

REMEMBERING AUGUSTINE: The Architectonic Structure of His Theology of *Memoria*

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Dedicated to

My mother

mea memorias vestrum non derelinquas me

My brothers John and Pedro

Te amo plus quam tu semper scis

But only in time can the moment in the rose-garden, The moment in the arbour where the rain beat, The moment in the draughty church at smokefall Be remembered; involved with past and future. Only through time time is conquered.

T. S. Eliot, Burnt Norton, Four Quartets

"You conferred this honour on my memory that you should dwell in it." *Conf.* X.25.36.

ABSTRACT

Augustine recognized memory to be pivotal in his journey to know and understand God and in his remembrance of God. His theology of memoria is complex, multi-faceted, and best described in Confessiones X. Architectonics, an investigatory "tool" used to examine Augustinian memory, reveals in greater depth Augustine's logical, profound, and multi-faceted approach in his interrogation of memory. Architectonics has unveiled four main neoteric discoveries. First, the architectonic structure of memory which elucidates the foundational pillars of memory in Conf. X and his earlier writings. These occur in a particular sequence: location of memoria, power of memory, sense-perception, teaching/learning, recollection and forgetfulness, images, phantasiae and phantasmata, transiency of memory, the beata vita. Second, Arc-hitectonics (Arc) and memory where Arc, a unique memory gene involved in neuronal communications, identifies a potential genomic memory process that provides knowledge regarding the inner workings of memory. Third, architectonics, time, and memory where a model for the simultaneity of the three cardinal "moments" of time - creation, the Incarnation, and eternity, with temporal time - past, present, and future, and physical time illustrated by the Arc gene. Arc in physical time intercalates with eternity and temporal time. Four, the theory of recapitulation where XIII recapitulates I-XII as viewed through creation and other motifs present in Confessiones. The architectonic investigation of Augustinian memory provokes a new way of thinking about memory and Confessiones - a re-thinking of Augustine's theology of memoria.

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ABBREVIATIONS

Abbreviations – primary sources

An. et. Or.	de anima et eius Origine
Beata V.	de beata vita
C. Acad.	contra academicos
Conf.	confessiones
Civ. Dei	de civitate dei
Doctr. Chr.	de doctrina christiana
En. Ps.	enarrationes in Psalmos
Ench.	enchiridion ad Laurentium de fide et spe et caritate
Ep.	epistula
Gn. Litt.	de Genesi ad litteram
Gn. Man.	de Genesi contra manichaeos
Imm. An	de immortalitate animae
Io. Ev. Tr	tractatus in evangelium Iohannis
Lib. Arb.	de libero arbitrio
Mag.	de magistro
Mor.	de moribus ecclesiae catholicae et de moribus manichaeorum
Mus.	de musica
Ord.	de ordine
Quant. An.	de quantitate animae
Retr.	retractationes
Serm.	sermones
Sol.	soliloquia
Trin.	de trinitate
Util. Cred	de utilitate credendi
V. Rel	de vera religione

Abbreviations – other

ARN

Annual Review of Neuroscience

ARP	Annual Review of Psychology
AugStud	Augustinian Studies
CUP	Cambridge University Press
CUAP	The Catholic University of America Press
CCSL	Corpus Christianorum Series Latina
CSEL	Corpus Scriptorum Ecclesiasticorum Latinorum
EB	Encyclopedia Britannica
FoC	The Fathers of the Church
HUP	Harvard University Press
LCL	Loeb Classical Library
NCP	New City Press
NLM	Neurobiology of Learning and Memory
NN	Nature Neuroscience
NP	Neural Plasticity
NRN	Nature Reviews Neuroscience
OUP	Oxford University Press
PL	Patrologia Latina
SP	Studia Patristica
ТМ	Trends in Neuroscience
TUCP	The University of Chicago Press
UCP	University of California Press

CHAPTER 1: Introduction

"Great is the power of memory, an awe-inspiring mystery, my God, a power of profound and infinite multiplicity."¹

Augustine was in awe of memory. He understood the significance and importance of memory in his journey to know and understand God. Without memory nothing would exist for Augustine, not the past, nor the present, nor the future. Augustine discerned the memory of God (*memoria Dei*)² within *memoria*³ and there, he discovered the place where he encountered the Divine. Augustine's inquisitiveness drove his desire to understand the inner workings of *memoria*. It was at Cassiciacum in 386 A.D. that Augustine first started to interrogate *memoria* and memory. A decade later, he wrote his most famous treatise on memory, *Confessiones* X. *Confessiones* is one of the most well-known and influential books written by Augustine. Over 450 articles along with many books are published every year.⁴ Yet, Augustinian memory remains an understudied and underwritten topic within this corpus.

Augustine's detailed account of *memoria* including the description of the different types of memory, their function and operation is in *Conf.* X. Here, Augustine's interrogation of memory was with a specific end goal in mind. He wanted to know how it was that he remembered God as he searched to know and understand God and achieve the *beata vita*. He wanted to understand how *memoria* was the gateway to the Divine and how memory worked in this process. Augustine approached his interrogation of memory from many angles – taxonomy of memory, anatomical operation of sense-perception in forming images, creation of images, formation, storage, remembrance, and retrieval of memory, and science, to mention a few. Augustine did not make a distinction between any of the above. It is we who tend

² Memoria Dei is not frequently used by Augustine in Confessiones; however, it is implicit in his writings. Conf. X recapitulates Conf. I-IX and shows how Augustine goes from memoria sui to memoria Dei with memory of God present to the soul. John A. Mourant, Saint Augustine on Memory (PA: Villanova University Press, 1980), 68. Conf. X.12.30-31, 23.33, 24.35-25.36.

¹ Conf. X.17.26.

³ In this thesis, "*memoria*" is used to depict the palaces or storehouse that houses actual memories. "Memory" depicts images, memories of events, things, and realities.

⁴ 2019 data. Robert Dodaro, "Persona (Non)Grata? Orthodox Readings of Augustine Revisited," The Sheptytsky Institute of Eastern Christian Studies, University of St. Michael's College, University of Toronto, December 3, 2019, https://youtu.be/RMg3gABA6LM.

to lapse into making such distinctions. Augustine's blending of disciplines is reminiscent of the seamless curtain in the temple, a representation of what this blending results in. However, when considered as separate entities, the curtain rips into different pieces much like when it ripped into two upon Christ's death on the cross (Matthew 27: 50-51). The torn curtain is a reminder of all that is wrong and dismembered. This results in the distortion and division of specialisms when in reality they should be considered together and accepted just like the seamless curtain which epitomised the unity God has intended. Augustine's thought process regarding the interrelatedness of disciplines was like the seamless curtain. Augustine in Conf. V.6.10, reflecting on his conversation with Faustus, recognised that several truths cannot contradict one another; rather all truth comes from God regardless of the discipline that truth comes from.⁵ Like Augustine, I have blended the disciplines into one seamless curtain. This thesis does not pitch theology versus science; it is not a defence of the compatibility of science and theology as if there is a bifurcation of the two. It views them as the metaphysical and physical unified, much in the same manner as the metaphysical soul and the physical body. They assist each other and one discipline is not superior to the other.

Important to Augustine was his creation ex nihilo theology. According to Augustine's interpretation of Genesis 1 exemplified in Confessiones and Gn. Litt. nothing existed before creation and everything was made from nothing and in a specific sequence and ordo. Augustine writes, "in the beginning, that is from yourself, in your wisdom which is begotten of your substance, you made something and made it out of nothing."⁶ This was true of memory, and time, both of which would not exist without each other, and as an act of creation, both were creatures. Creation ex nihilo informed Augustine's theology of *memoria*. It is also an important foundation for the work of this thesis. Memory becomes the basis for bringing back memory (present time from time past) and forms the memory of the future time through anticipation of eternity. In the same manner, movement in time is a re-enactment of creation in time; it is a re-calling of time itself.

⁵ Conf. V.6.10. Whichever way God showed Augustine truth, that way is always truth because it comes from God. That includes truth that comes from the natural world. ⁶ Conf. XII.7.7.

Augustine believed there was an *ordo* to creation, and in like fashion, he thought there was of memory. This can be seen when an architectonic analysis of his theology of *memoria* is performed. Architectonics is a "tool" used in this thesis. Architectonics examines the physical structure and function of memory in order to identify any logical structure behind Augustine's thought process on memory. However, this would be limiting and reductionist if this was all that an architectonic study did. Architectonics is revelatory regarding the understanding of memory as dynamic and fluidic with provision of knowledge of the inner workings of memory both at the physical and metaphysical levels. An important aspect of architectonics in this study is that it brings value to the metaphysical realm because it allows for an improved understanding of memory and its role in the rational soul's ability to return to its origins.⁷ Architectonics also helps to identify relationships between parts and the whole, and the whole that is composed of parts (i.e. unity). Further, architectonics provides insight into Augustine's relationship with memory and the Divine in his journey to know and understand God, and how he manages to cleverly draw the reader into his narrative. As Falconer suggests, architectonic theology seeks to draw the reader into its narrative rather than being removed from it and unengaged.⁸ Architectonics allows for knowledge to become well-ordered (cf. ordo of creation ex *nihilo*) and thus, more easily recollected and retrieved in memory.⁹ Parker writes regarding the importance of architectonics and its role in memory:

New experiences can be more easily catalogued and located in the relevance and meaningfulness. The ordering framework becomes more vivid and thus more stable and less easily forgotten. Importance of this is attested to by the fact that, if the memory content of a locus is forgotten, extra effort will often retrieve it. But if the organizing structure of memory loci collapses, all of its contents also fall into oblivion.¹⁰

⁷ Greer discusses the architectonic value that comes from architectonic analysis. I adapt this to the architectonics of memory where the same value is ascribed to the information that architectonics reveals. Russell Greer, "Architectonics and Style" *in The Centrality of Style*, eds. Mike Duncan, Star Medzerian Vanguri (SC: Palor Press, 2013), 72.

⁸ Robert Falconer, "Architectonic Theology," *Pharos Theology* 100 (2019): 2.

⁹ Rodney Douglas Parker, "The Architectonics of Memory: On Built Form and Built Thought," *Leonardo* 30, no. 2 (1997): 150.

¹⁰ Ibid.

Ultimately, architectonics challenges one to expand the ways in which one thinks about memory and to accept that it can provide a new way of thinking about Augustinian memory.

This thesis includes the scientific investigation of memory via a genomic memory process, much like Augustine who used scientific knowledge (*scientia*) to interrogate memory. This is the physical arm of architectonics where physical matter – like the human body and its parts, is examined to reveal information regarding memory. Investigation of a gene called Arc¹¹ known to be involved in the regulation of memory formation, consolidation, storage, and recollection was undertaken to determine if its role is involved in a genomic memory process that could delineate further Augustinian memory. The study of Arc should not be perceived as a purely scientific endeavour but rather, as research that provides additional information regarding the inner workings of memory including innate memory. Further, how does Arc fit into Augustinian memory, what does it tells us of Augustine and his theology, and does Arc have similar parallels with his theory of memory? These questions are addressed in this research.

Arc also is an exemplar of physical time working in conjunction with temporal time and eternity. Genomic study is important as the genome remembers how genes operate and regulate systems such as a genomic memory process. Arc recalls creation in this manner as it is because of creation that Arc has a conserved nature and unique expression and has survived through generations without "changing" its regulatory function and operation. The architectonics of Arc brings together the physical and the metaphysical through the unity of body (physical memory) and the metaphysical (rational soul's ability to remember its origins). The metaphysical action of Arc is that it provides to the rational soul the "ability to remember." Arc like creation has an *ordo* – a sequence of the genome and its regulation of memory; it also brings *ordo* to memory by bringing together memories that are disordered in the deep recesses of *memoria* in the mind.

Memory, as Augustine realized, was complicated and he was left puzzled and without answers which was the reason for interrogating *memoria* from every angle possible. However, in *Conf.* XIII there is an awareness that Augustine had arrived at better place of peace, acceptance, and understanding that he did not need to provide or

¹¹ Herein onwards, "Arc" will be used when referring to the "Arc gene."

know all the answers. That said, this thesis attempts to provide some insights into Augustinian memory in areas where Augustine was left perplexed, and how these insights enhance Augustine's theology allowing for a re-thinking of his theology of *memoria*. In this thesis, I am providing, through a multi-faceted approach to memory, a more fertile way of thinking and an attempt to provide a hermeneutical corrective to modern anachronism.

1.1 Thesis Aims

Many scholars view a theological topic through a pinhole, e.g. just one aspect or one motif of an entire book or doctrine. This is true of Augustinian memory where some scholars limit Augustinian memory in *Confessiones* to the study of literary, Christological, Trinitarian, *exidus-reditus*, or praise motifs, to name a few, to the exclusion of all else.¹² Memory cannot be viewed through a pinhole for in doing so, memory's cyclical remembrance of eternity to temporality to creation and vice versa, becomes a diminution of his theology of *memoria*. This leads to the first aim of my thesis.

The first aim of this thesis is to interrogate *memoria* and memory in much the same manner as Augustine. This first required a thorough examination of his earlier works in order to understand the development of Augustine's theology of *memoria* especially as he worked through his own thoughts and understanding of memory. This investigation is through the lens of architectonics whereby not just the structural and purely functionalistic physical elements of memory are analysed but also the underlying meaning where knowledge of the Divine and relationships become more defined for Augustine. Architectonic analysis of memory is, therefore, also an understanding of the relationship that can exist between the physical reality and the metaphysical. I asked the following question in my architectonic investigation of memory, "how much information does such an investigation unveil pertinent to both the physical and metaphysical aspects of Augustinian *memoria* and memory?"

¹² The different motifs are discussed in subsequent chapters.

The second aim is to understand how the architectonic structure is present in Augustine's writings on memory from Cassiciacum to *Confessiones*. Due to the enormity of this endeavour, this survey is limited to his major earlier writings (Chapter 3: 55-90). The larger focus is on *Confessiones*. This requires a logical analysis of the different structures and patterns that emerge and a non-reductionist approach to reading Augustine. Further, this also requires engaging with Augustine as he journeyed towards the Divine and fulfilment of the *beata vita*.

The third aim is to investigate the role of a specific memory gene – Arc, that is centrally involved in a neuronal communication system and which it regulates through its expression, memory formation, consolidation, storage, and recollection.¹³ Arc was selected as a prime candidate because of its unique structure and highly conserved nature. Its role in memory and time is an exemplar of creation, physical time, and movement towards eternity. The aim is to determine if Arc could be an exemplar of a gene involved in a genomic memory process that is significant, but also congruent with, Augustine's theology of *memoria*. Even further, to determine if Arc can provide insight into the operation and function of memory that could augment Augustine's theology of *memoria*. The use of Arc to investigate Augustinian memory is not inconsistent with Augustine's approach. As we have seen, Augustine employed multiple disciplines in his endeavours to understand memory and time. The necessity to investigate memory in terms of Arc is important as Arc is not simply a gene in the physical sense, but it is a gene that provides information regarding memory and can assist the soul in its remembrance of its origin.

The fourth aim is to investigate time and memory. Augustine knew that without time there could be no memory and without memory there could be no time. Both are creatures of creation *ex nihilio*. The interconnectedness of the two was important to Augustine as noted by his writing of *Conf*. XI. I wanted to investigate whether time had a similar architectonic structure to memory, and observe how it related to Arc, memory, creation, and eternity.

The fifth aim of this thesis arises from the observation of an architectonic structure of *Conf*. XIII where Augustine viewed memory through the lens of creation. My aim is to see if the same structure, sequence, and meaning are present.

¹³ See chapter 6: 147-203.

Lastly, my sixth aim is to examen *Conf.* XIII in the context of this architectonic structure and the insights acquired to determine if *Conf.* XIII is a recapitulation of *Conf.* I-XII. This last aim is to determine if a multi-faceted approach supports a unity to *Conf.* I-XIII and my proposed theory of recapitulation.

1.2 Thesis Claims

I want to provoke some new ways of thinking about Augustinian memory through an architectonic analysis of memory that includes physical, spiritual, and metaphysical dimensions, much in line with how Augustine interrogated *memoria* and memory.

I propose that investigating memory via an architectonic analysis does provide for a new way of thinking about Augustinian memory. Through this mode of investigation, it is apparent that Augustine taught and presented memory in a logical, deliberate, and divinely inspired manner, which was not simply structural in presentation. It was also revelatory regarding the inner working of memory and Augustine's struggles as he yearned for God and the *beata vita*. Memory was the key for Augustine to discover God and the memory of God within. It is my contention that this mode of investigation reveals a structure and specific sequence to memory that formed the foundation for the development of Augustine's theology of *memoria*. Careful analysis reveals eight foundational pillars of memory in *Conf*. X that are present in his earlier works. Further, this identification of eight foundational pillars provides a construct for *Conf*. XI-XIII. To the best of my knowledge, this identification of the foundational pillars of memory in *Conf*. X has not been identified in this particular structure and sequence with all its ramifications in understanding Augustine's theology of *memoria*.

I propose Arc as a prime exemplar of a gene involved in a genomic memory process that mirrors Augustine's operational dynamics of memory and time. I suspect too, that Augustine, being the man who used all knowledge available to him to decipher memory, would have used this information had it been available to him. I propose Arc as an example of how *scientia* works in unison, and co-operates, with *sapientia*; in doing so it generates a biological wisdom that informs divine *sapientia*.

The biological wisdom that comes from Arc expression and regulation of memory demonstrates how Arc operates in both physical (body) and metaphysical (soul) realities.

I have developed a model for eternity, temporal time, and physical time, where creation, the Incarnation, and eternity, correspond to temporal time – past, present, and future, and physical time. Physical time is represented by Arc past, Arc present, and Arc future. All three modes of time, eternity, temporal time, and physical time are interconnected, flow bidirectionally and in a cyclical manner, all the while recognizing the eternal "timelessness" of eternity. I have composed a diagrammatic representation to illustrate these dynamic, fluidic interactions and relationships that provides insight and new knowledge with regard to the understanding of physical time (via Arc) in conjunction with memory, eternity, and temporal time.

It is my contention that *Conf.* XIII has the same architectonic structure as memory in *Conf.* X but viewed through the lens of creation. This sheds light on Augustine's creation *ex nihilo* theology which was the foundation for all his theological thinking and doctrines. This structure aligns with the foundational pillars of memory in *Conf.* X and throughout *Conf.* I-XII. I propose that this structural analysis sheds further light on memory, its role in facilitating the rational soul's return to its origin, and additionally, provides insights to understanding Augustine's yearnings as he strove towards fulfilment of the *beata vita*.

I present my theory of recapitulation which I have developed through an examination of memory in *Conf.* XIII and its context through creation *ex nihilo* and *Conf.* I-XII; I contend that *Conf.* XIII is a recapitulation of *Conf.* I-XII. The research for this theory came from a multi-faceted investigation of memory in *Conf.* XIII and X, and then in *Conf.* I-IX, XI-XII, and the architectonic investigation of memory. This analysis reveals a multiplicity of layers and motifs which when taken together are non-reductionist. They produce a holistic, non-limiting, account of the unity of *Confessiones*, and recapitulation of *Conf.* I-XII in *Conf.* XIII. My theory of recapitulation provides insight into the inner workings of Augustine's mind and the deeper, profound, archaeological excavation of memory that allows for a re-thinking of Augustine's theology of *memoria*.

I conclude my thesis by presenting my "re-thinking" of Augustine's theology of *memoria*. All the above propositions and theories add insight and revelatory

information that helps the understanding of how memory functions and operates in the physical, spiritual, and metaphysical realities.

1.3 Theological Method

My investigation of Augustine's theology of *memoria* was largely through the perspective of architectonics, a methodology I adapted to encompass not just a structural and purely functionalistic approach but also an approach that examined Augustine's own theories of memory, his understanding, his life, his spiritual and metaphysical considerations of memory. Thus, architectonics becomes a multifactorial investigation of memory utilizing all available knowledge that contributes towards an understanding of memory. This is a performative laying out of my premises; however, this did lead to a detailed investigation into, and profound understanding of, *memoria* and memory. According to Geertz, this type of analysis sorts out the structures of signification.¹⁴ This investigatory approach provides novel information that allows for a re-thinking of Augustine's theology of *memoria* by the identification of foundational pillars in Augustinian memory.

This thesis co-opts the transdisciplinary approach that Augustine used in his interrogation of *memoria*. Augustine used the knowledge he had of various disciplines to find answers to his questions regarding *memoria*. I propose that we need to "reprogram" ourselves to read Augustine correctly as he develops his theology of *memoria* utilizing different spheres of knowledge. There is a cultural bias against this, however, we need not be allergic to the synergism of Augustine's methodology.

This thesis considers Augustine's hermeneutical understanding of creation *ex nihilo* in *Conf.* XIII and its implications for memory. Augustine, memory, and time are all creatures of creation; thus there is an ontological consideration to my investigation of memory. In creation, Arc is recognized as a creature as it is a result of God's creative act. Arc is centrally involved in memory and time and provides insight into physical time. The archaeology of memory happens by recalling creation, and the future of memory lies in the resurrection where time is elevated into eternity. Creation

¹⁴ Clifford Geertz, *Thick Description: Toward and Interpretive Theory of Culture* (NY: Basic Books, 1973), 314.

involves the incarnate act of God where eternity meets temporality and Christ is a reenactment of creation, and the means of the return to eternity. The architectonic structure of creation embodies the dynamics of all creation including the dynamic reorientation back to the Creator and then brought to completion in re-creation.¹⁵ Time is associated with the created order and thus physical structures. Creation and memory both have an architectonic structure that is revelatory in understanding Augustinian memory.

This thesis includes a historical aspect in the *historia sacra* of Christ and the *historia* of time and memory. The *historia sacra* is the temporal dispersion of God's action in time. Through the *historia sacra* of Christ, Augustine recognizes his journey through creation and the Incarnation and in his perpetual anticipation of future time in eternity. Time is an experience of the soul and memory, one of the reasons why Augustine felt memory and time were closely linked. This is an important motif in the comprehension of time. Hence, Augustine's compulsion to write *Conf.* XI.

This thesis also examines memory from a metaphysical and anthropological juxta-positioning where there is a sacramental nature to memory and the development of the physical i.e. creation and physical time as exemplified by Arc.

1.4 Thesis Plan

There are nine chapters in this thesis.

Chapter 1 is the introduction.

Chapter 2 introduces the use of architectonics in my investigation of Augustine's theology of *memoria*. It describes architectonics and how it applies to the study of Augustinian memory. This includes a discussion regarding Augustine's palaces of memory and his practice of interiority – important in understanding Augustine's journey and his interrogation of memory. Architectonics provides a logical, structural approach to deciphering what Augustine is communicating regarding *memoria*. It reveals specific insight into how Augustine seeks to know and

¹⁵ Jared Ortiz, "Creation in Saint Augustine's *Confessions*" (Ph.D. diss., The Catholic University of America, 2012), 329.

understand God. This includes Augustine's journey in seeking the *beata vita*. Finally, this chapter discusses the beginnings of Augustine's theology of *memoria*.

Chapter 3 is the survey of Augustine's major early works from 386 to 395 A.D. The survey is comprehensive and includes his major writings.¹⁶ This reveals a strategy to Augustine's questioning of memory and how he taught his readers and students on memory. The architectonic structure that unfolds in this survey reveals seven foundational pillars to memory that occur in a particular sequence.

Chapter 4 is the investigation of Augustine theology of *memoria* in *Confessiones* with in-depth focus on X, XI and XIII. The foundational pillars of memory are discovered to occur in the same sequence identified in chapter 3; however, *Conf.* X reveals one more foundational pillar. The architectonics of the inner workings of memory is discovered and expounded by Augustine in a manner that his reader can gain insight to Augustine's own struggles, perplexities, and growing understanding of God. This investigation unveils in part an understanding of how Augustine's ingenious mind worked.

Chapter 5 illustrates how much knowledge Augustine had of medical and scientific matters and thus understand Augustine's philosophy in using this knowledge in his probing of memory. It is an examination of *scientia* and how it evolves towards *sapientia* when *scientia* provides knowledge that informs the rational soul.

Chapter 6 is an examination of the role of Arc in memory. Arc is proposed as an exemplar of a gene involved in a genomic memory process. Arc expression is central in facilitating a neuronal communication system involved in the formation, consolidation, storage, and retrieval of memory. Arc is also involved in the spatiotemporal dimension of memory and the metaphysical in context of its role in the achievement of the *beata vita*. Arc presents a new way of thinking about the same Augustinian ideas.

Chapter 7 is a discussion on the Arc-hitectonics (Arc) of time and memory. This chapter presents the role of the *historia sacra* of Christ in terms of creation, the Incarnation, eternity, Augustine's life, and Arc. The chapter has three main sections: eternity, temporal time, and physical time all with their own Augustinian enigmas of

¹⁶ While comprehensive this survey excludes most letters and sermons that Augustine wrote.

memory and time. I propose Arc as an exemplar of physical time and present how it relates to eternity and temporal time.

Chapter 8 investigates the archaeology of memory by recalling creation. In *Conf.* XIII Augustine examined memory through the lens of creation. I discovered in this analysis a similar structure and *ordo* of memory (foundational pillars) identified in Chapter 3 and 4. These pillars and the motifs of memory, time, and creation are compared in parallel between *Conf.* XIII and I-XII. There is a clear structure that emerges along with multiple motifs that together support a unity of *Conf.* I-XIII. I propose a theory of recapitulation where *Conf.* XIII is a recapitulation of *Conf.* I-XIII. The significance of an architectonic structure in this theory of recapitulation reveals five distinct categories regarding Augustine and his writings. These are Augustine's cerebration, creation theology, pedagogy, recapitulation, and the unity of *Confessiones*.

Chapter 9 is my proposal for a "re-thinking" of Augustine's theology of *memoria*. Such a "re-thinking" is possible because of the knowledge gained through the architectonic investigation of *memoria* and memory. There are four categories involved in this re-thinking of Augustinian memory; they are the architectonic structure of memory, Arc-hitectonics (Arc) and memory, architectonics of time and memory, and my proposed theory of recapitulation. My theory of recapitulation contends that *Conf.* XIII is a recapitulation of Conf. I-XII.

1.5 Concluding Remarks

This chapter has introduced the reader to architectonics, my primary mode of investigating Augustinian memory. Architectonic investigation revealed information beyond a dry and functionalistic analysis of *memoria*. It included insights into Augustine's life, yearnings, and the paradoxes he encountered in his own interrogation of memory.

My thesis proves that memory has an architectonic structure in *Conf.* consisting of, and built upon, the foundational pillars of memory identified in Augustine's earlier works and *Conf.* X. I present a genomic memory process regulated by the Arc gene that provides insights into Augustinian memory. I propose a theory of recapitulation whereby XIII is a recapitulation of I-XII, and which views Augustinian memory through the lens of creation *ex nihilo*.

It is my hope that my thesis provokes a new way of thinking, of telling the same story, of what has always been. The novel information revealed in this thesis allows for a "re-thinking" of Augustine's theology of *memoria*.

Lastly, what engaged me most about Augustine was his deep, profound desire to know and understand God, to know how he remembered God, and his realization of the importance of memory and creation *ex nihilo* in his yearning for the *beata vita*.

CHAPTER 2: The Architectonics of Augustine's Theology of *Memoria*

"I come to the fields and vast palaces of memory...when I am in this storehouse, I ask that it produce what I want to recall."¹

2.1 Chapter Aims

Augustine's theology of *memoria* is quite complex with many seemingly perplexing elements. This chapter lays the foundation for the main methodology of this thesis. Architectonics is essentially a logical, structural approach to ascertain what Augustine is communicating regarding his theology of *memoria*.

To comprehend the development of Augustine's interrogation of *memoria* and his theology, there must be an understanding of his thought process and an appreciation of the desires of both Augustine and his rational soul. This is gained by first understanding how an architectonic analysis reveals information about the inner workings of *memoria*. Second, Augustine recognized the importance of the practice of interiority in his pursuit of the Divine. There is a movement within the practice of interiority that defines his relationship with God and serves as the platform upon which he discovered *memoria* and its role in re-membering God.

This chapter discusses architectonics and its use in this thesis. A brief summation of Augustine's practice of interiority is provided; this is important in recognizing the initial impetus that caused Augustine to interrogate *memoria*.

¹ Conf. X.8.12.

2.2 Introduction

Augustinian memory has an architectonic² structure revealed in his metaphysics of memory; memory resides in *memoria* which resides in the mind which is located in the rational soul. The vast palaces or storehouse of *memoria* are cavernous with indescribable secret nooks and crannies.³ This alludes to an architectonic structure similar to that of an architect's design of a building. The housing of memories in the different "nooks and crannies" is metaphorically similar to the occupants of a house with people in different rooms and locations. Memory itself also has an architectonic structure when one thinks of the different types of memory, the anatomical functioning of memory, and the operation of memory recollection and retrieval. The logic of Augustine's theology materializes as he explains *memoria*, as does the mode of teaching that he uses in the *Confessiones*. Both have an inbuilt architectonic configuration.

2.3 The Architectonics of Memoria

"See the broad plains and caves and caverns of my memory. The varieties there cannot be counted, and are, beyond any reckoning, full of innumerable things,"⁴

"Memory itself is a form of architecture."⁵

According to Jo, architecture has a long tradition of evoking memory. To imagine an architecture of memory is to understand the relationship that can exist

² Architectonics is a term that is derived from the Greek *architecton* which means "master craftsman." Architectonics is defined as relating to, or characteristic of architecture, design, and construction. There is a difference between the terms "architecture" and "architectonics." Architecture is both the process and product of planning, designing, and constructing a building or structure. Architectonics is the study of architecture itself. Greer, "Architectonics," 71.

³ Conf. X.8.13.

⁴ Conf. X.17.26.

⁵ Quote by Louise Joséphine Bourgeois, a French-American artist.

between the physical reality and mental meanings.⁶ Augustine says the same thing but in a somewhat different manner. In X.16.25, he writes about remembering Carthage and the faces he has seen. In this context, Carthage is the physical reality of an object that was seen, and the memory of Carthage is the "mental meaning." He continues, "for the image of an object to be impressed upon the memory, it is first necessary for the object to be present, so that an impression of the image becomes possible."⁷ Augustine remembers the "physical reality" of Carthage and recollects the images formed in memory and located in *memoria*.

Remizova asserts that the concept of architectural memory has many shades and forms and manifests itself in a variety of different forms of professional consciousness.⁸ There are traces of memory in the theory, history, and practice of architecture.⁹ She writes:

As historical knowledge, memory exists in such forms as chronological description, science of history, evolutionary results, catalogues of style, museum, archive. In designing and its language, memory is represented in forms such as canon, norm, dialogue with bygone era, norm, architectural fantasy, remembrance, historical association, reconstruction, restoration, and others.¹⁰

Augustine too, presents the different aspects of memory including historical in terms of creation, the Incarnation, eternity, temporality, and his personal life. Augustine also wrote about learning the liberal arts, the differences between *phantasiae* and *phantasmata* (true verses false images), imagination, and time and memory. All these are mentioned in *Conf.* X-XI. These categories of Augustinian memory illustrate that memory is the common denominator in the processing and storing of images and information (memories) that can be retrieved at a later date. In

⁶ Some authors like Jo and Remizova do not differentiate between architecture and architectonics. Seungkoo Jo, "Aldo Rossi: Architecture and Memory," *JAABE* 2, no. 1 (2003): 231-237. Olena Remizova, "Architectural Memory and Forms of its Existence," *Arch. Urb.* 44, no. 2 (2020): 97-108. ⁷ Conf. X.16.25

⁸ In some explanations of consciousness, consciousness is synonymous with the mind, and at other times, an aspect of mind. In the past, it was defined as one's "inner life," the world of introspection, of private thought, imagination, and volition. Julian Jaynes, *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (1976; repr., NY: Houghton Mifflin Harcourt Pub. Co., 2000). Remizova, "Architectural," 97. "Consciousness," from *Wikipedia*, the free encyclopedia, accessed January 20, 2023, https://en.wikipedia.org/wiki/Consciousness

⁹ Remizova, "Architectural," 97.

¹⁰ Ibid.

the architectural profession memory is also the main way of storing information and skills.¹¹ Architecture is a form of art that through its buildings and monuments stores information about the important phenomena of the spiritual and material culture of mankind.¹² The same is true of Augustinian memory. Through the *memoria Dei* located in the vast palaces of *memoria* and the remembrance of the Incarnation, Augustine is not only able to participate in Eucharistic moments of union with the Divine but he can also convey the truth of God to others – he uses memory to do both. *Memoria* for Augustine is the building or monument (palaces or storehouse) that contains the images and memories of spiritual practices and experiences.

Remizova, like Jo, believes that architectural memory is a mental phenomenon.¹³ She proposes this based on her activity-theoretical methodology she uses to study the different forms of architectural memory and their existence.¹⁴ For Augustine, memories are stored in *memoria* which is located in the mind. Memories are therefore, to adopt Remizova term, "mental phenomena."

Within the Augustinian corpus, *memoria* and memory have architectonic structures. How does this impact or change what Augustine said about memory? I would suggest that it did not affect what Augustine said. However, knowledge of the architectonics of memory reveals several truths. First, there is a logic and structure as to how Augustine thought and wrote about memory. Second, there are hints of how he himself was taught in his Roman Latin education and how this underlies his exposition on memory. Third, architectonics reveals relationships that exist between parts and the whole (e.g.: individual images together make a narrative of speech) and the whole with its parts. Fourth, it reveals the meaning of the memories. Fifth, it draws Augustine's reader into his narrative, and sixth, it reveals much about Augustine's own journey as he sought to know and understand God and progress towards the *beata vita*.

The study of the architectonics of memory in relation to Augustinian memory, is to the best of my knowledge, virtually non-existent. It may be mentioned in passing in some articles but certainly is not studied at length.

¹¹ Ibid., 98.

¹² Ibid.

¹³ Ibid., 107.

¹⁴ Ibid., 97-108.

2.3.1 The Origins of the House of Memory

The house of memory is an architectonic trope which describes the intimate relationship between architecture and memory.¹⁵ The historical development of this mnemonic technique is important in understanding how Augustine developed his initial thought processes regarding memory.

The concept of a "building" to explain memory and how it worked is thought to have originated with Simonides of Ceos (556-468 B.C.) who is often credited with formalizing the relationship between architecture and memory by associating image (memory) with place (architecture).¹⁶ This association describes a memory system with an architectonic format. Years later, Aristotle (384-322 B.C.) was interested in the mental processes involved in understanding and thinking in association with knowledge and memory.¹⁷ He believed memory and imagination to be located in the same area of the soul. Again, hints of an architectonic format. The anonymous author of Rhetorica ad Herennium (written in 90s B.C.) wrote a famous section on memory and the method of loci.¹⁸ The *Rhetorica ad Herennium* depicts memory as the guardian of all parts of rhetoric and describes "ideas" that are contained in the "treasure-house."¹⁹ However, it was the Roman rhetoricians Cicero (106-43 B.C.) and Quintilian (35-100 A.D.) who both invoked the use of architecture as an aid for memory; both were also sceptical of Simonides being credited as the originator of this technique.²⁰ They advised their students to construct a mental storage space in order to remember the many facts and stories that one needed to draw upon in public speaking.²¹ This storage space could be a real or idealized building. Quintilian suggested using a spacious house with many rooms.²² Purdy writes that the analogy between a house and memory appears in Roman rhetorical treatises in order to spur

¹⁵ Vincent Spagnolo, "Memory: The Storage of a House" (Master's Thesis, University of Calgary, 1998), V-1.

¹⁶ Frances A. Yates, *The Art of Memory* (Chicago: TUCP, 1966), 1.

¹⁷ Jo, "Aldo," 233.

¹⁸ Rhetorica ad Herennium, trans. H. Caplan (Cambridge, MA: HUP, 1954), 3.16-24.

¹⁹ Ibid., 3.16.

 ²⁰ Daniel L. Purdy, "The House of Memory: Architectural Technologies of the Self," in *On the Ruins of Babel: Architectural Metaphor in German Thought* (Cornell University Press, 2011), 146, 149.
 ²¹ Marcus Tullius Cicero, *De Orate*, trans. E. W. Sutton, H. Rackham (Cambridge, MA: HUP, 1963),

II.lxxxvi.351-lxxxix.361. Quintilian, *Institutio Oratoria*, trans. H. E. Butler (Cambridge, MA: HUP, 1964), XI.ii. Purdy, "The House," 146.

²² Quintilian, Institutio, XI.ii.20.

recollection; thus, an orator could quickly pull information from his mind as he spoke.²³ This system allowed knowledge to be contained in a logical sequence i.e., correct order of memories, and retained for a long period of time.

According to Purdy, Latin rhetoricians repeated the trope that memory was a treasure-house.²⁴ Purdy describes the stability of containers that preserved memories until they were needed. In this setting, spatialized memory is arranged in the present moment into distinct entities and then placed within this stable container.²⁵ Within this concept of a stable container, architecture was presumed to be the stable component; here the mind flowed, perceptions rolled into consciousness, but the house of memory, within which these were contained, remained unaltered.²⁶

Temporal time also came into play; past, present, and future time. Thus, time and space also existed in a single architectonic structure in which past memories were integrated, interpreted, and modified.²⁷ A key element of Augustine's philosophy of time is time as past, present, and future, as discussed in *Conf.* X-XI.

Memory remembers within an architectonic structure.

2.3.2 Augustine's Palaces of Memory

It would seem unlikely that the idea of an architectonic memory system with a storehouse that had many caverns was novel to Augustine. He was familiar with Aristotle, Cicero, and Quintilian, and their writings.²⁸ O'Donnell "tentatively" disagrees, arguing that the most that can be said is that Augustine draws from a "store of imagery congruent with the technique."²⁹ Nevertheless, it appears that Augustine may have adapted the concept of the "houses of memory." "Houses of memory" became the "palaces of memory." Augustine adapted "palaces of memory" to include memory of God, *memoria* as the gateway to the Divine, and the operations of memory.

²³ Purdy, "The House," 146.

²⁴ Quintilian, Institutio, XI.ii.2. Rhetorica ad Herennium, 3.16.28. Purdy, "The House," 147.

²⁵ Purdy, "The House," 147.

²⁶ Ibid.

²⁷ Jo, "Aldo," 236.

²⁸ Purdy, "The House," 146, 149.

²⁹ James J. O'Donnell, *Augustine Confessions III, Commentary on Books 8-13* (Oxford: OUP, 1992), 177.

Augustine described *memoria* as "vast palaces of memory" where there were treasuries including secret "nooks and crannies" storing innumerable images of all kinds of objects brought in by sense perception.³⁰ Augustine described how when he wanted to retrieve something from memory, he went into the storehouse and asked to retrieve the memories.³¹ Some were retrieved easily but others were not, and he had to go in search for the memory he wanted until it "emerges from its hiding places."³² Augustine wrote that this was what happened when he wanted to recount a narrative from memory.³³ Again, here is a visual of Augustine metaphorically using the image of his "vast palaces of memory" and the different storage spaces within to find memories and retrieve them in order to recount a narrative.

When Augustine uses the phrase "palaces of memory" he elevates the phrase "house of memory." The Collins English Dictionary defines the word palace as "a very large, impressive house, especially one which is the official home of a king, queen, or president."³⁴ The "house of memory" is no longer just a "house;" it is now the "palaces of memory." Interestingly, Augustine uses the plural "palaces" (*praetoria*)³⁵ suggesting that there is such an abundance of memories that they cannot be stored in only one palace. Augustine was correct; the human brain memory storage is 2.5 petabytes (or 2,500 terabytes).³⁶ The elevation to "palaces" suggests there is a change in how Augustine conceives of their function. Architectonically, it is a structure that houses memories in particular "nooks and crannies." However, Augustine also recognizes the "palaces of memory" as the place where memory in *memoria* leads him to the Divine through recollection of the *memoria Dei*. It is a place where a meaningful and transformative experience can take place.

³⁰ Conf. X.8.12-13 cf. X.8.13-14, X.17.26.

³¹ Conf. X.8.12.

³² Ibid.

³³ Ibid.

³⁴ "Palace," Collins English Dictionary, accessed 01/20/2023,

https://www.collinsdictionary.com/dictionary/english/palace

³⁵ The Latin term *praetorium* originally identified the tent of a general within a Roman *castrum* (encampment). William Smith, "*Praetorium,*" *Dictionary of Greek and Roman Antiquities*, 2 ed. (London: John Murray, 1872.)

³⁶ This is equivalent to 3 million hours of TV shows which would take 300 years of continuous TV running. Paul Reber, "What Is the Memory Capacity of the Human Brain?" *Scientific American* 21, no. 2 (2010): 70.

2.4 Augustine and Architectonics

Augustine thought it was inadequate for memory to be just a mnemonic function of the mind. He recognized memory as having two broad functions. First, memory was very much involved in knowing and understanding God and in the fulfilment of the *beata vita*. To discover the true pathway to God, Augustine realized that he first had to know himself. This involved a step-by-step process of interior examination i.e., the important exercise of Augustinian interiority. Second, Augustine's interrogations of memory recognized the complexity of the mechanics of memory in its operation and function of different types of memory which assisted the soul in remembering its origins, and the human being in remembering.

2.4.1 Neoplatonic Influence in Augustinian Interiority

Augustine's background in Neoplatonism is important in understanding the development of his practice of interiority and interrogation of memory.

Augustine the orator and rhetorician was acquainted with Platonic philosophy particularly, the works of Plotinus and Porphyry.³⁷ He had read the *libri platonicorum* in his search for a way that would deepen his self-knowledge and understanding of how to attain true happiness; he believed that the true end of *philosophia* was the attainment of wisdom and the *beata vita*.³⁸ These Platonic books admonished Augustine to "return into myself."³⁹ Plotinus understood the Delphic maxim "know thyself" as a command to "withdraw within yourself, and examine yourself."⁴⁰ He had developed Plato's philosophy of interiority, describing the return of the soul to intellect and the One from whom the soul proceeded. This conception of interiority to search for the Divine within was a central feature of the Roman school of epistemology, advocated by both Plotinus and Porphyry.⁴¹ This Neoplatonic influence

³⁷ Conf. VII.9.13. Augustine had read "certain books of the Platonists (libri platonicorum)."

³⁸ Ibid. Regarding the happy life: *Conf.* X.20.29-23.33. Gilson, *The Christian*, 3.

³⁹ Conf. VII.10.16.

⁴⁰ *Plotinus* I.6.9. *Plotinos: Complete Works*, vol. 1, trans. Kenneth Sylvan Guthrie, 2013.

⁴¹ Augustine developed a practice of interiority followed by an upward movement to participation in the Divine based on Plotinian philosophy. Both Plotinus and Augustine believed that the movement was from the material to the immaterial, and then from within the immaterial, from the mutable to the immutable. Unlike Plotinus, interiority for Augustine became a journey to the intelligible nature of

on Augustine is important because he did not know where to find God. He assumed this was due to his lack of self-knowledge. The Neoplatonists, Augustine believed, had succeeded in reaching the natural knowledge of God. They had beheld the inner Truth that is God, and therefore, could tell him where to look to find it.⁴²

2.4.2 Augustinian Interiority

"I entered into my innermost citadel and was given the power to do so because you had become my helper."⁴³

Augustine turned inwardly to examine his "inner man,"⁴⁴ where he could acquire "self-knowledge" and ultimately, according to Bonner, become like god.⁴⁵ Augustine believed that through interior cognition the incorporeal soul understood the material world. This in his day was controversial as Platonists, Manicheans, Stoics and Epicureans all believed the soul and mind and everything within were corporeal.⁴⁶ Augustine believed it was through divine illumination that the soul was allowed to understand the corporeal; God was known to the mind in the same way as the sunlight was shown to the corporeal eye.⁴⁷

Augustine encountered the phrase "inner man" after he began reading the Pauline literature first introduced to him in the sermons of Ambrose, Bishop of

being. As Pegis says, "it is within us that we reach more intimately the reality and the truth of human being and the Divine Being." For an in-depth discussion see Anton C. Pegis, "The Mind of St. Augustine," *Mediaeval Studies* 6, no. 1 (1944): 1-61. Peter Brown, *Augustine of Hippo: A Biography*. 45th Anniversary Ed. (1967; repr., Berkeley, LA: UCP, 2000), 79-92, John Peter Kenney, "Faith, and Reason," in *The Cambridge Companion to Augustine*, 2nd Ed., eds. David Vincent Meconi, Eleonore Stump (Cambridge: CUP, 2014), 278.

