological traits are good enough to function in B's body

as A, just as these traits were functioning in A's body. In that sense, they conclude, B is A. When B wakes up after the operation, what she sees in the mirror is A in B's body (for Baker, A's identity is constituted in B's body). In the meantime, biological continuity defenders, such as Olson, would claim that even though A's fully functioning brain is replaced in B's brainless body, when B wakes up, B does the thinking as the holder of brain functions and she thinks that she is B, since, A's psychological traits are only derivative in terms of their functions. Hence, A is only a donor of B's brain functions.[413]

From the hybrid point of view, neither does A's identity persist in B's body and the post-operation person is A in B's body (contrary to what Baker and Shoemaker suggest), nor does the person who wake up after the operation realise that she is B regardless of carrying A's brain and psychological traits (contrary to what Olson suggests). What matters in persistence, according to the hybrid view, is the uninterrupted[414] continuity of both bodily and psychological traits. Therefore, my suggestion is that the post-operation person would be C with A's brain in B's body. In fact, C's identity has the essential parts of both A and B's identity, yet C is neither A nor B. At this point, one may object that this reasoning leads us to the branching problem.[415] I think, after all, we are left to choose several options among the following mutually possibilities:

(i) A and B are dead.
(ii) Neo-Lockeans are right.
(iii) Animalism is right.
(iv) The post-operation person is neither A nor B essentially, but C.

Accepting that (iv) is a true predicate does not require (ii) and (iii) to be wrong. While (i) may not be true for the hybrid view, but that does not mean

[413] I would like to thank Eric Olson for making this point very clear in our meeting.
[414] The degree of interruption is disputable.
[415] This is a puzzle when we suppose A's cerebrum transferred into B's body, leaving A's original brainless body alive in a vegetative state. After the operation B is psychologically continuous with A, but A's body without a brain will be bodily continuous with A too. The problem indicates that if both psychological continuity and bodily continuity are sufficient for A's persistence, then there will be two A's in one place.

that A and B are still alive. More to the point, by accepting either (ii) or (iii) as true, we are left with a very puzzling case of the persistence criterion that is unsolvable. The plausible option for us to take is to accept that (iv) is true if and only if both (ii) and (iii) are taken to be necessary and sufficient (but not sufficient on their own) for the persistence condition.

In order to support my conclusions, I draw from hypothetical transplantation cases, I would like to mention Wiggins' reading of transplantation, in which he plausibly relates the topic to the notion of a guarantee. What a guarantee means in this context is that the natural process of a human being from the moment of existence to the point it ceases to exist is guaranteed. The nature of the process of coming into existence, maturing and finally ceasing to be is sustained and guaranteed by laws of biochemistry, physiology and so on. The brain transplantation procedure might violet the dependability of the natural process. That is to say, persons, namely individuals, as a natural body, may not be said to survive after such a procedure takes place. In small procedures, such as heart or liver transplantation (even though the transplanted organ is made of an inorganic matter), the organic nature of substance is still protected. Brain transplantation, however, may endanger this guarantee and undermine the collection of the natural process. The threat is also obvious for him; "the natural substance has become 'artefact-like', something not so much to be encountered in the world as putatively made or produced by us, something that is really up to us (individually or collectively) not merely to heal or care fore or protect but also to repair, to reshape, to reconstruct, even to reconceive."[416]

Examples are neither meant to be exhaustive nor precisely accurate. We can see clearly that all these add up to a good reason to think that no one would accept the possibility that persons are continuous with their post-operation selves in transplant cases. Although the hybrid view supports the claim that persons cease to exist once psychological or physical connectedness is interrupted, it does not rule out the possibility of cases in thought experiments where both psychological and physical connectedness

[416] Wigging (2001) p. 241.

still exist, either in a new person or the same person, even for a limited time. This possibility applies, for example in the case of duplication with teleportation, as Parfit suggests in *Persons and Reasons.*[417]