 ⁴² Philip Cary, "Plotinus on the Soul: A Study in the Metaphysics of Knowledge Soul," *AugStud* 36, no. 1 (2005): 232. Pier Franco Beatrice, "Quosdam Platonicorum Libros: The Platonic Readings of Augustine in Milan," *Vigiliae Christianae* 43 (1989): 252.

⁴³ Conf. VII.10.16.

⁴⁴ This term "inner man" was not a common phrase in Augustine's time nor in ancient philosophy. There is no record of its use until its appearance in the Pauline writings in the New Testament. Evidence of its use may have been destroyed. It is a term adopted by Augustine. Phillip Cary, *Augustine's Invention of the Inner Self: The Legacy of a Christian Platonist* (NY: OUP, 2000), 47.

⁴⁵ *Trin.* 9.11.16. "We are like God inasmuch as we know Him." Per Bonner, interiority is a way of achieving deification. Augustinian deification (*deificare*) is the process of the soul becoming immutably good through increasing our knowledge of God and loving Him – made possible by adopting us as His sons "through participating in our humanity in the person of Jesus Christ." Gerald Bonner, "*Deificare*," in *Augustinus-Lexikon*, vol. 2, ed. Cornelius Mayer (Basel: Schwabe & Co., 1996), 226.

⁴⁶ Cary, "Plotinus," 231.

⁴⁷ Sol. 1.8.15.

Milan.⁴⁸ Ambrose had preached on the introspective turn towards the "inner man."⁴⁹ However, it is Augustine who is credited by various authors as the discoverer of the "inner man" although he is often perceived as individualistic in his orientation and discovery of interiority.⁵⁰

There seems to be a disconnect between various authors and their discussions of Augustinian interiority each gravitating to one particular aspect of interiority. Some focus on interiority as an examination of the inner man, some consider it purely an intellectual process, and others consider it a contemplative process.⁵¹ There is a tendency to use these terms interchangeably and often, with the same meaning of an inward movement to the inner man. However, Augustinian interiority is really a movement within Augustine that developed into a spiritual exercise that he practiced throughout his life. Madec writing on *Conf.* III.6.11 comments that interiority was not an introspection in Augustine's life that went instantly from flesh, into his mind and to transcendence.⁵² Interiority was a movement that started with the introspection of the inner man but then developed to include an exercise of the mind followed by a meditative and contemplative process. There is an architectonic pattern in interiority that was expressed in this movement within Augustine. Augustine no longer saw interiority as just an examination for self-knowledge but rather a movement towards

⁴⁸ The three occurrences of the term "inner man" are in Romans 7: 22, 2 Corinthians 4: 16, Ephesians 3: 16. The Greek is ἐσω ἀνθρωπος translated as "inner man." The noun is the general word for "human being" not "man," but most translations interpret it as "inner man." Following the lead of Cary this phrase "inner man" is used to preserve integrity with the discussions in the literature. Cary, *Augustine's*, 162.

⁴⁹ According to Madec, Ambrose used this phrase purely exegetically and from a pastoral not philosophical perspective. Augustine took the phrase and developed the philosophical concept of the "inner space of the self." G. Madec. "L'homme Intérieur Selon Saint Ambriose" in *Ambriose de Milan*, ed. Y-M. Duval (Paris: Études Augustiniennes, 1974).

⁵⁰ Cary claims that Augustine invented the 'inner self.' He describes this as a Christian idea that originated in the Platonic tradition. What Cary claims is new from Augustine and different from Platonism is that the inward turn creates an inner space that is private; this private nature of the inner self is a consequence of the sinful nature of man. Cary, *Augustine's*.

⁵¹ For example, Cary focuses on Augustinian interiority as an invention of the inner self in his book. Kenney describes interiority as a contemplative process. Marrou argues that interiority is a philosophical exercise of the mind to gain intellectual comprehension of objects of faith. Grove views interiority somewhat differently; he describes interiority in terms of memory which is the place of Augustine's *interior intimo meo* and which reflects Augustine's recalling of his life in *Conf.* I-IX. He asserts that memory is the most interiorizing aspect of the human person and results in an outward movement towards God and neighbour. Cary, Augustine's. John Peter Kenney, *Contemplation and Classical Christianity: A Study in Augustine* (Oxford: OUP, 2013). Henri-Irenee Marrou, *Saint Augustin et la Fin de la Culture Antique*, 4th Ed. (Paris: E. De Boccard, 1958), 297-327. Kevin G. Grove, *Augustine on Memory* (NY; OUP, 2021), 1-2, 9-10.

⁵² Goulven Madec, Saint Augustin et la Philosophie: Notes Critique (Paris: Brepols, 1996), 91.

participation⁵³ with God where his soul transcended temporal reality and encountered eternal truth through *memoria* located in the mind of the rational soul. Within *memoria* he found a remembrance of God (*memoria Dei*). *Memoria Dei* was the fulcrum between Augustine's inner man and the Divine. This knowledge and experience instigated in Augustine a fervent desire to understand how there was the remembrance of God within his soul. This impelled him to passionately seek to explain, define, and comprehend the profundity of *memoria*.

The presence of *memoria Dei* and consequently, the possibility of knowledge of God, fuelled his growing desire to understand how a remembrance of God facilitated his rational soul's ability to experience God. Augustinian interiority in *Confessiones* has three movements: 1) turning inward: *interior examen*, 2) turning outward: *exercitatio animi* and 3) turning upward: *meditatio/ingressio* [to (*ad*) God] *et contemplatio* [in (*apud*) God],⁵⁴ each with specific roles in the acquisition of self-knowledge, the discovery of *memoria Dei*, the knowledge and transcendence of the soul, divine illumination, and experience of participation in the Divine.

2.4.2.1 Interior Examen

"And so step by step I ascended from the bodies to the soul which perceives through the body, and from there to its inward force, to which bodily senses report external sensations."⁵⁵

In Ord., Augustine wrote of the first step in the inward turn of interiority interior examen. He said, "man does not know himself. Now, for acquiring this self-

⁵³ Participatio is used by Augustine to describe the fact that humans exist only by the sharing of God's being with humans i.e., participation in God. God is both Being and the source of Being. Therefore, creatures have being because God freely shared or bestowed this on them by creating them *ex nihilo*. To be at all is to participate in God. Meconi describes how *participatio* "represents creation's need to partake of the perfect and immutable source of Being." *Conf.* VII.9.14, VII.18.24-19.25. Gerald Bonner, "Augustine's Conception of Deification," *Theological Studies* 37 (1986): 373. Jared Ortiz, *You Made Us for Yourself: Creation in St. Augustine's Confessions*, (Minneapolis: Fortress Press, 2016), 14, 17. David Vincent Meconi, "The Incarnation and the Role of Participation in St. Augustine's Confessions," *AugStud* 29, no. 2 (1998): 68.

⁵⁴ In the context of Augustine's interiority, *meditatio* is the upward turn to God (*ad Deus*). *Ingressio* can be used interchangeably with *meditatio* and is used, in this context, to further define *meditatio*. It is translated as "entry" to God's presence. *Contemplatio* is the upward turn toward being in/with God (*apud Deus*). Kenney, *Contemplation*, 61-92, 99-100.

knowledge, he needs a constant habit of withdrawing from the things of the senses and of concentrating his thought within himself and holding it there."⁵⁶ Augustine's inability to control his carnal temptations made him desperate to find the truth as he was so afraid of dying before the truth was found.⁵⁷ He firmly believed the lack of self-knowledge was the source of his lack of discipline.

Augustine through *interior examen* entered his inner space, and there he discovered himself within memory; "In the vast hall of my memory...there also I meet myself and recall what I am, what I have done, and when and where and how I was affected when I did it."⁵⁸ According to Kohut, remembering is an engagement "that enables the individual to recognize himself in his recalled past and facilitates healing the discontinuity of the self-caused...by myriad interactions with others and the larger world." ⁵⁹ As Augustine's soul looked inwards, it discovered rationality and a remembrance of God, and it perceived the intelligible and immutable. Yet Augustine did not retreat into himself and withdraw from his senses with the intention of staying within the intellect of his mind struggling with his demons, his self and self-knowledge. He saw the reality of truth and the encounter with the Divine that went beyond the intellect of the mind. This is unlike the Cartesian interiorism of modern philosophy where Descartes went into his consciousness and was unable to build a way out from his mind back into the world.⁶⁰ The trace, the tenuous remembrance of the incorporeal God present in Augustine, went beyond his soul, and lured him outwards and upwards to the Divine.

Through *interior examen*, Augustine's inward turning into his inner man allowed him to develop a growing awareness of the *spiritalis substantia* and the need

⁵⁶ Ord. 1.1.3. Also, *Trin.* 10.5.7 (so then it is one thing not to know oneself, another not to think about oneself).

⁵⁷ Conf. VII.5.7.

⁵⁸ Conf. X.18.14. Andrés G. Niño, "Spiritual Exercises in Augustine's Confessions," *Relig. Health* 47 (2008): 91.

⁵⁹ H. Kohut, *The Restoration of the Self* (NY: International Universities Press, 1977), 82.

⁶⁰ Pegis, The Mind, 38. Cottingham said Descartes was conscious of the finite but aware of the infinity placed by God in his mind – God placed the idea of God himself in his mind. Since God created him, his mind must be a reliable instrument. Stróżyński also points out that self-knowledge as simple awareness of the mind's existence is not a Cartesian introspection. Stróżyński writes that *Trin*. attempts to suggests an ontological dimension of the self and self-knowledge, but in a non-Cartesian way. John Cottingham, "Descartes I," YouTube, January 2012,

https://www.youtube.com/watch?v=abVVKe5zObU. Mateusz Stróżyński, "There is No Searching for the Self: Self-knowledge in Book Ten of Augustine's *De Trinitate*," *Phronesis* 58 (2013): 288.

to reject the *carnalium cognitationum figmenta* in this process.⁶¹ However, despite his decision to live a chaste life, his struggles continued to torment him, particularly, his inability to stop the images in his memory of his past sexual exploits which influenced his nightly dreams causing "carnal emissions."⁶² Augustine began to see that he had been searching through eyes that viewed the world and a body that looked out to the wrong external stimuli due to the soul's detachment from its Creator. However, God by his grace, used internal goading (*stimulis internis*) so that Augustine through an interior sight (*interiorem aspectum*) could see God's manifest presence.⁶³ Augustine worked hard to not focus on the body and lower, sensitive soul but rather delight in the truth he had discovered.⁶⁴

Augustine needed to transcend the self to discover the rational soul and find the immutable God who was present to his self.⁶⁵ In this regard, Luke 15:17 was an important text for Augustine. The prodigal son "came to himself" at the lowest moment of his existence.⁶⁶ Augustine understood this to mean that in a moment of realization the soul came back to itself; it was also simultaneously a coming to God who was within and above.⁶⁷ This gave Augustine hope. He discovered God was intimately present in the depths of his rational soul, "but you were more inward than my most inward part and higher that the highest element in me" (*interior intimo meo et superior summo meo*).⁶⁸ It was this recognition and acceptance of the truth that enabled Augustine to move forward. Yes, Augustine had become more aware of himself and his inner man had begun attending to his soul.

Augustine realized in his interiority that he had shifted in awareness from "I am" to "I know that I am" a more intuitive move of the illuminated mind and a step towards its ultimate goal of perfect wisdom and the *beata vita*.⁶⁹ In this process Augustine also shifted from an awareness of "God is" to "I know that God is." He came to know God is Being, "I AM who I AM," and "truth…not diffused through

⁶¹ Conf. VI.3.4; Jennifer Karyn Reid, "Patrician and Augustinian Ideas of "Inner Man"," *Medieval Latin* 20 (2010): 19.

⁶² Sol I.10.17. Conf. VII.17.23, X.30.41-42.

⁶³ Conf. VII.8.12. Reid, "Patrician," 21.

⁶⁴ Retr. 1.1.3, 1.3.2. Conf. I.20.31.

⁶⁵ Terence Sweeney, "God and the Soul: Augustine on the Journey to True Selfhood," *Heythrop Journal* LVII (2016): 682, 685.

⁶⁶ Sweeney, "God," 683.

⁶⁷ Ibid., 683, 685.

⁶⁸ Conf. III.6.11.

⁶⁹ M. J. Coughlan, "Si Fallor Sum Revisited," AugStud 13 (1982): 149.

space, either finite nor infinite."⁷⁰ With these understandings of the truth, Augustine's inner man also discovered that the rational soul as Reid describes, "was the resonant zone of contact with God."⁷¹ Augustine began to comprehend that when he ushered God "into his inner self," God permitted him to transcend above his mind and see the "immutable light."⁷² He discovered his soul was not divine.

This inward journey of discovery took Augustine to the very depth of his being to find the very Source of his being.⁷³ This required Augustine to dig deeper, turn outward from his inner self and embrace *exercitatio animi* – an exercise of the soul and mind.

2.4.2.2 Exercitatio Animi

"I entered into the very seat of my mind, which is located in my memory."⁷⁴

The mind (*mens*), the highest part of the rational soul,⁷⁵ was the logical place for Augustine to go deeper and evaluate the truths he had unearthed during his *interior examen*. Consequently, he developed an exercise of the soul and mind – *exercitatio animi*.⁷⁶ Marrou asserts that *exercitatio animi* began as a philosophical exercise of the mind.⁷⁷ However, this evolved from merely a philosophical exercise for Augustine as he realized he had to confront both the metaphysical and physical realities of his rational soul by turning outwards rather than remaining with his inner self.

 ⁷⁰ Conf. VII.10.16. Stróżyński also discusses this realization of Augustine. Stróżyński, "There," 288.
 ⁷¹ Reid, "Patrician," 19.

⁷² Conf. VII.10.16.

⁷³ Sweeney, "God," 687.

⁷⁴ Conf. X.25.36.

⁷⁵ Gilson has a detailed explanation of *mens* and *animus* (rational soul). *Mens* is the higher part of the soul that "clings to things intelligible and to God…the mind contains reason and intelligence." Gilson, *The Christian*, 64, n 3.

⁷⁶ Roland Teske, "Augustine's Philosophy of Memory" in *The Cambridge Companion to Augustine*, eds. Eleonore Stump, Norman Kretzmann (Cambridge: CUP, 2001). See also *Conf.* X.1.1-43.70., *En. Ps.* 145.5, *Trin.* 14.3.5.

⁷⁷ Marrou defines *exercitatio animi* as a philosophical exercise of the mind or soul where the mind is trained to attain an intellectual comprehension of objects of faith. Marrou, *Saint*, 297-327.

Augustine's adaptation of *exercitatio animi* had two important goals. The first was to train the mind to purge materialistic concepts from the mind.⁷⁸ The second, to transfer the affections "from the things of this world to God via an incorporeal rational soul."⁷⁹ Ayres defines Augustine's use of *exercitatio mentis* in *Trin.* as "a training in modes of thinking increasingly interior, and increasingly free from images, a gradual intellectual movement from the material to the immaterial, fundamentally Neoplatonic in character."⁸⁰

It was through the practice of *exercitatio animi* that Augustine recognized that memory located in the mind was the gateway to the Divine.⁸¹ Memory was the place where Augustine was able to come to peace with his demons and see beyond himself and towards God. He discovered that memory and mind were one and the same thing and were intricately connected: "we call memory itself the mind" and "memory is...the stomach of the mind."82 Hochschild describes memory as the power of the soul that 'looks down' or outwards to the sensible, and 'up' or inwards to the intelligible.⁸³ This was Augustine's discovery. Further, an *a priori* knowledge of God resided in memory albeit a "tenuous consciousness of the truth."⁸⁴ Chadwick explains how, to Augustine, memory had a far deeper and wider meaning than what we currently understand memory to be.⁸⁵ Memory was understood to mean that the mind knew things it did not know it knew, a remembrance/knowledge of God that was embedded in the mind. This a priori knowledge caused a seeking of God through the rational soul, therefore, God could only be sought if there was a remembrance of God through which Augustine was able to desire God and the *beata vita*.⁸⁶ This *memoria* Dei was recognizable to his rational soul.

 ⁷⁸ Paige E. Hochschild, *Memory in Augustine's Theological Anthropology* (Oxford: OUP, 2012), 149.
 ⁷⁹ Lewis Ayres, "The Christological Context of the *De Trinitate* XIII: Toward Relocating Books VIII-XV," *AugStud* 29 (1998): 114.

⁸⁰ Ayres uses "*mentis*" in the same context as "*animi*." In Latin, these two words can be used interchangeably. *Mentis* tends to be related solely with the mind whereas *animi* can also be used as soul. My use of *animi* reflects the development of an exercise that trains both soul and mind. Ayres, "The Christological," 128.

⁸¹ Conf. X.24.35, X.25.36.

⁸² Conf. X.14.21.

⁸³ Hochschild, Memory, 145.

⁸⁴ Conf. X.24.35. God transcends the soul and makes himself known in memory, "you remain in my consciousness."

⁸⁵ See footnote 12, Henry Chadwick, *Saint Augustine, Confessions* (1991; repr., Oxford: OUP, 1992), 185. *Conf.* X.21.31-26.37.

⁸⁶ Sol. 1.4.9, 2.20.34.

What emerges from Augustine's *exercitatio animi* is an interiority that paved the way for Augustine's soul to re-member, seek, and know God through memory. *Exercitatio animi* prepared the soul for its encounter with the Divine as it actively engaged and participated in seeking the Divine; this could only happen with the help of divine illumination.⁸⁷

2.4.2.3 Meditatio and Contemplatio

"The soul...is led to the house of God by following a certain sweetness, an indescribable interior pleasure. It is as if a musical instrument sweetly sounded from the house of God, and while walking in the tabernacle she heard the interior sound, and, led by its sweetness, followed it."⁸⁸

At this stage of interiority, Augustine realized an upward movement to see "the face of God" was imperative.⁸⁹ The innate presence of the *memoria* lay at the heart of this upward turn to God and was at the centre of both *meditatio* (*ingressio*) and *contemplatio*.⁹⁰ It was that sacred space between seeker and the sought, the homecoming between the *peregrinus*⁹¹ and the Father, and that sacramental encounter between the lost and the God who saves. Augustine was inevitably drawn upwards.

Meditatio and *contemplatio* are closely related and in the Christian setting must both be practiced if an encounter with God is desired. Through *meditatio* and

⁸⁷ Zwollo states that it is precisely because of Augustine's *imago Dei* doctrine that the intellect's inherent capacity for obtaining knowledge of God results in the turning to the Source. This contact with divine Light effectuates a spiritual renewal or "re-creation" of the human being which ultimately leads to perfect knowledge and intellectual vision. This dynamic process requires divine illumination which results in the potential to participate in the infinity of the Creator and to encounter God by a direct experience of divine Light. Laela Zwollo, "St. Augustine on the Soul's Divine Experience: *Visio Intellectualis* and *Imago Dei* from Book XII of *De Genesi ad Litteram Libri* XII," SP LXX (2013): 88-91.

⁸⁸ En. in Ps. 41.9.

⁸⁹ Ord. 1.8.23.

⁹⁰ Kenney, *Contemplation*, 61-92, 99-100.

⁹¹ Sweeney describes Augustine's journey from looking within to the soul looking outwards and upwards to God as the journey from the self as *spiritus ambulans* (wandering spirit) to a *peregrinus* (foreigner in a strange land striving to return home). He is on a journey from being a homeless wanderer to a foreigner realizing he has a home. For example, the prodigal son becomes a *peregrinus* when he comes to himself and starts to return home. Sweeney, "God," 686.

contemplatio Augustine made himself radically available to the presence of God so that he could ascend to, and participate with, God.

2.4.2.3.1 Meditatio

"You alone are great, and you alone dwell on high in the silence."⁹²

Meditatio was the very first step in approaching God and knowing God after the discovery of the *memoria Dei*. It was in the silence and solitude of *meditatio* that Augustine created a space that emboldened the emergence of "words from my soul and a cry from my mind, which is known to your ear."⁹³ At the start of *Confessions*, Augustine writes, "Who then are you, my God? ...What am I to you...?"⁹⁴ This was the relational uncovering in his interiority.

Through *meditatio* Augustine looked to and called upon God. As Hochschild says, "the invocation brings a God perceived as distant (transcendent) into the heart (*cor*) of a person."⁹⁵ Kenney writes that *contemplatio*⁹⁶ "as a form of interior knowledge, is the natural expression of the soul's station in the hierarchy of being and its exercise allows the soul to recover the native dignity of its created nature proximate to God."⁹⁷ *Meditatio* secured for the soul knowledge that is both *a priori* and indubitable; it situated the soul by revealing its transcendent source, opening it up to an ontological vista previously unknown to Augustine.⁹⁸ In the interior depth of his soul, Augustine could discern the divine presence. Pegis writes, "at the moment we discover ourselves as minds, we are freed from the life of sense, but at this moment we discover the presence of God."⁹⁹ Madec describes this as "an exercise in accommodating the mind to the radiance of spiritual light."¹⁰⁰

⁹² Conf. I.18.29.

⁹³ Conf. X.2.2. Niño, "Spiritual," 90.

⁹⁴ Conf. I.4.4-5.5.

⁹⁵ Hochschild, *Memory*, 149.

⁹⁶ Kenney uses contemplation and meditation interchangeably.

⁹⁷ Kenney, Contemplation, 85.

⁹⁸ Ibid., 85, 87. Kenney, "Faith," 282.

⁹⁹ Pegis, "The Mind," 46.

¹⁰⁰ Goulven Madec, "Analyse du "De Magistro," Revue d'Etudes Augustiniennes et Patritiques 21, no.

^{1 (1975): 65. (}un exercise d'accommodation de l'ésprit á l'éclat de la lumière spirituelle).

The upward turn to the Divine (*ad Deus*) through *meditatio* or *ingressio* was necessary so that the Creator of the rational soul could transcend the created soul even in the spatio-temporal world.¹⁰¹ Augustine through *ingressio* entered into God's presence.

2.4.2.3.2 Contemplatio

Contemplatio was the movement of God toward Augustine which accorded Augustine a temporal moment of being in/with (*apud Deus*) the Eternal Being. It was inherently temporal due to the soul's separation from its Creator, a result of its prelapsarian state.¹⁰² The omnipresent God (*ubique totus*), however, presented himself to Augustine's soul, for God knew his soul directly and intimately.¹⁰³ Boersma suggests that Augustine's conception of *ubique totus* revealed a continuity between how Augustine saw God in this life and in the next.¹⁰⁴

Contemplatio was that place where Augustine sought to ascend to, and participate with, God. The limitation of *contemplatio* was the temporary nature of ascent and participation. It was a transient reality that allowed a momentary glimpse of the eternal realm and of immortality. Permanent participation in the Divine was an eschatological reality fulfilled only in eternity. However, participation, though momentary, was a revelatory process.¹⁰⁵ Augustine was left with the certainty of the truth, the reality of the innate presence of the *memoria Dei*, the knowledge that ascent of the soul was possible, but also a deep sense of regret that ascension and participation were transient realities. Augustine and his soul had to come to terms with the "episodic character of contemplative knowledge"¹⁰⁶ and the infinitude of temporality.

¹⁰¹ Kenney, *Contemplation*, 90.

¹⁰² Ibid., 88, 111.

¹⁰³ Conf. I.3.3, VI.3.4. Boersma and O'Donnell translate *ubique totus* as "whole and everywhere" to articulate the divine presence in Augustine's works, especially in *Confessiones*. Both offer detailed overviews on Augustine's use of this phrase. Gerald P. Boersma, "Augustine on the Beatific Vision as *Ubique Totus*," *Scot. Theo.* 71, no. 1 (2018): 2, 16. James J. O'Donnell, *Augustine Confessions: Commentary on Books 1-7*, vol. II (1992; repr., Oxford: OUP, 2012).

¹⁰⁴ Boersma, "Augustine," 2, 16.

¹⁰⁵ John Milbank, "The Confession of Time in Augustine," Maynooth Phil. Papers 10 (2020): 30.

¹⁰⁶ Kenney, *Contemplation*, 88.

The forte of *contemplatio* was that there remained with Augustine a memory of the Divine and of these experiential encounters. Augustine could say, "yet the memory of you remained in me."¹⁰⁷ In the end, *contemplatio* was, as Hankey states, "a return to that gaze of eternal being which belongs to memory and to the fundamental structure of our minds."¹⁰⁸ The remembrance of God was the anchor of this transient reality of ascent; it was the lynchpin in the linking of heaven and earth, eternal and temporal, human being and Divine Being. *Contemplatio* provided Augustine with hope, for the remembrance of God constantly drew Augustine's soul back to its origins and the eschatological expectation of that final union with the Divine in the eternal realm. In fact, transcendence "transformed Augustine's understanding of God and gave wings to his soul."¹⁰⁹ His soul was led to the house of God by following a certain sweetness and an indescribable interior pleasure.¹¹⁰ This emphasized to Augustine the constant need to practice interiority and the importance of memory in this practice. This fuelled his insatiable desire to know more of God.

2.4.2.4 Christological Complicity

The Christological complicity in Augustinian interiority, memory, and *participatio* cannot be underestimated nor left undiscussed. Augustine understood Christ to be the source of participatory wisdom, the one who was immutable, and the Logos who participated in the created and the mutable.¹¹¹ The created soul recognized the ontological distance between itself and its Creator due to its prelapsarian condition. It was acutely aware of the need for a divine intervention as there was no salvific efficacy in Augustinian interiority not even in the *contemplatio* stage where ascent of the soul was possible. Augustine realized that with the upward turn and the ascent of the soul, there was also a downward turn, a divine descent, of God himself. The Incarnation was, therefore, a corporeal descent of the Divine which facilitated an incorporeal ascent of the rational soul. As Milbank describes, "God himself descends

¹⁰⁷ Conf. VII.17.23.

¹⁰⁸ Wayne J. Hankey, "Self-knowledge and God as Other in Augustine: Problems for a Postmodern Retrieval," *Bochumer Philosophisches Jahrbuch für Antike und Mittalter* 4 (1999), 107. *Trin.* XIII.9.13, XI.7.11, XII.2.2-3.3.

¹⁰⁹ Kenney, Contemplation, 168-169.

¹¹⁰ En. in Ps. 41.9.

¹¹¹ Meconi, "The Incarnation," 68.

all the way to actual and personal incarnation of human flesh."¹¹² Le Blond describes so profoundly the Incarnation as the insertion of the eternal into temporality.¹¹³ It was simultaneously a descent of the Divine and an ascent of the temporal rational soul. The Incarnation itself was the personal embodiment of truth.¹¹⁴ The profundity of the Incarnation, of the Divine becoming incarnate, and divine grace achieved through the Incarnation of Christ was not lost on Augustine. He believed that the soul had no way home without the divine grace; the fallen nature of the soul could not be healed by *contemplatio* alone but required divine assistance to overcome its prelapsarian condition.¹¹⁵ The Incarnation became the pivotal moment in the *historia sacra* of Christ to Augustine; through the Incarnation he could escape the temporal constraints of creation *ex nihilo* and through Christ's mediation, anticipate eternity.¹¹⁶

Implicit in the contemplative practice of Augustine was the lifelong need for the external authority of the incarnate Christ.¹¹⁷ Augustine describes how in submission to Christ, Christ "raises those submissive to him" and "carries them across to himself."¹¹⁸ In the practice of *contemplatio*, Augustine remembered the Incarnation where in the intersection of divine descent and the ascent of the soul, an existential sacramental moment occurred. This bidirectional participation "exacerbated the soul's sense of eschatological longing."¹¹⁹ According to Ayres, Augustine developed a 'theological' *exercitatio* through Christology; "fallen humanity needs to undergo a certain *exercitatio*...and such *exercitatio* is provided by the Incarnation."¹²⁰ *Contemplatio* thus became an instrument of grace, and the remembrance of God located deep within the rational soul became the driver in the search to seek the "face of God."¹²¹

¹¹² Milbank, "The Confession," 13.

¹¹³ "L'Incarnation, insertion de l'éternel dans le temps." Jean-Marie Le Blond, *Les Conversions de Saint Augustin*, (Paris: Aubier, 1950), 19.

¹¹⁴ Grove, Memory, 34.

¹¹⁵ Kenney, *Contemplation*, 91-92.

¹¹⁶ Chadwick, *Saint*, 227, n. 14. Thomas Clemmons, "Time, Eternity, and History in Augustine's Early Works," in *Augustine and Time*, eds. John Doody, Sean Hannan, Kim Paffenroth (Lanham, MD: Lexington Books, 2021), 9.

¹¹⁷ Cary, Soul, 236.

¹¹⁸ Conf. VII.18.24

¹¹⁹ Kenney, Contemplation, 92.

¹²⁰ Ayres, "The Christological," 125.

¹²¹ *Contemplatio* as an instrument of grace is explained more clearly in the final ascent narrative from *Doc. Christ.* 2.VII.9-11. Kenney, *Contemplation*, 120. *Ord.* I.8.23 (Face of God). The total dependence on God's grace is also necessary for the transcendence of the mind and going beyond self-knowledge. Stróżyński, "There," 299-300.

Grove asserts that Augustine's mediatory Christology culminates in the ascended Christ who continues to mediate the divine to the human in present time; this mediation remains ongoing even though Christ is resurrected and no longer an embodied temporal Christ.¹²² He posits that human memory fails to mediate, but Christ continues to succeed.¹²³ Grove continues, "Christ's mediation has been made possible and sustained the shift from the individual to the whole Christ" (*totus Christus*).¹²⁴ Christ is thus, central to Augustinian *mediatatio* and *contemplatio*.

2.4.2.5 Memoria Dei

During 1954-1966, Cilleruelo, Morán, and Madec were at the centre of the debate regarding the inclusion of a *memoria Dei* within Augustinian thought particularly relating to *Conf.* X and *Trin.*¹²⁵ The debate was never resolved and continues to this day.¹²⁶ Grove argues that the imposition of the phrase "*memoria Dei*" limits the discussion with scholars restricting themselves to specific texts at the exclusion of others and, restricts the remembering of God as an action or work within the created order.¹²⁷ Grove considers the term *memoria Dei* to be a "narrow recalling of an external content."¹²⁸ He is correct regarding the imposition of a "sweeping philosophical concept" based on the term *memoria Dei*.¹²⁹ However, a holistic approach to the study of *memoria* where this terminology is not limited to one interpretation and discipline, shows that while Augustine may not have specifically used the phrase "*memoria Dei*," he does speak of an innate knowledge of God.¹³⁰ It is logical that *memoria Dei*. The does speak of an innate knowledge of God.¹³⁰ It is logical that *memoria is* the phrase "*memoria Dei*" may not be explicitly mentioned but it is implicit in the text of *Conf.* X.

¹²² Grove, *Augustine*, 63, 71.

¹²³ Ibid., 82.

¹²⁴ Ibid.

¹²⁵ L. Cilleruelo, "La "*Memoria Dei*" Según San Augustín," *Aug.Mag.* 1 (1954): 499-509. L. Cilleruelo,
"Por qué "*Memoria Dei*?" *Rev. Études Aug.* IX (1964): 289-294. J. Morán, "Sobre la "*Memoria Dei*" Augustiniana," *Augustinus* IX (1964): 205-209. The positions of these scholars are summarized by Goulven Madec, "Pour et Contre la "*Memoria Dei*," *Rev. d'Etudes Aug. Pat.* 11, no. 1-2 (1965): 89-92. O'Donnell, *Augustine*, 176-177.

¹²⁶ Grove, Augustine, 5-6.

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ Ibid., 5.

¹³⁰ Conf. X.12.30-31, 23.33, 24.35, 25.36.

The discovery of the *memoria Dei* was profound to Augustine in its revelation that there was an actual memory of God within his mind which linked the rational soul and the Divine. The *memoria Dei* was embedded in the deepest core of his *memoria*, and it was through this *memoria Dei* that Augustine was able to remember God. In the act of creating the rational soul, God made himself known in *memoria* via an innate *memoria Dei*. Augustine declared, "you remain in my consciousness."¹³¹ Breyfogle suggests that Augustine believed that God was always present innately in memory and emphasized this truth by using a strange mixture of verb tenses in *Conf*. X.24.35.¹³²

Memoria Dei was a trace memory or *vestigium* of the Divine that existed in Augustine's soul.¹³³ The memory of God was an essential prerequisite for seeking (*quaerere*) the face of God,¹³⁴ and it was the cause of Augustine's desire for God and knowledge of God.¹³⁵ God resided innately in *memoria* waiting to be discovered via the *memoria Dei*, which galvanized Augustine's desire to interrogate and understand *memoria* and memory. It was interior intellection that had helped Augustine remember God and achieve recognition of the eternal Being who spoke in a language his soul could understand. Hochschild writes, "God contains human memory and in doing so fills it, illumines it, and speaks to it in a language it comprehends."¹³⁶ *Memoria* was where Augustine recognized his ontological dependence on God and God's grace, necessary to know God and find the *beata vita*.¹³⁷

Kenney writes that the soul, and specifically the mind, had to be trained to actualize its *memoria Dei* because actualization of this latent connection to God was essential for knowledge of God to emerge.¹³⁸ Augustine contends that unless he remembers God through the *memoria Dei*, he could not endeavour to understand him,

¹³¹ Conf. X.24.35. Consciousness can also be translated as memory. See James J. O'Donnell, *Augustine Confessions: Introduction and text* vol. 1 (Oxford: OUP, 1992, 2012), 132.

¹³² Augustine conceded earlier in *Conf.* X that truth was innately present in memory. He goes on to state that when truth is found, God is found, because God resides in memory and is sought in memory. Todd Breyfogle, "Memory and Imagination in Augustine's *Confessions,*" *New Blackfriars* 75, no. 881 (1994): 214.

¹³³ Gn. Litt. XII.24.51. Sweeney, God, 686.

¹³⁴ Sol. 2.20.34. Ord. 1.8.23. Kenney, Contemplation, 120

¹³⁵ Sol. 1.4.9.

¹³⁶ Hochschild, Memory, 149.

¹³⁷ Sweeney, "God," 686.

¹³⁸ Kenney, "Faith," 275. However, Matthews believes Augustine had explicitly rejected the belief that there was a "time when memoria was empty, wholly "potential" and in need of actualization." Matthews, "Augustinian," 199.

love him, and know him perfectly, and he required divine assistance to do this.¹³⁹ The mind's self-awareness could not be eliminated as it was the presence of *memoria Dei* that allowed the self to act. *Confessiones* VII shows that Augustine succeeded in remembering God through interior cognition and acknowledging that an *a priori* knowledge existed.¹⁴⁰ Augustine describes in *En. in Ps.* how *memoria Dei* was not a residing "with" God but an understanding that God "is" since "whatever understands God is with (*cum*) God."¹⁴¹ *Memoria Dei* was both the pointer and connector to the Divine, a gateway to the recovery of life and sustenance in the Divine.¹⁴²

2.4.3 The Beginnings of Augustine's Theology of Memoria

The beginnings of Augustine's theology of *memoria* started with his own intimate examination of his self where upon he discovered the remembrance of God and the role of *memoria*. His fervid desire to know the intricate details of *memoria* and memory compelled him to investigate memory from which he developed his theology of *memoria*.

Augustine's theological concept of connecting the rational soul with the mind (*mens*) and *memoria* is a central reality in his theology of *memoria*. This close connection between the mind and *memoria* is described in *Conf*. X.14.21, "we call memory itself the mind…no doubt, then, memory is, as it were, the stomach of the mind." The rational soul did have a trace of the Divine within; the soul, made in the image and likeness of God, had the *imago Dei* imprinted in the mind in *memoria*.¹⁴³ It was, therefore, logical that *memoria* was the place where a remembrance of God resided and where Augustine would go to look for God. Human beings were created with the capacity to discover the *memoria Dei* in the inner space of memory, and consequently, were able to search for the unchanging Truth - the Creator God.

¹³⁹ *Trin.* IX.11.16, XIV.12.15, 14.18.

¹⁴⁰ Kenney, *Contemplation*, 90.

 ¹⁴¹ En. Ps. 41.10. Ord. II.2.4. "quasi ego quod sapiens facit dixerim esse cum Deo, cum Deo est."
 ¹⁴² Conf. XII.10.10: "In you I am recovering life." Conf. X.28.39: "You lift up the person whom you fill."

¹⁴³ *Ut Convertatur ad Dominum*, University of Dallas seminar, accessed April 22, 2023, https://udallas.edu/constantin/academics/programs/philosophy/ documents/Seminar%20Text%20-

^{%20}Vulnerable%20Image.pdf

Augustine's theology was founded on creation *ex nihilo* as evident in *Conf*. XI-XIII. Often *Conf*. XI-XIII are considered confusing and difficult to understand in context of *Conf*. I-X; however, they portray an insight into Augustine's theology of creation *ex nihilo* and its foundational importance in his understanding of soul, mind, *memoria*, and memory. God placed a trace remembrance of himself within memory so human beings could re-member Him. Further, the soul with the *imago Dei* and the remembrance of God within could not be obliterated as long as existence was sustained by God.

Augustine's theology of memoria materialized as he discovered these truths. He questioned how memory worked and function in knowing and understanding God. He delineated the operation and function of the different types of memory, the role of the senses and sense-perception, the importance of time, and memory's role in achieving fulfilment of the *beata vita* even though unable to acquire answers to many of the paradoxes he encountered. As the details of his theology of *memoria* unfolded, Augustine's logical inquiry disclosed an architectonic structure starting with his earliest works and present in *Confessiones*.

2.5 Concluding Remarks

Architectonics does not impart just a dry structural composition to memory. It also provides for a deeper understanding of the dynamics of memory, its function and operation, and its role in Augustine's life. It draws the reader into Augustine's narrative and invites them to join Augustine in his journey and their own discovery of God.

It is important to know the beginnings of Augustine's intellectual exploration and his personal journey to understand his interrogation of memory. Augustine's inward turn to understand himself through the practice of interiority was found to follow a particular sequence of steps - *interior examen, exercitatio animi, meditatio,* and *contemplatio*. Augustine realized that first he had to know himself before he could know God. This structure to interiority is not one typically ascribed to interiority as most authors tend to focus on one aspect or combine all steps. Interiority revealed to Augustine the memory of God within his soul. It also revealed what Augustine required for his journey to know and understand God. The importance of this journey was not lost on Augustine and his inquisitive mind. He understood the constraints of temporality yet through interiority Augustine discovered how to pursue the Divine.

The development of Augustine's theology of *memoria* is first observed in his earlier works and therefore, they must be examined to get a complete picture of Augustinian *memoria*. His beliefs on *memoria* did mature as he grew in his faith, thus the study of some of his works leading to and including *Confessiones*.

The next chapter discusses Augustine's interrogation of *memoria* in his early works.

CHAPTER 3: The First Decade of Augustine's Interrogation of *Memoria*: 386-395 A.D.

"I desire to know God and the soul"¹

3.1 Chapter Aims

Augustine's theology of *memoria* cannot be understood without a grasp of how his own questions and ruminations evolved from his early writings. This chapter, a survey of these works, demonstrates that his questions regarding *memoria* are prevalent in his early works; some references to *memoria* are explicit in the text while others are implicit. Close analysis of Augustinian memory in these earlier works reveals an architectonic structure behind Augustine's questions, discussions, and presentations of *memoria*. This structure is based on seven foundational pillars² of memory which serve, or at least attempt, to understand Augustine's interrogations of memory. According to my research, such an architectonic structure with the identification of the seven foundational pillars of memory in Augustine's earlier works has not been previously reported. This research uncovers the complexity of Augustine's theology of *memoria* and provides for an in-depth appreciation of Augustine himself, his logical mind, and the evolution of his theology.

3.2 Introduction

Augustine's writings might, at first, seem disjointed, aporetic, and even confusing. However, the study of his works on *memoria* reveals a visualization and unfolding of Augustine's mind and thoughts which demonstrates the ingenuity of his thinking, and a hidden logic in his meanderings. There was a constant swirl of ideas percolating through Augustine's thought, some to be put down in ink and others settling into the recesses of his mind to be remembered and retrieved at the

¹ Sol. I.2.7.

² Foundational pillars: aspects of *memoria* that anchor Augustine's theology of *memoria*.

appropriate time. Augustine's interrogation of *memoria* came about because he believed memory was centrally involved in every aspect of life – both physical and spiritual including his soul's desire to know, understand, and participate in the Divine. His hunger to find answers regarding how memory and *memoria Dei* functioned became more fervent and intense when he realized the central role of memory in this process.³ Augustine's concept of *memoria*, i.e., it is in memory that God is first sought, was extraordinarily radical for his times; his conceptuality of *memoria* incredible even for his contemporaries. In fact, it is amazing to realize that it took 1,600 years before the first taxonomy of memory was proposed by Tulving in the 1970s, and it is astonishing to realize how similar Tulving's multisystem model of memory is to Augustine's own model of memory.⁴

Initially, Augustine did not see *memoria* as the place in the soul where God resided and where through contemplation, he could find union with God. At first, *memoria* was a power of the soul used to fulfil the obligation to teach the truth to others.⁵ Later on as his theology matured, the significance of *memoria* became apparent. The following is a survey of his earlier works discussing their contributions regarding memory.

3.2.1 The Important Works

Augustine's earliest predominant questions regarding *memoria* are documented primarily in *Mus., Sol., Gn. Litt., Ord., Ep. 7*, and *Retr.*⁶ According to O'Daly, the earliest accounts of *memoria* are found in *Ord.* II.2.6-7 recorded in

³ In his Cassiciacum writings, Augustine appears to be less expressive about his desire to search for God perhaps because these books are more philosophical in nature. However, in *Sol.* I.2.7. Augustine expresses his desire to know God, and a sense of fervency is becoming evident. The fervent nature of Augustine's search is noted more profusely throughout his writings in *Confessions*. Several notable examples are found in *Conf.* III.4.7 "and I longed for the immortality of wisdom with an incredible ardour in my heart," *Conf.* III.4.8 "My God, how I burned, how I burned with longing," *Conf.* XI.22.28 "My mind is on fire to solve this very intricate enigma."

⁴ E. Tulving, "Multiple Memory Systems and Consciousness," *Human Neurobiol.* 6 (1987): 67-80. Jean-Christophe Cassel, Daniel Cassel, Lilianne Manning, "From Augustine of Hippo's Memory Systems to Our Modern Taxonomy in Cognitive Psychology and Neuroscience of Memory: A 16-Century Nap of Intuition before Light of Evidence," *Behav. Sci.* 3 (2013): 21-41.

 ⁵ Ord. 2.2.6-7. Nello Cipriani, "Memory" in Augustine Through the Ages, An Encyclopedia, ed. Allan D. Fitzgerald (Grand Rapids: William B. Eerdmans Publishing Company, 1999), 553.
 ⁶ Mourant, Saint, 9.

Augustine's debate with his interlocuter Licentius.⁷ However, all four books written at Cassiciacum have accounts of *memoria*.⁸ The most extensive discussion is found in *Sol*.⁹ Other books written in the first decade post conversion have detailed interrogations of *memoria* – *Imm. An., Lib. Arb., Mag.,* and *V. Rel.* However, the most detailed insights into his theology of *memoria* are found in *Conf.* X; the later books of *Trin.* describe a more Trinitarian view of *memoria*. This chapter is a survey of Augustine's thought and developing theology of *memoria* in his writings from 386-395 A.D.

3.3 Memoria in Augustine's Cassiciacum Writings: 386-387 A.D.

The architectonic structure of memory interconnects and weaves together some of the key features of *memoria*. It reveals the initial development of an Augustinian theology of *memoria* which evolves and matures from his earliest works to his later works. The first four books discussed are his Cassiciacum writings.

3.3.1 Contra Academicos

Augustine stresses the need to have a stenographer record the words of his debates with his entourage. He writes in II.9.22:

Nevertheless, because memory is an unreliable custodian of our reasonings, I was anxious to have our frequent disputations committed to writing, so that those boys might learn to apply their minds to those questions and might attempt to attack and pursue them.¹⁰

⁷ Gerard O'Daly, "III: Memory in Plotinus and Two Early Texts of St. Augustine," in *Platonism Pagan* and *Christian: Studies in Plotinus and Augustine* (London, NY: Routledge, 2001), 461.

⁸ Augustine wrote *C. Acad., Beata V., Ord.*, and *Sol.* at Cassiciacum in 386/387 where he stayed for approximately six months. Augustine also wrote several letters e.g. to Nebridius.

⁹ Sol. discusses *memoria* in Book I and II specifically regarding recollection, forgetting, and the Platonic theory of *anamnesis*.

¹⁰ Sol. I.1.1 also mentions the memory's incapacity to retain everything. *Reason*: "Is memory so great that it can accurately hold on to everything that has been conceived?" *Augustine*: "That is difficult to do, indeed, it is impossible." *Reason*: "Therefore, it must be written down."

Writing preserves memory and is necessary because of the forgetfulness of memory. Memories can settle in the dark recesses of *memoria*. Writing assists the memory in remembering when something that is truthful might need to be remembered.¹¹ Socrates also saw a connection between writing and forgetfulness although his perspective was different, and his words were not written by him but by his student Plato.¹² Plato in *Phaedrus* discusses with Socrates the significance of written words and forgetfulness. Socrates did think some good could come out of written words but, in general, he was against writing because he thought that it caused a complacency and forgetfulness of what was written:

It will implant forgetfulness in their souls: they will cease to exercise memory because they rely on that which is written, calling things to remembrance no longer from within themselves, but by means of external marks.¹³

Perhaps, as Augustine thought about the source of memory and wrote about the forgetfulness of memory, in his mind was the remembrance of one who did not write down words – Christ. Augustine believed the Truth had arrived in the form of Christ who is the source of memory. Christ did not write down any words, that we know of, except for the one time when the women caught in adultery was brought to him to be stoned (John 8:1-11), and what he wrote is not remembered.

Augustine engages with the combination of *memoria* and *doctrina* and explores its implication for the teacher, not the pupil. Augustine was convinced that a wise teacher needed memory in order to impart his wisdom to others.¹⁴ This feature of memory is also discussed in *Ord*. when Licentius questions Augustine, and also in *Sol*.¹⁵ His teachings on memory did not go unnoticed by his students. Alypius, commented on memory and teaching, "For if nothing escapes me, I shall be grateful not only for your teaching (*doctrina*), but also for my memory."¹⁶

¹¹ Cf. *Sol.* II.20.34-35.

¹² Plato, *Phaedrus*, trans. R. Hackforth (Cambridge: CUP, 1972).

¹³ Ibid., 274e-275a.

¹⁴ C. Acad. II.6.14.

¹⁵ Ord. II.2.6-7. Sol. I.1.1.

¹⁶ *C. Acad.* II.6.14.

In *C. Acad.* there are also the first inklings of Augustinian interiority. Augustine questions whether the possession of truth or the simple search for truth is necessary and sufficient for happiness.¹⁷ His answer is that truth arises through redirecting the inquiry from a disputation on the outside to one within oneself.¹⁸

3.3.2 De Beata Vita

Augustine wrote *Beata V*. as he questioned what constituted the happy life and how it could be attained. He also wanted to know how it equated solely with the God who alone is unchangeable and eternal.¹⁹ The knowledge of God as unchangeable and eternal is something absolutely knowable and yet, incomprehensible. Augustine wrote that it was necessary to lead a good life in order to attain God and true happiness.²⁰ This good life was identified with God and not just contemplation; this was unlike Aristotle's belief that contemplation alone was sufficient.²¹ In fact, in *Beata V*., Augustine takes the Platonian theory of recollection and adapts it to explain how there is first the recollection of God, a result of an emanation from God that causes one to remember.²² This in turn ought to lead to the desire to seek God and develop a yearning for Him. *Beata V*. describes the dialectical discourse of the *beata vita* with his students and his mother. Augustine explains the things that do not facilitate a happy life, e.g., fear, earthly riches, and false happiness derived from worldly pleasure.²³ He leads them to the point where there is a recognition that God is eternal and ever remaining, and that whoever possesses God is happy.²⁴

Augustine's immediate objective in his search for the *beata vita* was the possibility of achieving a "state of ontological plenitude."²⁵ Try as he might,

¹⁷ Kavanagh explains that the phrase "possession of truth" does not mean possession of the totality of all knowable truth but the gradual discovery and combination of fragments of truth to attain an increasingly perfect knowledge without reaching an exhaustive grasp of its totality. Denis J. Kavanagh, "Answers to Skeptics" in *Saint Augustine, FoC, A New Translation* (1948; repr. Washington, D.C.: CUAP, 2008), 89, n. 6.

¹⁸ C. Acad. I.2.5. Brian Stock, *Augustine the Reader: Meditation, Self-Knowledge, and the Ethics of Interpretation* (Massachusetts: HUP, 1996), 226.

¹⁹ Mourant, *Saint*, 42.

²⁰ Beata V. 2.11.

²¹ Mourant, *Saint*, 42.

²² James Vandermark Lowe, "Platonic Recollection and Augustinian Memory" (PhD diss., University of Wisconsin-Madison, 1986), 32.

²³ Beata V. 2.11.

²⁴ Ibid.

²⁵ Stock, Augustine, 224.

Augustine found it hard to attain the true happy life and so began to believe that it could not be achieved here on earth. His spiritual practice of interiority allowed him to work on putting aside his corporeal temptations and develop healthy habits that were focused on encountering the Divine in his journey towards fulfilment of the *beata vita*. Augustine was starting to realize that through *memoria* he was "beginning to know (*recognoscere*)" the God that he sought.²⁶ In *Beata V*. 4.35 Augustine summarizes the true happy life, "to recognize piously and completely the One through whom you are led into the truth, the nature of the truth you enjoy, and the bond that connects you with the supreme measure."

3.3.3 De Ordine

The interrogation of *memoria* centres on the question regarding the location, the quality, and the association of memory with the transient. It is here in *Ord*. that Augustine begins to doubt some aspects of Plato's theory of memory and reminiscence.²⁷

Augustine tells Zenobius (I.2.5) that he is writing down his words so that "*nec* aliter dicendi necessitas nec labor **recordationis** esset." Recordatio is the word Augustine tends to use for Platonic recollection, however, he often uses it in a much broader sense; here in Ord., recordationis refers to the recollection of ordinary memory.²⁸ Interestingly, as in C. Acad., Augustine requests that his words be written down. Further, as in C. Acad. II.6.14, Augustine brings up the Wise Man's need of *memoria* to teach, "for honorable and necessary sorts of teaching" – "propter honestas ac necessarias disciplinas."²⁹

In Book II, Licentius explicates his view regarding the location and nature of *memoria*; "I am of the opinion that memory is one of these subservient parts."³⁰ He believes that *memoria* plays a role in the lower soul's use of the senses and he associates memory with the transient. Memory is used to remember fluctuating things and is therefore, itself unreliable, inferior, and transient: "Fleeting realities also belong

²⁶ Cf. C. Acad. II.2.4.

²⁷ O'Daly "III: Memory," 461-469 has an extensive discussion of the influence of Plato and Plotinus on Augustine and the differences that emerge as Augustine's theory of memory evolves.

²⁸ Lowe, "Platonic," 33.

²⁹ Ord. II.2.7. O'Daly, "III: Memory," 465.

³⁰ Ord. II.2.6.

to this lower part. What is memory for, if not for such impermanent realities?"³¹ This transiency of memory is also mentioned in *Sol*. I.1.1 where, as Conybeare writes, memory is presented as "a part of the *anima* but a *vilissima pars* - an extremely inferior part...that deals with the transient."³² Licentius' argument was based on his Plotinian view of the role and location of *memoria* in the lower soul; "memory is of things that have happened and passed away."³³ He also had a dualistic view of human nature, and the body and soul. For Augustine, there could be no separation of the mind and the body in remembering. Further, a soul detached from the body was mutable and needed the body where with mutual co-operation it could identify truth and adhere to God.³⁴

Augustine sensed that memory had a more important role than realized by his interlocutor. He believed the soul was comprised of a lower and higher constituent with *memoria* not only associated with images of transitory things but also the immutable and divine. Since the higher part of the soul – the rational soul, was not tainted by sense perception, and was permanent and immutable, it could be called wise and be with God.³⁵ It is evident that Augustine's own thoughts of *memoria* are evolving. Winkler writes that the evolution of Augustine's own theory of *memoria* is evidenced in *Ord*. by his refutation of Licentius' views regarding *memoria*:

Returning to these previous opinions, which take precedence over the words of Licentius, Saint Augustine has arrived at the starting point of the future development of his theory of memory. The first stage of his personal thought on this subject is therefore characterized by doubt and reservations about Plotinian doctrines which he had adopted before. Thus, the discussion of *De Ordine* prepares the way rather than announcing a direction.³⁶

I concur with Winkler.

³¹ Ord. II.2.6. Catherine Conybeare, "The Duty of a Teacher: Liminality and Disciplina in Augustine's De Ordine," in Augustine and the Disciplines: From Cassiciacum to Confessions. eds. Karla Pollmann, Mark Vessey (Oxford: OUP, 2005), 55. Sol. I.1.1.

³² Conybeare, "The Duty," 55.

³³ Ibid., 55. *Enneads* 4.4.6. Licentius' view is that there could be two souls or two parts of the soul. The two parts of the soul may be what he eventually leans towards when referring to the Plotinian view of *memoria* located in the lower soul.

³⁴ Ord. II.13.38.

³⁵ Ord. II.2.7. Conybeare, "The Duty," 55.

³⁶ My translation of a quote from Winkler's French text. Klaus Winkler, "La Théorie Augustinienne de la mémoire à son point de depart," *Augustinus Magister* I (Paris: Études Augustiniennes, 1954), 519.

3.3.4 Soliloquia

Of all the books written at Cassiciacum, *Sol.* has the most extensive discussion on *memoria*, in particular, on recollection and forgetting, and the Platonic theory of *anamnesis*. It is an important book because there is a shift from *memoria* as just a recollection of perceived physical things to recollection of the metaphysical. Book I is a search for intellectual and moral self-knowledge, and Book II, is a discussion on the nature of truth, the soul's immortality, and memory as recollection and forgetfulness.³⁷ The search for God in *memoria* is more evident in *Sol.* a crucial development in Augustine's theology. *Sol.* is a debate between Reason (*Ratio*)³⁸ and Augustine written in a Platonic philosophical dialogue format but unprecedented in that the entire work was a dialogue between Augustine and himself; indeed, Augustine had to invent a new word to describe this dialogical book – *soliloquium*.³⁹

The beginnings of Augustine's shift from full to partial acceptance of the Platonic theory of *anamnesis* is evident in *Sol. Anamnesis* involved the recollection of memories that one had never experienced; it also meant not-forgetting.⁴⁰ From the time of Plato, philosophical discussions of recollection often included its contrast with *oblivio* (or forgetting).⁴¹ Augustine also considered the phenomena of remembering and forgetting to be closely related. Augustine's theory of recollection is closest in resemblance to Plato's *Meno* where Plato equates learning with recollection and yet, despite the similarities to Plato's theory of *anamnesis*, it is evident in *Sol.* that Augustine's thinking had already begun to diverge from Plato.⁴² Augustine connects the subject of the liberal arts⁴³ with recollection and with learning; this is a concept observed throughout his works. Unlike Plato, Augustine believed in a two-stage recollection; first the liberal arts that have been learnt are recollected as such i.e. a

³⁷ Saint Augustine, *Soliloquies, Augustine's Interior Dialogue*, trans. Kim Paffenroth, ed. John E. Rotelle (NY: NCP, 2000), 10-14.

³⁸ *Ratio* depicts Augustine's Reason and interlocutor.

³⁹ Michael P. Foley, *Soliloquies: St. Augustine's Cassiciacum Dialogues, vol. 4* (New Haven: Yale University Press, 2020), xxix, 3.

 ⁴⁰ According to Bourke the Greeks had a word for forgetting *amnesis* and for recollection they used the term *anamnesis* which can mean either not-forgetting or remembering. Vernon J. Bourke, *Augustine's Love of Wisdom: An Introspective Philosophy* (Indiana: Purdue University Press, 1992), 167.
 ⁴¹ Bourke, *Augustine's*, 167.

⁴² Lowe, "Platonic," 54.

⁴³ In *Retr.* I.5.3 Augustine lists seven liberal arts: grammar, dialectic, rhetoric, music, geometry, arithmetic, and philosophy.

bringing forth of only the liberal arts themselves.⁴⁴ In an ideal situation, some truth is discern generating a desire to see the truth in full (*totam facies veritatis*).⁴⁵ Second, the truth from the liberal arts is recollected such that there is a total recollection of the truth as described by the phrase *recordationi revisendaeque veritati* in II.20.34⁴⁶ and this invites the student into a metaphysical encounter with memory and recollection. *Sol.* explains this digression from Plato's *anamnesis*.⁴⁷

There are three types of forgetfulness (oblivio) and recollection (recordationis) that can be delineated in Sol. II.20.34. The first type of forgetfulness and recollection is "partial forgetfulness" and "partial recollection" (pars quaedam *recordationis*).⁴⁸ Here, "something" is forgotten and cannot be recollected even when prompted by false reminders; yet through these suggestions there is a recollection of what "something" is not. Augustine would say that this type of recollection "is, itself, a certain part of remembering" i.e., "partial recollection."⁴⁹ Augustine refers to this type of forgetfulness in Conf. X when he quotes the parable of the woman and her lost drachma.⁵⁰ The second type of forgetfulness/recollection is a complete forgetfulness (validissima oblivione) with no recollection.⁵¹ Here a memory is unable to be recalled at all – "buried in the most profound oblivion"⁵² due to the distance in time from the actual event. It cannot be recalled even upon suggestion. Thus, instead of recollection there is a belief that the event occurred based on the evidence provided by others. The third type of forgetfulness and recollection is "forgetful remembrance."⁵³ Reason defines this type as "recollection of reminiscent truth" (recordationi revisendaeque *veritati*).⁵⁴ This Augustine describes as:

Such a type of forgetfulness occurs when we see something, recognize for certain that we have seen it at some time, and declare that we know it. But, where or when or how or in whose company it came to our attention, we struggle to review and remember. As, for example, if this were to happen to us in the case of a man, we ask him where it was we

⁴⁴ Lowe, "Platonic," 52.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Sol. II.20.34-35 describes Augustinian recollection of memory.

⁴⁸ Ibid., 48.

⁴⁹ Sol. II.20.34.

⁵⁰ Conf. X.18.27. Luke 15:8.

⁵¹ Lowe, "Platonic," 48.

⁵² Sol. II.20.34.

⁵³ I use this phrase to describe a memory forgotten but remembered in its entirety when reminded.

⁵⁴ Sol. II.20.34. Lowe, "Platonic," 52.

made his acquaintance. When he has reminded us of it, all at once the whole affair floods back to our memory like a light and we no longer have difficulty in remembering.⁵⁵

This is a full recollection or a total non-forgetfulness recalling a certain memory and the circumstances around that memory (*ubi, quanto, quamodo*).⁵⁶ Importantly, full recollection is triggered by something,⁵⁷ e.g., a particular object has meaning, and recollection is triggered by observation of some aspect of the object. This type of forgetfulness and recollection is different from the first type in that the recollection is both of the memory itself and the associated circumstances i.e., the where, when, and how. In the first type of forgetfulness and recollection, the remembrance is what the memory is *not* what it actually is.

Augustine's venture into recollection as described in *Sol*. II.20.34 has been primarily in the physical and perceptible world. According to Lowe, one phrase, *recordationi revisendaeque veritati* (recollection and recollection of the truth) and specifically, the word *veritati*, may invite a metaphysical interpretation.⁵⁸ While it is true that the rest of the passage (II.20.35) is anchored in the perceptible world,⁵⁹ the phrase "recollection of the truth" perhaps provides the first glimpse of the involvement of recollection in both the physical and the metaphysical.

Section II.20.34 is connected to II.20.35 by "*tales*," a linguistic link whereby Augustine establishes a relation between non-physical recollection and the third type of forgetfulness (forgetful reminiscence) in II.20.34.⁶⁰ In II.20.35 students who have learnt the liberal arts can suffer from this type of forgetfulness if they detect only a glimmer of truth in recollection.⁶¹ However, if they can behold all of the truth then they are like those (*tales*) who have not only recalled a piece of knowledge but have also recalled all the associated memory-data; the final goal is the "full countenance of truth" (*totam facies veritatis*).⁶² According to Lowe, if the liberal arts are learnt and

⁵⁵ Sol. II.20.34.

⁵⁶ (Where, how much, how). Lowe, "Platonic," 50.

⁵⁷ This triggering of a memory is reminiscent of Proust's involuntary memory. Eating tea-soaked Madeleine cakes triggers Proust's memory of eating madeleine cakes with his aunt, and memories of his childhood home. Marcel Proust, *In Search of Lost Time*, trans. C. K. Scott Moncrieff, Terence Kilmartin, Andreas Mayor (NY: The Modern Library, 2003).

⁵⁸ Lowe, "Platonic," 51.

⁵⁹ Ibid., 51.

⁶⁰ Ibid., 51-52.

⁶¹ Ibid., 52.

⁶² Ibid.

recollected as liberal arts only and no truth discerned in them, then recollection is only partial, leading to a forgetfulness of what the liberal arts point to.⁶³

Reality is contorted by the perils of deception from images that invade the mind. Augustine warns of these "false colours and forms" that distort truth, thereby deceiving the well-learned in the liberal arts:⁶⁴

Such imaginations as these are to be shunned with great precaution. There falsity is detected when they vary with the varying so-called mirror of thought, whereas that countenance of truth is ever one and changeless.⁶⁵

The phrase 'mirror of thought' is used by Plotinus in relation to imagination; he also stated that visible "colours and shapes" were "but reproductions of the Reason-Principle."⁶⁶ Augustine may have had these phrases in mind as he warned about the infiltration of false images that contaminate the truth.

Augustinian recollection also facilitates the discovery of truth since *ratio* was regarded as the contemplation of truth.⁶⁷ In *Sol. ratio* is described by Augustine as "the mind's act of looking."⁶⁸ For Nash, *ratio* used in this context is related to the mind in the same way as sight is to the eye and so the mind must look to find truth.⁶⁹ Augustine is beginning to recognize that there is more to the intellectual soul than sense knowledge; the soul also searches for truth and discovers it. The soul then realizes that truth is recollection of a known unchangeable truth so obscure that it is buried deep within *memoria*.⁷⁰

Undoubtedly, *memoria* is clearly central to the soul's search for truth. The outcome of this search is God himself. In *Sol*. I.6.13 Augustine writes, "the gaze is followed by the very vision of God, who is the final end of our gazing, not because the gaze no longer exists, but because it has nothing further toward which to strive."

⁶³ Ibid.

⁶⁴ Ibid., 52-53.

⁶⁵ Sol. II.20.35.

⁶⁶ Enneads 1.4.10, 4.3.12, 6.3.15. Foley, Soliloquies, 306, n. 137.

⁶⁷ Sol. I.6.13. Bourke, Augustine, 170.

⁶⁸ Sol. I.6.13.

⁶⁹ Ibid. *Imm. An.* 6.10. Ronald Nash, *Light of the Mind: St. Augustine's Theory of Knowledge* (Ohio: Academic Renewal Press, 2003), 64.

⁷⁰ Cf. *Sol.* II.20.35.

Soliloquia is where the first indications are found that memory is more than just remembering experiences, learning, and images of things perceived. In the language of interiority, memory can be an outward remembrance of physical things, or an upward journey of recollection through sensible things to the intelligible. It is through recollection that knowledge can be attained. Hochschild writes:

The possibility of recollection proves that knowledge can come into being thanks to explicit logical connections, even where there is no full and conscious apprehension. Thus memory contains a horizon of rational coherence, which is itself the ground for knowledge. This points to Augustine's emerging sense that knowledge must include other aspects of the activity of the intellectual soul and cannot be reduced to a simple propositional certainty.⁷¹

A defining role of memory is the discovery in *Soliloquia* that memory is the vehicle that facilitates the discovery of truth and encounter with the Divine.

3.4 Memoria in Augustine's Writings from 387-395 A.D.

Augustine's writings post Cassiciacum and prior to *Confessiones* develop in more detail the characteristics of *memoria*. The following survey is of some of the key books that contain references to *memoria* written from 387-395 A.D.

3.4.1 De Immortalitate Animae

Augustine wrote *Imm. An.* shortly after he had left Cassiciacum; it was written between Ash Wednesday in March and Easter Sunday in April of 387 A.D.⁷² It is an unfinished work written by a man eager to acquire wisdom regarding his new faith. His ideas are rather immature compared to later writings. In *Retr.*, Augustine would look back on this book and called it a reminder (*commonitorium*) to himself to complete the *Sol.* and he declared, "because of the intricacy and brevity of its reasoning, it is so obscure that even my attention flags as I read it and I myself, can

⁷¹ Hochschild, *Memory*, 101.

⁷² Ludwig Schopp, "The Immortality of the Soul," *Saint Augustine, FoC, A New Translation* (1947; repr. Washington D.C.: CUAP, 2002), 9.

scarcely understand it."⁷³ Nevertheless, Augustine was able to provide some insight into the complexities of the immortality of the soul he was seeking to understand. He concludes that the unchanging existence of the truth in his mind can only exist in an incorporeal substance that is alive – the soul, and thus the rational soul, which is inseparably connected to this truth, is immortal.⁷⁴ Augustine also associates temporality with *memoria* believing it is necessary for *memoria* to be able to conceive of time as past, present, and future.⁷⁵

In *Imm. An.* 3.3, Augustine writes that an action, such as speaking the shortest syllable and hearing the beginning and end of that syllable requires memory to complete that action.⁷⁶ There is also the expectation that it will be finished: "Moreover, what is done in this manner must be accompanied once by the expectation (*expectatio*) that it can be completed and also by memory, in order to comprehend the measure of its capacity."⁷⁷ Here is the Augustinian concept of the link between temporality and memory which is developed further in *Imm. An.* 3.3-4 and where time consists of the past, present, and future:

Expectation pertains to future events, memory to past events, the intention to act, however, belongs to the present through which the future passes into the past; neither can we anticipate the end of a commenced movement of a body without any memory.

Augustine elaborates further, "the intention to act lies in the present through which the future lapses into the past, and the outcome of the motion of a body, once started, cannot be expected without memory."⁷⁸ While actions are constrained by time and

⁷³ *Retr.* I.5.1.

⁷⁴ Schopp, "The Immortality," 8.

⁷⁵ Imm. An. 3.3-4.

⁷⁶ This concept of the temporality of speaking and *memoria* is brought out in more detail in *Conf.* XI.6.8.

⁷⁷ *Imm. An.* 3.3. This is reminiscent of both Aristotle and Plato who use the same argument. Plato in *Phaedo* compares himself to the swans of Apollo who sing most beautifully before they die. Birds sing of the not-present future, poets use rhythm and melodies to make present the images of memory, and the birds sing about what they did before. Poets, musician, and birds are incited to sing because of what is absent through memory. There is the same need of memory in the requirement to sing words and a continuity of past, present, and future. Plato, *Phaedo*, trans. Chris Emlyn-Jones, William Preddy, LCL 36 (Cambridge, MA: HUP, 2017), 84e-85b. For a more elaborate discussion see Jessica Wiskus, "On Song, Logos, and the Movement of the Soul: After Plato and Aristotle," *Revista Portuguesa de Filosofia* 74, no. 4 (2018): 917-934.

⁷⁸ Imm. An. 3.3. Time past, present, and future is discussed in great detail in Conf. XI.

space, memory is required to understand the action and its completion. All three aspects of time – past, present, and future are important in *memoria*. For Augustine, the past, present, and future of temporality cannot exist together in the physical realm, however, they can in the mind. The example of speech has already demonstrated this fact. Though a spoken word has a distinct past, present and future (i.e., beginning, middle, and end), the mind must transcend time in order to understand the word; a person must simultaneously remember the first part of the word, attend to the middle, and anticipate the last part.⁷⁹ Memory is crucial in remembering the past; if the past is forgotten it is lost forever. And remembering the present is also important, the present is lost when the past is forgotten as the present moment cannot be recalled again. Memory is also important in remembering the future because it is in memory that the outcome or end of an action is retained. Additionally, present in the mind is the existence of the unknown. In *Imm. An.* 3.3, Augustine states that "in the one who intends to carry out something, there can exist something that really [still] belongs in the realm of things not yet in existence." In *Imm. An.* 4.6., Augustine writes that:

There is something in the mind that is not actual in present thought...the mind is not aware it possesses something, except what has entered its thought. Therefore, something may be in the mind of whose presence there the mind itself is not aware.

Augustine's theology is still very immature, but he is beginning to develop his theory of the rational soul and innate knowledge.

In *Imm. An.* 4.6., the liberal arts, the trained mind, and forgetfulness are brought together reminiscent of *C. Acad.* and *Sol.*⁸⁰ When the arts are forgotten because the mind has been preoccupied with "other things," recollection of these forgotten arts is still possible according to Augustine. Augustine has added another dimension to the recollection process. As Lowe explains, "Instead of recollecting the forgotten data, we find it: the usual verb *recorder* does not appear, because Augustine is again looking at the process of recollection as a remedy to forgetfulness."⁸¹ It is,

⁷⁹ Lowe, "Platonic," 59-60.

⁸⁰ C. Acad. I.1.4, II.6.14. Sol. II.20.35.

⁸¹ Lowe, "Platonic," 63.

therefore, possible to reason with ourselves or through clever questioning, recollect forgotten arts – in other words, it is possible to induce recollection.

It would appear that in *Imm. An.* Augustine uses the basis of Plato's theory of recollection to support his arguments but then deviates from it as he developed his own theory. In *Imm. An.* 4.6., the Platonic echoes are more evident. According to Lowe, the reference to the questioner who tries to help a person remember the forgotten arts, refers specifically to the *Meno* version of recollection, and the choice of *ars geometrica* calls to mind *Sol.* and may also reflect the example Socrates uses in the *Meno*.⁸² Augustine differs from Plato in stating that recollection can be induced by the person themselves. Recollection involves the metaphysical since the existence of things unknown and the recollection of things temporal and eternal are in memory, and memory is able to transcend time. Augustine saw memory as a physical faculty with metaphysical powers, unlike Plato who thought memory was related only to the physical.⁸³

3.4.2 De Quantitate Animae

Quant. An. was written in Rome between 387 and 388 A.D. Augustine, in dialogue with Evodius, explains the origins, nature, and magnitude of the soul, and the concept of body/soul union and separation. This book describes how the soul passes through three stages: the power of the soul in the body (matter), the soul's power in itself (spirit), and its power before God (God).⁸⁴ Buried throughout are scattered references to *memoria*. Chapter 5 is the exception with a significant section devoted to Augustine's discussion with Evodius regarding the location of memory.

The first reference to *memoria* and the soul is found in 5.8-9. Augustine asks the question, "does memory, in your opinion, belong to the soul or the body?" Evodius finds it hard to accept that the soul can contain images within the confines of its space. Augustine also says that the soul, while lacking quantity, can contain what is great by virtue of memory.⁸⁵ He explains that it is the mind that retains and sees the images, size, and character of a city (e.g., Milan) – the eyes themselves do not see the

⁸² Ibid., 64.

⁸³ Ibid., 61.

⁸⁴ Schopp, *Fathers*, 54.

⁸⁵ Quant. An. 14.23.

city (5.8). The mind can recognize temporal space as it can see the intervening distance. The mind and memory are also vast and located within the soul. Augustine writes, "I wish you to consider somewhat more carefully how great and how many objects our memory contains; all of these, of course, are contained in the soul" (5.9). Later in 14.24 Augustine explains that reason (*ratio*) is the sight of the soul; the eye is actually the *ratio inferior* by which the mind sees sense images that are stored in the memory.⁸⁶ Augustine is speaking of memory working with imagination; arising from experience in time and the gathering and retention of images, which in turn give rise to natures that are understood.⁸⁷ The soul, "a rational substance made to rule the body,"⁸⁸ is present to the body through memory.

While Augustine held a non-dualistic view of the unity of the body and soul; the soul always maintained its superiority, "[the soul] has such power that it rules all the members of a body and presides over all motions of the body for all the world as the director of its activity."⁸⁹ The union of the physical with the spiritual is, according to Hochschild, explained by Augustine through an anthropological lens; since God 'never abandons the soul,' the physical itself is firmly held under divine providence by virtue of its subordination to a particular soul.⁹⁰ The body itself limits the soul only with respect to present perception;⁹¹ however, memory enables the soul to overcome this limitation by the activity of memory, particularly recollection and expectation.⁹²

3.4.3 De Musica

Augustine started writing *Mus.* prior to his baptism in 387 A.D. and finished it sometime in 391 A.D. in Africa. It follows a dialogic format between the student (*discipulus*) and the teacher (*magister* i.e., Augustine). It is an unfinished work

⁸⁶ Cf. Sol. I.6.13. See Imm. An. 6.10, 7.23. Nash, The Light, 64, 75.

⁸⁷ On memory and imagination, see the correspondence between Augustine and Nebridius, especially *Ep*. VI and VII. Breyfogle, "Memory," 139-54.

⁸⁸ Quant. An. 13.22.

⁸⁹ Ibid., 14.23.

⁹⁰ Ibid., 36.80. Hochschild, *Memory*, 109.

⁹¹ Quant. An. 25.48. Sense perception is defined by Augustine as "a bodily experience of which the soul is not unaware." According to Hochschild, the Augustinian model of perception is Aristotelian with regard to the passage of time in that sense perception in itself is instantaneous, but the intelligibility of what is experienced, the collection of what is taken in through the various senses, presupposes a synthesis of data. Hochschild, *Memory*, 105.

⁹² Hochschild, *Memory*, 104.

intended to be a series on music with the first six books comprising the section that "pertain to that part called Rhythm."⁹³ The first five books are on rhythm and meter in music, while the sixth book is on the hierarchy of numbers as constitutive of the soul, the universe, and the angels.⁹⁴ Hochschild has researched *memoria* in *Mus*. and concludes that in Book VI Augustine develops a twofold sense of memory pertaining to the sensible and the intelligible.⁹⁵ She describes how this twofold sense has a moral character (more strongly than for Plotinus) which must be incorporated into the life of the virtues according to the higher truth. There is also a rhythm and order to memory; first, there is rhythm in the perception and second, rhythm in the memory.⁹⁶ *Mus*. is demonstrative of the architectonics of memory that exists through the rhythm and meter of music and the hierarchy of numbers. Further, *Mus*. presents for the first time the central role *memoria* has in the mind's knowledge of God, although it is barely developed.⁹⁷

An insight to Augustine's theory of *memoria* actually starts in Book I where the association of memory with imitation is observed. This is an important association which sets up the discussion of *memoria* in later sections in Book VI. In I.5.10, the *magister* describes the flute player who remembers from memory the tunes that he plays. Through practice his fingers become better at playing flawlessly. This the flute player plays whether he learns tunes himself or learns them from others thereby, imitating them. This, however, is the type of memory that humans have in common with the beasts.⁹⁸ Nevertheless, the salient connection between imitation and memory is apparent.

What slowly becomes evident to the *discipulus* is that there are those actors and musicians who have no grasp of the principle of acting or music; they

⁹⁵ Hochschild has researched in detail Augustine's *memoria* in *Mus*. Her article "Unity of Memory in *De Musica*" is a comprehensive treatise. She discusses the same ideas in her book *Memory in Augustine's Theological Anthropology*, 117-131. Paige E. Hochschild, "Unity of Memory in *De Musica* VI" in *SP* LXX. Vol. 18. Papers presented at the Sixteenth Internal Conference on Patristic Studies, *St. Augustine and his Opponents*, ed. Markus Vinzent (Louven, Belgium: Peeters Publishers, 2013), 611-617. *Mus*. VI.

⁹³ Retr. 1.6.

⁹⁴ Saint Augustine, On Music, vol. 4, FoC: A New Translation, trans. Robert Catesby Taliaferro (NY: FoC, 1947), 154.

⁹⁶ Hochschild, "Unity," 611.

⁹⁷ Hochschild, Memory, 110, 229.

⁹⁸ In I.1-5, the similarities between a flute player and birds making music are described. In both, memory has the same function in learning and imitation of music. Both humans and beasts have rhythm and order in music and execution. At this point Augustine associates memory with imitation to explain how both the flute player and the bird can produce music.

strive only for an imitation that will earn them the mob's applause and coins.⁹⁹ Augustine considers the distinction between good and bad art, and notes the role of memory in bad art. The artist who learns by imitation instead of learning through new creative discovery fabricates bad art.¹⁰⁰ To Augustine, this is an abuse of memory.

The exposition of memory in Book VI is quite extensive; it broadly falls into two categories: memory pertaining to the sensible, and memory pertaining to the spiritual where memory is central in the soul's knowledge of God.¹⁰¹ The Augustinian movement from memory just relating to the sensible to becoming the vehicle by which he remembers and can encounter the Divine can be seen most clearly in Book VI. While still an immature theology, it forms the foundation for his theology of *memoria*.

In VI.3.4 the *magister* discusses the association between *memoria* and recollection specifically with regard to audible things. Lowe writes that the most salient point made in this passage is "the connection of memory-data (memory-rhythms) with the sensations (perceptible rhythms) that give rise to them.¹⁰² He goes on to say that in this passage, "there is a brief description of the process of memory." Here, however, *memoria* is only associated with perceptible and sensible things.

VI.4.6 deals with the issue of deciding which is superior - the imitation of memory or the use of numbers in the memory verses numbers that are imprinted in the mind.¹⁰³ Augustine connects memory and forgetting; "numbers in the memory, although they remain longer than those numbers they are imprinted by...both pass away, one by cessation, others by forgetting" (VI.4.6). Imitation is deemed superior because forgetting occurs by cessation whereas memory that forgets numbers is inferior because it is the purpose of memory to remember.¹⁰⁴ This is a more negative dynamic to memory because it is a memory that is forgotten as opposed to a recollection of memory.

The ensuing section from VI.4.7 to 5.14 considers the nature of sense perception and the involvement of the soul. According to Lowe, this is where

⁹⁹ Mus. 5.10-6.11.

¹⁰⁰ This connection between art and *memoria* is also in *Imm. An.* 3.3.

¹⁰¹ Mus. VI.5.10. Mourant, Saint, 13. Hochschild, "Unity," 611.

¹⁰² Lowe, "Platonic," 88.

¹⁰³ Hochschild, *Memory*, 121.

¹⁰⁴ Ibid.

Augustine formulates a theory of sensation in which the soul plays an active part: sensation (*sentire*) becomes an action of the soul and the sense itself (*sensus*) becomes a "tool" of the body whereby the soul becomes aware of the external stimuli affecting the body.¹⁰⁵ In this manner the soul retains superiority over the body:

For I think the body is animated by the soul only to the purpose of the doer. Nor do I think it is affected in any way by the body, but it acts through it and in it as something divinely subjected to its dominion. But at times it acts with ease, at times with difficulty.¹⁰⁶

The central role of memory in the soul's focus on returning to God begins at VI.5.14. The soul struggles with the "push of carnal pleasures" yielding to their attention despite trying to overcome them. Peace comes though when one turns back to God. As, the *magister* writes in VI.5.14:

But a greater unquiet arises for one turning back to God...and it is so until the push of carnal business, excited by daily habit and inserting itself into the heart of the conversion by disorderly memories, comes to rest.

Memory can and does play a role in distracting the soul's focus from esteeming "the body's pleasure" (VI.5.14). Augustine declares that it is the grace of God through Jesus Christ that can deliver him from his body of death.¹⁰⁷ The soul, when it turns back to God, does so through a movement in memory as it remembers by the grace of God.

The dialogue at this point reverts back to sensible memory and temporal spatial memory.¹⁰⁸ The beginning and end of a syllable, stretched over time, has defined spatial and temporal intervals. Memory is necessary to remember what is heard otherwise the first part of the syllable disappears into the unheard.¹⁰⁹ *Memoria*

¹⁰⁵ Lowe, "Platonic," 90.

¹⁰⁶ *Mus*. VI.5.9.

¹⁰⁷ Mus. VI.5.14.

¹⁰⁸ Mus. VI.8.21.

¹⁰⁹ Ibid.

also judges the diversity in different sounds and their respective time intervals. As Hochschild states, memory is a tool that operates in a twofold manner; she writes:

The judicial numbers bring a superior order to the lower kinds of number through the memory, effectively referring reason to what comes through the senses. Conversely, memory assists the judgement in comprehending as an inarticulate whole the seemingly boundless 'diversity' (*varietas*) of what occurs in time.¹¹⁰

The concept of temporality and *ordo* now becomes important in the dialogue. The two in Book VI are not exclusive of each other. Musical measure imposes order (*ordo*), and time implies spatiality creating "temporal spaces" (*temporalium spatium*) where the unintelligible can become the intelligible.¹¹¹ According to Hochschild, memory reveals the ability of the mind to express and discern *ordo* in the whole of creation; it does this by its dual function of linking the mind to the intelligible reasons and opening the mind to the sensible world as something possessing an intrinsic *ordo*.¹¹² Hochschild asserts that "*Mus*. deepens this interpretation by making memory into the moral filter...through which the mind selectively chooses to attend to what is taken in through the senses, purging images that correspond to the ill-considered use of physical goods."¹¹³

Augustine writes that the soul "understands eternal things and counts temporal things below them even within itself and knows these higher things are rather to be desired than those lower."¹¹⁴ Memory thus serves to order the soul with respect to what is lesser, and it does this by mediating a higher *ordo* that is perceived through the mind and reason; this higher *ordo* is called *aequalitas* (equality).¹¹⁵ The higher *ordo* or *aequalitas* mediated by memory is able to discern the *ordo* present in creation. In this discernment, the soul realizes that it has already, through recollection, access to this *ordo*. *Ordo* does not pass before the eyes in temporal succession, but is present, immediately, when it is remembered. It is in the soul, but not *of* the soul, coming from a principle that transcends the soul itself.¹¹⁶ Hochschild writes that

¹¹⁰ Hochschild, Memory, 125.

¹¹¹ Hochschild, "Unity," 615.

¹¹² Hochschild, *Memory*, 230. Architectonic structure also has an ordo.

¹¹³ Ibid.

¹¹⁴ Mus. VI.13.37.

¹¹⁵ Hochschild, *Memory*, 125.

¹¹⁶ Hochschild, "Unity," 615.

memory is what links the temporality of the soul's mode of perceiving to the transcendence of the soul's mode of being of truth.¹¹⁷ What Augustine is developing in VI.11 is the concept that there are two types of memory. One is associated with the sensible, temporal, and unintelligible while the other is associated with the intelligible and eternal.¹¹⁸

VI.11 has an extended discussion on *phantasiae* and *phantasmata*.¹¹⁹ Augustine describes the difference between the two as follows:

For my father I have often seen I know, in one way, and my grandfather I have never seen, another way. The first of these is a phantasia, the other phantasm. The first I find in my memory, the last in that motion of my mind born of those the memory has.¹²⁰

Phantasia is thus a memory created from images that are retained based on known and perceived physical sense interactions while *phantasmata* are images that have not been perceived but are created from the images or memories already present in *memoria*; *phantasmata* may not be dependable or even true. *Phantasmata* are concerned with the active imagination. *Memoria* plays a different role in the distinction between *phantasiae* and *phantasmata*. Augustine explains this:

But what I make from what I've seen, I make by memory. Yet it's one thing to find a phantasia in the memory and another to make a phantasm out of the memory. And a power of the soul can do all these things.¹²¹

¹¹⁷ Hochschild, *Memory*, 230.

¹¹⁸ Ibid., 127.

¹¹⁹ According to O'Daly, use of these terms appears to be of Stoic origin but Augustine's demarcation of *phantasia* from *phantasma* does not correspond to the Stoic distinction between *phantasia* as the making of an impression or alteration in the mind to the perceived object, and *phantasma* as the product of an 'empty attraction' or 'appearance of thinking' without and direct external thought. Augustine's definition of the difference between these terms are in *mus*. VI.11.22. When Augustine uses the term *phantasia* he has no ambiguity assigned to it unlike Porphyry who adapted the Stoic definition and uses the term interchangeably with *phantasma*. Augustine may have been influenced by Cicero's use of *phantasia*. Gerard O'Daly, *Augustine's Philosophy of Mind* (London: Gerald Duckworth & Co. Ltd.: 1987), 107-108.

¹²¹ Ibid.

Phantasia is found in *memoria* itself while the *phantasmata* are the product of mental labor. Thonnard argues that *phantasmata* are more often than not, perverse in nature and burden the mind with the weight of its own vacuity.¹²² *Phantasmata* are second order memory images voluntarily induced in the mind that can impair the proper functioning of the intellect and hamper its efforts to find truth.¹²³ Augustine advises "it is the greatest error to hold even true phantasms for things known," and counsels that one should resist *phantasmata* lest one falls into the trap of being deceived by them:

But some follow their phantasms so headlong the only ground for all false opinions is to hold phantasias or phantasms for things known, known by the senses. And so let us resist them as much as we can, nor so fit our mind to them that, while our thinking is on them, we believe we see them with the understanding.¹²⁴

Mus. is a complex work which can be difficult and even confusing to read; however, this complexity arises from Augustine's search for God through *memoria*. VI.12.34 opens in the same manner as VI.5.14 with the following concept, "but the memory not only takes in the carnal motions of the mind ... but also the spiritual motions." The two types of memory compete against each other and can find no peace. This struggle between the soul's desire to turn to God and succumbing to carnal desires is constant. *Memoria* does have what Lowe describes as vestigial "shadowy remains of past perceptions,"¹²⁵ however, *memoria* is also the soul's means of turning back to God as it remembers truth. And this kind of truth, Augustine concludes, is properly *in* the soul, though *from* God who is truth most supremely.¹²⁶ The soul which is superior to the body when subordinate to God, can discern what it takes to turn back to God. Hochschild elaborates on what Augustine writes regarding "to live in *memoria*."¹²⁷ She writes, "living 'in memory' requires a strict discernment

¹²² Mus. VI.11.32. F. J. Thonnard's comments on Mus.'s distinction between *phantasia* and *phantasma* in *Oeuvres de Saint Augustin*, eds. Guy Finaert, F. J. Thonnard, *Bibliothéque Augustinenne* 7 (Paris: Desclée de Brouwer, 1947): 523-524.

¹²³ Marianne Djuth, "Veiled and Unveiled Beauty: The Role of the Imagination in Augustine's Esthetics," *Theological Studies* (2007): 80.

¹²⁴ Mus. VI.11.32.

¹²⁵ Lowe, "Platonic," 102.

¹²⁶ Hochschild, *Memory*, 129.

¹²⁷ Hochschild, "Unity," 615.

of *ordo* in the sensible, and an almost clinical attention with discipline, avoiding pleasure simply for its own sake."