4.4.2.2 Duplication: Is Teleportation a Case of the Continuity of Identity?

In Parfit's account, there are two major cases in teleportation examples. In this section, I will outline my interpretation of his example and scrutinise whether Parfit's duplication cases are compatible with the hybrid view. In the first case, we suppose that person A steps into a teleporter in *x* place, pushes a button to activate the machine and steps out of a teleporter in *y* place. In the first teleportation case, the teleportation is achieved by the teleporter in *x* place scanning A's body, transfers the exact state of every particle composing her into information, and transmitting the information to the receiving teleporter in *y* place. As soon as A's body is transmitted from *x* to *y*, the body in *x* place disappears or ceases to exist. At the same moment, the receiving teleporter in *y* place recreates A from the precise nature and arrangement of A's atoms that perfectly matches the information about her state recorded an instant ago (or simultaneously) in *x* place. In *Persons and Reasons*, Parfit explains the case as follows:[418]

> The Scanner destroys my brain and body. My blueprint is beamed to Mars, where another machine makes an organic Replica of me. My Replica thinks that he is me, and he seems to remember living my life up to the moment when I pressed the green button. In every other way, both physically and psychologically, my Replica is just like me. If he returned to Earth, everyone would think that he was me.[419]

Following Parfit's claim, we can call the resulting person A_Y, and her

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[417] Parfit (1986) pp. 199-201.

[418] Parfit explains the same case with a similar example elsewhere: "Suppose that you enter a cubicle in which, when you press a button, a scanner records the states of all of the cells in your brain and body, destroying both while doing so. This information is then transmitted at the speed of light to some other planet, where a replicator produces a perfect organic copy of you. Since the brain of your Replica is exactly like yours, it will seem to remember living your life up to the moment when you pressed the button, its character will be just like yours, and it will be in every other way psychologically continuous with you." Parfit (2009), p.21.

[419] Parfit (1986), p. 199.

experience of the transition will be continuous. She can perfectly comprehend whatever has happened to her and her body by entering the teleporter in *x* place and being transmitted to *y* place with her unity a moment later.

There are two possibilities for such a case. What Parfit understands from the persistence of identity is simply either the case of survival of identity or of death. Either, A_X dies, and the identity of A_X does not survive, or A_X's identity survives as A_Y, and A_X is A_Y. Parfit conceivably argues that the procedure would not be a failure. This means, first of all, when A_X becomes A_Y she will not die, but continue through some sort of transportation process. Secondly, for Parfit, although there is no necessary and sufficient reason to believe that A_X is identical to A_Y, A_X survives as A_Y, and this is what matters.[420]

It remains to be determined whether her identity survives. The hybrid view agrees that A is alive and survives after the teleportation takes place, and it is perfectly reasonable to suggest that A_X is identical to A_Y, or at least that there is a hope for numerical identity, since the human body that entered the teleporter in *x* place was transmitted to *y*. The human body that is created or arranged from the same organic matter (along with the exact information is supposedly transmitted from one place to another) in *y* place is the only candidate for being the person who is persistent with the original A after the teleportation takes place. Therefore, A has a persistent (and most likely uninterrupted) identity. The possibility of persistence does not rule out numerical identity. If A's identity persists after teleportation, A survives as A_Y. In this case, if we suppose that the identity of A in *x* and A in *y* is transitive, then

(i) A_X is psychologically continuous with A_Y,
(ii) A_X is physically continuous with A_Y, and
(iii) therefore, A_X is psychologically continuous with A_Y *in virtue*

[420] Parfit's solution is simple. Double success on believing that the transmitted person is still alive, and the original person survives as resulting person. Therefore, the transmission cannot be a failure. Survival and being identical do not necessarily entail one another. What it means is that being identical with a transmitted person is not a necessary condition of survival.

of being physically continuous with A_Y.