Augustine in *Mus.* has expounded in some detail the role and mechanisms of *memoria*. In *Mus.*, he has introduced the role of *memoria* in association with the Divine and not just with perceptible, sensible things. This is a far superior concept of *memoria* which includes a metaphysical recollection and pursuit of God.¹²⁸

3.4.4 De Moribus Ecclesiae Catholicae de Moribus Manichoraeorum

This book was written to refute the false claims of the Manichaeans and their belief that they were superior to the Christians. It was written in 388 A.D. and revised in 390 A.D.¹²⁹ There is a brief section in I.6.9-10, titled "Virtue Gives Perfection to the Soul; The Soul Obtains Virtue by Following God; Following God is the Happy Life." This is a quick summary, in a few sentences, of the happy life described in the *Beata V*. Augustine writes that "Only God remains, therefore, if we follow after Him, we live well; if we reach Him, we live not only well but happily."¹³⁰ Although memory or the role of memory is not specifically mentioned in *Mor. Eccl.* memory does have an important role in the achievement of the happy life as noted in *Beata V*. Augustine also in chapter 11.18 encourages his readers to strive after God, "To strive after God, then, is to desire happiness; to reach God is happiness itself."

3.4.5 De Libero Arbitrio

Augustine started writing *Lib. Arb.* in Rome in 388 A.D. and finished it in 395 A.D. several years after his ordination as bishop of Hippo.¹³¹ The first book is believed to be written by Augustine early on with Books II and III written when he was a presbyter, consequently, there is a clear distinction in the maturity of his

¹²⁸ Mus. VI.12.35.

¹²⁹ Donald A. Gallagher, Idella J. Gallagher, "Introduction," in *The Catholic and Manichaean Ways of Life, FoC*, Vol. 56, xi–xx (CUAP, 1966.)

¹³⁰ Mor. Eccl. I.6.10.

¹³¹ Robert P. Russell, *The Teacher, The Free Choice of the Will, Grace and Free Will* (Washington, D.C.: CUAP, 2004), 66.

theology between the "early" and "late" Augustine.¹³² The book, written in the form of a dialogue with his student Evodius,¹³³ was written as a refutation of the dualistic Manichean belief of the eternal and conflicting forces of Light (Good) and Darkness (Evil); conflict in man between good and evil represented the universal conflict between these ultimate cosmic forces.¹³⁴ The main themes of *Lib. Arb.* are the freedom of the will and the nature and origin of moral evil. There is no detailed explicit dialogue about memory but it is evident in certain sections that memory is pertinent if not central to the arguments that are debated.

In chapter II.12.34 the dialogue centres on finding truth and the happy life – a concept that was first present in *Beata V*. He writes in II.13.35:

I had promised to show you, if you recall, that there is something higher than our mind and reason. There you have it - truth itself!...And who is happier than the man who finds joy in the firm, changeless, and most excellent truth?...When truth steals into our minds with a kind of eloquent silence without, as it were, the noisy intrusion of words, shall we look for another happy life and not enjoy that which is so sure and intimately present to us?

The only thing of which the soul is certain is that it has a mind.¹³⁵ However, as Gilson writes, "Of course, the soul does not see God's essence when it sees truth in its own mind…but at least it sees the goal it must reach if it is to enjoy this happiness and enter into its rest."¹³⁶ Truth is independent, and transcendent of the mind it rules.¹³⁷ In discovering the transcendence of truth, the mind discovers God's existence.¹³⁸ Augustine writes:

Since it is in truth that we know and possess the highest good, and since that truth is wisdom, let us see in wisdom our highest good. Let

¹³² Some author such as Séjourné and O'Connell claim that Book II is a retraction of the first. P. Séjourné, "Les conversions de saint Augustin d'après le "*De Libero Arbitrio*," *Revue des Sciences Religieuses* 25 (1951). Robert J. O'Connell, "*De Libero Arbitrio* I: Stoicism Revisited," *AugStud.* 1 (1970): 49-68.

¹³³ Evodius is not mentioned by name in *Lib. Arb.*, however, Augustine's letter to Evodius in 415 A.D. leaves no doubt that Evodius is the interlocutor (162.2). Russell, *The Teacher*, 70.

¹³⁴ Russell, *The Teacher*, 66.

¹³⁵ Gilson, *The Christian*, 67.

¹³⁶ Ibid., 22. *Lib. Arb.* II.13.35.

¹³⁷ *Lib. Arb.* II.12.34.

¹³⁸ Gilson, *The Christian*, 21.

us make it our aim to enjoy fully, for happy indeed is the man whose delight is in the highest good.¹³⁹

Augustine discusses the origin of the soul (III.20.56-21.62). The origin of the soul is not what concerns Augustine, but rather more important is the soul's future destination. What is observed in III.20-21 is the introduction of the concept of temporality and remembering/recollection of memories regarding the soul and truth. The first mention is in III.21.59 where "a path through temporal things has been marked out...that we accept on faith past and future events so far as this suffices for men on their journey towards things eternal." In III.21.61 Augustine writes, "within the order of temporal events, our expectation of the things to come [*futurorum exspectatio*] should certainly occupy our attention more than an inquiry into things of the past." This concept of temporality of past, present, and future, was also evident in *Imm. An.* and *Mus.*¹⁴⁰ The course of the present is dependent on understanding the role of temporality as it pertains to recollection and forgetfulness of the past, and expectation of the future outcome or end – a result of present actions. Augustine uses metaphor to illustrate this in III.21.61:

But it would do him no good to remember the shore from which he embarked on his journey if he miscalculated about the port of Rome and should suffer shipwreck upon the shoals. So, too, if I do not remember the time my life began, this will be of no hindrance to me as long as I know the end is wherein I am to find rest. Any recollection or conjecture about the beginning of my life would be no help to me if I should run upon the reefs of error by holding views unworthy of that same God who alone is the end of the soul's labors.

Lib. Arb. Has definitive contributions to the understanding of memoria.

¹³⁹ *Lib. Arb.* II.13.36. Mourant, *Saint*, 42.

¹⁴⁰ Imm. An. 3.3-4: time consists of past, present, and future. The same phrase *futurorum expectatio* occurs in 3.3 and in *Lib. Arb.* III.21.61 where both refer to a future expectation. In the first case, expectation is associated with the future, memory with the past, and intention to act within the present. In the second, Augustine writes that it is not helpful to recollect the past if in the present he errs by not remembering (knowing) the end where he will find rest. In *Mus.* VI.8.21, temporality is associated with time intervals where sound in the present becomes past and there is expectation of the sound continuing into the future. The *ordo* that exists in temporality is evident in *Lib. Arb.*

3.4.6 Epistola VII

Epistola VII is a letter Augustine wrote in 389 A.D.¹⁴¹ in response to Nebridius (*Ep.* VI.1.) who had argued that there can be no memory without *phantasia* (*omnis... memoria sine phantasia esse non possit*).¹⁴² The overriding theme in *Ep.* VII is the power of memory with particular reference to the role of imagination. Augustine categorizes mental images into three types: 1) those based on actual impressions of the things obtained via our senses e.g., Carthage, 2) things we think of e.g., fantasies and 3) things we reason to e.g., numbers and dimensions.¹⁴³ Mourant categorizes the response of Augustine in *Ep.* VII into three characteristics regarding *memoria*: 1) *phantasia* not conditioned by time and space, 2) validity of *memoria* in the present and 3) Augustine's developing objections to *anamnesis*.¹⁴⁴

One theme that stands out is the Augustinian concept that memory is not just a remembrance of past things but of things still in existence. Here, the association of the temporality of memory with the remembrance of past *and* present memories is laid out for Nebridius. Augustine asserts that past memories are those that have in part "left us behind and partly...those we have left behind."¹⁴⁵ He cites as an example the memory of Carthage, something that still exists but that he has left behind. This is a memory of past time. In VII.1.2., Augustine describes how memory can be of things that have not passed out of existence. Eternity for example, lasts forever, and does not need a product of the imagination to enter the mind. Nevertheless, eternity cannot enter the mind unless it is remembered. Augustine concludes that "there can be a memory of certain things without imagination."¹⁴⁶ According to O'Daly, this recollection of the memory of eternity.¹⁴⁷ This recollection of eternity occurs in the

¹⁴¹ *Ep.* VII is generally believed to have been written in 389 but some translators like Teske give a range of 388-391. *Letters: The Works of Saint Augustine, A Translation for the 21st Century*, trans. Roland Teske, ed. John E. Rotelle (NY: NCP, 2001), 26.

¹⁴² *Ep.* VI.1.1. O'Daly believes that Nebridius' position on memory was influenced by the Aristotelian tradition of memory. Augustine disagrees with Nebridius' position in *Ep.* VII.1.1, "You think that there can be no memory without images or representations of imagination, which you chose to call '*phantasia*.' I disagree." Gerard O'Daly, "III: Memory," 466.

¹⁴³ Ep. VII.2.4, VII.3.6-7. Mourant, Saint, 16-17.

¹⁴⁴ Mourant, *Saint*, 16-17.

¹⁴⁵ *Ep.* VII.1.1.

¹⁴⁶ *Ep*. VII.1.2.

¹⁴⁷ O'Daly, "III: Memory," 466.

present.¹⁴⁸ Memory is capable of recollection and remembrance of the past in the present because of the memory that exists in the present.¹⁴⁹ The validity of present memory is just as valid to Augustine as memory of the past. O'Daly writes, "what Augustine is insisting upon is the validity of a memory which does not need the aid of any *phantasia* conditioned by space or time."¹⁵⁰ However, he does warn in VII.2.4-5 of the dangers of creating false images.

Finally, Augustine informs Nebridius that the soul has the power (*vim*) to remember things it has not seen.¹⁵¹ This power (*vis*) is particularly noticeable in regard to numbers or imagining something the soul has seen in a transformed state like a:

Raven set, as if it were, before our eyes, which is, of course, familiar to our sight, to be transformed by adding and subtracting certain elements and to be turned into any image whatever that has absolutely never been seen before.¹⁵²

Imagination alters data that is brought in by the senses and is able to create images that have not been experienced by any of the senses in their totality.¹⁵³

In this letter, Augustine's association of memories with past recollections is reminiscent of Plato's theory of *anamnesis* because it is a recollection of something in the past that exists in the past. O'Daly writes that O'Connell¹⁵⁴ is correct when he states that "to justify using the term *memoria*, there must be reference to the past."¹⁵⁵ He continues on to say that "Augustine distinguishes formally between the "pastness" of the act of apprehension and of the object apprehended." There are definitely Platonian overtones to Augustine's language (e.g., *memoria*, *oblivio*) and concepts

¹⁴⁸ Here one can see the development of Augustine's theory of temporality in his theology of *memoria*. Temporality and *memoria* are inseparable and cannot be understood without the other. A detailed analysis is recorded in *Conf.* XI.

¹⁴⁹ *Ep*. VII.1.2.

¹⁵⁰ O'Daly, "III: Memory," 466.

¹⁵¹ *Ep.* VII.3.6. "What do you suppose but there is a certain power implanted in the soul...a power that the soul carries with it wherever it goes." Teske, *The Works*, 29.

¹⁵² *Ep.* VII.3.6.

¹⁵³ Ibid.

¹⁵⁴ Robert J. O'Connell, "Pre-existence in Augustine's Seventh Letter," *Revue d''Etudes Augustiniennes et Patristiques* 15, no. 1-2 (1969): 71.

¹⁵⁵ Gerard J. P. O'Daly, "Did St. Augustine Ever Believe in the Soul's Pre-Existence?" *AugStud.* 5 (1974): 232.

regarding memory throughout *Ep*. VII. It is true, as O'Daly states, that *Ep*. VII does defend *anamnesis* against an invalid objection, however, when Augustine realizes the implications of the constant presence of truth to the mind, he deliberately dissociated himself from the Platonic theory of *anamnesis* because of its concept of past acquisition of knowledge.¹⁵⁶ Perhaps Augustine saw that the memory of history had become memory of the present in the Incarnation of Christ. Memory of the past was indisputably so important to memory in the present for God had entered into the present of history.

The temporality of memory with not only the recollection of past memories but the remembering of present memories is a key deviation from Plato's theory of *anamnesis*. O'Daly contends this is evidence of Augustine's abandonment of the Platonic *anamnesis* theory.¹⁵⁷ Further, in *Retr.* I.4.4 Augustine writes that that the unchangeable truths become evident to human beings because of the light of eternal reason that is present in them.¹⁵⁸ Knowledge of things in the past were not forgotten as Plato thought. It is this point that Augustine uses as an objection to the Platonic *anamnesis* theory.¹⁵⁹

3.4.7 De Magistro

Mag. written in 389 A.D. is a dialogue between Augustine and his interlocutor, his son Adeodatus.¹⁶⁰ In *Retr.* I.11, Augustine described the contents of this book as having "a discussion, an investigation, and the discovery that there is no teacher who teaches men knowledge except God." According to Hochschild, *Mag.* "opens up the conceptual space for memory to become the foundation of knowledge as a dialectical mode of presence."¹⁶¹ She also argues that *Mag.* does not use a "theory

¹⁵⁶ O'Daly, "III: Memory," 467.

¹⁵⁷ Ibid. O'Daly writes that *Ep*. VII marks this progressive abandonment of Platonic *anamnesis*. ¹⁵⁸ Aquinas, years later, follows Augustine is his use of the phrase "light of natural reason." Aquinas associates this light as the divine light which is imprinted on us. "The light of Thy countenance, O Lord, is signed upon us: thus implying that the **light of natural reason**, whereby we discern what is good and what is evil, which is the function of the natural law, is nothing else than an imprint on us of the Divine light." Aquinas, *The Summa Theologica of St. Thomas Aquinas, Part 1*, trans. Fathers of the English Dominican Province (1952; repr., London: Burns Oats & Washbourne, Ltd., 1927), I-II. Q90. A1.ad 1.

¹⁵⁹ O'Daly, "III: Memory," 466.

¹⁶⁰ Russell, *The Teacher*, 3.

¹⁶¹ Hochschild, *Memory*, 110.

of memory." While it is true that there is no specific theory of memory described in *Mag.*, it is contended here that there are indeed some important sections e.g., chapter 12, that provide significant contributions towards the formulation of a theology of *memoria*.

Augustine is concerned how one succeeds in learning.¹⁶² He understands how the ability to recognize a sound provides meaning to the knowledge of words. However, recognition of that sound is *only* possible if there is some retention of that sound as a memory in *memoria*:

It is perfectly logical and true to conclude that whenever words are spoken, we either know what they mean or we do not. If we know, they recall rather than teach something to us; if we do not know, they cannot even recall something, though they may lead us to inquire.¹⁶³

The reality of understanding meaning is not from the words themselves, but the truth which presides over the mind itself from within.¹⁶⁴ Truth resides within *memoria* – this is a foundational characteristic of memory which contributes to the formulation of a theology of *memoria*.

Chapter 12 is more specific in the discussion of images and recollection. In 12.39-40 Augustine, as in *Ord*. II.2.7, stresses the necessary involvement of memory in instruction and learning both on the part of the teacher and student. However, he now elaborates on the role of images in recollection and sense perception. Augustine presents an interesting point regarding memory; he writes:

But when questions are asked, not about those which our senses perceived on former occasions, then our words do not refer to the things themselves, but to the images impressed by them upon the senses and stored away in the memory.¹⁶⁵

¹⁶² Mag. 11.36-38, 14.45-46. Gareth B. Matthews, "Augustine on Speaking from Memory," American Philosophical Quarterly 2, no. 2 (1955): 158.

¹⁶³ Mag. 11.36.

¹⁶⁴ Mag. 11.38. According to Russel, 'presides' is a favourite term Augustine's used to describe the action of the 'inner light' upon the soul in its perception of truth. Russel, *The Teacher*, 51.

¹⁶⁵ Mag. 12.39. Matthews, "Augustine," 157.

Matthews contends there is a tendency to change the subject when asked about familiar but absent, sensible things by deferring to memory images instead.¹⁶⁶ He claims that this is a peculiar thing for Augustine to say given that its meaning is hard to understand.¹⁶⁷ Perhaps what Augustine might be thinking is akin to the example of when a person is asked to describe an object like a lamp of particular shape and colour present before them and they exclaim that it reminds them of a similar lamp they saw some years earlier. When they start to describe the lamp before them, they really are resorting to the past images and memory of the earlier lamp stored in the recesses of *memoria*. These images are "witnesses, so to speak, of things previously experienced by the senses" but, as Augustine writes, "these images are only witnesses for ourselves."¹⁶⁸

Augustine also acknowledges the action of God in the role of learning and understanding the veracity of what is true. He writes:

But when it is a question of things which we behold the mind, namely, with our intellect and reason, we give verbal expression to realities which we directly perceive as in that inner light of truth¹⁶⁹ by which the inner man, as he is called, is enlightened and made happy. But, here again, if the one who hears my words sees those things himself with that clear and inner eye of the soul, he knows the things whereof I speak by contemplating them himself, and not by my words. Therefore, even when I say what is true, and he sees what is true, it is not I who teach him. For he is being taught, not by my words, but by the realities themselves made manifest to him by the enlightening action of God from within.¹⁷⁰

In this excerpt, an extrapolation of what St. Paul says in Ephesians 3: 16 can be observed; Paul writes, "I pray that out of his glorious riches he may strengthen you with power through his Spirit in your inner being." This passage is also reminiscent of the happy life described in *Beata V*. where the "inner light of truth" reveals to the soul what is necessary to achieve the *beata vita*. In chapter 14.46, it is the Teacher who directs the inward turn to him for instruction in the acquisition of the happy life which is defined by Augustine in this text as "to love Him and to know Him, that is the

¹⁶⁶ Matthews, "Augustine," 157.

¹⁶⁷ Ibid.

¹⁶⁸ Mag. 12.40.

¹⁶⁹ The "inner light of truth" is a phrase that Augustine uses for "divine illumination."

¹⁷⁰ Mag. 12.40.

happy life." There is also reference to the realities made manifest by the action of God via what Augustine would later describe as "divine illumination." This is a recurrent theme in Augustine's theology of *memoria*, where it is through God's action via the *memoria* that one can know and understand the realities of truth and the Divine.

Hochschild, in *Mag.* asserts that the only explicit function accorded to memory is the retention of images of things sensed in the past; hence, memory can become the foundation of knowledge.¹⁷¹ The paradox of this though is highlighted in *Mag.* How can someone attempt to learn something unless one already has some sort of anterior knowledge, such that what is learned can be affirmed to be true?¹⁷² This is the same question seen in Plato's *Meno* where Plato provides an answer through his theory of recollection. Augustine accepts this theory but with modifications e.g. not embracing pre-existence.¹⁷³ The link between temporality and memory is noted; recollection pertains to past images. Augustine says it is through judgement that we see past images as "certain attestations of things sensed previously."¹⁷⁴ Our mind can therefore consider them and take them as truthful in the limited manner in which anything can be truthful that is based on sense perception.¹⁷⁵

It is true that *Mag*. may not have many explicit references to memory; it does however, have crucial insights regarding the function and characteristics of memory that are key to Augustine's theology of *memoria* and that cannot be overlooked. Even Adeodatus, Augustine's son recognized the central role of *memoria* in the discussions in *Mag*. Adeodatus in 14.46 acknowledges, "but as to the truth of what is said, I have also learned that He alone teaches who made use of external words to remind us that He dwells within us." The most significant role of *memoria* is when it is invoked in remembering the indwelling God.

3.4.8 De Vera Religione

V. Rel. was written in 390 A.D. and was addressed to Romanianus, Augustine's patron and his principal student at Cassiciacum.¹⁷⁶ It was the last book he

¹⁷¹ Hochschild, *Memory*, 110, 113, 117.

¹⁷² Ibid., 113.

¹⁷³ Ibid.

¹⁷⁴ *Mag.* 12.39.

¹⁷⁵ Ibid. Hochschild, Memory, 117.

¹⁷⁶ John H. S. Burleigh, Augustine: Earlier Writings (Philadelphia: The Westminster Press, 1953), 222.

wrote before he was ordained as a priest at Hippo. In *Retr.* XII.1, Augustine writes that he repeatedly and at length argues that the one true God is to be worshipped by the true religion. He also notes that this book addresses the Manichaeans and their "two natures." There are not many specific references to memory but there are a few that demonstrate the underlying role of memory and images. The first mention related to memory is in III.3:

Nothing hinders the perception of truth more than a life devoted to lusts, and the false images¹⁷⁷ of sensible things, derived from the sensible world and impressed on us by the agency of the body, which beget various opinions and errors.

False images distract from the true worship of God by creating fantasies (X.18). The soul should, according to Augustine, accept the "temporal condition of human society" but at the same time, it should have "directed its regard to eternal things."¹⁷⁸ Augustine describes *phantasmata* as "nothing but figments of corporeal shapes appearing to bodily senses" declaring that it is the "easiest thing in the world to commit them to memory."¹⁷⁹ Images committed to memory are easy to manipulate; they form different shapes, they can expand or minimize, decrease or multiply in number, and/or the order of images can be disturbed and reset.¹⁸⁰ Augustine warns that it is difficult to guard against *phantasmata* as one seeks the truth; he encourages the reader to not serve the creature but to serve the Creator.¹⁸¹

XXXIV.64 has the most content regarding imagination. Early on, Augustine did not have a theory of imagination. A shift in his understanding of imagination (*imaginatio*) is noted over time including variations in the definition of the word *imaginatio*.¹⁸² Indeed, according to Breyfogle, in this section, *imaginatio* is used in the sense of the "vain imaginations" (Romans 1: 21); imaginations (*imaginatione*) are derived from things perceived by the senses and are barriers to proper

¹⁷⁷ The words for false images in this text is '*falsas imagines*' and not *phantasmata* which can be the source of false images.

¹⁷⁸ *V. Rel.* X.18.

¹⁷⁹ Ibid.

¹⁸⁰ Ibid.

¹⁸¹ Ibid., X.18-19.

¹⁸² Breyfogle, "Memory," 214.

contemplation.¹⁸³ The influence of imagination persuade Augustine to do what he desires, for these imaginations cloud the mind with illusions and fantasies:¹⁸⁴

Obstinate souls! Give me a single man who can see without being influenced by imaginations derived from things seen in the flesh (*sine ulla imaginatione visorm carnalium*).... And in imagination (*figmento cogitationis*) I go where I like, and speak to whom I like. These imaginary things are false, and what is false cannot be known. When I contemplate them and believe in them, I do not have knowledge, because what I contemplate with the intelligence must be true, and not by any possibility what are commonly called phantasms (*phantasmata*).¹⁸⁵

Imaginatio through the formation of *phantasmata* seeks via falsehoods to distract and hinder the ability to worship the true God.¹⁸⁶

3.5 The Foundational Pillars of Augustine's Theology of Memoria

Augustine's writings in his first decade post conversion illustrate the extent to which *memoria* was deeply embedded in his desire to know God and the *beata vita*. The details regarding *memoria* and memory were substantial in these books and sufficient to identify and extrapolate an architectonic structure to memory. The examination of *memoria* in these books reveals seven main foundational pillars/aspects of *memoria* that are key to his theology of *memoria*. Of note, is the fact that the four books written at Cassiciacum, all, to one degree or another, discuss these characteristics of *memoria*. The later books between 387-396, also include and develop these aspects of *memoria*.

3.5.1 Foundational Pillars of Memoria

The foundational pillars and characteristics of *memoria* and the books in which they appear are listed in **Table 3.1**. These pillars form the foundations of an

 ¹⁸³ Ibid. Breyfogle states the most explicit use of *imaginatio* as vain imaginations in found in *V. Rel.* ¹⁸⁴ Ibid.

¹⁸⁵ V. Rel. XXXIV.64.

¹⁸⁶ Breyfogle, "Memory," 215.

architectonic structure to *memoria* and Augustine's theology. The books in bold are where a particular foundational pillar is located; the non-bolded books are where this aspect is mentioned but is not the key feature.

Foundational Pillars of	Book
Memoria	
Location of <i>memoria</i>	Ord., Imm. An., Quant. An., Lib. Arb.
Sense-perception	Sol., Quant. An., Mus., V. Rel.
Teaching/Learning	C. Acad., Ord., Sol., Imm. An., Mag.
Recollection and Forgetfulness	C. Acad., Sol., Imm. An., Quant. An.,
	Mus., Ep VII, Mag.
Images, Phantasia, Phantasmata	Sol., Beata V., V. Rel., Quant. An.,
	Mus., Ep. VII, Mag.,
Transiency of memory	Sol., Ord., Imm. An., Mus., Ep. VII, Lib.
	Arb., Mag., V. Rel.
The beata vita	C. Acad., Ord., Beata V., Sol., Imm. An.,
	Mus., Ep. VII, Mag., Mor. Eccl. Lib.
	Arb., V. Rel.

Table 3.1: The distinct aspects of memory that form the key structure of *memoria*.

Table 3.1 demonstrates the following facts:

- 1. All foundational pillars are found in his books written at Cassiciacum. It would seem therefore, that Augustine already had developed in his own mind the sequence of these foundational pillars of *memoria*.
- 2. Augustine's writings from 387-395 also included these foundational pillars. They were further developed compared to the Cassiciacum books, however,

comparatively, they were still considered immature compared to *Confessiones* and *De Trinitate*.

- 3. Important to note, is that the *beata vita* is discussed in 11/12 books surveyed in this chapter. The desire to know and possess God and thus know the happy life was, in a sense, not a pillar but the corner stone of his theology of *memoria*.
- From the very beginning Augustine understood the significance of *memoria* not just in a physical temporal sense but also within a metaphysical dimension.

3.6 Concluding Remarks

This chapter has illustrated how Augustine's theology of *memoria* was developing right from the very beginning of his early writings starting at Cassiciacum. Each book describes an aspect of memory which becomes more sophisticated as Augustine matures in his faith.

In addition, I observed an architectonic structure to Augustine's theology of *memoria* which became evident when examining the structural breakout of the described foundational pillars of *memoria*. This assists in understanding Augustine's logic as he developed his theology regarding the types of memory and their functions.

The foundational pillars of *memoria* discovered in this survey of Augustine's early works lay the groundwork for understanding *memoria* in *Confessiones* X- XI. This will be discussed in the next chapter.

CHAPTER 4: Augustine's Theology of *Memoria* in *Confessiones*

*"The power of memory is great, very great, my God. It is a vast and infinite profundity."*¹

4.1 Chapter Aims

Augustine theology of *memoria* reaches it apotheosis in *Conf.* X with further delineation in XI-XIII. The architectonic structure I discussed in the previous chapter carries through to *Conf.* X. The order, and characteristic, of each foundational pillar is present in the same order as they emerged in Augustine's earlier works. In addition, there is now evidence of another pillar of memory – the temporal dimension of *memoria*, an aspect further developed in *Conf.* XI. This chapter builds upon the knowledge gained by examination of the architectonic structure of *memoria* in *Conf.* X. The architectonic insights from *Conf.* X shed light on Augustine's own progression as he developed his theology, how he interrogated *memoria*, and how he wished to inform and teach his readers of his knowledge. This architectonic motif in *Conf.* X built upon the pillars of memory revealed in his earlier works is to the best of my knowledge a novel perspective of Augustine's theology of *memoria*.

4.2 Introduction

Augustine's presentation of *memoria* in *Conf.* X is divided into two halves. The first is the definition, structure, and function of *memoria*, memories, and images via sense-perceptions and innate memories. This half starts at X.8.12 and ends at X.19.28. The second half from X.20.29 to X.43.68 focuses on the *beata vita*. The architectonic structure of *memoria* identified in Augustine's early writings are developed further in *Conf.* X.

¹ Conf. X.8.15.

4.3 Memoria in Confessiones

Augustine wrote *Confessiones* between 397 and 401 A.D. It can be said that *Confessiones* is the most famous of all his writings. Book X has the most comprehensive description of *memoria* in any of Augustine's works. Yet, of the numerous academic articles and books written, very few tackle the topic of memory; when they do, it is often in passing or written with a specific focus on a particular aspect of *memoria*.² Lacking in the literature is a comprehensive, logical examination, and correlation of the various aspects of *memoria* from his early writings to his later writings to determine if there is a specific pattern or structure to Augustine's interrogation of memory and consequent, development of his theology of *memoria*. My in-depth investigation of Augustine's writings reveals that a pattern does indeed emerge.

As Augustine explores various aspects of *memoria* it becomes evident that he discusses *memoria* with three specific end goals. First, to understand how it is that he remembers God. Second, to understand how *memoria* aides in the search for, and understanding of, God. Third, how to achieve the *beata vita*. The logic of his theology materializes as he explains *memoria*, as does the mode of teaching that he uses in *Confessiones*. Additionally, an architectonic structure emerges. The order of the foundational pillars observed in *Conf.* X sheds light on Augustine's teaching style. He reinforces a pattern of teaching through this architectonic structure of foundational pillars of *memoria* and their particular sequence. Through this he offers his readers the ability to build their own architectonic structure regarding their remembrance and understanding of *memoria*.

The blueprint of Augustine's theology of *memoria* in *Conf.* X is logically laid out into eight distinct and sequential sections. It includes an additional foundational pillar that is not present in the previous chapter – the power of memory. To the best of my knowledge this presentation of *memoria* as independent foundational pillars

² Hochschild writes from an anthropological perspective focusing on *Conf.* X. Ayres explores the Trinitarian aspect of *memoria*. O'Daly's focus is empirical memory. Nash's focus is knowledge coming from the mind and thus memory. Mourant has a nice synopsis of *memoria* that is comprehensive in its discussion of the different aspects of *memoria*, but it lacks in detail. Grove examines *memoria* from a Christological perspective. Hochschild, *Memory*. Lewis Ayres, *Augustine and the Trinity* (Cambridge: CUP, 2010). O'Daly, *Augustine's*. Nash, *The Light*. Mourant, *Saint Augustine*. Grove, *Augustine*.

occurring in a sequential architectonic structure with theological implications has not been previously presented. The eight constituents of *memoria*, and the order in which they appear, are as follows:

Constituent of Memoria	Key References in Book X.
The location of <i>memoria</i>	8.11-14.
Power of Memory	8.11., 8.15., 17.26.
Sense-perception	8.13-14., 9.16., 12.19., 14.22., 33.49.,
	35.5455., 40.65.
Teaching and Learning	9.16., 10.17., 13.20., 15.23.
Recollection and Forgetfulness	9.16., 10.17., 11.18., 13.20., 14.21-22.,
	16.24-25., 18.27., 19.28., 20.29., 24.22-
	25.23., (8.13.)*
Images, Phantasia, Phantasmata	9.1610.17., 11.18., 16.24-25., 17.26.
	8.15., (8.12-13)*
Temporal dimension of Memory	10.17., 15.19., 18.23., 28.38.,
The beata vita	20.29 43.68., (8.13-14)*

Table 4.1: Sequential organization of memoria in Confessiones X

* Mentioned in synopsis of memoria (8.11-14)

In *Confessiones*, Augustine reflects on *memoria* as he looks back on his life and presents his theology of *memoria* in a specific logical fashion. His mode of reflection and teaching style is meant to help the reader to gain an understanding of the function of *memoria* and the central role it plays in the search for the Divine. It would appear from his teaching style that Augustine assumes his readers have some understanding of *memoria* based on his earlier writings and sermons.

Augustine's recounting of *memoria* commences in X.8.12-14 where there is a brief synopsis followed by a more detailed exposition in the following chapters. His

first key objective in X.8.12 is to illustrate the vastness of *memoria* and powerful dynamic role of memory within these palaces of *memoria*.

4.3.1 Location of Memoria

Knowledge of the location of *memoria* was not inconsequential to Augustine. This knowledge was necessary in fulfilling his aspiration to acquire the *beata vita* and ascend to God. At the time he wrote *Confessiones*, Augustine knew with certainty that *memoria* resided in the mind which in turn was located in the rational soul. It was Augustine's aim to rise above the natural capacity of the body in a step-by-step fashion to ascend, via the soul, to the God who made him.³ In doing so, he comes to the "vast fields and palaces of memory" (X.8.12). Here, the numerous memories and images are stored in the "mysterious, secret, and indescribable nooks and crannies."⁴ Augustine metaphorically describes in X.14.21 the "stomach of the mind" as the location of memory, having earlier stated that mind is the very memory itself. The point is that the location of *memoria* is situated in the mind itself and the two cannot be separated, and memories are stored in the "stomach" or the "nooks and crannies."

The operation of *memoria* within its palaces and vast fields is such that memories are not "swallowed up and buried in oblivion (*oblivio*)" but are available even to the point of pouring "out to crowd the mind."⁵ The great vastness and hidden spaces of *memoria* reveal a great fluidity and movement of images in and out of the deep recesses of *memoria*.⁶ There is the implication of a disordered and ordered organization of memory which is later confirmed in XI.11.18. The idea of a fluidic and dynamic operation of *memoria* is thus seen from the beginning of Augustine's discussion of memory in Book X continuing into Book XI with its association with temporality.

Augustine starts his remarkable elaboration on memory in *Confessiones* X with the visualization of the location of *memoria* as vast fields and palaces, and the storage of memories within *memoria*. Right from the beginning he wants his readers to grasp the enormity of *memoria* and memories by describing the location. This

³ Conf. X.8.12.

⁴ Conf. X.8.13.

⁵ Conf. X.8.12.

⁶ Conf. X.8.12-13.

equates to the architectonic structure of *memoria* and memories. Now, Augustine delves further into *memoria* where he perceives the power of *memoria*. Augustine understands that the operation of *memoria* is not an uncomplicated process. This complexity becomes evident as he delineates the various aspects of *memoria* in subsequent chapters of Book X.

4.3.2 Power of Memoria

The power of memory is something that completely amazes Augustine. There are only eight specific mentions of the power of memory in *Confessiones* X, however, the underlying thread of all of Augustine's discussions on *memoria* is its power. As he writes about the complexities and intricacies of the structure and function of memory, Augustine's words are infiltrated with his sense of wonderment and amazement, his perplexities, his incomprehension, and his understanding.

Augustine's illustrates the significance of the power of *memoria* by emphasizing the magnitude of the *memoria*'s power at the start of two important sections of *Conf.* X. In the first section starting at X.8.12, the power of memory starts the discussion of the role of *memoria* in the formation, retention, recollection and remembrance of memories, images, and skills. The second section at X.17.26 is the start of the discussion of the happy life and the role of *memoria* in Augustine's journey to achieve the *beata vita*. Both these sections start with the same phrase. The Latin and English translations are as follows:

X.8.15	"magna ista vis est memoriae"	The power of memory is great
X.17.26	"magna vis est memoriae"	Great is the power of memory
X.17.26	"tanta vis est memoriae"	So great is the power of memory

Starting these two sections with the same acknowledgement of the greatness of the power of *memoria*, suggests that Augustine wanted to emphasize the two significant aspects of *memoria*, and was genuinely astounded by the functioning of *memoria*. Both are important and have the same goal of searching for God, finding him, and the *beata vita*.

The other five mentions of the power of memory regard specific functions of *memoria*. In X.7.11 Augustine describes the power of the soul that gives life to the body and the senses to perceive (*est alia vis, non solum qua vivifico sed etiam qua sensificio carnem meam*). In X.13.20 the recollection of memories is possible due to the power of memory (*utique per vim memoriae recordabor*). The ability to hold memories in *memoria* is made possible due to the power of memory in X.14.21 (*sicut sese habet vis memoriae*). The presence in memory of objects as opposed to their image (e.g., numbers and not images of numbers) is because of the power of memory in X.15.23 (*nisi eadem imago vi memoriae*). Finally in X.16.25, Augustine admits that the power of memory is something he does not understand, "*et ecce memoriae meae vis non comprehenditur.*"

In his earlier writings Augustine seems to prefer to talk about the power of the *soul* with regard to memory as opposed to the power of *memory*. In *Mus*. VI, Augustine uses the phrase "power of the soul" (*quae omnia vis animae potest*)⁷ to describe how the soul can find a *phantasia* in *memoria* and also create *phantasmata*. This phrase is used only once in Book VI. In *Ep*. VII.3.6 Nebridius states that the soul has an innate power to remember things it has not seen (imagination).⁸ The Latin translation for the context of power are as follows, "*nisi esse vim quamdam minuendi et augendi animae⁹ insitam*" (but by a diminishing and increasing power [**force**] innate in the soul) and "*quae vis in numeris praecipue animadverti potest*" (the power [**force**] can be noticed especially in regard to numbers.) The term *vim/vis* is used in the soul's association with function of the mind and is the same term used in *Confessiones* X for power; however, this has a different meaning from than that used to describe the "great power of *memoria*." The earlier use of *vis* might be better translated as "force" as force implies an active, intense action compelled by physical, moral, or intellectual means and with a final end result while power implies the

⁷ Mus. VI.11.32.

⁸ Teske, The Works, 18.

⁹ Some translators translate *animae* as mind others as soul. Gilson points out that Augustine at times uses *animus* and *anima* to mean the soul, but *anima* is most often used by Augustine to refer to the animating principle of bodies considered in the vital function it exercises in them while Augustine preferably designates animus to mean the soul i.e., a vital principle that is at the same time a rational substance. Parsons and Cunningham translate *anima* as mind. Gilson, *The* Christian, 269, n. 1a. Wilfrid Parsons, *Saint Augustine, Letters Vol.* 1 (1-82) in *FoC* (Washington, D.C., 1951), 18. J. G. Cunningham, *From Nicene and Post-Nicene Fathers*, Vol. 1, ed. Philip Schaff (Buffalo, NY: Christian Literature Publishing Co., 1887).

possession of control, authority, or influence with a vast capacity.¹⁰ The use of *vis* in *Confessiones* X is associated with *memoria* while in the earlier writings it appears to be more often associated with the soul.¹¹ This differentiation in the use of *vim/vis* would also fit in with the other five mentions of *vis* in *Confessiones* X where *vim/vis* pertains to a function of memory.

4.3.3 Sense-perception

The role of sense-perception and memory is the first principle of *memoria* that Augustine establishes in *Conf.* X.8.13 before he describes what sense-perception is and how it works. He says, "memory preserves in distinct particulars and general categories all the perceptions which have penetrated, each by its own route of entry." Hochschild describes the significance of the preservation of knowledge acquired through sense-perception as a foundational role of memory.¹²

The five senses all produce perceptions that are stored in the memory of the mind; sight, sound, smell, taste, and touch, all of which demonstrate the power of sensation.¹³ Years earlier in *Quant. An.*, Augustine informed Evodius, who had chosen to describe the five senses in this manner, that his description was "very ancient and commonly used by the old masters of rhetoric."¹⁴ He preferred to define sensation as "a bodily experience of which the soul is not unaware."¹⁵ Memory's huge cavern with its "indescribable nooks and crannies," receives sense-perception or bodily experiences and are there to be recalled when needed.¹⁶

Sense-perception does utilize all five senses. Augustine describes how the pleasures of the ears have a "tenacious hold" on him and "subjugated" him.¹⁷ His ears

¹⁰ Definitions of power and force from Merriam-Webster Dictionary accessed November 11, 2021, https://www.merriam-webster.com/dictionary/power, https://www.merriam-webster.com/dictionary/force.

¹¹ A more detailed thorough examination of the use of *vis* in Augustine's writings, and a comprehensive linguistic analysis, would be needed to augment this interpretation; however, this is outside the scope of this work. Therefore, it is recognized that my interpretation may have an element of presumption based on the texts examined in this section.

¹² Hochschild, *Memory*, 13.

¹³ Conf. X.8.13.

¹⁴ Quant. An. 23.41.

¹⁵ Ibid.

¹⁶ Conf. X.8.13.

¹⁷ Conf. X.33.49.

hear when the words of numbers are spoken or songs are sung.¹⁸ Augustine is aware of how ears can cause temptation but how moved he is when he hears songs when sacred words are chanted well.¹⁹ The eyes see and are entrapped by the various arts and crafts men make; these men follow what they have made and abandon the God who made them.²⁰ It is a contrast between what men create verses the creation of humankind *ex nihilo* by the Divine. Augustine is grateful that God rescues him from these temptations when he succumbs.²¹ The sense of smell is not a temptation to Augustine even as he remembers perfumes; he is indifferent to the presence of perfumes.²² Augustine does struggle every day with uncontrolled desires in eating and drinking. He cannot give up the pleasures of eating and drinking but realizes he must moderate between "laxity and austerity."²³ Finally, Augustine warns of a temptation that is "manifold in its danger."²⁴ It is the "lust of the flesh which inheres in the delight given by all pleasures of the senses (those who are enslaved to it perish by putting themselves far from you)."²⁵ Fortunately, "in the soul there exists, through the medium of the same bodily senses, a cupidity which does not take delight in carnal pleasures but in perceptions acquired through the flesh."²⁶ Augustine is aware that does he not use the senses for the proper acquisition of knowledge when succumbing to temptations of the flesh.²⁷ He is also aware of his ability to distinguish the activity of the senses of pleasure verses that of the senses of curiosity.²⁸

Augustine acknowledges that God had walked beside him, teaching and helping him regarding the senses and their proper use. It was the "abiding light of God" that enabled an understanding and insight into these matters.²⁹ The result was that Augustine was drawn by God who sometimes caused him "to enter into an extraordinary depth of feeling marked by a strange sweetness."³⁰ Sense-perception is the first step in understanding how memory works in the physical sense. It is an

- ²⁰ *Conf.* X.34.53. ²¹ Ibid.
- 2^{2} G (\mathbf{W}, \mathbf{W})
- ²² Conf. X.32.48.
 ²³ Conf. X.31.47.
- ²⁴ Conf. X.34.53.
- ²⁵ Conf. X.35.54.
- ²⁶ Ibid.
- ²⁷ Ibid.

²⁹ Conf. X.40.65.

¹⁸ Conf. X.8-13, 33.49.

¹⁹ Conf. X.33.49.

²⁸ Conf. X.35.55.

³⁰ Ibid.

important consideration as Augustine explores the role of memory in teaching and learning.

4.3.4 Teaching and Learning

Confessiones brings to its apex the dialectical debate regarding learning and teaching that started at Cassiciacum. Augustine had initially approached the debate of the association of memory with learning and teaching very much from a philosophical viewpoint.³¹ In *C. Acad.* I.1.3, Augustine writes how he was "compelled to flee to the bosom of philosophy." However, by the time Augustine wrote *Confessiones*, this philosophical approach had evolved to extricate the underlying reason for trying to understand *memoria* - its role in his search to know and understand God and achieve the *beata vita*. Augustine had purposed this from the start but the role of *memoria* in this capacity became more prominent in his thought process throughout the years and more comprehensively detailed in *Confessiones*.

So important is memory in the context of learning and teaching, that Augustine was determined right from the very beginning to stress that what was taught could not be lost from memory. Consequently, Augustine wrote about employing stenographers to commit his words to writing so that his students – and teachers, did not forget.³² Augustine, in conversation with Licentius, elaborates on how the wise teacher needs to commit to memory what he is going to teach so that he can teach properly and improve his teaching skills.³³ Memory is the central dynamic in both teaching and learning. Knowledge that is new, learnt, and committed to memory, can be either good or bad knowledge. Augustine differentiates between the two when he cites the example of a musician who can learn from his own compositions or who can imitate someone else's music.³⁴

Conf. X approaches teaching and learning from a somewhat different angle. Here the discussion centres on the liberal arts, skills learnt, and memory having knowledge of skills and memories within its deep recesses. The actual skills

³¹ *C. Acad.* I.1.3-4.

³² C. Acad. I.1.4, II.6.14, II.9.22.

³³ Ord. II.2.6-7.

³⁴ Mus. I.5.10. Imm. An. 3.3.

themselves, acquired via the liberal arts, are carried in the interior space of *memoria*.³⁵ Of note, is the fact that they are not just carried into these interior spaces, but they are pushed back into the *deep* recesses of *memoria*. Augustine explains the difference between sense-perception and the learning of skills acquired through the liberal arts. The realities of the liberal arts contained in *memoria* are different from the images of actions that pass and fade created by sense-perception. For example, a voice that makes an impression through the ears and leaves behind a trace allowing it to be recalled.³⁶ The object itself has no entry into *memoria* only the images that are created, unlike *memoria* which has within it the actual skills acquired through the liberal arts. Augustine concludes that these skills must already be in his memory "but so remote and pushed into the background, as if in most secret caverns, that unless they were dug out by someone drawing attention to them, perhaps I could not have thought of them."³⁷ With these stored skills, Augustine defines learning as this:

We find that the process of learning is simply this: by thinking we, as it were, gather together ideas which the memory contains in a dispersed and disordered way, and by concentrating our attention we arrange them in order as if ready to hand, stored in the very memory where previously they lay hidden, scattered, and neglected. Now they easily come forward under the direction of the mind familiar with them.³⁸

When Augustine then elaborates on memory containing the "innumerable principles and laws of numbers and dimensions" he also describes how these are different from the numbers that are thought of mathematically or that are images of numbers.³⁹ Numbers are ideas held in his memory in the way that he learnt them.⁴⁰ These ideas pertain not just to the skills learnt from the liberal arts but also the "notions" of the four perturbations of the mind.⁴¹ The images might be imprinted by the physical senses, but the "notions" are not received through bodily senses, they are

³⁵ Conf. X.9.16.

³⁶ Ibid.

³⁷ Conf. X.10.17. Augustine echoes Plato that learning is remembering, bringing to the conscious mind something already present. Chadwick, *Saint*, 189.

³⁸ Conf. X.11.18.

³⁹ Conf. X.12.19.

⁴⁰ Conf. X.13.20.

⁴¹ Conf. X.14.22. Four perturbations: cupidity, gladness, fear, sadness.

perceived by the mind through memory.⁴² Augustine concludes that memory enables the recognition of these skills and notions allowing them to be both learnt and taught.

4.3.5 Recollection and Forgetfulness

Augustine's evolution in his understanding of the role of recollection and forgetfulness in memory, is undeniable from his Cassiciacum works to his later writings. Initially, the philosophical Platonic influences i.e., the association of memories with past recollections and the concept that recollection is of memories not yet experienced (not-forgetting) can be noted in his earlier books. This Platonic influence in understanding recollection is first noted in *Ord.* I.2.5 where Augustine uses the word "*recordationis*" to describe recollection of memories. *Sol.* engages with remembering and forgetting in more detail. In *Ep.* VII, Augustine writes to Nebridius that recollection is of something in the past that exists in the past. Yet, while there is this acceptance of Platonic influences, for Augustine recollection meant far more, thus leading him to dissociate from Plato's *anamnesis. Conf.* X illustrates this deviation when Augustine developed his theory that recollection was a two-stage process – recollection of learnt arts and recollection of truth from the liberal arts,⁴³ and recollection of present memories.

For recollection to occur, the mind must have the ability to retain not only the "images imprinted by the physical senses" e.g., the sounds of names but also the "notions themselves."⁴⁴ The act of recollection of the "image" and its "notion" led Augustine to note that in his act of remembering the image was available to him. This might at first seem obvious, however, his insight is that remembrance and recognition of the image is located in memory itself.⁴⁵

Augustine also asserts that, "surely memory is present to itself through itself, and not through its own image."⁴⁶ This claim of Augustine brings forth another aspect of *memoria* that intrigues him and causes further interrogation of *memoria*. This is the idea of memory associated with forgetfulness and the ability to remember

⁴² Conf. X.14.22-25.23.

⁴³ *Sol*. II.20.34.

⁴⁴ Conf. X.14.22.

⁴⁵ Conf. X.15.23.

⁴⁶ Ibid.

forgetfulness. He questions how he could possibly recognize something forgotten. Augustine writes:

If I had forgotten what the force of the sound was, I would be incapable of recognizing it. So when I remember memory, memory is available to itself through itself. But when I remember forgetfulness, both memory and forgetfulness are present – memory by means of which I could remember, forgetfulness which I did remember.⁴⁷

This is a remarkably interesting concept of forgetfulness. Forgetfulness can be recalled allowing recognition of a hidden memory and forgetfulness itself can be remembered. How is this so? Is this recollection of forgetfulness a remembrance of its actual presence in memory or is it remembering through its image?⁴⁸ This perplexes Augustine, and he acknowledges the difficulty he has in resolving this mystery.⁴⁹ In X.16.25 the debate goes round in circles without resolving this dilemma. Augustine concludes, "Yet in some way, though incomprehensible and inexplicable, I am certain that I remember forgetfulness itself, and yet forgetfulness destroys what we remember."

Conf. X also confirms what he presented in *Sol.* regarding the delineation of different types of forgetfulness and recollection (*recordationis*).⁵⁰ *Conf.* X.18.27 illustrates the concept of partial forgetfulness through the woman in Luke 15: 8 who lost her drachma and searched for it. Augustine's point is that she would not have searched for the coin had she not remembered it; it had to be in her memory because otherwise she would not have recognized the drachma when she found it. And here Augustine comes back to the point that "the object was lost to the eyes but held in the memory"⁵¹ because the image of the object was retained within memory. Complete forgetfulness where memory is totally effaced from the mind is described in *Sol.* II.20.34 as *validissima oblivione*. Memory is unable to recall anything pertaining to a particular memory even when prompted. Interestingly, in *Conf.* X.19.28, Augustine declares that "when at least we remember ourselves to have completely forgotten, we have not totally forgotten." However, Augustine also asks, "But if we have

⁴⁷ Conf. X.16.24.

⁴⁸ Ibid.

⁴⁹ Conf. X.16.25.

⁵⁰ Sol. II.20.34.

⁵¹ Conf. X.18.27.

completely forgotten, we cannot even search for what has been lost."⁵² It is interesting to note that Augustine presents the concept that it is memory itself that contains these three different types of memory; memory is the source of forgetfulness.⁵³

This paradoxical debate regarding remembering, forgetfulness, and remembering forgetfulness finds no solid answers from Augustine; he asks of God:

How then am I to seek for you, Lord? ... but then I ought to say how my request proceeds; is it by remembering, as if I had forgotten it and still recall that I had forgotten? Or is through an urge to learn something quite unknown, whether I never had known it or had so forgotten it that I do not even remember having forgotten it?⁵⁴

Augustine asks these questions as he searches for God and the *beata vita*. There is one certainty that Augustine is convinced of – it is within memory that the happy life is found,⁵⁵ and it is through memory that truth and God are found.⁵⁶ He writes, "You conferred this honour on my memory that you should dwell in it."⁵⁷ The apotheosis in the association with *memoria* and the soul's search for God is found in *Conf.* X.20.29-43.68.

Memory, forgetfulness, and recollection are so closely yet complicatedly intertwined that Augustine finds it exasperatingly difficult to completely explain the dynamics behind them. He recognizes that they are simultaneously both metaphysical and physical. Beyond the temporal remembrance of objects and memories, recollection is associated with the discovery of truth, a truth that is buried deep in memory. The discovery of this truth is recognition that is it a re-membering (recollection) of a known unchangeable truth – the Divine himself.

4.3.6 Images, Phantasiae, Phantasmata

Augustine asks the following question, "But who can say how images are created?"⁵⁸ By this time, Augustine would have assumed that most of his readers

⁵² Conf. X.19.28

⁵³ Conf. X.18.27-19.28.

⁵⁴ Conf. X.20.29.

⁵⁵ Conf. X.21.31.

⁵⁶ Conf. X.24.35.

⁵⁷ Conf. X.25.36.

⁵⁸ Conf. X.8.13.

would have some understanding of memory in particular with regard to the skills of the liberal arts, notions of objects, true or false images, and fantasies.⁵⁹ Consequently, Augustine's discussions on images centres more on memory-image processes and the effect of images rather than in depth definition of what an image is or is not. The key references to images in Book X are presented sequentially from X.8.12 to X.30.41.

How the formation of images (*imaginum*) happens is unclear to Augustine but he knows for certain that they are a result of sense-perceptions; as O'Daly puts it, incorporeal sense-impression leads to incorporeal memory-image.⁶⁰ Images of all kinds are stored and hidden in the deep recesses of *memoria*. Images are continuously being formed while our perceptive processes are taking place, however, they are not formed spontaneously but their formation is a willed one i.e., the formation is a selective process.⁶¹ These images can be recalled even if the things that left them behind are no longer present just like temporarily forgotten words.⁶²

Augustine, at this point, interjects his discussion of *memoria* with an expression of wonder at the power of memory, its vastness, and its profoundness.⁶³ His awe of memory and images is conspicuous in X.8.14. He communicates that images can be of past events, yet they are futuristic in that they are foundational in thinking of future events and actions. They are also images of the present because the imagining of the future occurs in the present. The vast recesses of *memoria* holds all these images. Further, it can be said that some images are imprinted on the mind. Images of objects are presented to Augustine's mind when he thinks about for example, the sky or the ocean.⁶⁴ He can 'see' the sky or ocean when not directly looking at them because of the images in his mind. This concept is mentioned in *Mus*. with regard to numbers and objects and in *Conf.*⁶⁵ Sounds and names also have

⁵⁹ By the time *Confessiones* was written, Augustine had acquired a large group of followers and students who were well read and knew his works. His books were widely circulated throughout the Mediterranean and he had corresponded to others in Gaul, Spain, Italy, and the Middle East. So anxious were some to get new material from Augustine, that some of his friends stole a copy of Chapter 12 of *Trin.* before it was completed. *Saint Augustine: The Trinity*, trans. Stephen McKenna (Washington, D.C.: CUAP, 1963), viii. J. O'Donnell, "St. Augustine," *EB* (2021),

https://www.britannica.com/biography/Saint-Augustine.

⁶⁰ Conf. X.8.12-13. O'Daly, Augustine's, 132.

⁶¹ O'Daly, Augustine's, 132.

⁶² Conf. X.8.12-13.

⁶³ Conf. X.8.15.

⁶⁴ Ibid.

⁶⁵ *Mus.* VI.4.6. In *Conf.* X.10.17 Augustine also calls images of objects "realities." "I hid in my memory not their images but the realities."

images imprinted by the physical senses that enable recognition of the sound or name.⁶⁶

Conf. X.9.16-10.17 discusses the difference between images and the skills acquired through the liberal arts, their realities that are in memory itself as opposed to their image; Augustine describes these as truth of realities that are already in memory, but so remote and pushed into the background, as if in most secret caverns.⁶⁷ Images that constitute innate memories in *Conf.* emerge as a memory process whereby images and memories further Augustine's pursuit of God. God is not found among the images of physical objects stored in *memoria* yet these images allow him to realize this fact. God can be found in the discovery of truth in *memoria.* "Where I discovered the truth, there I found my God, truth itself.....you remain in my consciousness, and there I find you when I recall you and delight in you."⁶⁸

Images, which are present in an orderly or disorderly fashion, are discerned inwardly not through the senses. It is by "concentrating our attention we arrange them in order (*ordo*) as if ready to hand, stored in the very memory where previously they lay hidden, scattered, and neglected."⁶⁹ These images are brought together (*cogenda*) and gathered (*colligenda*) so that they are capable of being known.⁷⁰ They are preserved to be available to the thought that recalls them (*sed rerum sensarum imagines illic praesto sunt cogitationi reminiscenti eas*).⁷¹

From a negative perspective, the power of images is such that images of past acts e.g. lust and sexual habits remain and are forcibly imposed on Augustine's mind even when Augustine has no control of his consciousness during his sleep.⁷² He calls these "illusionary images" that cause "false dreams" and a sickness of the soul.⁷³

4.3.6.1 Imaginatio

Augustine's conception of *imaginatio* is inextricably bound up with his understandings of memory and the role that memory plays in storing, reproducing,

⁶⁶ Conf. X.26.25.

⁶⁷ Conf. X.10.17.

⁶⁸ Conf. X.24.35.

⁶⁹ Conf. X.11.18.

⁷⁰ Ibid.

⁷¹ Conf. X.8.13. Cogitationi translated as thought.

⁷² Conf. X.30.41.

⁷³ Conf. X.30.41-42.

and arranging the images generated in it on the basis of sense experience.⁷⁴ Augustine appears to have a threefold use of the word *imaginatio*.⁷⁵ The three interpretations are fantasy, simple mental image, or a mental image produced by an intentional creative act. *V. Rel.* has the most explicit use of *imaginatio* perceived by senses and which create *phantasmata*.⁷⁶ According to Breyfogle, Augustine modified his distinction between *phantasiae* and *imaginatio* somewhere between *V. Rel.* and *Conf*.⁷⁷ Augustine accords a strong degree of reality to images present in memory in *Conf.*; this was not something he was willing to commit to in *V. Rel.*⁷⁸ In *Conf. imaginatio* pertains to a second sense in the formulation of more general mental images; the mind can imagine the sun rising and the memory can contain 'images' of the happy life or of truth.⁷⁹ Breyfogle asserts that, in this sense, *imaginatio* can have a positive connotation - mental images of the happy life.⁸⁰

Augustine also uses *imaginatio* in terms of "vain fantasies."⁸¹ These "vain fantasies" cause images to deviate from their reality. This is because imagination constitutes the locus of the mind's struggle to liberate itself from the ill effects of memory images that orient it toward the world rather than God.⁸² Truth cannot come forward in memory until the things stored there are arranged by "close attention."⁸³ Imagination thus becomes central to the whole of Augustine's endeavours. To ascend to God by means of memory means memory must be rightly ordered by imagination in accordance with the truth.⁸⁴ Imagination poses a threat in these circumstances when it is disordered and distracted from its focus on the divine. It does not need to pose a threat because it is also by means of the memory that Augustine has a "knowledge of his good conscience."⁸⁵

⁷⁴ Djuth, "Veiled," 79.

⁷⁵ Breyfogle, "Memory," 214.

⁷⁶ V. Rel. 64. Phantasia implies an image that is stored and intact in *memoria*. Phantasma refers to an invented image that is derived from *phantasia*.

⁷⁷ Breyfogle, "Memory," 215.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Conf. XIII.6.7. (Romans 1: 21).

⁸² Djuth, "Veiled," 82.

⁸³ Breyfogle, "Memory," 217.

⁸⁴ Ibid.

⁸⁵ Conf. X.30.41.

Another function of *imaginatio* is its association with future expectation and time. This development is new in *Conf*.⁸⁶ Imagination, through its creative power, can provide images of what can be expected in the future since images in memory can create new images. Imagination impacts both the temporal now and the eternal future. In the present, it can remember the future through recollection of the Incarnation and the Word of God.⁸⁷

4.3.6.2 Phantasiae, Phantasmata

When Augustine considered the role of imagination, he identified two types of images: *phantasiae* and *phantasmata*. *Phantasiae* are images that reproduce the sensory *visio* of the soul; they are created from the interaction of the soul and body senses which create images built from reality.⁸⁸ According to Park, Augustine in *Conf.* calls the sensory *visio* the *imago* of the soul which is stored and intact in memory.⁸⁹ *Phantasiae* are thus true images whereas *phantasmata* are invented images derived from *phantasiae*.⁹⁰ *Imaginatio* has the ability to form both *phantasiae* and *phantasmata*; they share a common feature in that they are both images, but they differ in the way they are formed.⁹¹

It was important to Augustine that his readers saw the distinction between *phantasiae* and *phantasmata* since it could lead them to truth, the Truth, or deception.

4.3.6.2.1 Phantasiae

The word *phantasiae* appears only twice in *Conf.* but *phantasmata* occurs on significantly more occasions.⁹² There must be some significance as to why Augustine used this specific word *phantasiae* only twice in *Conf.* Understanding the context in which *phantasiae* occurs in both sections elucidates the significance. Both

⁸⁶ Breyfogle, "Memory," 216.

⁸⁷ Conf. VII.7.11, XIII.21.31.

⁸⁸ Wook Joo Park, "Imagining Divine Beauty: Augustine on *Phantasma*, Lamentation and Expectation," *Heythrop Journal* LXII (2021): 805.

⁸⁹ Park, "Imagining," 814.

⁹⁰ Mus. VI.11.32.

⁹¹ Park, "Imagining," 805. Augustine tends to discuss the differences between the two as opposed to discussing their substantial identity.

⁹² Ibid.

occurrences are prior to Book X. *Phantasiae* first appears in *Conf.* III.6.10 where he writes:

But you, my love, for whom I faint that I may receive strength, you are not the bodies which we see, though they be up in heaven, nor even any object up there lying beyond our sight. For you have made these bodies, and you do not even hold them to be among the greatest of your creatures. How far removed you are from those fantasies (*phantasmatis*) of mine, fantasies (*phantasmatis*) physical entities which have no existence! We have more reliable knowledge in our images (*phantasiae*) of bodies which really exist, and the bodies are more certain than the images. But you are no body.

There is a clear distinction between the use of *phantasmata* and *phantasiae*. Here, *phantasiae* are true and reliable images held in memory⁹³ that the soul uses to become aware of itself and the Divine. However, according to Park, *phantasiae* "can be beneficial for the human soul only if the soul is fully aware of the true Creator…by divine illumination."⁹⁴ *Phantasmata*, on the other hand, are fantasies created from *phantasiae* and are "physical entities which have no existence." In *Conf.* Augustine thinks of *phantasmata* as false images of God that deceive the mind and distract from God.⁹⁵ Park proposes that *phantasmata*, although viewed negatively by Augustine, can still play a role in turning the soul's attention back to God.⁹⁶ Augustine experienced constant vacillations between *phantasiae* and *phantasmata*. He frequently lamented the fact that he succumbed to the distractions of *phantasmata*.⁹⁷ However, he also knew the soul could recognize the falsity of these *phantasmata* thus helping him as he strove to overcome their distraction and return to a focus on the Divine.

The second occurrence of *phantasiae* is in *Conf.* IX.10.25 refers to acquiring an image through sense-perception. Augustine writes:

If to anyone the tumult of the flesh has fallen silent, if the images (*phantasiae*) of earth, water, and air are quiescent, if the heavens themselves are shut out and the very soul itself is making no sound and is surpassing itself by no longer thinking (*cogitando*) about itself, if all

⁹³ Mus. VI.11.32.

⁹⁴ Park, "Imagining," 806.

⁹⁵ Conf. III.6.10, 7.12, IV.4.9, 7.12, VII.1.1, 17.23.

⁹⁶ Park, "Imagining," 806.

⁹⁷ Conf. IV.7.12, VII.1.1, XIII.6.7.

dreams and visions in the imagination (*imaginariae*) are excluded, if all language and every sign and everything transitory is silent.

Augustine here describes how *phantasiae* are derived from sense-perception. Later on in the chapter, he asserts it is through divine illumination that the mind knows the truth. Again, Augustine attributes reality or truth to *phantasiae* but not to *phantasmata*. According to Djuth, *phantasiae* for Augustine was of considerable worth to his understanding of the soul's inner life, because *phantasiae* indicated the existence of a higher empirical function of the mind.⁹⁸

The significance of these two mentions is that *phantasiae* are clearly true images whereas *phantasmata* are not. I would suggest that the more numerous mentions in *Conf.* of *phantasmata* arise from Augustine's desire to make intelligible the serious nature of false images, their implications, and effect on the soul. Further, he wanted to provide instruction on how to resist the distractions of *phantasmata*.

4.3.6.2.2 Phantasmata

Augustine ascribes different aspects or types of *phantasmata*. The first is *phantasmata* that are false images derived from *phantasiae* that distract from the Divine. The second is false images and fantasies such as those adopted by cults. The third concept is in reference to God and Christ.

4.3.6.2.2.1 Phantasmata that Distract From the Divine

Djuth writes regarding *phantasmata*:

[*Phantasia*] is found in memory, the latter [*phantasma*] is the product of mental labor, more often than not perverse in nature and burdening the mind with the weight of its own vacuity. As second order memory images voluntarily induced in the mind, *phantasmata* can impair the proper functioning of the intellect and hamper its efforts to find truth.⁹⁹

⁹⁸ Djuth, "Veiled," 80.

⁹⁹ Mus. VI.11.32. Djuth, "Veiled," 80.

Phantasmata replace actual, experiential knowledge; such fantasies are unruly, disorganized, and distracting causing *memoria* in the mind to become limited in its capacity to seek God.¹⁰⁰ Djuth also comments that the multiplicity of *phantasmata* obscure the truth about both Augustine and God; they also inhibit reason from judging the merits of Augustine's opinion.¹⁰¹

The ramification of *phantasmata* causing distraction from God is a struggle between succumbing to temptations and trying to live a life that is not distracted from truth, a struggle clearly evident in *Conf*. In *Mus*.11.32, Augustine writes that those who live via *phantasmata* as the final truth live "the life of opinion" and emphasizes that to consider *phantasmata* knowledge is the worst kind of error.¹⁰² *V. Rel.* also elaborates on this turmoil causing a hindrance to the truth.¹⁰³

The struggle that arose because of the unruly nature of *phantasmata* had a negative impact on Augustine who even became disillusioned with *phantasiae*. This was because *phantasiae* collaborated with *phantasmata* since both were formed from sense-perceptions; but without *phantasiae*, *phantasmata* could not occur. As such, both engaged in a turbulent struggle between soul and body. Augustine warned that such imaginations should be shunned with great precaution.¹⁰⁴

4.3.6.2.2.2 Phantasmata Adopted by Cults

Augustine attributed the use of *phantasmata* to designate false images and fantasies that were concocted together to explain a cult's religious belief. For example, Augustine used it with reference to the Manichaeans whose "fanciful notion of a race of darkness" was simply imagination distorting reality by organizing fantasies originating from true images.¹⁰⁵ Augustine considered Manichaean beliefs to be heretical since they are nothing but thoughtless *phantasmata* and/or rash and easy opinions concerning the nature of God and the soul.¹⁰⁶ The Manichaeans were not the

¹⁰⁰ Hochschild, *Memory*, 127.

¹⁰¹ Djuth, "Veiled," 82. V. Rel. 39.72-73.

¹⁰² "*Mus.* VI.11.32. "But some follow their phantasms [*phantasmata*] so headlong the only ground for all false opinion is to hold phantasias [*phantasiae*] or phantasms [*phantasmata*] for things known, known by the senses." Hochschild, *Memory*, 128.

¹⁰³ V. Rel. 3.3, 10.18.

¹⁰⁴ *Ep.* VII.2.4-5.

¹⁰⁵ *Conf.* IV.4.9. Djuth, "Veiled," 85.

¹⁰⁶ Djuth, "Veiled," 84-85.

only group who were at the receiving end of Augustine's view on heresy based on *phantasmata*. Other people or groups included the polemicists such as Petilian, Jovinian, Julian of Eclanum, and the Arians.¹⁰⁷ None of these individuals or cults could discern the true nature of God and the soul on account of their idolatrous lifestyle and their "rash and easy opinions" based on *phantasmata*.

Phantasmata lead to idolatrous religion and idolatrous living; in fact, they are the root of idolatry.¹⁰⁸ When those enslaved by *phantasmata* worship new gods, they delude themselves. In this context, Augustine defines a new god as:

An object that temporarily captivates the human imagination."¹⁰⁹ Surely it is not an old god, or an eternal one, as the God of Christianity is. A new god, then, is either one or the other of two things: a stone or a *phantasma*.¹¹⁰

Such idolators are tricked by *phantasmata* into believing that God can be seen as a corporeal god. They do not "see" the true incorporeal God.

4.3.6.2.2.3 Phantasmata in Reference to God and Christ

Augustinian also connects *phantasmata* with reference to God and Christ. Referring to his prior Manichaean beliefs, Augustine, questions how the cross of Christ could save him if it were just a "phantom," as he had previously believed.¹¹¹ Here, Chadwick translates *phantasma* as phantom.¹¹² *Phantasmata* create false images of God and Christ and, like the Manichaeans, people do not see the true nature of Christ. In *Trin*. VIII.4.7, Augustine provides the example of those who read the Scriptures and imagine what Christ's physical body and face looked like; those images are really *phantasmata*. As Djuth says, the only ones who knew what his physical appearance was like were those who lived with, and saw, him in the first

¹⁰⁷ C. *Litteras Petiliani* 3.27.32. *C. Iulianum* 1.2.4. C. *Iulianum Opus Imperfectum* 3.117. Taken from Djuth, "Veiled," 85.

¹⁰⁸ Djuth, "Veiled," 86.

¹⁰⁹ Ibid.

¹¹⁰ En. Ps. 80.13–14. V. Rel. 2.2. Djuth, "Veiled," 86.

¹¹¹ Conf. V.9.16

¹¹² Chadwick, Saint, 58.

century.¹¹³ She observes from this that Augustine differentiates two types of belief, faith, and opinion, while at the same time distinguishing between belief and empirical knowledge; she writes:

For it is one thing to believe that Christ is the Son of God born of the Virgin Mary and another to surmise that in his incarnate life he had a beard, long hair, and brown eyes. The former pertains to the stability of faith, the latter to the instability of opinion.¹¹⁴

Individuals who surrender to these *phantasmata* are incapable of recognizing truth; they are so imprisoned by them that they are incapable of lifting up their mind to a higher level of rational insight. Thus, the Incarnation of Christ became a point in faith where the image of Christ could become distorted leading to distraction from God.

4.3.7 Temporal Dimension of Memoria

This association between memory and time is presented in far more detail in *Conf.* XI (Chapter 7: 204-245). This section will discuss memory and temporality as presented in *Conf.* X.

The temporality of memory in Book X implicitly underlies most of the discussion, however, there are only two distinct mentions of memory in relation to time. The first reference in X.8.13 is Augustine's comment that images stored within can be immediately present in that moment of time. Then in X.8.14 Augustine expands on this connecting of past, present, and future saying:

Out of the same abundance in store, I combine these past events images of various things, whether experienced directly or believed on the basis of what I have experienced; and on this basis I reason about future actions and events and hopes, and again think of all these things in the present.

¹¹³ Djuth, "Veiled," 81.

¹¹⁴ Ibid.

Manning, a neuropsychologist, makes the interesting point that Augustine likely was the first philosopher to put forward the idea that past and future were equivalent entities that exist as long as they were present in the consciousness.¹¹⁵ Augustine does develop the concept of time and memory further than his predecessors; for him memory exists in time past, present, and future at any given moment. The present recollects images from the past and those images are present in anticipation of the future. Time and memory are not just a linear, sequential occurrence.

The second occurrence regarding the temporality of memory in Book X, is at X.10.17 where Augustine mentions how learnt memories are stored in *memoria* and recalled in the present. The "realities" of images are also hidden in memory where they were formulated even before they were learnt. These memories are buried so deep in the recesses of *memoria* that they must be "dug out" (recollected) into the present suggesting a "movement in time." Here too, the concept of a past, present, and future aspect of memory is evident.

The significance of *memoria* and how time worked was such an intriguing enigma to Augustine that his mind was on fire to solve the intricate enigma of time.¹¹⁶

4.3.8 The Beata Vita

The power of *memoria* continues to amaze Augustine. One can appreciate his increasing sense of profound awe as he discovers convincingly that it is through *memoria* that he can know God and the *beata vita*. Augustine, before investigating the *beata vita*, begins by acknowledging the power of *memoria*, recognising the role memory and the mind play in attempting to reach God. His search is extensive, "I run through all these things, I fly here and there, and penetrate their working as far as I can. But I never reach the end."¹¹⁷

Augustine knew that his journey to find God and acquire the *beata vita* would not be straightforward; it would be convoluted, complicated, and enigmatic. Yes, his

¹¹⁵ Lillian Manning, Daniel Cassel, Jean-Christophe Cassel, "St. Augustine's Reflections on Memory and Time and the Current Concept of Subjective Time in Mental Time Travel," *Behav. Sci.* 3 (2013): 239.

¹¹⁶ Conf. XI.22.28.

¹¹⁷ Conf. X.17.26.

knowledge and understanding of God would grow but living the *beata vita* was not simply intellectual knowledge or understanding. It was a way of life infused with divine illumination. It should be noted, as Menn writes, that desiring the *beata vita* is not merely analogous to desiring God; the possession of the *beata vita* is only possible once one possesses God, and then desiring the *beata vita* becomes desiring God.¹¹⁸ Much as he tried to live this life, Augustine still fought the inner demons that made him succumb to worldly distractions resulting in digressions from the *beata vita*.

The focus in Book X now becomes how *memoria* is central to the search for God and the *beata vita*. Devoted to this discussion are twenty-four chapters which is striking. This is twice as many chapters compared to his previous section on *memoria*. Augustine's dedication of twice as many chapters illustrates the importance and significance he attributes to the *beata vita*, and this sets the tone for establishing Augustine's priorities. The discussion of the *beata vita* in Book X has three distinct sections. They are,

- 1. Seeking the *beata vita*: X.20.29-27.38.
- 2. Struggles in acquiring the *beata vita*: X.28.39-39.64.
- 3. Transformation towards acquiring the *beata vita*: X.40.65-43.70.

All three are important components in the discussion of *memoria* and the *beata vita*.

4.3.8.1 Seeking the Beata Vita

Augustine recognized that he could not successfully acquire the *beata vita* on his own merits. The *beata vita* was not just some illusionary state of joy but rather a state of joy that came from knowing and possessing God and was to be found in *memoria*.¹¹⁹ His incredible desire to know God was so that "my soul may live, for my body derives life from my soul and my soul derives life from you."¹²⁰ He asks God, "How then shall I seek the happy life?...my question is whether the happy life is in the

¹¹⁸ Stephen Menn, "The Desire for God and the Aporetic Method in Augustine's Confessions," in *Augustine's Confessions: Philosophy in Autobiography*, ed. William E. Mann (Oxford: OUP, 2014), 88. ¹¹⁹ Conf. X.20.29, 22.32-23.33.

¹²⁰ Conf. X.20.29.

memory."¹²¹ The remarkable conclusion is that there is knowledge and memory of the *beata vita* in *memoria* otherwise it would be impossible to know, understand, or experience it.¹²² The authentic *beata vita* is to set one's joy on God, to be grounded in him, and to acknowledge that the *beata vita* emanates from God and not any one person.¹²³ There is no possibility of true happiness and a life of *beatitude* apart from God. It is evident in X.21-22, that Augustine identifies God with both joy and the *beata vita*.¹²⁴

Why is it that some desire the *beata vita* based on truth but not others? Augustine wondered if all people truly wanted to be happy since some did not want to find their source of joy – "the happy life is joy based on truth."¹²⁵ Augustine recognized that the pull between the flesh and the spirit is such that many acquiesce to the flesh. These individuals are not happy because they cannot break from past experiences and memories (X.23.20-22) and they cannot reconcile the past with the present and so, this led to a divided self, one desiring the flesh and the other the happy life.¹²⁶ Augustine would argue that while the pull of the flesh was strong and often irresistible, people still preferred "to find joy in true rather than false things."¹²⁷

In X.24.35-27.38, Augustine recapitulates that he is certain God is in *memoria*, however, he knew God was not contained in memory because God was not a physical object or image. Rather God was the "Lord God of the mind." God "deigned" to dwell in his *memoria* and there is where Augustine finds God when he thinks of him.¹²⁸ Augustine is profoundly impacted by this reality and exclaims, "Late have I loved you, beauty so old and so new: late have I loved you."¹²⁹ This was important for Augustine to acknowledge before he embarked on the next section regarding the *beata vita* – the hurdles that made it difficult to attain the *beata vita*.

¹²¹ Ibid.

¹²² Conf. X.20.29-33.

¹²³ Conf. X.22.32.

¹²⁴ Bourke, Augustine's, 179.

¹²⁵ Conf. X.33.33.

¹²⁶ Stock, *Augustine*, 225.

¹²⁷ Conf. X.23.34.

¹²⁸ Conf. X.25.36.

¹²⁹ Conf. X.27.38.

4.3.8.2 Struggles in Acquiring the Beata Vita

This next section in the search for the *beata vita* – X.28.39-39.64, elaborates on the struggle between flesh and spirit. Augustine struggled between the regrets of the wrongdoings of his past and the memories of good joys (X.28.39).

X.28.39-39.64 is punctuated with Augustine's hope in God's mercy and grace as he attempts to resist the temptations of the flesh. It is interesting to note that Augustine experiences many struggles with temptations that arise from each of the five senses. First, he discusses the temptations of the flesh (touch) in X.30.41-42. Augustine was troubled by the "live images" of his past sexual acts. During the day Augustine was able to push them aside, however, at night he says, "in sleep they not only arouse pleasure, but they even elicited consent, and were very much like the actual act."¹³⁰ He appealed to God to heal the "sickness of my soul … by a more abundant outflow of your grace, to extinguish the lascivious impulses of my sleep."¹³¹

Second, the next vice causing temptations were those that arose from the enjoyment of good food and drinking; the sense of taste presented in X.31.43-47. This enjoyment distressed Augustine as he tried to find the balance between the "necessity of food" and its "sweetness." He writes, "and often there is uncertainty whether the motive is necessary care of the body seeking sustenance or the deceptive desire for pleasure demanding service."¹³² Augustine invoked God's help and received grace from God as he attempted to follow Luke 21: 34, "your hearts shall not be weighed down by gluttony and drunkenness." His struggle was constant, "every day against uncontrolled desire in eating and drinking,"¹³³ and yet throughout this Augustine confessed his weakness and magnified God's name.

Third is the vice of smell and alluring perfumes in X.32.48. This did not bother Augustine much as he did not care whether the smell was present or not. Again, he reiterates the mercy of God as the one reliable promise and ground of confidence.

Fourth, X.33.49-50 elaborates on the pleasures of the ears when listening to beautiful melodies and chanted sacred words. Augustine admitted this pleasure "had a

¹³⁰ Conf. X.30.41.

¹³¹ Conf. X.30.42.

¹³² Conf. X.31.44.

¹³³ Conf. X.31.47.

more tenacious hold on me, and had subjugated me," but also God had set him free and liberated him from this hold.¹³⁴ There was an important moving and soothing of the soul that occurred when he heard sacred words being chanted. Even in these circumstances, Augustine erred on the side of severity by not listening to these chants until he finally conceded the utility of music in worship. He writes:

I remember the tears which I poured out at the time when I was first recovering my faith, and that now I am moved not by the chant but by the words being sung, when they are sung with a clear voice and entirely appropriate modulation, then again I recognize the great utility of music in worship.¹³⁵

Augustine drew a line in the sand at this point. If the music moved him more that the subject of the song then he drew the line, that was when he pleaded to God for his mercy and healing.

The fifth vice involves the eyes (X.24.51-35.54). The sight that came through the use of the eyes was noteworthy since it could be the contributor to temptation of the sensible and it could be the metaphysical sight for the soul. The wrestling was between the sights that pleased the body and those that pleased the soul. Arts and sensible things pleased the body but they could form images that "go far beyond necessary and moderate requirements and pious symbols...they [men] abandon God by whom they were made, destroying what they were created to be."¹³⁶

Augustine warns of the danger of these bodily senses within the soul having a "vain inquisitiveness dignified with the title of knowledge and science."¹³⁷ This "appetite for knowing" arises from the "lust of the eyes" since the eyes play an important role in acquiring knowledge.¹³⁸ Sight is key as it applies to the other senses; e.g. see what you eat, see how that sounds, see what smells.¹³⁹ Augustine seems to echo Aristotle who said that sight is the principle way in which knowledge is acquired (*Metaphysics* I.I). Augustine writes that from this observation, it is easier to

¹³⁴ *Conf.* X.33.49.

¹³⁵ Conf. X.33.50. ¹³⁶ Conf. X.34.53.

¹³⁷ Conf. X.35.55.

¹³⁸ Ibid.

¹³⁹ Conf. X.35.54.

distinguish the activities of the five senses in relation to pleasure verses their relation to curiosity. He writes:

Pleasure pursues beautiful objects – what is agreeable to look at, to hear, to smell, to taste, to touch. But curiosity pursues the contraries of these delights with the motive of seeing what experiences are like, not with a wish to undergo discomfort, but out of a lust for experimenting and knowing.¹⁴⁰

In X.35.56 Augustine exemplifies his struggles between desires of the sensible, temporal world and the things that are good for his soul. Memories of images created by the senses plague him. However, it is with God's assistance that he manages to resist temptations; "In this immense jungle full of traps and dangers, see how many I have cut out and expelled from my heart, as you have granted me to do."¹⁴¹ At the same time, Augustine is not so arrogant as to think that he has expelled all temptations, and his acquiescence to them, merely because God has enabled him to do so. "How often we slip, who can count? … my life is full of such lapses."¹⁴² Yet again, Augustine declares that his one hope in managing this tumultuous struggle is God's great mercy.¹⁴³

Deep within Augustine is still the desire to seek praise and be loved by others because of the joy derived from such power.¹⁴⁴ He likes praise (based on vanity) even telling God that he cannot pretend that he does not like it! This is a temptation that has not ceased to trouble Augustine, and he suspects it will continue to trouble him his whole life. He writes in X.36.59 that "it is a wretched life, and vanity is repulsive. This is the main cause why I fail to love and fear you in purity." So strong is this predilection that Augustine writes four chapters on his battle with resisting this temptation of self-aggrandizement and growth in vanity (X.36.59-39.64). Augustine reaches the conclusion that being admired can actually be a good thing if accompanied by a good life and actions. Further, he believes he has managed to

¹⁴⁰ Conf. X.35.55.

¹⁴¹ Conf. X.35.56.

¹⁴² Conf. X.35.57.

¹⁴³ Conf. X.35.57-36.58.

¹⁴⁴ Conf. X.36.59-39.64.

succeed in "restraining his mind from carnal pleasures and from curious quests for superfluous knowledge."¹⁴⁵ He concludes in X.38.63 by asking God for his mercy "until my defect is repaired, and I am perfectly restored to that peace which is unknown to the arrogant observer."

4.3.8.3 Restoration and the Beata Vita

The third main section regarding the *beata vita* - X.40.65-43.70 concerns the transformation or restoration required towards acquiring the *beata vita*. The role of *memoria* in this section is brought out as Augustine discusses the movement of his soul as he listens to, and learns from, God, whom he declares as the "abiding light."¹⁴⁶

Augustine struggled with the back and forth of temptation and obedience to God; all he could do was confess and pray to the incarnate Christ as the only mediator who could reconcile him to God as truth.¹⁴⁷ God, through the true Mediator, showed to humanity his mercy. In turn, Christ showed Augustine that he could be reconciled to the truth and healed from his "sins and the pile of misery."¹⁴⁸ Through Christ Augustine was able to look steadily on the truth and strive towards fulfilment of the *beata vita*.¹⁴⁹ He experienced momentary flashes of the *beata vita*, but in the end Augustine never really achieved complete fulfilment of the *beata vita* in temporality.¹⁵⁰ The desire for spiritual happiness had, in the present, a capacity for a past memory of the *beata vita*, and a future expectation. Stock writes that this desire is both a rediscovery of something forgotten before incorporation and of something to come afterwards.¹⁵¹ Gilson writes, memory of the happy life is not memory of past but present in which God and the soul stand in a positive relation to one another along the vertical axis of experience.¹⁵² Hochschild asserts that memory is the locus of

¹⁴⁵ Conf. X.37.60.

¹⁴⁶ Conf. X.40.65.

¹⁴⁷ Menn, "The Desire," 107.

¹⁴⁸ Conf. X.42.67-43.70.

¹⁴⁹ Ibid.

¹⁵⁰ Ibid.

¹⁵¹ Stock, *Augustine*, 225.

¹⁵² Gilson, *The Christian*, 82.

union and communication between the body and soul.¹⁵³ True happiness and the *beata vita* are equated solely with God who alone is unchangeable and eternal.¹⁵⁴

4.4 Memoria in Augustine's Writings Post Confessiones

Trin. and Gn. *Litt.* are two key works of Augustine that have additional impactful contributions to his theology of *memoria*.

4.4.1 De Trinitate

Augustine started writing *Trin.* c. 400 A.D. and finished c. 416 A.D.¹⁵⁵ The focus of *Trin.* is the Trinity; it was written to strengthen the faith of his fellow Christians.¹⁵⁶ The discussion on *memoria* is found in Books X-XIV although the greatest focus is found in Book XI.

Two authors, Hochschild and Grove, have written eloquent, thoughtful, and insightful books which include discussions of *Trin.*, Augustinian memory, and the Trinity.¹⁵⁷ Interestingly, Grove sees Augustine's argument regarding the Trinity as structural whereby the structure of *Trin.* reveals itself as an intellectual product of Augustine's work of memory.¹⁵⁸ He, however, argues that the structure and function of the Trinity is effectively lost when relegated to Augustine's inner self.¹⁵⁹ The inner triad of memory, understanding, and will in the mind, fail because the self and mind are radically different to the Trinity.¹⁶⁰ According to Grove, the work of memory in the whole Christ bridges this failure of the inner self; he writes that it is Christ the Mediator who:

¹⁵³ Hochschild, *Memory*, 229-230.

¹⁵⁴ Mourant, Saint, 42.

¹⁵⁵ This is debated. Most scholars generally agree that *Trin*. was started in 400 A.D. and finished in 416 A.D. McKenna, *Saint*, vii.

¹⁵⁶ McKenna, Saint, ix.

¹⁵⁷ Hochschild, Memory. Grove, Augustine.

¹⁵⁸ Ibid., 199.

¹⁵⁹ Ibid., 198-199. Grove discussion on the "structure and function" of the Trinity is reminiscent of an architectonic analysis. Although he does not describe his discussion in this manner, he definitely brings out elements underlying an architectonic analysis.

¹⁶⁰ Ibid., 198.

Provides the link between the failed interior triad of the human person and the remembering-understanding-loving God that renews the broken and tarnished image of God. Thus, the work of memory shows how the body of Christ is not secondary to Augustine's Trinitarian theology but the necessary precondition for it.¹⁶¹

Hochschild recognizes the same Christology in Augustine, however, her work does not have a negative connotation to Augustine's interiority in the same way that Grove' does. She summarizes the role of *memoria* in *Trin*. as follows:

Accordingly, memory is not simply a key in the argument about the unity of man's nature, but instead becomes a necessary element for a spiritual theodicy of participation in the body of Christ, and therefore in the life of the triune God...According to the manner in which humanity is taken up into the life of the Trinity through Christ...¹⁶²

Both authors concur that within the work of memory, the incarnate Christ is a prerequisite to life in the Trinity, although they reach their conclusions via oppositional interpretations.

4.4.1.1 Trinitarian Motifs

Augustine's fondness of, indeed propensity for, creating a tripartite composition or trinitarian motif to his descriptions of different concepts including *memoria* is exemplified in *Trin*. For example,

- *velle* (willing), *meminisse* (remembering), *intelligere* (understanding)¹⁶³
- memoria (memory), intellegentia (intelligence), and voluntas (will)¹⁶⁴
- *ingenium* (ability), *doctrina* (knowledge), *usus* (use)¹⁶⁵

In the first triad the highest activity of the mind i.e. intelligence, consists of the three distinct activities listed.¹⁶⁶ The second triad pertains to the three things the mind is

¹⁶¹ Ibid., 211-212.

¹⁶² Ibid., 195.

¹⁶³ *Trin.* X.10.13. Ayres, *Augustine*, 303.

¹⁶⁴ Trin. X.11.17. This triad finds its origin in Cicero. Ayres, Augustine, 304.

¹⁶⁵ Trin. X.11.17. Hochschild, Memory, 199-200.