As we can see clearly, according to the hybrid view, in the first case of teleportation, not only is A_X the same person with A_Y, where those two are psychologically and physically connected, but also A_X and A_Y are numerically identical. Persistence of identity in this teleportation case, of course, only possible through several conditions: (i) A_X ceases to exist after the transmission takes place, but (ii) non-existence must take place right after (or simultaneously) A_X becomes[421] A_Y. Even though one might object that if A_X ceases to exist then becoming is distracted, it makes sense to speak of the point at which A_Y comes to existence without A_X's continuity being distracted. (iii) Therefore, A_X becomes A_Y without ruling out the initial condition of numerical identity.

In the second case of teleportation, we suppose that rather than destroying A_X, the transmitting teleporter only scans the body and transmits the data to the receiving teleporter in *y* place. This process results in two living exact duplicates of A, one is A_X and the other is A_Y.[422] Although we expect A_X and A_Y to be both physically and psychologically continuous and to have the same personality characteristics (such as holding the same memory, the same intentions, the same beliefs, and being composed by the same sort of matter in the same way, and so on), A_X and A_Y will be two separate individuals due to their duplications in different places at the same time. This second case of duplication is contrary to the notion of numerical identity. Undoubtedly, the second notion of duplication fails to be the case of a persistent identity, as A_Y would only be a duplicate of A_X, and as soon as teleportation takes place, A_X and A_Y's identities diverge from one

[421] The term "becoming" here is not used in a teleological sense. Teleological becoming is related to the relation between potentiality and actuality.

[422] This is how Parfit exemplifies the second teleportation case in *Reasons and Persons*: "Several years pass, during which I am often Teletransported. I am now back in the cubicle, ready for another trip to Mars. But this time, when I press the green button, I do not lose consciousness. There is a whirring sound, then silence. I leave the cubicle, and say to the attendant: "It's not working. What did I do wrong?' 'It's working', he replies, handing me a printed card. This reads: 'The New Scanner records your blueprint without destroying your brain and body. We hope that you will welcome the opportunities which this technical advance offer." The attendant tells me that I am one of the first people to use the New Scanner. He adds that, if I stay for an hour, I can use the Intercom to see and talk to myself on Mars. 'Wait a minute', I reply, 'If I'm here I can't also be on Mars'." Parfit (1984) p. 199.

another. Since, they are only qualitatively identical, and this condition is not necessary and sufficient for A_X and A_Y to have numerical identity or to be one and the same person. Although teleportation is a case in which the exact duplicate of the original person with a perfect physical similarity can come into existence, duplicates cannot be continuous with each other. Therefore, the second teleportation case cannot indicate the possibility of a persistent identity, so it fails.

4.5 Conclusion

As is perhaps already clear, the model Langford, Noonan, McDowell and Wiggins point out motivates a hybrid approach to our persistence according to which we persist by way of the unity of biological continuity and psychological continuity. This is an account of what we are is developed according to which we are both organisms and persons. How these accounts defend the hybrid view hinges on understanding the persistence conditions in an original way.

After examining animalism and the constitution view I come to conclusion that above exposition also sets out their isolated persistence conditions, and the significance of these conditions in our persistence as a unity. The aim of this chapter has been to emphasize the different strands of our identity that constitute it, and their connections with one another.

By taking the crucial function of numerical identity into consideration, it has been shown how split-brain scenarios fail to be the case for a persisting identity – unless, without worrying about the branching problem, we classify the person as new that comes into existence after transplantation takes place. The idea of a new person coming into existence in the hypothetical scenario of a split-brain case is a possible conclusion. Personal identity cannot accommodate the possibility of two identities placed in one body; equally, the possibility of one identity adopting continuity with two identities is ruled out. The proposal here is that we cannot accept the possibility of a continuant identity, where two hemispheres of the brain could carry on functioning in two separate bodies as distinct persons, or two distinct identities could be united into a single

unity and composed under one identity as the carrier of two distinct identities simultaneously.