¹⁶⁶ Ayres, *Augustine*, 303.

certain of – *memoria*, *intellegentia*, and *voluntas*; all are co-equal and inseparable in the mind.¹⁶⁷ The third triad is mutually related to the previous triad and concerns three aspects of learning; *ingenium* and *doctrina* are the province of all three but *usus* is in a special manner associated with *voluntas* whereby to use is to put something at the will's disposal.¹⁶⁸

According to Hochschild, the final two chapters of *Trin*. X affirm Augustine's preference for the triadic structure of *memoria*, *illentegentia*, and *voluntas*.¹⁶⁹ Augustine writes of this triadic structure:

These three then, memory, understanding, and will, are not three lives but one life, not three minds but one mind. It follows of course that they are not three substances but one substance...these three are one in that they are one life, one mind, one being...but they are three in that they have reference to each other. And if they were not equal...they would not of course contain each other.¹⁷⁰

This trinitarian description of this triad of *memoria*, *intellegentia*, and *voluntas* is reminiscent of the Trinity of God the Father, God the Son, and God the Holy Spirit. Milbank mentions that the schema of trinitarian motifs could also "fit" to the:

Scheme by which Augustine locates the Trinity in the Father's creative act, the Son's beginning of creation in his wisdom, and the Spirit's completion of creation by linking heaven and earth through intellectual ordering.¹⁷¹

Augustine declares, "there is the Trinity, my God – Father and Son and Holy Spirit, Creator of the entire creation" (XIII.5.6). Without doubt, creation is inextricably connected to the Trinity and trinitarian motifs. In *Conf.* Augustine's Trinitarian beliefs are often more implicit in the text yet his propensity for tripartite motifs is suggestive of a Trinitarian theology.

¹⁶⁷ Ibid., 304.

¹⁶⁸ Hochschild, Memory, 199-200.

¹⁶⁹ Ibid., 199.

¹⁷⁰ Trin. X.4.18.

¹⁷¹ Milbank, "The Confession," 26-27.

4.4.1.2 Incarnation

The Incarnation was the pivotal moment in history for Augustine.¹⁷² Memory was crucial to remember the significance and meaning of the Incarnation. In *Trin*. Augustine elaborates further on the Incarnation within the understanding of the Trinity, and also the spiritual disciplines required to have union with the Divine. Hochschild puts it this way:

Memory reveals the possibility of the creature with union with the eternal. The incarnation as a pedagogical principle unifies the temporal and eternal and is not merely a means to surpass one in exclusion of the other.¹⁷³

Hochschild contends that the theological unity of the last books of *Conf.* and *Trin.* "lies in the emergence of the central role of the incarnation, epistemologically, spiritually, and argumentatively."¹⁷⁴ The Incarnation is a principle of unification of the temporal and the eternal.¹⁷⁵ Put somewhat differently, Grove writes that to Augustine memory is configured to life and existence mediated by Christ; the work of remembering and forgetting ends in becoming Christ together (communal life).¹⁷⁶ To both, Christ the Mediator is the key to participation in the Trinity, and the incarnate Christ is the temporal manifestation of union of the temporal and eternal.

4.4.1.3 Vestigium Memoriae

The opening sentences in *Trin*. XI.1.1. says:

Let us endeavour, therefore, to discover, if we can, any trace at all of the Trinity even in this outer man, not that he himself is also in the same way the image of God.

¹⁷² See also Incarnation in Chapter 8: 246-328.

¹⁷³ Hochschild, *Memory*, 191.

¹⁷⁴ Ibid.

¹⁷⁵ Ibid.

¹⁷⁶ Grove, Augustine, 226.

These opening words reveal several facts. Of note is the Augustinian concept of the inner and outer man and their roles in understanding and participating in the discovery of trace memories within the inner and/or outer man; this is part of the examination of self and soul (interiority) discussed in Chapter 2: 37-51. Further, the concept of a "trace" of the Trinity references the memory traces within *memoria* in Augustine's earlier writings. Finally, the connection between the inner and outer man and their roles in discovering a trace of the Trinity is clear. Hochschild comments:

The exercise of looking for traces of a trinitarian image in acts of sense perception is required by the fact that these are 'more familiar' resulting in Augustine defending the unity of the body of the person; if the body is also 'called man,' then the external reality must reflect the internal ordering principles of the soul.¹⁷⁷

Augustine asserts that it is the highest part of man that receives the divine imprint directly, without any intervening "nature" or mediator; "for the image is only then an expression of God in the full sense, when no other nature lies between it and God."¹⁷⁸ The ensuing discussion is much like that of *Confessiones* and even earlier writings where the "sickness of the soul" and a life of good is a balancing act.

4.4.1.4 Scientia and Sapientia¹⁷⁹

In Book XIII, Augustine discusses *scientia* and *sapientia* and the differences between the two; yet despite these differences, he finds a link between them in memory.¹⁸⁰ In *Trin*. XIII.19.24, Augustine states that the "focal point of the union of *scientia* and *sapientia* is 'that most important temporal event' – namely, the joining of God with humanity in time."¹⁸¹ For Augustine, faith in the incarnate Christ both unifies *scientia* and *sapientia* and gives access to *sapientia* by a participation of union.¹⁸²

¹⁷⁷ Trin. XI.1.1. Hochschild, Memory, 202.

¹⁷⁸ Trin. XI.5.8.

¹⁷⁹ Scientia and Sapientia are discussed at length in the following chapter.

¹⁸⁰ Discussed in greater detail in chapter 5. *Scientia* is knowledge of temporal matters while *sapientia* is knowledge of the eternal.

¹⁸¹ Ibid., 212-213.

¹⁸² Ibid., 213.

4.4.2 De Genesi ad Litteram Libri Duodecim

This book was started between the years 399-404 A.D.¹⁸³ Chapter XII discusses images and how they operate in realizing the spiritual vision in the form of a memory, and the role that the bodily senses play in conveying images to *memoria* where images of those bodies are formed and stored.¹⁸⁴

There are three kinds of vision: bodily, spiritual, and intellectual. The spiritual sense of *visio* i.e., eyes of the mind is the mediator between the mind and the body.¹⁸⁵ Corporeal and spiritual *visio* (eye and sight) are two different aspects of the same act of looking; after the object has disappeared and its vestigial memory remains, spiritual *visio* comes from that memory.¹⁸⁶ Spiritual *visio* is the soul's vision of images which have been impressed on it from the corporeal senses.¹⁸⁷ Thus, the body cooperates with the soul in providing both earthly sight and spiritual insight. Augustine writes that true knowledge and understanding attained by intellectual vision are only made possible through divine illumination (XII.31.59). The human intellect, without the divine light, is not able to "see" or understand any truth; the active mind is the "illumined" mind.

In XII.12.25-15.31 Augustine launches into the details of the function and distinct aspects of *memoria*. Bodily vision is distinguished from a spiritual vision.¹⁸⁸ The soul faces temptations as it navigates bodily images and spiritual attention to the divine. Augustine links together sense-perception, imagination, and memory where perception involves the serial formation of mental images that are retained in the memory directly as the perception takes place.¹⁸⁹ Imagination is described as either the reproductive recollection of retained images or their creative manipulation.¹⁹⁰

¹⁸³ There is debate amongst scholars as to the original start date. It was completed in 416 with a pause in 410 where the first nine books were revised returning in 412 to complete the volume. Edmund Hill, *On Genesis*, ed. John E. Rotelle (NY: NCP, 2002), 164 n. 45.

¹⁸⁴ Gn. Litt. XII.4.9, XII.11.22, XII.24.51. Matthew W. Knotts. On Creation, Science, Disenchantment, and the Contours of Being and Knowing (NY, London: Bloomsbury Academic, 2020), 56.

¹⁸⁵ *Gn. Litt.* XII.24.51.

¹⁸⁶ Gn. Litt. XII.11.22, 24.51. Knotts, On Creation, 56.

¹⁸⁷ Gn. Litt. XII.9.20.

¹⁸⁸ Gn. Litt. XII.12.25.

¹⁸⁹ Gn. Litt. XI.16.33, II.11.22 cf. Mus. VI.8.21. Gerard O'Daly, Platonism Pagan and Christian: Studies in Plotinus and Augustine (London, NY: Routledge, 2001), 33.

¹⁹⁰ O'Daly, *Platonism*, 33.

4.4.3 Retractationes

Retr. was finished in 427 A.D. towards the end of Augustine's life. It was a systematic review of his written works with the purpose of correcting any errors or comments that might offend him or others.¹⁹¹ Of interest is the fact that *Confessiones* and *Retr.* are the two books of all his writings that are a recollection of his memory; recollection and reminiscences in terms of what he had experienced in his life, his theological expositions, and his written works. Noteworthy too, is the fact that both books reviewed and recollected, among other things, wrongdoings or errors in his life or his writings.¹⁹² *Retr.* actually, has very little to say about *Confessiones*; Augustine wrote that he praised "the just and living God for my evil and good acts."¹⁹³ He is pleased with the book as he knows that it has "given pleasure to many of my brethren."¹⁹⁴

There is not much mention of *memoria* in *Retractationes*. In his comments regarding *Quant*. *An.*, he clarifies that he did not mean that the soul brought all the arts it had learnt from a previous life; learning is just remembering and recalling. The soul is made and ordered such that it learns when "it moves toward those things to which it is joined or toward itself."¹⁹⁵ It can only speak about arts with regard to the senses of the body.

4.5 Concluding Remarks

There is no doubt that Augustine's theology of *memoria* is ingenious and profound yet, it is complex, at times convoluted, and paradoxical. The manner in which Augustine presents *memoria* is well thought out, deliberate, and is telling of his mode of hermeneutics, exposition, and pedagogy. He not only outlines the operational

¹⁹¹ Saint Augustine, The Retractions, trans. Mary Inez Bogan (1968; repr. Washington D.C.: CUAP, 1999), xiii.

¹⁹² By wrongdoings and errors, I mean Augustine's failures in succumbing to worldly desires in his life or unintentional errors in his writings that upon review Augustine believed to be wrong - a "failure" to transmit verbally in a clear manner to his audience; consequently, what he wrote could be misconstrued.

¹⁹³ *Retr.* 32.1.

¹⁹⁴ Ibid.

¹⁹⁵ *Retr.* 7.2.

aspects of *memoria* and memory but also the spiritual function – *memoria* as the gateway to the Divine. Thus, at the very core of this theological inquiry is Augustine's own journey in attempting to understand *memoria* and further his search for God and the *beata vita*.

I have presented how important an architectonic analysis is in the investigation of Augustine's theology of *memoria*. Architectonics involves a far more in-depth examination than simply structure and function; it reveals the inner workings of Augustine's mind and the interplay between different facets and layers of memory. Significantly, it reveals the depths of Augustine's desire for knowledge and the profound and awe-inspiring complexities of memory. It shows a brilliant mind at work in sometimes torturous moments of struggle between his earthly desires and his desire for the *beata vita*.

This chapter has revealed several interesting observations. The architectonic structure of *memoria* observed in his early writings continues into his later works and sets the tone for the interrogation of *memoria* in *Conf*. X. The same foundational pillars of *memoria* exist in both earlier and later writings and occur essentially, in the same sequence with one important addition – the power of memory occurring after the location of memory in *Conf*. Architectonics proposes a novel means in the study of Augustinian memory.

As Augustine lays the foundations of this structure working through in an underlying logical fashion in his interrogations, he starts to find some answers. He has now arrived at a place where he can ask, "How then am I to seek for you, Lord? When I seek for you my God, my quest is for the happy life."¹⁹⁶ The *beata vita* was an important consequence of understanding memory and acquiring knowledge of God via *memoria*. This is illustrated in the section on the *beata vita* which is twice as long compared to that on *memoria*. *Conf.* X has an architectonic structure regarding its composition, content, and length attributed to the content.

The next chapter investigates Augustine's concept of *scientia* and *sapientia* in *memoria*.

¹⁹⁶ Conf. X.20.29.

CHAPTER 5: *Memoria* Through the Lens of Augustinian *Scientia* and *Sapientia*

"But I had already been taught by you, my God, through wonderful and hidden ways ... none other than you is teacher of the truth, wherever and from whatever source it is manifest."¹

5.1 Chapter Aims

Augustine was a man whose knowledge spanned many disciplines. When he started on his journey to interrogate *memoria*, he developed not only a theology within which there was an architectonic structure that facilitated understanding and teaching, but a theology that included a broad span of knowledge and disciplines that he made no apologies for using.

In this chapter, Augustine's background knowledge in medicine and science is investigated to see how he incorporated this type of knowledge into his understanding of *memoria*, and how he was able to connect the physical with the metaphysical, the body with the soul, and *memoria* with the Divine.² What emerges in this chapter is the picture of a man well-versed in many "ologies" but who had one two-part goal in mind – to understand God's creation, and his own journey to know and understand the Creator God. This chapter also lays the foundation for Chapter 6.

5.2 Introduction

Augustine saw in God's creative act a beautiful human body that was a manifestation of God's goodness; it was a purposefully created "physical structure"

¹ *Conf.* V.6.10. Augustine makes this statement while discussing the Manichaean influence on his beliefs. He clarifies that truth is truth whatever way God shows him truth because it comes from God, and this includes truth that comes from the natural world.

² Augustine's use of medicine and science often go unnoticed in his writings on memory.

designed for the service of a rational soul.³ God created the human body and soul together to make a living being: "he alone, coupling and connecting in some wonderful fashion the spiritual and corporeal natures, the one to command, the other to obey, makes a living being."⁴ God gave the soul, a mind "in which reason and understanding lie."⁵ It was abundantly clear to Augustine that God created a living being where the physical nature of the human body was interrelated to the metaphysical dimension, and they were dependent on each other. Consequently, the metaphysical dimension and operation of *memoria* were intricately related to the physical structure and functioning of memory. Memory was the 'connector' or 'intermediary' between the physical and metaphysical, a fact that Augustine recognized as he delved deeper into every aspect of his knowledge and that of the temporal word to interrogate *memoria*. This chapter explores how Augustine used his scientific and medical knowledge as he probed the magnitude and multiplicity of memory in support of his developing theology of *memoria*.

5.3 Augustine's Medical and Scientific Background

Augustine was an educated, highly intellectual man who was familiar with, and understood, the natural sciences, medicine, and the sciences of mathematics and logic.⁶ What is astounding and impressive about Augustine is how much further advanced he was compared to his contemporaries and the modern science of his times including his understanding of memory and the processes behind its operation. His sophisticated and technical knowledge of medicine and science is observed in the

Mathematics, for example, is a process of deductive logic. C. G. Fraser et al., "Mathematics," *EB*, November 9, 2020. https://www.britannica.com/science/mathematics. *Logic: A Science and an Art.* https://logiccurriculum.com/2017/08/01/logic-science-art/

³ *Civ. Dei.* 22.24. Francois P. Retief, Louise Cilliers, "St. Augustine and Medical Science," *Acta Patristica et Byzantina* 21, no. 1 (2010): 96.

⁴ *Civ. Dei.* 22.24. Augustine has multiple references regarding the body and soul. Cf. *Quant. An.* 33.70. *Orig. An.* 2.4. *Imm. An.* 16.25. *Serm.* 243.7 to mention a few.

⁵ Civ. Dei. 22.24. Retief, "St. Augustine," 96.

⁶ Mathematics is defined as the science of structure, order, and relation that has evolved from elemental practices of counting, measuring, and describing the shapes of objects. It deals with logical reasoning and quantitative calculation. Logic is the science and art of reasoning well. Logic as a science seeks to discover rules of reasoning; logic as an art seeks to apply those rules to rational discourse.

terminology he used.⁷ His publications – both his writings and his sermons, included many references to medical concepts and scientific facts as he sought to strengthen his theological arguments.⁸ Augustine's use of mathematics is best seen in *Mus*. where he uses numbers and rhythm to explain memory, and where he uses logical methodology to seek the rules behind the workings of memory. He also used mathematics and logic to explain the indispensable role of memory in the awareness of sensation.9 Augustine, was not opposed to using every available means as he examined *memoria* in his exhaustive search for God and the beata vita.

The medical sciences, natural history, physical sciences, astronomy, and physics would not have been included in the classical arts that Augustine learnt in the classroom as part of his formal academic education.¹⁰ His knowledge of these contemporary medical theories and scientific practices was autodidactic, most likely through the reading of various medical books, public lectures, patient observation, and discussion with learned colleagues in those fields.¹¹ Augustine writes about teaching himself "the dimensions of figures and music and numbers..."

My agile mind found no difficulty with these subjects, and without assistance from a human teacher I could elucidate extremely complicated books.¹²

Augustine would have had knowledge of the works of famous philosophers and physicians like Hippocrates, Aretaeus, Rufus, Soranus, and Galen but these were written in Greek so he was more likely to have read the Latin works of Vindicianus,¹³

⁷ The sophistication of Augustine's language and knowledge of memory is recognized considering that in a historical context it was Hermann Ebbinghaus a German psychologist who in 1879 pioneered the experimental study of memory to examine acquisition (learning), forgetting of memory, and memory and time. This was 14 centuries after Augustine. In 1970s and 1980s, Tulving developed a taxonomical model for memory virtually similar to Augustine's model (15 centuries after Augustine). Tulving, "Multiple," 67-80. Britannica, T. Editors of Encyclopaedia. "Hermann Ebbinghaus." EB, January 20, 2022. https://www.britannica.com/biography/Hermann-Ebbinghaus.

⁸ Retief, "St. Augustine," 94.

⁹ O'Daly, Augustine's, 88.

¹⁰ Shelley Annette Reid, "The First Dispensation of Christ is Medicinal: Augustine and Roman Medical Culture" (PhD diss., University of British Columbia, 2008), 123. ¹¹ Reid, "The First," 122.

¹² Conf. IV.16.31.

¹³ Augustine in *Ep.* 138.1.3 describes Vindicianus as the eminent figure in the medical profession of day. Scholars frequently conclude that he obtained most of his medical knowledge directly from Vindicianus. According to Reid, there is no firm evidence that Augustine read the medical treatises of

a famous physician of the 4th century and personally known to, and greatly admired by, Augustine.¹⁴ He considered Gennadius a good physician, a believer, and his friend.¹⁵ In a letter to the bishop of Carthage (*Ep.* 41.2), Augustine warmly recommended the physician Hilarinus, *archiater* (head city physician) and *principalis* (head of the city senate).¹⁶ According to Retief and Cilliers, Augustine maintained a practical bond between his understanding of medicine and his theological convictions and teaching.¹⁷ Further, Keenan writes, "Augustine … turns to medical art in defending certain doctrines such as the existence of the soul, the resurrection of the body, and design in nature."¹⁸

In *An. et Or.*, Augustine notes that anatomy is an essential aspect of medical training; he further adds that while knowledge of anatomy is known to few men, any man might acquire it if he wished, a statement which seems to imply the accessibility to anatomical demonstrations or lectures.¹⁹ One may speculate that the importance of anatomy to Augustine is surmised from his characterization of the ontological formation of the human body. According to Djuth, Augustine characterized this ontology in three ways: 1) a unity of parts that exist in space, 2) a temporal being that has a beginning and an end and, 3) a body that is lower and less dignified than the soul which is the higher in their hierarchy of being.²⁰ Since the body is a living body, its unity consists in the participation of matter; harmony exists between the body that is visible matter and the soul as the unseen principle of life animating the matter of the

any of his contemporary North African medical writers, even those of Vindicianus. Reid states that Courcelle is one example of a scholar who presumes that Augustine first heard about Hippocrates from Vindicianus, but this assertion seems extremely unlikely. Hippocrates' name and reputation would have been part of common culture, at least among the educated classes, and Augustine himself states that Hippocrates was mentioned in works of Cicero (Augustine's citation of Cicero's *De fato* in which Hippocrates is mentioned in *Civ. Dei* 5.2). Vindicianus does have a distinguished place in Augustine's work, appearing on three occasions, two of which are in *Confessiones*. Reid, "The First," 123-124. ¹⁴ Retief, "St. Augustine," 95.

¹⁵ Ibid., 97.

¹⁶ Ibid., 96.

¹⁷ Ibid., 99.

¹⁸ Mary Emily Keenan, "Augustine and the Medical Profession," *Trans. Proc. Amer. Philo. Ass.* 67 (1936): 169.

¹⁹ An. et Or. 4.6.7. "Because they have learnt the art of anatomy or experiment, which are both comprised in the physician's education, which few obtain, while others have refused to acquire the information, although they might, of course, if they had liked." Reid, "The First," 150.

²⁰ Marianne Djuth, "The Body, Sensation, and the Art of Medicine in Augustine's Early Writings," *Augustiniana* 66, no.1 (2016): 68.

body.²¹ Augustine writes, "it [the soul] pervades the whole body which it animates, not by a local distribution of parts, but by a certain vital influence."²²

In his ontological characterization of the human body, Augustine saw the connection between body, soul, and medical science. *Orig. An.* is a work dedicated to Jerome in which Augustine is pertinacious in making sure that his views on the nature of the soul are both doctrinally and "scientifically" sound.²³ It is interesting that in *Enchiridion*, Augustine places knowledge of medicine and the body on a higher plane than knowledge of other aspects of the physical world.²⁴ Augustine argues that no Christian should be ashamed of being ignorant of the natural world, such as astronomy or geography, since even philosophers are limited in their knowledge.²⁵ He writes regarding convulsions that the more important knowledge is that associated with a person and not convulsions associated with earthquakes; the concern should be for convulsions that affect a person's health thereby, forcing a consultation of physicians.²⁶

Medical sciences were so important to Augustine that he elevated them to the same level as the arts of navigation and agriculture because all three arts provided services through which God worked.²⁷ All these arts were included in the larger category of arts which comprised crafts, such as pottery and housebuilding, and physical pursuits, such as dancing, running, and wrestling.²⁸ In *Doc. Chr.*, Augustine reasons that what binds these disparate activities together is their relationship with time, "In all these arts knowledge gained from past experiences causes future ones to be inferred. None of these craftsman moves a muscle at his work except to link his experience of the past with his plans for the future."²⁹

Augustine justifies his use of the medical sciences by including them in the list of secular activities that he approves of.³⁰ It is evident from the Augustinian corpus that Augustine views medicine as an art that is valuable in understanding the inner workings of the human body and soul. Knowledge obtained from medical sciences, he

²¹ Quant. 33.70. Djuth, "The Body," 68.

²² Orig. An. 2.4. Imm. An. 16.25.

²³ Reid, "The First," 155.

²⁴ Ench. 9.16. Reid, "The First," 156.

²⁵ Ibid.

²⁶ Ibid.

²⁷ Doc. Chr. 2.30.47. Reid, "The First," 160.

²⁸ Reid, "The First," 160.

²⁹ Ibid.

³⁰ Ibid.

believes, had to be knowledge that was helpful in transcending from the temporal to the eternal, and understanding the physical and metaphysical dimensions of that process. He mentions that in anatomy and scientific experimentation, there is the danger of moving beyond the accepted bounds of human knowledge.³¹ This is illustrated in one of his sermons where he discusses the beauty of the human body, noting how perfectly its parts function and what harmony there is in its proportions.³² Reid writes, "near the end of the sermon he adds that the body's beauty excites not just lust, but research by the studious or curious.³³ This statement is notable for two reasons. First, the implication that research driven by curiosity can be exhilaratingly lascivious just like lustfulness generated by a beautiful body. Second, Augustine believed *curiositas* was dangerous as it could connote an inappropriate desire for knowledge.³⁴ Knowledge obtained to just fulfil a curiosity or just to gain knowledge was to Augustine, wrong. However, when science based on reliable evidence is used wisely (leading to sapiential knowledge), it is not contrary to the scriptures and eternal matters.³⁵

Augustine would have been tricked into thinking the soul was corporeal in nature had he not been "well versed" in his knowledge of the nature of the body, the form that is in the body, place, time, and motion (*Quant. An.* 31.63).³⁶ Twenty years on, Vincentius Victor would not accept Augustine's claim to the incorporeality of the soul and saw this as a sign of Augustine's own ignorance about the physical nature of the human body.³⁷ Augustine's indignant response regarding his supposed lack of education on such matters was to state, "For my own part, indeed, if I wished to display how far it was in my power to treat scientifically and intelligently the entire field of man's nature, I should have to fill many volumes."³⁸ Augustine was not wrong regarding his knowledge.

³¹ Ibid., 161.

³² Serm. 243.7. Reid, "The First," 161.

³³ Reid, "The First," 161.

³⁴ Mor. 1.21.38. Augustine warns against inquisitiveness which leads to pride. *Conf.* X.35.54-57 where *curiositas* is characterized as a disease (*morbus cupiditatis*). Reid, "The First," 161.

³⁵ Gn. Litt. 1.21.41.

³⁶ Reid, "The First," 164.

³⁷ Ibid.

³⁸ An. et Or. 4.3.2.

5.3.1 Augustine's Vocabulary

Augustine's specific medical and scientific vocabulary was extensive, highly sophisticated, and extremely technical. This was confirmed by Jean-Paul Rassinier, a French physician, who in 1991 undertook a quantitative and qualitive analysis of the medical vocabulary used by Augustine.³⁹ His database search of the Augustinian corpus identified over a hundred medical terms, with more than 14,000 textual occurrences; an extensive use of medical vocabulary by Augustine.⁴⁰ Rassinier, Reid, and O'Donnell all comment that there are many times when his use of medical terms was metaphorical.⁴¹ O'Donnell suggests that this use of medical metaphor in some of Augustine's writings might be due to his personal experience with physical suffering.⁴²

Augustine used and correlated medical terminology, descriptions of diseases, and medicinal treatments in his sermons and in his written works in order to help his audience understand spiritual doctrines. His metaphorical use of highly sophisticated scientific/medical language established the connection and interrelatedness between the physical (science, medicine) and the spiritual (metaphysical). For example, Wright argues that Augustine uses the technical medical term "phrenitis" (acute delirium with acute fever) as a reiterative rhetorical strategy to strengthen and expand the conceptual system implied by the conventional metaphor "sin in sickness of the soul."⁴³ In late antiquity, phrenitis was understood to affect the brain and its cognitive functions.⁴⁴ To the ancient physicians, phrenitis was a dangerous illness because it was thought to be caused by inflammation in the part of the body where the ruling part of the soul was thought to be located – the brain; it was thus considered a

³⁹ Rassinier provides a quantitative indication to the extent of Augustine's use of medical terms. Reid's dissertation has an excellent and in-depth research into Augustine's use of medical terminology. Jean-Paul Rassinier, "Le Vocabulaire Médical de Saint Augustin: Approche Quantitative et Qualitative," in *Le Latin Medical La constitution d'un Language Scientifique*, eds. Guy Sabbah et al. (Saint-Étienne: Publications de l'Université de Saint-Étienne, 1991), 379-395. Reid, "The First," 166.

⁴⁰ Rassinier, "Le Vocabulaire," 379-395. Reid, "The first," 166, n.9.

⁴¹ For more on the metaphors used by Augustine see Bernard Jaroslaw Marciniak, "Medical Metaphors

in Augustine's Letters," *Vox Patrum* 71 (2019): 373. Reid, "The First," 250. O'Donnell, *Augustine*, vol. 1, xli-li. Rassinier, "Le Vocabulaire," 379-395.

⁴² O'Donnell, Augustine, vol. 1, xli-li.

⁴³ Jessica Wright, "Preaching Phrenitis: Augustine's Medicalization of Religious Difference," *Early Christian Studies* 28, no. 4 (2020): 526.

⁴⁴ Marke Ahonen, *Mental Disorders in Ancient Philosophy* (Dordrecht: Springer, 2014), 24 n.41.

condition of the brain.⁴⁵ Augustine would often invoke phrenitis as the cause of rejecting Christ's saving grace.⁴⁶ This metaphorical use of phrenitis also illustrates the connection between the physical body and the metaphysical soul.⁴⁷

Reid offers three conclusions as to Augustine's use of highly technical and even, at times, obscure medical terminology.⁴⁸ First, it demonstrates that Augustine took great interest in medical issues, to the extent of picking up and retaining highly technical vocabulary which he then appropriated for his own purposes. Second, it affirms that there existed sufficient opportunities in the textual or oral culture for becoming familiar with this technical language. Third, it suggests that he has an audience which he could generally expect to understand his medical terms and allusions. Reid goes on to write that a closer examination of Augustine's employment of this vocabulary reveals that when he does use such technical language, in most cases it is to provide his audience, whether they be the congregation listening to his sermons or the readers of his treatises, with some sort of direct or indirect explanatory comment.⁴⁹ Keenan proposes that Augustine's purpose in incorporating material of a biological, medical, and scientific nature in his works is didactic.⁵⁰

5.3.2 Augustine's Methodology

In *Gn. Litt.*, Augustine describes a two-step methodology for incorporating scientific knowledge into the process of understanding the temporal and the eternal.⁵¹ His discussion is focused on the "shape and form of the sky"⁵² described in Genesis

⁴⁵ It should be noted that some physicians thought the region was the heart and not the brain. Glenda Camille McDonald, "Concepts and Treatments of Phrenitis in Ancient Medicine" (PhD diss., Newcastle University, 2009), 78-79. Chiara Thumiger, *A History of the Mind and Mental Health in Classical Greek Medical Thought* (Cambridge: CUP, 2017), 46-47. Wright, "Preaching," 527.

⁴⁶ Augustine used "phrenitis" over 40 times in his writings. Wright, "Preaching," 527, 538.
⁴⁷ This connection is such that healing from phrenitis or sickness of the soul had to be a healing of both body and soul and not just one or the other; it was a caring of both body and soul – the totality of a human person. See Wright, "Preaching," 552. Heidi Marx-Wolf, "The Good Physician: Imperial Doctors and Medical Professionalization in Late Antiquity," SP (2017): 80.

⁴⁸ Reid, "The First," 168-169.

⁴⁹ Ibid., 169.

⁵⁰ Doc. Chr. 2.24. Ep. 55.13. Serm. 2.11.16. Mary E. Keenan, "St. Augustine and Biological Science," Osiris 7 (1939): 588.

⁵¹ Howell briefly writes about an Augustinian two-step methodology for incorporating science and Scripture. I have developed his comments regarding methodology. Kenneth Howell, "How Augustine Reined in Science," *Catholic Answers* (1998): 3-4.

⁵² Gn. Litt. II.9.20.

rather than the descriptions given by the physical sciences.⁵³ In the methodology outlined by Augustine, the first step is to evaluate whether the observed scientific principle or claim has any validity. This must be done by using the methods of science, empirical observation, and theoretical reasoning. Augustine considers it insufficient to quote the Bible against a scientific theory without evidence, again supporting the use of scientific principles in deciphering and supporting the truth. He believed that if there was any uncertainty regarding the proposed scientific conclusion, then it could be considered false, "this [truth] ... is true which has divine authority behind it, rather than that which is the guesswork of human weakness."⁵⁴ The second step Augustine considers important in the validation of scientific truth is that said truth must stand with the truth of scripture and not be inconsistent with it.⁵⁵ In Augustine's eyes, two truths cannot contradict one another. The reality is that all truth comes from God, and scientific fact and Scripture are but two different manifestations of God's revelation of truth:

But I had already been taught by you, my God, through wonderful and hidden ways ... none other than you is teacher of the truth, wherever and from whatever source it is manifest.⁵⁶

5.4 Memoria and Sense-Perception

Augustine recognized that transmitted stimuli from the sense-perception of external objects which resulted in memory formation, caused changes within the human body. In this way, the operation of *memoria* was inextricably linked to sense-perceptions. A multitude of memory-impressions stored in *memoria* as sense-perceptions travel from the five senses to the brain; the senses are the messengers of the body (*quinque notissimis nuntiis corporis*) which report to and are directed by the soul.⁵⁷ The senses provided knowledge for the soul which then uses the bodily senses

⁵³ Gn. Litt. II.9.20-22 cf. Gen 1: 6-8, 14.

⁵⁴ Gn. Litt. II.9.21.

⁵⁵ Ibid.

⁵⁶ Conf. V.6.10.

⁵⁷ Gn. Litt. XII.24.51. Util. Cred. 1.1. Lib. Arb. II.3.8. En. Ps. 145.4.

as the corporeal instruments of perception.⁵⁸ Augustine writes, "it is still not the body that is the subject of sensation, but the soul through the body."⁵⁹ This view of Augustine of the active role of the soul in sense-perception, was similar to that of Plotinus.⁶⁰

Miethe argues that both the images associated with particular sensations and the ideas relating to them are brought into being by the activity of the soul.⁶¹ Augustine understood the importance of sense-perception in this capacity. He wanted to have a satisfactory explanation of the means by which sense-organs received impressions, and where and how these were correlated and coordinated, and then received by the soul.⁶²

It is not surprising that Augustine is fascinated by human physiology and anatomy in understanding how sense-perception works.⁶³ From a physiological perspective, Augustine held to the theory of humours as espoused by Hippocrates and the Dogmatists.⁶⁴ He recalls in *Quant. An.* what he learnt about the body from physicians who observed the effects that the humours have on the body.⁶⁵ From a medical perspective, Augustine conceived of the body in terms of the four elements and the corresponding humours associated with them.⁶⁶ He was cognizant of the relationship posited between the four elements with their accompanying oppositional qualities of hot/cold and wet/dry and the corporeal humours.⁶⁷ The alliances were

- 1. hot air with wet blood,
- 2. hot, dry fire with bile and cold,
- 3. dry earth with black bile,

⁵⁸ Ord. II.2.6. Sol. II.3.3. Djuth, "The Body," 76.

⁵⁹ Gn. Litt. III.5.7.

⁶⁰ Terry I. Miethe, "Augustine's Theory of Sense Knowledge," JETS 22, no. 3 (1979): 259.

⁶¹ Ibid. Gn. Litt. 12.16.33.

⁶² Augustine in *Gn. Litt.* XII.24.51 elaborates even further the active role of the soul in this process. O'Daly, *Augustine's*, 80.

⁶³ Perhaps, Augustine's clearest exposition on the mechanics of sense-perception can be found in *Gn. Litt.* Vision is one of the most important senses: *Mor.* I.20.37, *Lib. Arb.* II.18.48. On the physiology of the brain: *Gn. Litt*, I.16.31, IV.34.54, XII.16.32, 17.23-19.25.

⁶⁴ Reid, "The First," 173.

⁶⁵ Djuth, "The Body," 71.

⁶⁶ References to the four humours and/or the four qualities, and the need for an internal balance of the humours and qualities, appear on numerous occasions, right from early works, such as *Quant. An.*, through to later works, e.g., *Contra Julianum* composed in 421. A.D. *Lib. Arb.* III.5.13. *Quant. An.* 1. 2. Reid, "The First," 174. Djuth, "The Body," 71.

⁶⁷ Reid, "The First," 176.

4. cold, wet water with phlegm.

He connects these four elements to the five senses of the human body in *Gn. Litt.* where he cites the pre-Socratic philosopher Anaxagoras' maxim that "all the elements are in everything" (*elementa omnia in omnibus esse*); he notes that fire, the highest of the elements in the cosmic sphere and therefore, the element closest to the divine, penetrates everything to give the human body motion.⁶⁸

Augustine used both physiology and anatomy to further define the transmission of sense-perception from the five senses to form memories and their storage in the *memoria* of the soul. His physiological understanding of the nervous system showed him that the sensory nerves attached to, and originating from, the brain, transmit stimuli to and from the brain.⁶⁹ O'Daly provides a nice explanation of this process as understood by Augustine,⁷⁰ a process described in *Gen. Litt.*⁷¹ There are thin tubes like passages called *tenues fistulae* that lead from the central part of the brain to the outer surface of the body and the various senses – sight, smell, taste, touch, and sound. Augustine highlights the sense of touch; it spreads out to the whole body and is governed by the same part of the central brain. The sense of touch was directed by the brain through the *medulla cervicis et columnae* (marrow of the neck and spinal column) throughout the body via very fine streams (*tenuissimi quidem rivuli*). The sense of touch is thus activated returning stimuli to the brain.⁷² Augustine stated that this transmission of stimuli is not just what the physicians attest to but what they actually claim to be able to demonstrate.⁷³

From an anatomical perspective, Augustine in *Gn. Litt.* 7.18.24 is very clear that the physiological seat of memory is the central ventricle of the cerebrum,⁷⁴ and that memory images are formed from sense-impressions.⁷⁵ He is precise regarding the source and terminus of sensation, and what controls sensation – the front ventricle. The third ventricle behind the neck is the source of the motor nerves.⁷⁶ This is the

⁶⁸ Gn. Litt. III.4.6-7, 5.7. Reid, "The First," 176.

⁶⁹ O'Daly, Augustine's, 80.

⁷⁰ Ibid., 80-105. O'Daly's chapter 3 has an excellent discussion on sense-perception.

⁷¹ Gn. Litt. VII.13.20, 18.24, XII.20.42.

⁷² Gn. Litt. VII.13.20. Roland L. Teske, *To Know God and the Soul: Essays on the Thought of St. Augustine* (CUAP: Washington, D.C., 2008), 208-209.

⁷³ O'Daly, Augustine's, 81. Gn. Litt. VII.13.20, 18.24.

⁷⁴ O'Daly, Augustine's, 133.

⁷⁵ Conf. X. Gn. Litt. VII.12, 18-20.

⁷⁶ O'Daly, Augustine's, 81. Gn. Litt. VII.17.23-18.24.

ventricle from which all movement comes. Augustine believed that the three ventricles were connected but the central ventricle, associated with memory, was the link between the first and third ventricle. It confirmed memory was active "otherwise, since movement follows upon sensation, you may fail to link to your perception what has to be done, if you have forgotten what you have done on previous occasions."⁷⁷ Further, bodily movement could not be performed over intervals in time were it not for memory located in the middle ventricle. Therefore, physiologically, memory is directly linked with sensation and the initiation of bodily actions (voluntary movements – spontaneous motus).⁷⁸ However, Augustine also writes that sensation, memory, or movement could become non-functional if the ventricles were damaged or defective.⁷⁹ For example, a defect could occur in an individual's sense-organ e.g. a defective eye resulting in blindness.⁸⁰ This "defect" could also be used to explain Alzheimer Disease where past experiences and memories are forgotten due to defects in the brain caused by abnormal build-up of proteins in and around brain cells. With regard to the cerebral ventricle of the brain, it should be noted, that Augustine is careful to stress that the cerebral ventricle is the servant (*ministerium*) of memory rather than memory itself.⁸¹

Augustine's studies deciphering memory through a physiological and anatomical examination of "neurotransmitters,"⁸² sense-perceptions and a nervous system including the ventricles of the brain with their defined functions in memory reveal how he sought to incorporate all aspects of his knowledge including the medical sciences to understand *memoria*.

5.5 Memoria and the Mind's Eye

Eyes, to Augustine, had an important role in the sense-perception of perceived images, and therefore, memory. To him, the eyes were also the mind's eyes to the

⁷⁷ Gn. Litt. VII.17.18.24.

⁷⁸ Ibid.

⁷⁹ Ibid., 81. Gen. Litt. XII.20.42.

⁸⁰ Gn. Litt. XII.20.42.

⁸¹ O'Daly, Augustine's, 133. Gn. Litt. VII.19.25.

⁸² I use this term to refer to the stimuli transmitted from the senses to the brain via the *tenues fistulae* and the *tenuissimi quidem rivuli* that Augustine calls 'stimuli' or 'messengers.'

soul,⁸³ and therefore, significant in understanding their role in *memoria*. Physics and biology have important roles in understanding eyes. Augustine uses the theory of rays (a physics theory)⁸⁴ to describe how this is the case. O'Daly summarizes this nicely as follows:

Rays (*radii*) emanating from the pupil of the eye to impinge upon objects,⁸⁵ so that seeing becomes a kind of visual touching. A ray travels at great speed allowing for instantaneous perceptions of distant objects.⁸⁶ It then 'bursts out' (*erumpit*) of the eyes and ranges abroad in vision:⁸⁷ 'to have opened the eye is to have arrived'⁸⁸ at the seen object, no matter how far distant the latter is. In fact, seeing presupposes a space, not too great but none the less existent, between eye and object⁸⁹.⁹⁰

The eyes cannot see themselves (*Trin*. IX.3.3), neither can they see a body directly superimposed upon their surface.⁹¹ O'Daly writes that this seems at first to create a difficulty, as it appears to run counter to the principle that bodies are physically contiguous with that which they feel (*Quant. An.* 43).⁹² But Augustine's use of the ray theory precisely counters this difficulty. It is not the eyes but their sight (*visus*) that senses something when we see; sight is where it sees, and at the same time the eye can only sense something where it is not.⁹³ The eyes through sight allow the soul to use them so that the soul can look and see. Healthy eyes are required for the soul to turn to the light of the divine.⁹⁴

There is a spatiotemporal dynamic associated with the sense of sight and the other senses. Time passes from when a ray from the eyes sees the object and the eye receives the image of the object. There is space because of the distance the ray travels between the eye and the object perceived, and there is the space within the infrastructure of the *tenues fistulae*, *tenuissimi quidem rivuli* and the brain. Sense-

⁸³ Sol. I.6.12.

⁸⁴ The laws of reflection and refraction.

⁸⁵ Trin. 9.3; Serm. 277.10

⁸⁶ *Ep.* 137.8

⁸⁷ Quant. An. 43

⁸⁸ Serm. 277.10

⁸⁹ Serm. 277.14

⁹⁰ O'Daly, *Augustine's*, 82-83.

⁹¹ Ibid., 82.

⁹² Ibid.

⁹³ Ibid., 83.

⁹⁴ Sol. I.6.13.

perception which transmits the sensory stimuli to the soul is thus, also a form of motion or change. Augustine describes sensory motion as one which runs counter to the motion set up in the body by the sensory stimulus where sentience is the product of the interaction of two movements.⁹⁵ Augustine says that this motion is caused by the soul (*Mus.* 6.10.). It is "the something" which in each of the senses, corresponds to one of the elements of the material world.⁹⁶

5.6 Memoria and Spatiotemporal Dynamics

Closely related to *memoria* and the formation of memories is time. Most of Augustine's interrogations of memory and time centre on the continuum of time (past, present, and future), the spatiotemporal dynamics, and measurement of time. Memory, functioning in a temporal setting is subject to spatiotemporal dynamics. Nordlund comments that even though physics as a formal discipline began in the tenth century A.D., Augustine's apparent tendency to think in terms of physical quantities and their measurement, including his scientific capabilities and fixation on time, eternity, creation, and the nature of God and his relation to man, should qualify him as at least an honorary physicist!⁹⁷ Augustine did not know the field of physics but he certainly used the known scientific principles of his time to understand *memoria* and time – another illustration of how significant the 'art' of *scientia*⁹⁸ was to Augustine in deciphering eternal matters. And as is characteristic of Augustine, he also makes sure to inform his audience that he is "investigating...not making assertions."⁹⁹

Confessiones XI¹⁰⁰ is devoted to Augustine's interrogations of time in relation to *memoria* and is where he takes a deep dive into the many spatiotemporal conundrums of time. Augustine writes of memory, the senses, and time in *Conf.* XI.18.23:

⁹⁵ O'Daly, *Augustine's*, 83.

⁹⁶ Ibid., 84.

⁹⁷ Thomas Nordlund, "The Physics of Augustine: The Matter of Time, Change and an Unchanging God," *Religions* 6 (2015): 222.

⁹⁸ Augustine uses the term *scientia* to describe knowledge that is obtained from physical and temporal processes.

⁹⁹ Conf. XI.17.22.

¹⁰⁰ Chapter 7 discusses memory and time in more detail.

When a true narrative of the past is related, the memory produces not the actual events which have passed away but words conceived from images of them, which they fixed in the mind like imprints as they passed through the senses...but when I am recollecting and telling my story, I am looking on its image in present time, since it is still in my memory.

Augustine recognizes three measurements of time in its continuum: past, present, and future.¹⁰¹ Augustine talks of time and memory in terms of the duration of time "a long past is a long memory of the past."¹⁰² However, Augustine wonders how it is possible to measure time when it comes from the future and passes into the past via the present.¹⁰³ The connection between time, memory, and eternity intrigues Augustine. O'Neill writes regarding Augustine's association of memory and eternity with time:

Memory is a kind of wellspring from which the past, present, and future can be drawn. Prior to calling forth memories to attention, they somehow exist within the memory, existing in potency in the present despite their temporally past character. The power of the memory is a limited human mode of approximating God's being outside of time – His eternality. This approximation between divine eternity and the human soul is possible because in the soul's powers we have something akin to eternity: the memory, which prior to its activity contains all time in potential.¹⁰⁴

The impressions that things make on a person as they pass by are the impressions created in the mind by temporal change that also create a measurable spatial extension – the space of memory.¹⁰⁵ Further, Augustine argues that there is such a thing as the "space of time."¹⁰⁶ One of the challenges in understanding the spatial and temporal dimensions pertains to how reality is affected if an additional space or time dimension

¹⁰¹ Conf. XI.20.26.

¹⁰² Conf. XI.28.37.

¹⁰³ Conf. XI. 21.27.

¹⁰⁴ Seamus O'Neill, "Augustine and Boethius, Memory and Eternity," *Analecta Hermeneutica* 6 (2014): 8.

¹⁰⁵ Jordan Baker, "Augustine, Time, and the Movement of Eternity," *The Other Journal: An Intersection between Theology and Culture* 31 (2020): 2.

¹⁰⁶ Augustine discusses this in relation to a person deciding how long they wished to utter a sound and planning that space of time in silence. *Conf.* XI.27.36.

is added. *Mus.* is a good example of a text that attempts to explain this, in this case in terms of the dynamics of sound.¹⁰⁷

Baker writes that Augustine believes that a particular concept of time – "deictic" time, metaphysically depends on the mind; deictic time for Augustine is "flowing time."¹⁰⁸ Craig Callender, a philosopher of science, physics and metaphysics writes about the importance of studying deictic time in terms of physics:

One of manifest time's most important properties is temporal deictic structure. In our conceptualization of time, we can characterize temporal relationships either by reference to the present moment, or Now, or simply to another moment in the time series. The former conceptualization leads to a classification of events in terms of past, present, and future, whereas the latter leads to one in terms of the earlier than relation.¹⁰⁹

Physics claims that space-time has no objective "flow of time"¹¹⁰ or privileged "now."¹¹¹ Augustine's point regarding the "flow of time" requires a person to "measure" against the continuum of their minds. According to Callender, a person conceptualizes themselves as a moving self because of their immediate experience and memories, from which they develop agential expectations.¹¹² Baker asserts that Callender's argument that "flow" is primarily an experience of a change in us as an "updating ego" is similar to Augustine's claim that the change metaphysically underwriting time involves properties "passing away" in the substance of our minds.¹¹³

Augustine's interrogation of time and space and their link with *memoria* is, suggests Nordlund, an attempt to formulate some of the quantitative laws of physics to describe the processes of memory with relation to time while explicitly demanding

¹⁰⁷ See *Mus*. VI for the exposition of this concept.

¹⁰⁸ Deictic structure and deictic time are spatial and temporal. The concept of deictic time is controversial among physicists and centres on the debate explaining whether manifest temporal deictic structure is possible while assuming that it is not fundamentally in the world. Callender states that there tends to be confusion surrounding temporal deictic structure with sequence time, i.e., conflating the "Now" with simultaneity; the critical point time is the Now (present) verses sequential time (flow of time). Craig Callender, "Time Lost, Time Regained," in *Metaphysics and Cognitive Science*, eds. Alvin I. Goldman, Brian P. McLaughlin (Oxford: OUP, 2019): 27. Baker, "Augustine," 2.

¹⁰⁹ Callender, "Time," 27.

¹¹⁰ "Flow" of time is the tripartite structure of past, present, and future. Callender, "Time," 29. ¹¹¹ Baker, 'Augustine," 5.

¹¹² Ibid.

¹¹³ Ibid., 8.

that faith in an unchanging and all-powerful God simultaneously fit with these formulations.¹¹⁴

5.7 Memoria, Scientia, and Sapientia

Augustine never thought of *scientia* and his theological beliefs as two separate entities or disciplines. His distinction pertained to how *scientia* was used. Was it used for acquiring knowledge just for the sake of knowledge thereby leading to "puffed up" men or was it used as "good" knowledge to inform divine wisdom (*sapientia*)¹¹⁵ and move towards eternal truths? Augustine writes:

For science, too, has its good measure if that which in it puffs up, or is wont to puff up, is overcome by love for eternal things which does not puff up but, as we know, edifies. For without science we cannot even possess the very virtues by which we live rightly and by which this miserable life is so regulated that it may arrive at that eternal life which is truly blessed. ¹¹⁶

Augustine writes that "a transitory thought is committed to the memory by means of sciences in which the mind is instructed."¹¹⁷ Augustine is careful to distinguish between *sapientia* which belongs to the "intellectual cognition of eternal things" and *scientia* which is "the reasonable cognition of temporal things."¹¹⁸ He is also careful to note the rightful place and use of *scientia* in acquiring favourable knowledge to understand the sources of wisdom and truth.¹¹⁹

The importance of *scientia* in attaining *sapientia* in the role of *memoria* is illustrated in Augustine's inquiry, and description, of sense-perception. As mentioned earlier, sense-perceptions convey information from the senses to form memories that

¹¹⁴ Nordlund, "The Physics," 223.

¹¹⁵ Augustine defined *sapientia* in *C. Acad.* 3.20 as situated *apud Deum* and in 3.31 as remaining itself (*in semetipso*). To him *sapientia* in its deepest sense was God's own Wisdom – the Son of God. The soul clings to *sapientia* once it has found her. Robert O'Connell, *Images of Conversion in St. Augustine's Confessions* (NY: Fordham University Press, 1996), 264-265.

¹¹⁶ *Trin.* XII.14.21 cf. *Conf.* V.3.6-6.11 where Augustine warns of the dangers of bad science in his discussion with Faustus.

¹¹⁷ *Trin*. XII.14.23.

¹¹⁸ *Trin*. XII.14.25.

¹¹⁹ Conf. V.6.10. Trin. XIV.1.3.

are stored in *memoria* and that speak to the soul. When reliable information is conveyed in this way *memoria* gains knowledge.¹²⁰ This knowledge is ascribed to *scientia* gained from the senses and from temporal phenomena.¹²¹ This is evidenced by the numerous passages in Augustine's corpus. This is what fascinated Augustine and impelled him to investigate sense-perception using *scientia*. Augustine writes, "the human mind, therefore, knows all these things which it has acquired through itself, through the senses of its body, and through the testimonies of others, and keeps them in the treasure-house of memory."¹²² The truth of what has been learnt by the bodily senses and the things in them that are known to us cannot be doubted.¹²³ The soul, while superior to the physical body, is involved in these processes and relates to both *scientia* and *sapientia*. In this capacity, the senses are considered messengers from which the soul is cognizant of the temporal and corporeal.¹²⁴ Here, *scientia* evolves towards *sapientia* and *memoria* because there is revelation that comes with increased knowledge even temporal. *Scientia* participates in the informing of the soul as it facilitates *memoria*'s role as the gateway between the temporal and the eternal.

Augustine used his knowledge of the medical sciences i.e. *scientia* in his role as a bishop to help his flock to understand sapiential matters. His *Epistolae* illustrate that Augustine is both a man who is familiar with medical phenomena and procedures, and a bishop who cares about the purity of faith and the discipline of the Church.¹²⁵ He describes the condition and problems of the Church through a variety of medical metaphors.¹²⁶ His metaphorical use of *scientia* in doctrinal exegesis can be noted in his exposition of the biblical doctrine on the Body of Christ¹²⁷ and his development of the idea of the healer (*medicus*)¹²⁸ – Christ himself. Christ is the prime example of how *scientia* and *sapientia* meet – Christ's Incarnation and death in temporal time and in human form (matter) and Christ's resurrection into the eternal. Jean-Marie Le Blond describes so profoundly the Incarnation as the insertion of the eternal into temporality.¹²⁹ I would go further to state that the resurrection is where

¹²⁰ O'Daly, *Augustine's*, 92-102.

¹²¹ Miethe, "Augustine's," 259.

¹²² Trin. XV.12.22.

¹²³ Nash, *Light*, 42.

¹²⁴ Gn. Litt. VII.13.20.

¹²⁵ Marciniak, "Medical," 373-388.

¹²⁶ Marciniak, "Medical," 385. Keenan, "St. Augustine," 589.

¹²⁷ *Ep.* 140.18 cf. Col 1: 18.

¹²⁸ *Ep*. 266.3.

¹²⁹ "L'Incarnation, insertion de l'éternel dans le temps." Le Blond, *Les Conversions*, 19.

the temporal meets the eternal. These are the points in temporal time where for human beings, *scientia* and *sapientia* meet. Augustine does make certain that his audience knows that human knowledge – *scientia*, and human wisdom – *sapientia*, are distinct but related and inseparable as it was with Christ. Augustine writes that "faith in the temporal things, which the Eternal One died and suffered for us in the man whom He bore in time and led to eternal things," reflects the temporal/eternal nature of Christ.¹³⁰ It is a precondition of the temporal virtue needed for eternal life and it is where human wisdom will participate perfectly in divine wisdom:

The virtues themselves whereby one lives prudently, bravely, temperately, and justly in this temporal mortality, are not true virtues unless they are referred to the same faith which, though temporal, leads, nonetheless, to eternal things.¹³¹

Faith in the person and the reconciling work of Christ is, to Augustine, the way that leads from temporal knowledge (*scientia*) to eternal knowledge (*sapientia*).

5.8 Concluding Remarks

It is evident that Augustine's medical and scientific knowledge was remarkable considering he was neither a physician nor scientist. His works are scattered with medical and scientific terminology which surprisingly, is quite similar to modern anatomy and taxonomy.

Augustine's temporal knowledge gained from *scientia* informed and coalesced with *sapientia*. This came from his understanding of creation and the Creator God who created the human being and the natural, temporal world. Augustinian methodology in his interrogation of *memoria* included the knowledge gained from *scientia* which in itself was not distinct from *sapientia* especially when *scientia* informed *sapientia*. *Scientia* evolves towards *sapientia* when the desired outcome of

¹³⁰ Trin. XIV.1.3.

¹³¹ Ibid.

obtaining *sapientia* is accomplished rather than having sciential knowledge with no end purpose but being "puffed up."

The following chapter adopts Augustine's methodology in exploring new dynamics in the operation of *memoria*. It presents a proposed genomic model incorporating the foundational pillars of Augustine's theology of *memoria*.

CHAPTER 6: Re-collecting Memory: Old Wine, New Skins

"The important thing in science is not so much to obtain new facts as to discover new ways of thinking about them."

Sir William Lawrence Bragg¹

6.1 Chapter Aims

Thus far, my investigation of Augustine's theology of *memoria* has unveiled an architectonic structure that has provided keen, and some novel, insight into Augustine's thought process and the way he interrogated, wrote about, and taught on, *memoria*. This knowledge certainly impacted Augustine in his search to know and understand God. Interestingly, Augustine also utilized medical and scientific terminology frequently and was well versed in the medical sciences. He used this knowledge as he tried to unravel the inner workings of *memoria*. In this chapter, the inner workings of *memoria* are explored in the same vein.

The discovery of a novel neuronal communication system involved in memory processes, regulated by a gene called Arc, has initiated more in-depth studies of memory. The Arc gene is well-positioned to unveil Arc-hitectonic information regarding its central and unique role in memory systems and the proposal of a genomic memory process. This chapter outlines the supporting data regarding Arc.

¹ William Lawrence Bragg was a physicist and crystallographer who won the Nobel prize in physics in 1915 for demonstrating the use of X-rays in revealing the structure of crystals (Bragg's Law). Despite his many discoveries in science, he still believed they were just a new way of thinking and discussing observed facts. Harry B. Gray, John D. Simon, William C. Trogler, *Braving the Elements* (California: University Science Books, 1995), 17. Kathleen Lonsdale, "Sir Lawrence Bragg," *EB* (2021). Accessed January 27, 2022. https://www.britannica.com/biography/Lawrence-Bragg.

6.2 Introduction

Max Delbrück, one of the founding fathers of molecular biology,² argues that the historical basis for a genetic involvement in biological processes was first proposed by Aristotle who, he says, was the first to discover "the principle implied" in DNA.³ Aristotle did not believe, as did Plato, that the generation of human beings resulted from semen with extracts from the human body thereby, containing homunculi; he believed that the male contributed in semen a form principle which could determine both male and female form.⁴ In other words, the male contributed to the plan of development but not to the material body of the embryo; the female contributed the substrate since the form principle was missing as she did not produce offspring by herself.⁵ Zwart endorses Delbrück's view of Aristotle; he writes:

Aristotle's hylemorphic conception of life can be regarded as a remarkably lucid anticipation of genomics. From an Aristotelean perspective, the genome can be considered as the formula, the programme or plan ($\lambda \delta \gamma \circ \varsigma$) which guides the development of living beings from their embryonic state up to their full realisation ($\dot{\epsilon} \nu \tau \epsilon \lambda \epsilon \chi \epsilon \iota \alpha$) as flourishing, self-sustaining, reproducing adults who have fully actualised their potential form ($\dot{\epsilon} \delta \delta \circ \varsigma$). So, yes, from an Aristotelian viewpoint, the genome can meaningfully be regarded as the text of life, producing living beings from the chemical mayhem of their abiotic surroundings (i.e. inorganic matter).⁶

² Max Delbrück along with Alfred Hershey and Salvador Luria won the 1969 Nobel Prize in Physiology or Medicine "for their discoveries concerning the replication mechanism and the genetic structure of viruses." https://www.nobelprize.org/prizes/lists/all-nobel-laureates-in-physiology-or-medicine/.

³ Aristotle, according to Delbrück, could be classified as a biologist as ascertained from the five books he wrote on biological and scientific principles. Max Delbrück, "How Aristotle Discovered DNA," in *Physics and Our World: Reissue of the Proceedings of a Symposium in Honor of Victor F. Weisskof*, ed. Kerson Huang (World Scientific Publishing Company, 2013), 129-137.

⁴ Aristotle's conclusion is not based on genetics; however, of note is that sperm in semen contains either an X (female) or Y (male) chromosome. An embryo's sex is determined by whether they inherit an X or Y chromosome from sperm forming XX or XY embryos (ova will always have an X chromosome since they come from the mother). Aristotle's form principle of development of human beings is discussed in Delbrück, "How," 234.

⁵ Delbrück, "How," 135.

⁶ H. A. E. Zwart, "In the Beginning was the Genome: Genomics and the Bi-textuality of Human Existence," *New Bioethics* 24, no. 1 (2018): 35.

Augustine also made some indirect observations that are very pertinent to "the principle implied" in genetics.⁷ For example, in *Civ. Dei* V.2 he believed that Hippocrates was correct in his assessment regarding the health of twins who fell ill and recovered at the same time. Augustine explained that the foetuses of twins are of the same constitution as the mother because they were contemporaneously part of the same body as the mother and were receiving the same nourishments from the mother. They, therefore, would respond similarly to the same illnesses and external environmental factors. Furthermore, he notes that this may continue to be true as the twins grow if they are exposed to the same foods, quality of air and water, and same exercise:

Which, according to the testimony of medical science, have a very great influence, good or bad, on the condition of bodily health - and where they would also be accustomed to the same kinds of exercise, they would have bodily constitutions so similar that they would be similarly affected with sickness at the same time and by the same causes.⁸

Augustine also notes:

But we know that twins do not only act differently, and travel to very different places, but that they also suffer from different kinds of sickness; for which Hippocrates would give what is in my opinion the simplest reason, namely, that, through diversity of food and exercise, which arises not from the constitution of the body, but from the inclination of the mind, they may have come to be different from each other in respect of health.⁹

Augustine may have written *Civ. Dei* V.2 as a refutation to astrologers who believed that the constitution of twins was based on which constellation they were born under.¹⁰ Augustine calls this nonsense declaring that "the medical hypothesis is far more acceptable and obviously more credible."¹¹ What Augustine notes regarding twins is how environmental variations can in different ways influence the behaviour

⁷ The term **genetics** refers to the study of genes and their function; **genomics** refers to the study of the function and structure of genes and DNA at the base pair level.

⁸ Civ. Dei V.2.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Civ. Dei V.2.

and the constitution of twins, even identical twins. This is in fact, an observation which conforms to "the principle implied" in genetics given the similar response of the twins as a result of having the same constitution as the mother, and exposure to the same external factors. The field of the genetics of inheritance was not known at the time but there was some understanding of inheritance from the mother and consequent conferring of similar responses to external factors.

Charles Darwin developed the theory of pangenesis in his attempt to describe a developmental theory of heredity, which assumes the existence of material heredity particles.¹² Surprisingly reminiscent of Plato's homunculi, Darwin proposed that all parts of the body produced heredity particles called gemmules which were able to self-replicate, penetrate cells, and after being transported to, and congregating in, the sexual organs, were transmitted from parents to the offspring.¹³ Many aspects of Darwin's pangenesis theory are inconsistent and inaccurate but it still conveys the concept that varying numbers of gemmules from all parts of the body play a role in hereditable traits (blending inheritance)¹⁴ and differences, and the mixing of fluids during fertilization.¹⁵ Darwin's pangenesis was discredited for decades until the 21st century when several authors compared Darwin's pangenesis to the discovery of foetal cells, and thus DNA, in maternal blood.¹⁶ Further, small RNAs particularly microRNAs, can be secreted from mammalian cells; they circulate in blood and other bodily fluids, and play a role in gene regulation, and diverse cellular and developmental processes.¹⁷

It can be concluded that "genetic principles" were known in Aristotelian and Augustinian times, well before the 19th-21st centuries when theologians and scientists started taking these genetic principles to the next level. Indeed, as Bragg would say, they were not so much obtaining new facts but discovering

¹² Ute Deichmann, "Gemmules and the Elements: On Darwin's and Mendel's Concepts and Methods in Heredity," *Gen. Phil. Sci.* 41, no.1 (2010): 85.

¹³ Deichmann, "Gemmules," 94. Yonsheng Liu, Xiuju Li, "Has Darwin's Pangenesis Been Rediscovered?" *BioScience* 64 (2014): 1037

¹⁴ Blending inheritance is the merging of parental differences in the offspring of bisexual reproduction. Deichmann, "Gemmules," 91.

¹⁵ Ibid., 91-95.

¹⁶ Liu, "Has Darwin," 1039. Yongsheng Liu, "A New Perspective on Darwin's Pangenesis," *Biol. Rev.* (2008): 141-149. A. I. Ibraimov, "Darwin's Gemmules and Adaptation," *Adv. Biol.* 8, no. 2 (2015): 1589-1595. Y. M. Lo et al., "Prescence of Fetal DNA in Maternal Plasma and Serum," *Lancet* 350 (1997): 1039.

¹⁷ Lui, "Has Darwin," 1039. D. H. Chitwood, M. C. P. Timmermans, "Small RNAs are on the Move," *Nature* 467 (2010): 415-419.

new ways of thinking about them. The 21st century has brought forth a new way of thinking, as we shall see, regarding memory processes that can assist in expanding our knowledge and augmenting Augustine's theology of *memoria*.

6.3 A Novel Communication System Involved in Memory

Following in the footsteps of Augustine who unapologetically used highly technical scientific and medical terminology, this discussion regarding the brain, memory, and the Arc gene¹⁸ will include technical terminology in order to fully understand the importance of the role of this gene in memory.

The human brain is an organ of enormous complexity. A healthy human brain has approximately 1,000 trillion synapses with 200 billion neurons.¹⁹ Each neuron is connected to as many as 10,000 other neurons which all pass stimuli to each other via as many as the 1,000 trillion synaptic connections, equivalent by some estimates to a computer with a one trillion bit per second processor; estimates of the human brain's memory capacity is approximately 2.5 petabytes (the 19 million volumes in the US Library of Congress represents about 10 terabytes of data).²⁰ In the cerebral cortex where implicit basic associative learning and memory occurs, there are more than 125 trillion synapses roughly equal to the number of stars in 1,500 Milky Way galaxies.²¹

It is in the mind within the brain where memory is formed, consolidated and available for recollection. Central to memory is a mass neuronal communication system facilitated by genetic and genomic processes which regulate synaptic activity between neurons. In fact, the adaptive capacity of the brain with regard to memory depends on synaptic plasticity i.e. the ability of a synapse to change in strength in response to use or disuse.²² This dynamic synaptic network through the mass neuronal

¹⁸ For information on genes, see Holms Rolston III, "What is a Gene? From Molecules to Metaphysics," *Theoretical Med. Bioethics* 27 (2006): 471-497.

¹⁹ Jiawei Zhang, "Basic Neural Units of the Brain: Neurons, Synapses and Action Potential," in *IFM Lab Tutorial Series* 5 (2019): 2. Steven J. Smith, "Stunning Details of Brain Connections Revealed," *ScienceDaily* (2010): 1.

²⁰ Zhang, "Basic," 2. Smith, "Stunning," 1.

²¹ Smith, "Stunning," 1.

²² Oleksii Nikolaienko et al., "Arc Protein: A Flexible Hub for Synaptic Plasticity and Cognition," *Cell Dev. Biol.* 77 (2018): 34.

communication system has the ability to receive, transmit, and store information resulting in the formation of a memory, its storage and retrieval.²³

Scientifically and psychologically, memories are experience-dependent internal representations, in other words, acquired models of the world encoded in the spatiotemporal activity of brain circuits.²⁴ Neurons and synapses are therefore, involved in the very foundation, structure, and experience of one's life. This experience-dependent neuronal activity regulates, via molecular genetic and genomic processes, synaptic plasticity.²⁵ According to Kukushin and Carew, synaptic plasticity is generally accepted as the principal implementation of information storage in neural systems.²⁶ The connections between neurons are not static but dynamic, changing over time. When more signals are sent between two neurons, the amplitude of the post-synaptic neuron's response increases becoming stronger; with each new experience and each remembered event or fact, the brain slightly re-wires its physical structure.²⁷

Remembering past memories is an integral part of human existence. Foster explains this in basic terms, if one did not have a good memory, one would not be able to drive to work, hold a meaningful conversation with their children, read a book, or even prepare a meal.²⁸ Augustine may not have known the 'finer' details of the brain and nervous system; however, he did understand the complexities involved with memory and was in awe of its incredible power.²⁹ This is also emphasized by Mau et al. who write that it is far too simplistic to say that memory processes involved in updating memory and the fluidity of memories are neural patterns that guide behaviour.³⁰ They go on to say that encountered environments are dynamic and probabilistic, and therefore, the brain has the difficult task of shaping memory

²³ Jonathan A. Beagen et al., "Three-dimensional Genome Restructuring Across Timescales of Activityinduced Neuronal Gene Expression," NN 23 (2020): 707-717.

²⁴ Yadin Dudai, "Molecular Bases of Long-term Memories: A Question of Persistence," *Cur. Opin. Neurobio.* 12 (2002): 211.

 ²⁵ S. W. Flavell, M. E. Greenberg, "Signaling Mechanisms Linking Neuronal Activity to Gene Expression and Plasticity of the Nervous System," *ARN* 31 (2008): 563-590. Jason D. Shepherd, Mark F. Bear, "New Views of Arc, a Master Regulator of Synaptic Plasticity," *NN* 14, no. 3 (2011): 279.
 ²⁶ Nikolay Vadimovich Kukushkin, Thomas James Carew, "Memory Takes Time," *Neuron* 95 (2017):

^{259.} ²⁷ Zhang, "Basic," 3.

²⁸ Jonathan K. Foster, "Memory: From Sense to Storage," New Scientist (2011): 1.

²⁹ Conf. X.8.15, X.17.26.

³⁰ William Mau, Michael E. Hasselmo, Denise J. Cai, "The Brain in Motion: How Ensemble Fluidity Drives Memory-updating and Flexibility," *eLife* 9 (2020): e63550, 1.

representations to address this challenge. The functioning of memory is not as simple as acquiring a memory and then recalling that memory. However, to this day there is still much that is unknown and mysterious regarding memory.

In 2018/19, some immensely important breakthroughs in the discovery of a novel neuronal communication process shed new insights into how memories were formed, stored, and remembered. Pastuzyn and Shepherd demonstrated how a novel neuronal gene called Arc was important in regulating synaptic communication.³¹ They proposed a new mechanism³² of synaptic communication between neurons regulated via expression of the Arc gene. So important was this finding that it was reported by a number of news outlets.³³ Since January 2018, there has been further evidence supporting Arc as a master regulator and molecular mediator of synaptic plasticity. This evidence demonstrates that Arc plays an important role in controlling large signalling networks implicated in learning, memory formation and consolidation, and behaviour.³⁴ The knowledge uncovered around Arc allows for the proposal of a genomic memory³⁵ process which could provide evidence of a physical system that assists in the metaphysical recollection of memory.

³¹ Elissa D. Pastuzyn et al., "The Neuronal Gene Arc Encodes a Repurposed Retrotransposon Gag Protein that Mediates Intercellular RNA Transfer," *Cell* 172 (2018): 275-288.

³² The term **mechanism** is most commonly perceived, in today's culture, to mean "a system of parts working together in a machine;" however, it is also correctly defined as "a natural or established process by which something takes place, or the fundamental processes involved in or responsible for an action, reaction, or other natural phenomenon." Mechanism is used in terms of "**natural and fundamental process**" here and throughout this thesis. https://www.merriam-

webster.com/dictionary/mechanism and https://www.lexico.com/definition/mechanism. ³³ Julie Kiefer, "Surprise: A Virus-like Protein is Important for Cognition and Memory," *UNews and ScienceDaily* (2018). Carrie Arnold, "Cells Talk in a Language That Looks Like Viruses," *Quanta Magazine* (2018). "Memory gene goes viral," *NIH News Release*, January 16, 2018. The BBC in 2013 had already reported a study by Steve Finkbeiner revealing the importance of Arc protein in memory loss. "Arc Protein Could be Key to Memory Loss, Says Study," https://www.bbc.co.uk/news/health-22811691, June 9, 2013.

³⁴ Some key articles: Michal Fila et al., "mRNA Trafficking in the Nervous System: A Key Mechanism of the Involvement of Activity-Regulated Cytoskeleton-Associated Protein (Arc) in Synaptic Plasticity," NP (2021): 1-12. Erik I. Hallin et al., "Structure of Monomeric Full-length Arc Sheds Light on Molecular Flexibility, Protein Interactions, and Functional Modalities," Neurochem. 147 (2018): 323-340. James Ashley et al., "Retrovirus-like Gag Protein Arc1 Binds RNA and Traffics Across Synaptic Boutons," Cell 172 (2018): 262-274. Jason D. Shepherd, "Arc – An Endogenous Neuronal Retrovirus?" Sem. Cell Div. Biol. 77 (2018): 73-78. Matthew R. Campioni, Steven Finkbeiner, "Going Retro: Ancient Viral Origins of Cognition," Neuron 86 (2015): 346.

³⁵ **Genomic memory** is a term I use to describe the concept of memory regulated specifically by gene expression and genetic processes i.e., it describes the *operation* of memory at the genome level. This is different to **genetic memory** which is a *theorized* phenomenon in which certain kinds of memories could be inherited, being present at birth in the absence of any associated sensory experience, and that such memories could be incorporated into the genome over long spans of time.

6.3.1 Arc and Synaptic Communication

Researchers have identified more than 100 genes important for memory.³⁶ Konopka et al. designed a study which was the first to identify correlations between gene data and brain activity during memory processing, providing a new window into human memory.³⁷ The search for immediate-early genes (IEGs)³⁸ that responded to neuronal activity independently of protein synthesis led to the discovery of Arc.³⁹ Arc, implicated in both acquired and innate memory mechanisms, regulates the transcription of over 1,900 genes controlling memory, cognition, synaptic function, neuronal plasticity, intrinsic excitability,⁴⁰ and intra- and intercellular signalling.⁴¹

6.3.1.1 The Arc Gene

Arc is an interesting candidate memory gene in understanding memory due to its unusual molecular structure, mode of action, and role in synaptic communication between neurons specifically involved in memory. Arc is required for proteinsynthesis-dependent synaptic plasticity related to learning and memory and it is one of the key molecular players in cognition.⁴² The brain processes information regarding memory formation, consolidation, storage, retention, and recollection via this synaptic communication system which is elegantly regulated by expression of the Arc gene which occurs within minutes of neuronal stimulation.⁴³ Arc protein induction highly correlates with ongoing cognitive activity in the hippocampus⁴⁴ and in the cortex.⁴⁵

³⁶ Cognitive Neuroscience Society. "Identifying Genes Key to Human Memory: Insights from Genetics and Cognitive Neuroscience," CNS 2017 Press Release (Accessed 21/01/2022). ³⁷ Ibid.

³⁸ IEG are a class of genes that are rapidly and transiently induced by a large number of cellular stimuli. ³⁹ B. Pérez-Cadahía, B. Drobic, J. R. Davie, "Activation and Function of Immediate-early Genes in the Nervous System," Biochem. Cell Biol. 89, no. 1 (2011): 62.

⁴⁰ Intrinsic excitability is the electrical excitability of a particular neuron.

⁴¹ How-Wing Leung et al., "Arc Regulates Transcription of Genes for Plasticity, Excitability and Alzheimer's Disease," Biomedicines 10, no. 1946 (2022): 1.

⁴² Shepherd, "New," 279-284.

⁴³ Shepherd, "New," 282. T. Fowler, R. Sen, A. L. Roy, "Regulation of Primary Response Genes," Mol. Cell 44 (2011): 348-360. K. M. Tyssowski et al. "Different Neuronal Activity Patterns Induce Different Gene Expression Programs," Neuron. 98 (2018): 530-546 e511.

⁴⁴ V. Ramirez-Amaya et al., "Spatial Exploration-induced Arc mRNA and Protein Expression: Evidence for Selective, Network-specific Reactivation," Neurosci. 25 (2005): 497.

⁴⁵ D. Tse et al., "Schema-dependent Gene Activation and Memory Encoding in Neocortex," Science 333 (2011): 891-895.

Any dysregulation of Arc or genetic mutation can result in memory and neurological disorders.

The role of Arc in the intra- and intercellular movement of genomic memory information is closely associated with its exquisite molecular architecture.⁴⁶ The α-helical Arc gene, located on chromosome 8 band region q24.3,⁴⁷ is unusual in that it is a highly conserved single-copy gene that encodes⁴⁸ a single protein consisting of 396 amino-acids.⁴⁹ Zhang et al. were the first to provide an atomic structure for Arc.⁵⁰ They showed that Arc has two structural domains connected by a flexible linker region.⁵¹ This structural configuration of Arc was found to be similar to the HIV Gag protein.⁵² The Arc protein contains retroviral⁵³/retrotransposon⁵⁴ viral Gag polyproteins that originated from the Ty3/gypsy retrotransposon family. The Ty3/gypsy retrotransposons are ancient forms of RNA-based self-replicating elements that are present in animal, plant, and fungal kingdoms and are considered ancestral to modern retroviruses.⁵⁵ Arc protein is the only synaptic protein of this class. Arc, as a gene that originates from these retrotransposon insertions, contains conserved domains similar to the Gag protein, which are required for the formation of retrovirus capsids.⁵⁶

⁴⁶ Fila, "mRNA," 7.

⁴⁷ J. Kremerskothen, A. Barnekow, "Human Activity-regulated Cytoskeleton-associated Gene (ARC) Maps to Chromosome 8q24," *Chromosome Res.* 8, no. 7 (2000): 655.

⁴⁸ A gene's DNA has information encoded in a specific sequence of base pairs that is needed to make a protein. Proteins are composed of amino acids. They are required for the structure, function, and regulation of cells, tissues, and organs.

 ⁴⁹ Clive R. Bramham et al., "The Arc of Synaptic Memory," *Exp. Brain Res.* 200 (2010): 131. Melissa Boldridge et al., "Characterization of the C-terminal tail of the Arc protein," PLOS ONE (2020): 1-12.
 ⁵⁰ Zhang, "Structural," 496.

⁵¹ Boldridge, "Characterization," 2.

⁵² Gag protein is part of the basic infrastructure of retroviruses. Zhang, "Structural," 497-498.

⁵³ A retrovirus is a virus that uses RNA as its genetic material. When a retrovirus infects a cell, it makes a DNA copy of its genome that is inserted into the DNA of the host cell. Retroviruses behave differently from the typical genetic process of DNA making RNA, and RNA making protein. David N. Bodine, NHGRI "Retrovirus," https://www.genome.gov/genetics-transcription/Retrovirus.

⁵⁴ Retrotransposons duplicate through RNA intermediates that are reverse transcribed and inserted at new genomic locations. One of the main differences between retroviruses and retrotransposons is whether they are infectious. Retroviruses are capable of moving between cells, whereas retrotransposons can only insert new copies into the genome present within the same cell and rely mostly on vertical transmission through generations. Richard Cordaux, Mark A. Batzer, "The Impact of Retrotransposons on Human Genome Evolution," *Nature Reviews* 10 (2009): 691. M. Naville et al., "Not So Bad After All: Retroviruses and Long Terminal Repeat Retrotransposons as a Source of New Genes in Vertebrates," *Clin. Microbio. Infect.* 22, no. 4 (2016): 312.

⁵⁵ Shepherd, "Arc," 74.

⁵⁶ E. O. Freed, "HIV-1 Assembly, Release and Maturation," *Nat Rev. Microbiol.* 13, no. 8 (2015): 484-496.

The Arc gene is fascinating because it does not conform to the 'traditional' or 'expected' structure and function of a typical gene. Paradoxically, it is a simple yet complex gene, and is highly dynamic with unusual attributes. Arc functions like a virus and produces viral structures called capsids (they house mRNA) that infect other neurons. In these neurons Arc mRNA⁵⁷ transcripts⁵⁸ are translated into more capsid-like protein structures which are required for neuronal function.⁵⁹ The recipient neurons can then translate the Arc mRNA transcripts into even more capsid-like structures where they are released and inserted into other neurons just like a virus infecting host cell, and the cycle repeats itself over and over.⁶⁰ Neurons thus communicate with each other by "trafficking" Arc mRNA between each other. This trafficking across synapses is critical for synaptic plasticity, which is important in memory processes. **Figure 6.1** illustrates the specific steps in the Arc capsid cycle.

⁵⁷ Messenger RNA (mRNA) is a single-stranded RNA molecular the is complementary to DNA strands of a gene.

⁵⁸ Transcription and translation are genetic processes used by a cell to make all proteins needed for cellular and bodily functions. These genetic processes are initiated by information stored in the sequence of bases in DNA (gene). During transcription, a piece of DNA that codes for a specific gene is copied into messenger RNA (mRNA) in the nucleus of the cell. The mRNA (transcripts) then carries the genetic information from the DNA to the cytoplasm, where translation occurs. During translation, proteins are made using the information stored in the mRNA sequence. NCI "Transcription," accessed March 5, 2022, https://www.cancer.gov/publications/dictionaries/cancer-terms/def/transcription.
⁵⁹ O. Svetlana et al., "Structure of the Ty3/Gypsy Retrotransposon Capsid and the Evolution of

Retroviruses," PNAS 116, no. 20 (2019): 10055.

⁶⁰ Hallin, "Structure," 324.

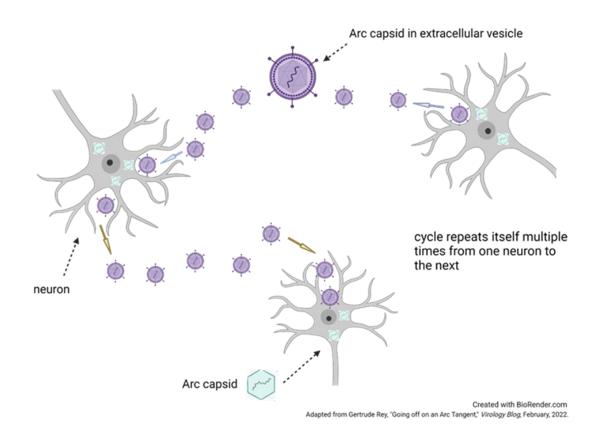


Figure 6.1: The Arc cycle and Arc's role in the intercellular neuronal communication pathway.

The Arc capsid cycle exemplifies how Arc mediates intercellular trafficking of mRNA via Arc EVs. It is the arc-hitectonic structural versatility of Arc that facilitates its operation as a gene involved in memory.

6.3.1.2 The Capsid

The Arc capsid is essential to the effectiveness of Arc in the mechanics of memory processes. Capsids form a closed shell that encapsulates and protects genetic material allowing for the intercellular transfer of newly synthesized Arc mRNA from one neuron to another.⁶¹ Therefore, a more detailed examination of its architectonic

⁶¹ Dodonova, "Structure," 10055. P. Kelly, S. A. Deadwyler, "Experience-dependent Regulation of the Immediate-early Gene Arc Differs Across Brain Regions," *Neurosci.* 23, no. 16 (2003): 6443-6451. Ashley, "Retrovirus-like," 262-274.

structure – its intricate design, and function is warranted to understand its significance in neuronal synaptic communications involved in memory. An example of a capsid is shown in **Figure 6.2**.

Figure 6.2: 3D model of a helical capsid structure of a virus showing encapsulated RNA and protein sub-units.

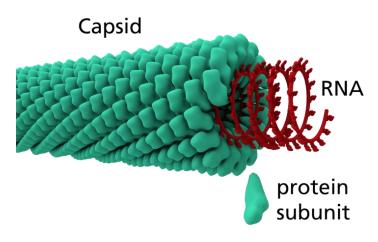


Image: Thomas Splettstoesse via Wikimedia Creative Commons

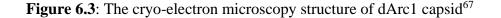
The capsid's individual components have chemical features that allow them to fit together and to assemble to form the capsid. The Arc capsids are perfect icosahedral structures with a high degree of similarity to mature retroviral capsids from viruses like HIV.⁶² Campioni et al. describe how the capsids including Arc's also have spikes protruding from their surfaces, reminiscent of the spikes used by viruses to bind target cells,⁶³ actually very similar to the RNA SARS-CoV-2 (COVID-19) virus' protein spikes.⁶⁴ The Arc capsid contains amphiphatic⁶⁵ regions

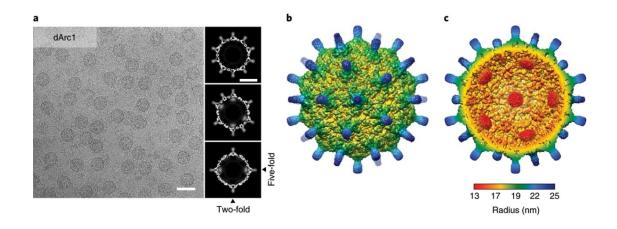
⁶² Campioni, "Going," 347. Vivian Budnik, Travis Thomson, "Structure of an Arc-ane Virus-like Capsid," *NN*. 23 (2020): 153.

⁶³ Ibid., 347.

 ⁶⁴ For a more detailed description of the SARS-CoV-2 protein spike and similarities with Arc see Jun Zhang et al., "Structure of SARS-CoV-2 Spike Protein," *Curr. Opin. Virol.* 50 (2021): 173-182.
 ⁶⁵ A molecule is amphiphatic if it has both hydrophobic and hydrophilic properties. In the case of the Arc capsid and its spikes, the hydrophilic (water-loving) and hydrophobic (lipophilic or fat-loving)

that extend from the capsid surface through the spikes which are reminiscent of viralamphiphatic membrane-penetrating proteins.⁶⁶ This facilitates the capsid penetrating through the membrane of a neuron in order to enter or exit the neuron.





Taken from S. Erlendsson, et al., "Structures of Virus-like Capsids Formed by the Drosophila Neuronal Arc Proteins." NN 23 (2020): 172. (Used under permissions granted by Nature editorial policies.)

Figure 6.3: (a) Representative dArc1 micrograph and central sections through 3D reconstructions perpendicular to the five-, three-, and two-fold axes. (b) Surface representation of dArc1, viewed down the five-fold axis and coloured by radius. (c) As in (b), with the front half of the capsid removed to reveal internal features.

properties are thought to be involved in the penetration of, and release from, the neuron membrane. Michael P. Hantik et al., "Intercellular Communication in the Nervous System Goes Viral," *TM* 44, no. 4 (2021): 254.

⁶⁶ S. Erlendsson et al., "Structures of Virus-like Capsids Formed by the Drosophila Neuronal Arc Proteins," *NN* 23 (2020): 172-175. Hantik, "Intracellular," 254.

⁶⁷ dArc1 is the variant of Arc that is found in *Drosophila*.

Arc capsid formation is influenced by the amount of Arc protein in neuronal synapses and interactions with other host proteins.⁶⁸

Extracellular vesicles which contain the capsids, play a critical role in the neuronal memory communication process both in normal and diseased brains.⁶⁹ The role of EVs was elucidated in a key study by Ashley et al. while investigating the role of Arc1 in *Drosophila*.⁷⁰ They discovered how the Arc1 protein formed capsids and were loaded into EVs which then facilitated transfer from one neuron to another; the mechanism involved was similar to that of retroviruses and retrotransposons and was necessary for synaptic plasticity. At the same time as Ashley, Pastuzyn et al. showed in another ground-breaking paper the involvement of mammalian Arc in inter-neuron Arc mRNA trafficking,⁷¹ confirming the results obtained by Ashley. In another study, Popov noted that as a neuron became more active, there was an increase in the number of EVs produced that contained the Arc capsids.⁷²

When a virus capsid reaches its terminus, the capsid is disassembled; this is a complicated process requiring host factors. Eventually, the capsid is trafficked to the neuron's nucleus whereupon disassembly occurs.⁷³

6.3.1.3 Spatio-temporal Dynamics of Arc

Arc exhibits both spatial and temporal dynamics. The cyclic nature of the Arc neuronal memory communication pathway demonstrates its spatial dynamics. First, the formation of the capsid requires an understanding of spatial orientation as it occupies a given space, operates in that space, and moves through space to another target location; this confirms the spatiotemporal dynamic of the capsid. Second, the coordination of intra- and intercellular Arc mRNA trafficking requires the precise

⁶⁸ Shepherd, "New," 270-284. M. P Hantak et al. "Intercellular Communication in the Nervous System Goes Viral," *Trends Neurosci.* 44, no. 4 (2021): 252. Nielsen, "The Capsid," 1071-1081e5.

⁶⁹ R. C. Paolicelli, G. Bergamini, L. Rajendran, "Cell-to-cell Communication by Extracellular Vesicles: Focus on Microglia," *Neurosci.* 405 (2019): 148-157.

⁷⁰ Ashley "Retrovirus-like," 262-274, e11.

⁷¹ Pastuzyn, "The Neuronal," e18.

⁷² N. N. Popov et al., "The Generation of Coding Sequences of Cellular Genome Through Cooption of Viral Genes," *Annals Mechnikov Institute* N4 (2018): 9.

⁷³ Hantak, "Intercellular," 254.

spatial and temporal expression of Arc at the protein level.⁷⁴ The cascade sequence of intra- and intercellular Arc mRNA trafficking results in synaptic activity at a target location; this not only demonstrates the spatial orientation of the capsid and Arc mRNA in different locations but also the time span of these steps, hence, the temporal dynamics of the transfer of mRNA from one location i.e. one neuron to another. According to Pastuzyn this cascade sequence can be initiated from a behavioural expression initiate the spatial exploration of a memory.⁷⁵ Third, the Arc cycle and Arc expression initiate the spatial exploration of a novel temporal environment.⁷⁶ Arc is thus essential for spatial memory acquisition and consolidation. Vazdarjanova et al. were the first to demonstrate that exploring a novel environment induces Arc in the principal neurons of the hippocampus, neocortex, and dorsal striatum.⁷⁷

The temporal dynamics of the Arc gene itself can be observed in two ways. The Arc protein eventually degrades, as does its function and longevity over time. Wall et al. were able to demonstrate the functional consequences of modifying the temporal profile of Arc expression and degradation.⁷⁸ They showed that disruption in the degradation of the Arc protein resulted in deficits in reversal learning strategy. Secondly, the temporal dynamic of Arc exists in the initial recognition of a signal within a spatial orientation in a given moment in time to the time a memory is formed and consolidated. Studies have shown that the time between a presynaptic and postsynaptic neuron firing in order to produce a change in synaptic strength is generally less than 40 milliseconds because after 40-60 milliseconds no plasticity occurs.⁷⁹ Short- and long-term memories can take anywhere from a few seconds to weeks to be consolidated into longer term memories to be recalled at a later time in

⁷⁴ Pastuzyn, "The Neuronal," e18. A. Vazdarjanova et al., "Spatial Exploration Induces ARC, a Plasticity-related Immediate-early Gene, Only in Calcium/calmodulin-dependent Protein Kinase IIpositive Principal Excitatory and Inhibitory Neurons of the Rat Forebrain," *Comp. Neurol.* 498 (2006): 317-329.