The intention in this chapter was to gain some clarity over cases and examine them through the hybrid test. The simple formulation I borrowed from the previous chapter "*x* is both psychologically and physically continuous *in virtue of* being physically continuous with *y*" should present my position on the debate over everyday cases, such as the fetus problem, the vegetative state case, the possibility of continuity after certain brain diseases like dementia and Alzheimer's disease, and also split-brain cases of thought experiments, such as fission, fusion and duplication. The hybrid model postulates an example of continuity in a duplication case, where physical and psychological connectedness stands as a strong possibility. What differentiates the success of the fetus puzzle and the failure of most thought experiments is that in the fetus case we are inclined to think that a fetus will grow into a person through time and there is a strong relation between the potentiality of a fetus and the realisation of its actuality as an adult person. By contrast, in thought experiments transplant cases fail, as mostly the individual does not survive after the transplantation takes place.

CONCLUSION

After a careful examination of the historical and contemporary accounts of personal identity, finally I come to the conclusion that these accounts can be categorised as reductionist and non-reductionist according to their variable ways of understanding persistence conditions. Bodily continuity and psychological continuity defenders, animalists and constitutionalists are gathered under the category of reductionism, as they tend to reduce the persistence conditions of personal identity to either one or another notion of persons. Whereas, the hybrid view is non-reductionist in nature, and most importantly, it does not require identity to be strictly reduced to *only* one continuity condition.

As I mentioned earlier, at first glance, this thesis seems to deliver familiar results to the hylomorphic view we are acquainted with it after Aristotle. However, the contemporary followers of the hylomorphic view defend their thesis from various angles without explaining how their hylomorphism is related to the Aristotelian notion of hylomorphism in the first place. What differentiates my interpretation of hylomorphism from Toner's and Hershenov's is that it seems as if they are defending a dualist approach in their treatment of personal identity. Their concern is about the relation between the soul and the body of an individual. Regarding the persistence conditions, such an approach is willing to take the reductionist methodology. Whereas, hylomorphism does not really need the notion of soul in order to determine the persistence conditions. Looking from this perspective, I agree with William's exposition that "hylomorphism might be better expressed by saying that there was no such thing as the soul at all."[423] Hence, mental functions, such as consciousness and the continuity of memory, are considered in terms of the relations of form and matter. This unity seems to be a human being, or/and a person. On the one hand, the hybrid theory I defend employs the appeal of hylomorphism as an initial step and progresses through the claims of both animalism and neo-Lockeanism; it entails that we are animals as much as Olson and other

[423] Williams (2006) p. 219.

animalists concern, and we accommodate the causal relation of psychological connectedness in our life. On the other hand, this project addresses the difficulties that challenge animalism and neo-Lockeanism.

Rather than stripping mysticism away from different interpretations of hylomorphism, which could be a work of another project, I simply bring the idea of hybrid identity to our attention. It may seem as if I use the term "hylomorphism" and "hybrid view" interchangeably, yet I have employed hylomorphism in order to indicate that from one perspective the persistence question of personal identity is a subject of metaphysical inquiry, and hylomorphism provokes a reflection on the term "human being" as a natural body, which consists of two intrinsic principles. These intrinsic principles are manifested as psychological continuity and biological continuity, and the hylomorphic unity of these principles is represented with the condition of "*x* is at t_1 is the same being with *y* at t_2 iff (i) *x* is biologically continuous with *y*, and (ii) *x* is psychologically continuous with *y in virtue of* biological continuity." This has been a search of a necessary and sufficient condition for the persistence conditions, if there were any. This analysis revealed a condition obtains in virtue of which the persistence conditions of identity hold in any particular case.

What differentiates my findings from any form of so called non-reductionist substance dualism is that substance dualism requires a higher degree of continuity in immaterial substance. For the sake of generating a philosophically acceptable and respectable account, I explicitly tried to avoid referring to soul as the only candidate for an immaterial substance. Much has been written about this problem. Some contemporary solutions have been proposed. Attempts to resolve the issue have been suggested, and arguments against the validity of such a possibility stand as real problems for the notion of immaterial substance. Like any other non-reductionist, I have proposed an alternative way of conceiving substance, in my case in Aristotelian terms, as something underlying our being which is the material substance itself. This material substance has its autonomy, which may be causally dependent on its components, yet from the ontological perspective substance is still independent and its persistence conditions are independent

from the parts. The causal dependence of persistence is associated with the persistence conditions of substance.

Another aspect that differentiates my findings from other non-reductionist accounts is that although some non-reductionists use the neo-Aristotelian notion of hylomorphic unity in their model, my unifying claim is similar to what Wiggins endorses as he interprets metaphysics of persons as a single, internally consistent theory. This theory enables me to defend an idea in which the terms "person" and "human being" — and even the term "human animal" — serve as different names denoting a single explanatory meaning, without reducing the identity criterion to any particular element. In this way, my interpretation of neo-Aristotelian account of personal identity has been separated from those who label neo-Aristotelianism as "reductionist" or even "dualist". Since Aristotle was explicitly clear as regards the notion of natural substances, that substance does not belong to anything apart from itself and "to that which has it, of which it is again the substance itself". The person's identity, in that sense, persists through time only *in virtue of* the unity that her identity represents. Furthermore, the hybrid view shows that the hylomorphic theory is a valuable model to show that the subject has a persistent identity, unless a dismissible distraction occurs in the person's body. Therefore, we can assume that a person has a persistent identity in her own particular way.

Perhaps the most challenging issue for any identity claim, who defends the idea that the self as an underlying subject has a continuous notion, is to maintain the unity of identity when one's biological and psychological connectedness diverge. As a result, there is a theoretical necessity that we must convincingly acknowledge the conditions that separate (and also unites) the term "person" from (and with) the term "human being". From the scientific perspective, a human being exists from the moment of conception. Yet, by the features of persons that are associated with personhood, some suggest that not all human beings are persons, as these states are not present from the moment of conception. The most unsophisticated form of consciousness, the consciousness of sensation, does not appear even in the early fetus state. The determinant feature for

personhood is the capacity for consciousness in its simplistic form. Therefore, what follows from this reasoning is that for a certain time, a fetus is a human being but not a person. Accordingly, where a human being is not a person or ceases to be a person is differentiated in two cases. The first case involves in the idea that we do not have a causal relation between the early stages of existence and later stages in adulthood. The second case indicates a terrible brain damage results in being in a vegetative state wherein the body may breathe, the heart may beat, or the body may need a life support machine. When we are considering the application of the term "person" without any mental characteristics, neither a fetus nor someone in a vegetative state do not qualify as persons.

I discerned on which accounts we can defend the view that all humans are persons without any further requirements, particularly in Chapters 3 and 4. The traditional religious doctrine, for instance, cleaves to the idea that individual souls are present at the moment of conception. Accordingly, all human beings – including fetuses and ones with an irreversible brain damage – have souls, even though they cannot exhibit the characteristics of persons. All human beings are persons because they possess a soul. If personhood depends on having a soul, rather than other characteristics, such as having an organic body and the causal relation between mental states at different times, what challenges this reasoning is that we may not be able to differentiate properly whether something is a person or not at a given time. For that reason, the idea of soul and any conclusion derived from the religious doctrine were not of direct interest within the limits of inquiry we are considering in this thesis.

A plausible outlook for the fetus problem and a person in a vegetative state cases should indicate certain qualities that we can rely upon regardless of any change: A human being is a person iff (i) it is qualified as a person according to the certain features of personhood; or (ii) it has the *potential* to develop these features if there will be no distraction in growth

(e.g., fetuses)[424]; or (iii) it has qualified as a person under condition (i) at least once (e.g., it could be someone in an irreversible vegetative state) .

The initial argument of this thesis affirmed the notion of a person within a hybrid unity in all circumstances. Undoubtedly, the ethical extension of this view is available in the most sophisticated and strongly suggested version. Yet, in the present work I limit my inquiry to conduct a necessary preliminary discussion before exploring the ethical implications of personal identity. The crucial step has been taken, for now, was to treat fetuses and those in vegetative states with the same rights that we ascribe to persons.[425] The hybrid view I defended in this thesis is perhaps better understood if we project our analysis to make this argument separately, rather than extending the concept of person. As I have claimed earlier, we might argue that personhood is a determinant feature that someone has the potential to be a person or has been a person at least once attributes someone the same essence as persons. Although it does not necessarily follow that such entities are persons now, I think we have provided enough reasons to consider the notion of a persistent identity over time regardless of the objections in which one may target the idea of self and persistence.

My constructive claim, detailed mainly in Chapters 3 and 4, was that the hylomorphic understanding of our continuity through time structures its strands from both sides of psychological continuity views and bodily continuity views. I claimed that along with the contributions of non-reductionists, such as Wiggins, Noonan, and McDowell, the hybrid theory – a person's identity persists so long as she has the same psychology in virtue of having the same biological attributes – stands as a plausible option in the pursuit of our understanding of personal identity. Many philosophers in the debate abandoned this theory altogether and favour for one side of the explanation, regardless of how poorly it might fit with our understanding of ourselves in everyday cases, or even in transplant and teletransportation cases, as I discussed in Chapter 4. Throughout the thesis, I have claimed that

[424] However, some may claim that infants who are born with Anencephaly condition may not have the potential to grow into persons. This condition may create changes in reasoning towards severely disabled people.
[425] Nevertheless, this may be investigated further in a different inquiry.

the best balance of fit with these accounts to the merits of the topic is the one which does not force us to abandon any crucial part of the explanation. In the contemporary discussion, both the psychological continuity and biological continuity defenders suggest that we are supposed to be bound to one of the sides, strictly speaking, even if a view requires us to accept something that is strongly counterintuitive. The hybrid view I evaluate in this thesis succeeds in accepting both sides of the explanation without omitting any parts.

It is also equally clear that neither side of the explanation can be rejected. This claim also indicates that answering the question of what we are may lead to a paradox. Perhaps, though, the strategy for defining persistence can be employed in some plausible ways so as to yield a feasible account of identity. In order to avoid the ambiguity of this feature, we must highlight one crucial aspect of a being. If we do not presuppose a strong connection between several explanations of identity, the fact that our empirical judgements track either psychological or bodily continuity only when one diverges from another might just as well be taken to show that these judgements can come apart from identity, as that identity can come apart from the hybrid notion. I implicitly endorsed the intuitions behind psychological and bodily approaches, as both can be accommodated by the hybrid unity I have been defending. The way hybrid theorists present "person" articulates a coherent form of the concept that unities the idea of a person as object of biological inquiry and the subject of consciousness. Everyone may not be satisfied with this expedient, especially the ones who try to disassemble this agreement between the parts, and insist that these two sides cannot fit together. However, the intention of this thesis is to demonstrate that the concept of person is intrinsically non-reductionist. Hence, it is the way of reading personal identity as it is associated with ontological dependence, and non-reductionism brings the animalist and neo-Lockean readings together. The objective of this thesis is to dissolve the debate between psychological continuity and biological continuity defenders and to defend a method, which establishes a third way between continuities

by accepting that both continuity conditions are necessary and sufficient in relation to navigating the persistence conditions of personal identity.

Finally, I would like to stress that the hybrid view not only takes our understanding of neo-Aristotelian theory of substance ontology as a whole one step further, but might also spark new ideas in thought experiments as to how attributions of moral responsibility apply to persons as moral agents. This requires a criterion by which identity remains the same through time. This notion will necessarily entail remaining being morally accountable through time. The hybrid view might then be useful regarding the future conditions of the morality of transplantation and teleportation cases, the fetus problem and vegetative state cases. The idea of the possibility of a continuant identity in the hybrid view in particular, both in theory and practice, is an undeniable attribute of being a person and essential to the notion of personal identity, yet the moral conditions of a persistent identity exceed the scope of this thesis. Such an inquiry could be an initial concern of another project. For now, however, I have concluded that contemporary interpretation of substance ontology may yet ground the answer to the modern philosophical problem of personal identity.

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