⁷⁵ Pastuzyn, "The Neuronal," e18.

⁷⁶ Vazdarjanova, "Spatial," 323.

⁷⁷ Ibid., 328.

⁷⁸ Mark J. Wall et al., "The Temporal Dynamics of Arc Expression Regulate Cognitive Flexibility," *Neuron* 98, no. 6 (2018): 1124–1132, e7.

 ⁷⁹ Samuel J. Gershman, "The Molecular Memory Code and Synaptic Plasticity: A Synthesis," *Biosystems* 224 (2023): 3. G-Q. Bi, M-M. Poo, "Synaptic Modifications in Cultured Hippocampal Neurons: Dependence on Spike Timing, Synaptic Strength, and Postsynaptic Cell Type," *Neurosci*. 18 (1998): 10464-10472.

the future.⁸⁰ There is a timescale that is involved, one that has an initial present which moves into the past akin to the Augustinian theory of time past, present, and future.

6.3.1.4 Summary of the Arc Gene

Arc has unique properties regarding its structure and function in regulating a neuronal communication system involved in memory processes. It allows for the proposal of a potential genomic model in modulating the operation of memory. Its unique features, properties, and roles are summarized in **Table 6.1**.

⁸⁰ For a good review see Mau, "The Brain," 1-24.

TABLE 6.1: Summary of the Arc Gen	ne
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Arc Gene		
FEATURES	PROPERTIES/ROLE	
Single copy gene	Arc regulates memory consolidation and reconsolidation processes	
Highly conserved	Synaptic plasticity	
Expression induced in divergent behavioural pathways	 Diverse in function Associated with and interconnects with >1900 genes Highly dynamic 	
Arc gene transcripts are trafficked into the synapse, activate neuron	 Tightly regulated by neuronal activity and experience Local transportation of Arc proteins at synapses (critical for synaptic plasticity) 	
Arc mRNA finds its way to synapses that are recently active (local synaptic support and strengthening)	 Arc protein expression observed in the nucleus of neurons Involved in regulating expression Activating neurons mobilizes Arc triggering release of capsids 	
Viral-like features	Viral-like functionsInvolved in learning	
Uptake/transfer of RNA by Arc protein occurs in absence of envelope (lipid bilayer)	 A-helical, Arc capsid with quaternary arrangement N- and C-terminals, Flexible linker region Formation and consolidation of memory 	
Arc gene selectively expressed when neuron has high level of activity Similar to HIV in structure and function	 Capable of oligomerization Storage of memory Retrieval of memory 	

6.3.1.5 Arc vs. Ark

God's creation of human beings included the detailed inner structure and workings of the human body right down to the genomic level. Thinking of Arc in terms of creation re-called to mind an interesting observation. **Arc** is named after the type of gene it is (**a**ctivity **r**egulated **c**ytoskeleton); however, its very name brings to mind the **ark** as in Noah's **ark** (Genesis 7). Interestingly, Arc and Ark have commonalities that exemplify divine action within time and result in specific remembrances of past, present, and future time worth mentioning. There is definitely a movement of Divine action in both and an architectonic structure to their physical actions. A side-by-side comparison demonstrates an interesting correlative between the two. **Table 6.2** illustrates the common features of Arc and ark.

Arc Gene	Noah's Ark
Structure of Gene	Structure of the ark
Preservation of structure	Preservation of species – life
Preservation of memory	Preservation of memory
Order and sequence	Order and sequence: 2 x 2
Operational mechanics Functional regulation of memory Operates in time 	Operational mechanics of ArkDay to day operation of the arkOperates in time
 Metaphysical dimension Soul re-members its origins God re-calls soul to himself 	 Metaphysical dimension God re-members his creation People (creation) re-member(s) their God
 Remembered over time Arc is re-membered by the genome when transmitted from cell to cell in proliferation or generational transmission 	 Remembered over time Noah's Ark remembered from generation to generation as a reminder of God and his actions
 Structure to God's plan Arc facilitator of memory through which soul re-members the Divine 	 Structure to God's plan Ark facilitator of memory - God re-members Noah, Genesis 8: 1)

Noah's ark is a literal representation of Arc! The architectonic structure of **Arc** and **ark** demonstrate the Divine in the midst of his creation and his manifestation in its present operation and revelation of the future (eternity). God remembered Noah in the flood and caused the waters to recede resulting in a "re-creation" where the old became new. Arc re-creates (and re-calls) memory through its role in memory processes. Through memory the rational soul re-members the Divine and so Arc as the facilitator of memory brings new out of old just like Noah and the ark.

6.4 Old Wine, New Skins

With due understatement, memory is a complex process. This becomes even more evident in this section as the homogeny between Augustine's theology of *memoria* and the molecular memory processes regulated by Arc are discussed. Following Augustine, this section will elaborate on the same eight foundational pillars of memory and their sequence identified in *Conf.* X: location of memory, power of memory, sense-perception, teaching and learning, recollection and forgetfulness, images, *phantasia*, and *phantasmata*, the temporal dimension of *memoria*, and the *beata vita*.

6.4.1 The Location of Memory

*"Memory's huge cavern, with its mysterious, secret, and indescribable nooks and crannies..."*⁸¹

"The brain is shown to have three ventricles...the third in between the two, in which they demonstrate that memory is active..."⁸²

The exact location of memory in the mind has been debated for centuries. Identifying the location of memory was important for Augustine because memory was

⁸¹ Conf. X.8.13.

⁸² Gn. Litt. VII.18.24.

the place where God dwelt.⁸³ Memory was also where he found the knowledge necessary to understand his human being as himself and to pursue the *beata vita*. Metaphorically, Augustine visualized the location of memory as "the fields and vast palaces of memory"⁸⁴ located in *memoria* within the *mens* of the rational soul and where the numerous memories and images were stored in the "mysterious, secret, and indescribable nooks and crannies."⁸⁵ However, from his understanding of anatomy, Augustine had surmised a specific physical location in the brain where memories were located. In *Gn. Litt.* VII.18.24 Augustine writes:

The brain is shown to have three ventricles, one in the front, at the face, from which all sensation is controlled; a second behind at the neck, from which all movement comes; the third in between the two, in which they demonstrate that memory is active; otherwise, since movement follows upon sensation, you may fail to link to your perceptions what has to be done, if you have forgotten what you have done on previous occasions.

In the same section, Augustine also reiterates that his understanding of the ventricular theory of the brain was confirmed by medical knowledge:

These medical men say there are sure and certain indications to prove all this, as when these parts, affected by some disease or defect, have each made clear enough what they are for by failure in the functions of sense perception, or of movement of limbs, or of remembering how to move the body.

It is thought Augustine obtained this information from Vindicianus who was likely to be familiar with, and influenced by, Galen, a Greek physician and philosopher.⁸⁶ Galen, in the second century A.D., held a ventricular theory of the brain, and wrote about the location of memory in the *hêgemonikon* – the ruling centre of the soul

⁸³ Conf. X.25.36.

⁸⁴ Conf. X.8.12.

⁸⁵ Conf. X.8.13.

⁸⁶ Christopher D. Green, "Where did the Ventricular Localization of Mental Faculties Come From?" *Hist. Behav. Sci.* 39, no. 2 (2003): 140. Julius Rocca, "Galen and the Ventricular System," *Hist. Neurosci.* 69, no. 3 (1997): 227-239.

located in the brain.⁸⁷ Galen's model of the nervous system including the ventricular theory of the brain had considerable support especially in Britain until the 1830s.⁸⁸

Modern science has been able to map the location of memory in the brain and has demonstrated that Galen and Augustine had informed insight into the location of memory. When memories are initially formed, they are thought to be stored in the hippocampal-entorhinal cortex (HPC-EC) network;⁸⁹ Augustine believed the hippocampus was central to memory storage since it was located in the "second ventricle" now known as the temporal lobe. Episodic⁹⁰ memories initially require rapid synaptic plasticity within the hippocampus for their formation after which they gradually consolidated in neocortical networks for permanent storage.⁹¹ It is known that both short-term and long-term memories are formed simultaneously in the hippocampus and prefrontal cortex where the memory cells become more silent or active over time based on the type of memory.⁹² Arc regulates Arc protein induction in the hippocampus and in the cortex which correlates with ongoing cognitive activity and both short-term memory (STM) and long-term memory (LTM) consolidation. Its absence causes severe memory disorders.⁹³ Further, prolonged inhibition of the hippocampal or neocortical networks during the consolidation period produces deficits in remote memory formation.⁹⁴ Augustine was aware of how damage to the brain and disruption of memory processes created either temporary or permanent forgetfulness; he wrote of this in Conf. X. Specific locations in the brain are associated with memory storage. Augustine's description of the "fields and vast palaces of memory...indescribable nooks and crannies" was metaphorical but a great

⁸⁷ Rocca, "Galen," 227-239.

Gerd Graβhoff, Michael Meyer, "Mapping Memory. Theories in Ancient, Medieval and Early Modern Philosophy and Medicine," *Anc. Stud.* 6 (2016): 681. Philipp deLacy, *On the doctrines of Hippocrates and Plato, 4,1,2, Second Part: Books VI-IX* (Berlin: Akademie Verlag, 2014), VIII 1.3-5. ⁸⁸ Rocca, "Galen," 227 n. 2.

⁸⁹ HPC-EC network plays an essential role for episodic memory. It preserves spatial and temporal information regarding the occurrence of past events. Takashi Kitamura et al., "Engrams and Circuits Crucial for Systems Consolidation of a Memory," *Science* 356, no. 6333 (2017): 73.

⁹⁰ Episodic memory involves the ability to learn, store, and retrieve information about unique individual experiences that occur in daily life. These memories typically include information about the time, the place of an event, and detailed information about the event itself. Bradford C. Dickerson, Howard Eichenbaum, "The Episodic Memory System: Neurocircuitry and Disorders," *Neuropsychopharm. Rev.* 35 (2010): 87.

⁹¹ Kitamura, "Engrams," 73.

⁹² Ibid.

⁹³ V. Ramirez-Amaya, "Spatial," 497. Tse, "Schema-dependent," 891-895.

⁹⁴ Moriel Zelikowsky, Stephanie Bissiere, Michael S. Fanselow, "Contextual Fear Memories Formed in the Absence of the Dorsal Hippocampus Decay Across Time," *Neuroscience* 32, no. 10 (2012): 3393-3397. Kitamura, "Engrams," 73.

descriptor of the different locations of memory.⁹⁵ His anatomical description of the ventricular system of the brain with regards to memory aligns closer to modern science than one would think. It should be noted that in Latin, *ventriculum* from which ventricle is derived, means "little belly;" this is the same term used by Augustine in Gn. Litt. VII.18.24 when he says, "the brain is shown to have, as it were, three ventricles (little bellies)." In Conf. X.14.21 Augustine uses this term for his metaphorical use of "belly" or "stomach" as in "memory is the stomach of the mind" (ergo memoria quasi venter est animi).⁹⁶ The following Figure 6.4 illustrates the different compartments of the brain and how they relate to Augustine's ventricular description.

Augustinian terminology in red, taken from Gn. Litt. VII.18.24.

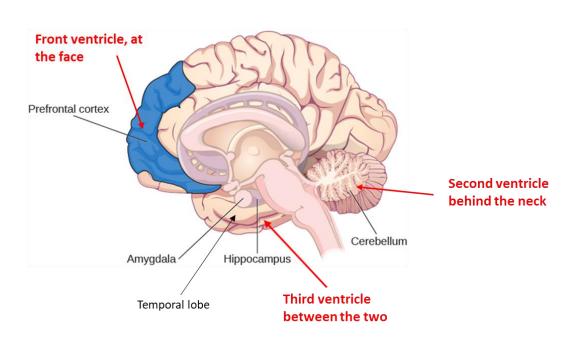
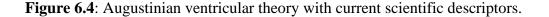


Image from https://opentext.wsu.edu/psych105/chapter/8-3-parts-of-the-brain-involved-in-memory/

Rear of head



Front of head

⁹⁵ Conf. X.8.12-13.

⁹⁶ Edmund Hill, The Works of St. Augustine (NY: NCP, 2002), 334, n. 17.

The prefrontal cortex located in the frontal lobe, is responsible for memory related tasks that originate from perception, semantic activities, and encoding of task relevant information in working memory.⁹⁷ The frontal lobe was, according to Augustine, associated with the control of sense-perception.⁹⁸ The cerebellum, identified by Augustine as the second ventricle, is important in procedural memories, motor learning, and classical conditioning. According to current neurobiology, the cerebellum plays a role in processing procedural memories, such as how to play the piano. Augustine would likely relate memory in the cerebellum to a musician learning how to play an instrument; music was influential in Augustine's development of his theory of memory. The total number of neurons in the cerebellum is approximately 105 billion all of which require Arc expression to regulate synaptic communication regarding memory.⁹⁹ The third ventricle correlates to the temporal lobe within which, are the medial temporal lobe, hippocampus, and amygdala. It is the third ventricle where Augustine claimed memory to be located and actively operational.¹⁰⁰ The amygdala is involved in emotive memories (e.g., fear) while the hippocampus is associated with declarative and episodic memory and recognition of memory.

The homology between Augustinian and current neurobiological functions of the brain and their locations are illustrated in **Figure 6.5**.

⁹⁷ Parts of the Brain Involved in Memory, accessed February 19, 2022.

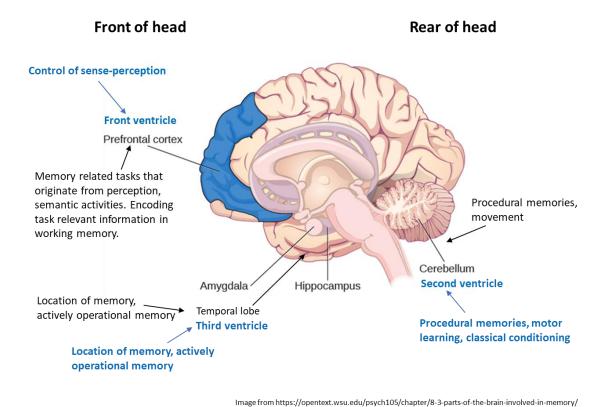
https://opentext.wsu.edu/psych105/chapter/8-3-parts-of-the-brain-involved-in-memory. Shitij Kapur et al., "Neuroanatomical Correlates of Encoding in Episodic Memory: Levels of Processing Effect, *PNAS USA* 91 (1994): 2009-2010. A. Baddeley, "Working Memory: Looking Back and Looking Forward," *NRN* 4 (2003): 829–839.

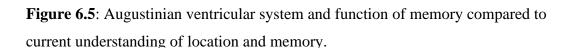
⁹⁸ Gn. Litt. VII.18.24.

⁹⁹ Birgitte Bo Andersen, Lise Korbo, Bente Pakkenberg, "A Quantitative Study of the Human Cerebellum with Unbiased Sereological Techniques," *Comp. Neurol.* 326, no. 4 (1992): 549. Pastuzyn, "The Neuronal," e18.

¹⁰⁰ Gn. Litt. VII.18.24.

Augustinian terminology in blue, taken from Gn. Litt. VII.18.24.





The hippocampus is a critical and active hub in the mechanics of memory particularly, crucial to the encoding of memory.¹⁰¹ It has the ability to integrate and interpret contextual clues to drive recall, but it is also important in the discrimination and association of memory data.¹⁰² The vital role of the hippocampus in memory is demonstrated in patients who have partial brain resections. In 1953, Henry Molaison underwent a bilateral medial temporal lobe resection which included his hippocampus, amygdala, and partial loss of the adjacent parahippocampal gyrus to cure his profound epileptic seizures which had seriously incapacitated him, despite

 ¹⁰¹ S. Matin, K. L. Phan, I. Liberzon, "The Contextual Brain: Implications for Fear Conditioning, Extinction and Psychopathology," *NRN* 14 (2013): 417-428. T. D. Goode et al., "An Integrated Index: Engrams, Place Cells, and Hippocampal Memory," *Neuron* 107 (2020): 807.
 ¹⁰² Ibid.

high doses of anticonvulsant medication.¹⁰³ The surgery controlled his epilepsy but resulted in severe memory impairments. The results obtained from examining Molaison from the surgery until his death in 2008, established the fundamental principle that memory is a distinct cerebral function, separable from other perceptual and cognitive abilities; the medial aspect of the temporal lobe was identified as the important region for memory.¹⁰⁴ According to Squire, the implication was that the brain, to some extent, has to separate its perceptual and intellectual functions from its capacity to lay down in memory the records that ordinarily result from engaging in perceptual and intellectual work.¹⁰⁵ Molaison was unable to convert STM into LTM learned post his surgery. Consequently, he was forced to live entirely in the present; each day brought no recollection of the previous day due to his implicit memory deficits. However, Molaison retained his capacity to remember information that he had acquired before his surgery; this led to the key insight about the organization of memory, where it was stored, and medial temporal lobe function.

Memories from early life appear to be intact unless the damage extends well into the lateral temporal lobe or the frontal lobe in which case memory loss can sometimes extend back for decades.¹⁰⁶ The structures damaged in Molaison are important for the formation of LTM and its maintenance and memory consolidation. The consequences of the bilateral medial temporal lobe resection illustrate that memory becomes impaired with the loss of these structures. This suggests that memory consolidation and storage are also located in the hippocampus. This is attested to by the fact that the hippocampus is one of the brain regions most affected by Alzheimer's disease that is characterized by severe memory loss. Alzheimer's disease involves neurodegeneration, or the deterioration and death of neurons. While this neurodegeneration is widespread, neurons in the hippocampus are particularly susceptible.

Knowledge of the physical location of memory is important. This architectonic knowledge provides for an understanding of why the operations of memory function well or fail.

¹⁰³ Larry R. Squire, "The Legacy of Patient H.M. for Neuroscience," *Neuron* 61, no. 1 (2009): 6–9.
¹⁰⁴ Squire, "The Legacy," 7.

¹⁰⁵ Ibid., 7.

¹⁰⁶ Ibid., 10.

6.4.2 The Power of Memory

"Great is the power of memory, an awe-inspiring mystery, my God, a power of profound and infinite multiplicity"¹⁰⁷

Memory is undeniably powerful. Whether it be in its storage capacity, or where memory itself is located and managed, or the different types of memory and their roles, or the intricate and elegant molecular regulation by Arc; memory is fascinating, mysterious, and yes, astoundingly powerful. Arc could be likened to a control centre managing and interconnecting neuronal activity and memory operations. Arc is immensely powerful in its functionality and beautiful in its elegance. It is no wonder that Augustine wanted his readers and audience to get a grasp of the enormity of the power of memory before he taught and wrote about the finer details; they would be able to get an even greater appreciation and perspective on the operation of memory and recognize its very specific role in their journey to God.

6.4.3 Memory and Sense-perception

"Memory preserves in distinct particulars and general categories all the perceptions which have penetrated, each by its own route of entry."¹⁰⁸

Augustine had described in *Gn. Litt.* VII.18.24 the anatomical structure for the transmission of "messengers" from the five senses to the brain where memories of these sense-perceptions were made and stored. He wrote of the sense of touch being directed by the brain throughout the body via the "*tenuissimi quidem rivuli*" (very fine streams) that ran through the "*tenues fistulae*" (fine tubes) which led from central part of the brain to the outer surface of the body.¹⁰⁹ These sense-perceptions led to the formation of sensory memories which were created in an immediate fashion as soon as the information reached the brain. Sensory information remains in the brain for 1-2

¹⁰⁷ Conf. X.17.26.

¹⁰⁸ Conf. X.8.13.

¹⁰⁹ Gn. Litt. 7.13.20, 7.18.24, 12.20.42.

seconds. During this period, the information of the object is processed thus allowing the brain to recall previous memories of said object; this process of recalling enables the brain to identify and name the object.¹¹⁰ Arc and the Arc cycle ensure that STM and LTM are encoded and consolidated. As the five senses operate, the brain is continuously assembling and sorting perceptions of the outside world including acquisition of spatial surroundings. Augustine's description of messengers of sense-perception transmitted to the brain via "*tenuissimi quidem rivuli*" in "*tenues fistulae*" from the external senses is surprisingly analogous to peripheral nervous system and the role of Arc within.

Figure 6.6 is Augustine's sensory model of memory compared with current descriptors of the peripheral and central nervous system, and Arc's role at the synapses of neurons. Augustine's terminology is in the darker **red**.

¹¹⁰ "Memory Processes in the Human Brain," in *The Human Memory 2010-2022*, accessed April 18, 2022, https://human-memory.net/memory-storage/.

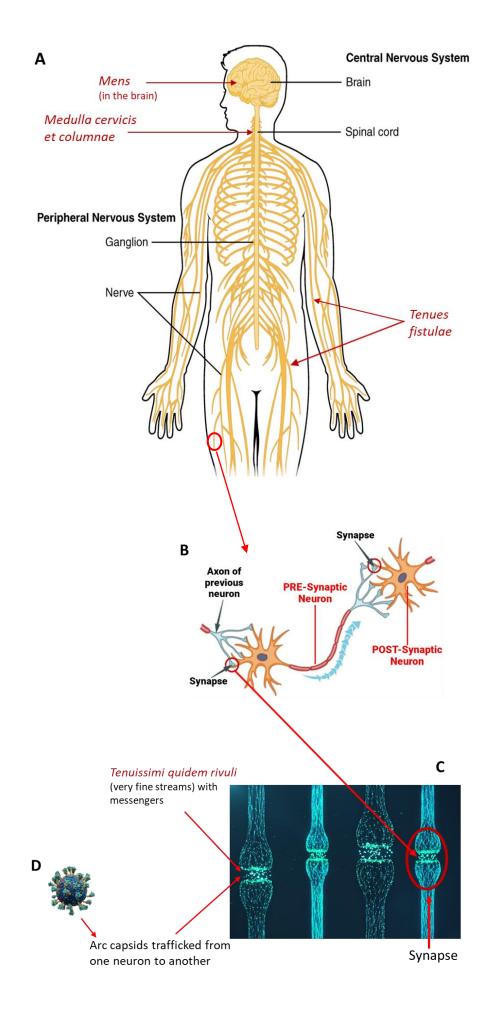


Figure 6.6: (A) The nervous system comprising of the peripheral central nervous systems compares to the Augustinian *tenues fistulae* and the *medulla cervicis et columnae et mens,* respectively, which correlate to the peripheral nerves, spinal cord, and brain. **(B)** Structure of neurons illustrating synaptic connections. **(C)** Representation of synaptic junctions illustrating transmission of neurotransmitters which correlate to *tenuissimi quidem rivuli* carrying messengers. EVs containing Arc capsids trafficking Arc mRNA between synapses. **(D)** Arc virus-like structure which produces Arc capsids.

Images obtained from iStock

With the anatomical homology between Augustine's theory and current neurobiology, it is not surprising that there are also similarities between the functional operation of sensory memory. The formation of memories via sense-perception is important because memories are crucial to survival. Rosa et al. in their work demonstrated that vision not only involves the formation of an optically perfect image but also perception.¹¹¹ Augustine understood how vision was a function of senseperception and could be explained by what is currently known as "physics."¹¹²

The formation of a memory and/or memory trace (engram)¹¹³ that can be recalled not only requires long-term changes in the strength of the synapses connecting the neurons that constitute the engram, but also stable changes in their intrinsic excitability.¹¹⁴ The encoding of a particular memory is thought to involve only a fraction of neurons.¹¹⁵ Formation of neuronal ensembles (neurons forming an engram) requires modulation of gene expression and subsequent modifications of synaptic functions.¹¹⁶ Arc's involvement in the regulation of synaptic plasticity of

¹¹¹ Rosa Andreia Martins et al., "Plasticity in the Human Visual Cortex: An Ophthalmology-Based Perspective," *BioMed Research International* 568354 (2013): 1, 9.

¹¹² O'Daly, Augustine's, 82-83.

¹¹³ Richard Semon was the first to theorize that learning induces persistent changes in specific brain cells that retain information, and which are subsequently reactivated upon appropriate retrieval; he called this hypothetical material basis of learnt information, the memory engram. Asok, "Molecule," 15. Tonegawa, "Memory," 101.

¹¹⁴ Amy R. Dunn, Catherine C. Kaczorowski, "Regulation of Intrinsic Excitability: Roles for Learning and Memory, Aging and Alzheimer's Disease, and Genetic Diversity," *NLM* 164 (2019): 107069.

¹¹⁵ David F. Clayton et al., "The Role of the Genome in Experience-dependent Plasticity: Extending the Analogy of the Genomic Action Potential," *PNAS* (2019): 3.

¹¹⁶ Alexander V. Kedrov, Mikhail Durymanov, Konstantin V. Anokhin, "The Arc Gene: Retroviral Heritage in Cognitive Functions," *Neurosci. Biobehav. Rev.* 99 (2019): 275.

these neurons is so robust and reproducible that cellular imagining can detect neural networks that underlie information processing and memory.¹¹⁷

The role of vision in retina-brain interactions is significant given the importance Augustine gave to vision as the mind's eye of the soul.¹¹⁸ In this capacity, the eyes (vision, *visio*) provided temporal information that informed the soul and allowed it to know how to adapt in order to turn towards the Divine. When processing a visual scene, there are mechanisms for selecting relevant information that includes perceptual learning and long-term adaptation and filtering out of irrelevant information.¹¹⁹ This is the precise mechanism that the rational soul adapts when filtering relevant information through the "mind's eye." This mechanism is regulated by Arc; however, Arc expression is activated by visual stimulation but only occurs after opening of the eyes.¹²⁰ In fact, loss of Arc triggers an abnormal ocular dominance response thereby reducing visual acuity.¹²¹ Arc, therefore, is required to establish and modify synaptic connections in the visual cortex.¹²² McCurry et al. concluded that Arc is a critical component of the molecular machinery that leads to lasting modifications to changes in the quality of sensory experience.¹²³

6.4.4 Memory's Role in Teaching and Learning

*"All these ideas I hold in my memory, and the way I hold them in my memory is the way that I learnt them."*¹²⁴

Augustine recognized the interdependency between learning and teaching. Each had the necessity of acquiring new memories, coordinating these memories, and converting them into longer-term memories. With regard to learning, memory was

¹¹⁷ Day, "Arc," e1.

¹¹⁸ Sol. I.6.12.

¹¹⁹ D. Schneider, C. Beste, E. Wascher, "On the Time Course of Bottom-up and top-down Processes in Selective Vsual Attention: an EEG Study," *Psychophysiology* 11 (2012): 1492.

 ¹²⁰ C. McCurry et al., "Loss of Arc Renders the Visual Cortex Impervious to the Effects of Sensory Experience or Deprivation," *NN* 13 (2010): 450–457. Niels Plath et al., "Arc/Arg3.1 Is Essential for the Consolidation of Synaptic Plasticity and Memories," *Neuron* 52, no. 3 (2006): 441.
 ¹²¹ McCurry, "Loss," 450-457.

¹²² Visual cortex is the primary cortical region of the brain that receives, integrates, and processes visual information from the retinas.

¹²³ McCurry, "Loss," 456.

¹²⁴ Conf. X.13.20.

important. For example, a teacher was obligated to continually learn in order to teach and impart sound wisdom. According to Mau et al., "memories do not simply conserve veridical representations of the past but must continually integrate new information to ensure survival in dynamic environments."¹²⁵ While this statement is written in the context of episodic memory, it does apply to teaching. Augustine uses "memory" with regard to both the student and teacher; but does it have the same implication for both since it is the teacher who must manage the "dynamic environment of learning and teaching?" Yes, and no. For the student, memory is used in acquiring and storing new information. For the teacher, memory is used in two ways. First, the student, in the context of learning procures new information both to solidify current memory but also to acquire new memories that support and augment their knowledge. The second, is memory in the context of teaching, where the teacher imparts knowledge to the student in order that the student may learn. The updating of old memories must occur without corrupting original memories and must have the ability to add new memories to augment prior memories or create new ones. Augustine describes a very tight correlation between memory, learning, and teaching. The interdependency of molecular genomic processes which include Arc also demonstrate a tight synergistic relationship with regard to their role in memory, learning, and teaching.

The fundamental cellular and molecular mechanisms underlying memory in learning and teaching have been studied extensively.¹²⁶ Immediately after learning, newly formed memories are stabilized through the induction of synaptic plasticity¹²⁷ where Arc controls long-term changes in the strength of synapses.¹²⁸ Arc has an important role in the late phases of learning and memory.¹²⁹

Chen proposes that neuron excitability (NE) plays a vital role in memory formation regulating three fundamental phases of memory: allocation, consolidation,

¹²⁵ Mau, "The Brain," 1-24.

¹²⁶ Reviews offering good summaries: Mau, "The Brain." Blake A. Richards, Paul W. Frankland, "The Persistence and Transience of Memory," *Neuron* 94, no. 6 (2017): 1071-1084. Dunn, "Regulation," 107069. Yire Jeong et al., "Synaptic Plasticity Dependent Competition Rule Influences Memory Formation," *Nat. Com.* 12 (2021): 3915-3928.

¹²⁷ Lingxuan Chen et al., "The Role of Intrinsic Excitability in the Evolution of Memory: Significance in Memory Allocation, Consolidation, and Updating," *NLM* 173 (2020): 107266.

¹²⁸ Leung, "Arc," 8.

¹²⁹ Erica Korb, Steven Finkbeiner, "Arc in Synaptic Plasticity: From Gene to Behavior," *TM* 34, no. 11 (2011): 595.

and updating.¹³⁰ First, allocation of memory is to a specific ensemble of neurons. Second, learning induces an increase in the excitability of ensemble neurons and works synergistically with synaptic plasticity mechanisms to facilitate memory consolidation resulting in successful learning. Third, NE may also contribute to multiple dynamic memory updating processes.

Interestingly, the time course of excitability after learning can vary across distinct behavioural tasks, different brain regions, cell types, and the diverse experimental methods used to measure it.¹³¹ NE promotes both the stability and flexibility of memories, helping to shape, update, and organize memories accumulated across a lifetime.¹³² NE exerts lasting effects on memory from the initial formation to consolidation. Its transient nature makes NE an ideal cellular property governing the dynamic process of integration during memory updating. Arc, as we have seen, is intricately involved in the regulation of NE, and therefore, the formation, consolidation, and regulation of memory in teaching and learning.

6.4.4.1 Types of Learning

Learning involves different types of memory. One type is fast-learning.¹³³ According to Piette, fast learning mechanisms are best characterized by single-trial learning paradigms which lead to memory formation after a single and brief (few hundred milliseconds to few minutes) exposure to relevant stimuli.¹³⁴ Physical memory traces (engrams) are rapidly formed without requiring repetition of the learning experience.¹³⁵ A fast-learning task is sufficient to activate Arc and invoke long-term synaptic plasticity changes.¹³⁶ In mice, long-term structural and synaptic plasticity changes have been reported after a fast-learning experience such as fear conditioning.¹³⁷ Hippocampal neurons activated by a single fear conditioning protocol

¹³⁰ Chen, "The Role," 5, 12.

¹³¹ Ibid., 7.

¹³² Ibid., 9.

¹³³ H. A. Lechner, L. R. Squire, J. H. Byrne, "100 Years of Consolidation - Remembering Müller and Pilzecker," *Learn. Mem.* 6 (1999): 77-87.

¹³⁴ Charlotte Piette, Jonathan Touboul, Laurent Venance, "Engrams of Fast Learning," *Front. Cell. Neurosci.* 14 (2020): 1.

¹³⁵ Ibid., 2.

¹³⁶ Ibid.

¹³⁷ J. R. Clarke et al., "Plastic Modifications Induced by Object Recognition Memory Processing," *PNAS USA* 107 (2010): 2652-2657.

become more excitable during several days, thereby potentially facilitating subsequent learning.¹³⁸ Emotive episodes are fast-learning experiences. Augustine refers to emotions and memories in *Conf.* X.14.21-22. He can call to mind from memory the four emotions of "cupidity, gladness, fear, and sadness" even when he is not physically experiencing the emotion, e.g., fear and/or sadness that once was or even happiness.¹³⁹ Augustine questions whether this means that memory is independent of the mind.¹⁴⁰ However, he concludes, "when they are entrusted to the memory [*memoriae*], they are as if transferred to the stomach [*ventrum*] and can there be stored; but they cannot be tasted."¹⁴¹ Essentially, Augustine too believes that there can be long-term storage of memory traces related to emotionally charged unique experiences.

Learning also occurs via the integration of new memories into existing ones for the purpose of either updating old memories or creating new memories. This process of integrating new memories into existing ones is known as "Rule and Schema" learning and is critical for survival.¹⁴² The brain can utilize the established rule or schema when similar information is encountered to achieve more efficient learning. Chen describes rat experiments where a rule or schema is created through repeated training of an odour discrimination task during which water-deprived rats learned to distinguish between pairs of odours to obtain a water reward.¹⁴³ These findings indicate that prior learning of an associative schema may facilitate faster encoding and memory consolidation when learning new associations. The dynamic nature of memory makes it possible to integrate new information during memory updating while reducing the influence of outdated knowledge; this is crucial for memory-guided decision making, and up-to-date teaching.¹⁴⁴ In a dynamic environment, whatever is learned from a single memory may also need to be updated over time as the initial memory may not hold true for future experiences.¹⁴⁵ The brain has the ability to cross-reference and store information and memories while

¹³⁸ Piette, "Engrams," 2.

¹³⁹ *Conf.* X.14.21.

¹⁴⁰ Ibid. ¹⁴¹ Ibid.

¹⁴² Chen, "The Role," 7.

¹⁴³ Ibid., 10.

¹⁴⁴ Ibid.

¹⁴⁵ Mau, "The Brain," 1.

maintaining stability and fidelity.¹⁴⁶ Both the anatomical structure of the brain and the regulation of memories via Arc are central to these processes.

6.4.4.2 Innate Memory

Much like Augustine, who believed in innate memory and *a priori* knowledge, some modern-day scientists do argue for the existence of innate memory that leads to an *a priori* knowledge.¹⁴⁷ Mau asserts that spontaneous remodelling of the synaptic connectivity space uses *a priori* knowledge when permitting memory-updating.¹⁴⁸ Continual remodelling and synaptic plasticity modulation must occur for the memory neural network to adapt once dynamic conditions are imposed; this requires an *a priori* knowledge or memory. Mau writes regarding this:

This suggests that slow synaptic turnover may facilitate the ability to draw from *a priori* knowledge base (by storing connectivity patterns that are slow to decay) while still flexibly exploring related options through stochastic probing of new potential connectivity patterns, built atop existing ones. Such an implementation may underlie flexible behaviors that are based on memories for past outcomes.¹⁴⁹

Perhaps the most understood and studied example of innate memory in humans is found in the immune response system where there are extremely specific innate immune cells that play a critical role in immunity. Host immunity is divided into innate and adaptive immune responses where memory is a characteristic recognized within both arms of the immune system.¹⁵⁰ The innate memory cells react rapidly and non-specifically to pathogens, whereas the adaptive memory cells respond in a slower but specific manner, with the generation of long-lived immunological

¹⁴⁶ Richards, "The Persistence," 1071-1084.

¹⁴⁷ Some articles discussing innate memory, see Mau, "The Brain," 1-24. Rodrigo Perin, Thomas K.
Berger, Henry Markram, "A Synaptic Organizing Principle for Cortical Neuronal Groups," *PNAS* 108, no. 13 (2011): 5419-5424. Darold Treffert, "Genetic Memory: How We Know Things We Never Learned," *Scientific American*, Guest Blog, January 28, 2015. Mihai G. Netea et al., "Innate and Adaptive Immune Memory: An Evolutionary Continuum in the Host's Response to Pathogens," *Cell Host Microbe* 25 (2019): 13-26. A. S. Fokas, "Mathematics, Innate Knowledge and Neuroscience," Presentation 2012, Accessed 15 June, 2022, https://www.damtp.cam.ac.uk/user/tf227/Mathematics-%20Innate%20Knowledge%20and%20Neuroscience-%20COMPLETE.pdf

¹⁴⁸ Mau, "The Brain," 7.

¹⁴⁹ Ibid.

¹⁵⁰ Mona Sadeghalvad, Hamid-Reza Mohammadi-Motlagh, Nima Rezaei, "Structure and Function of the Immune System," *Encyclo. Infect. Immun.* 1 (2022): 24-38. Netea, "Innate," 13.

memory.¹⁵¹ During an infection, innate immunity is the first to be triggered (the inflammatory reaction), taking several minutes up to hours to be fully activated; innate immunity is crucial for the host's defence in the first phase of infection.¹⁵² Adaptive immunity comes into play after this initial first phase. What is interesting is that innate memory immune responses can adapt allowing for sustained defence.¹⁵³ Innate immune memory is thought to exist in new-borns and is not a property that is learnt as one grows; it is a built-in memory that resides in the genome.¹⁵⁴

Researchers at Blue Brain Project¹⁵⁵ discovered that a neuron network of about fifty neurons formed the "building blocks" or ensembles of more complex knowledge but they contained basic innate knowledge.¹⁵⁶ This is much like the innate immune memory cells developing adaptive responses. BBP's scientists ran tests on the neuronal circuits of several rats and ascertained that if the neuronal circuits had only been formed based on an individual rat's experience, the tests would bring about very different characteristics for each rat.¹⁵⁷ However, the rats all displayed similar characteristics which suggests that their neuronal circuits must have been established prior to their experiences – it must be inborn. This BBP research supports an innate genetic structure ("building blocks") of some of the fundamental representations of basic knowledge.¹⁵⁸ This knowledge is therefore inscribed in our genes and are present at birth.

It is possible to acquire knowledge via innate knowledge that is genetically inherited. For example, when a horse is born, it can immediately walk. The foal did not learn this behaviour; it simply knew how to do it.¹⁵⁹ Another example of a built-in innate knowledge is discussed by Treffert with regard to innate or genetic memory in

¹⁵¹ Netea, "Innate," 13.

¹⁵² Ibid.

¹⁵³ M. K. Netea, J. Quintin, J. W. van der Meer, "Trained Immunity: A Memory for Innate Host Defense," *Cell Host Microbe* 9 (2011): 355-361. Netea, "Innate," 14.

¹⁵⁴ A. K. Simon, G. A. Hollander, A. McMichael, "Evolution of the Immune System in Humans from Infancy to Old Age," *Proc. R. Soc.* B 282 (2015): 20143085.

¹⁵⁵ The Blue Brain Project (BBP) is a Swiss brain research initiative that aims to create a digital reconstruction of the mouse brain. The project was founded in May 2005 by the Brain and Mind Institute of *École Polytechnique Fédérale de Lausanne* (EPFL) in Switzerland. Its mission is to use biologically detailed digital reconstructions and simulations of the mammalian brain to identify the fundamental principles of brain structure and function.

¹⁵⁶ Lionel Pousaz, "New Evidence for Innate Knowledge," EPFL. (2011).

¹⁵⁷ Ibid., 1.

¹⁵⁸ Ibid.

¹⁵⁹ Jen Davis, "Learned Behaviors of Horses," accessed February 2, 2023, https://animals.mom.com/learned-behaviors-horses-4599.html.

savants.¹⁶⁰ He argues that savants have what he calls "factory-installed software" and that they are convincing examples of "genetic inheritance of actual instruction and knowledge that precedes learning."¹⁶¹ He, agrees with Carpenter, ¹⁶² who believes that savants have a congenital aptitude for certain mental activity "which showed itself at so early a period as to exclude the notion that it could have been acquired by the experience of the individual."¹⁶³ Savants are an exceptional example of innate knowledge but at least, comparatively speaking, a basic innate knowledge or memory still exists in all persons. Augustine presents many examples, but one is the learning of liberal arts where, as in the case of music, there is an innate knowledge of music that comes forth from a musician when they compose.¹⁶⁴ There is also a learnt or acquired knowledge in music where the musician learns from another musician.¹⁶⁵ Another Augustinian example would be actual numbers that are kept in memory and not their image, and which are present before the person knows how to speak that number.¹⁶⁶ For Augustine, mathematics played an entrenched role in deciphering memory and in the search for truth. Fokas in a 2012 presentation on *Mathematics*, Innate Knowledge, and Neuroscience, argues that mathematics has a crucial role in the search for truth.¹⁶⁷ Additionally, Arc is thought to have an innate memory as it too carries a priori directives regarding its expression, operation, and role in memory.

6.4.4.3 Consolidation of Memory

Memory consolidation,¹⁶⁸ the process by which memory traces of encoded information (e.g. images) are strengthened, stabilized, and stored, operates within an architectonic structure. Consolidation is the next step in the formation of a memory; it works most effectively when the images that are stored can be linked to an existing

¹⁶⁰ Treffert, "Genetic," 1.

¹⁶¹ Ibid., 4.

¹⁶² William Carpenter, a 19th century British physician and neurologist, is one of the founders of the modern theory of the adaptive unconsciousness. He believed in the existence of an innate knowledge. William Carpenter, accessed February 2, 2023,

https://en.wikipedia.org/wiki/William_Benjamin_Carpenter

¹⁶³ Trefferts, "Genetic," 4.

¹⁶⁴ Mus. I.5.10.

¹⁶⁵ Ibid.

¹⁶⁶ Conf. X.15.23.

¹⁶⁷ Fokas, "Mathematics," n. 148.

¹⁶⁸ Müller and Pilzecker were the first to adopt the term 'consolidation' to describe post-experience processes of memory stabilization. Müller, "Experimentelle," 1-300.

neuronal network. New memories are consolidated after learning and memory allocation; the newly acquired memories are then transformed into LTM.¹⁶⁹ Both LTM and STM formation is facilitated by Arc which stabilizes synaptic plasticity.¹⁷⁰ LTM (persistent memory), has the capacity to reactivate or reconstruct the original, or a similar representation, by the process of retrieval of the original memory.¹⁷¹ Holtmaat and Caroni believe that LTM consolidation involves both the formation of new synapses and the elimination of pre-existing synapses."¹⁷² Synaptic consolidation is assumed to last minutes to hours after encoding within the local circuit and synapses.¹⁷³ Systems consolidation, on the other hand, is considered to take days to months or even longer and involves the reorganisation and distribution of the memory representations across different brain regions.¹⁷⁴ These two levels of consolidation (synaptic and systems) are closely related.¹⁷⁵ Leung et al. write that Arc plays a critical role in memory consolidation which is demonstrated by the fact that knockdown¹⁷⁶ of Arc expression interferes with stabilization of memory.¹⁷⁷ The data presented by Leung shows that Arc regulates the expression of a large number of synaptic proteins with functions in both the pre- and post-synaptic compartment.¹⁷⁸ They present a new mechanism by which Arc can control long-lasting changes in synaptic structure and function required for memory consolidation.¹⁷⁹

¹⁶⁹ Dudai, "Molecular," 211.

¹⁷⁰ Korb, "Arc," 1.

¹⁷¹ Ibid.

¹⁷² A. Holtmaat, P. Caroni, "Functional and Structural Underpinnings of Neuronal Assembly Formation in Learning," *NN* 19 (2016): 1553-1562.

¹⁷³ Asok describes three types of consolidation. Storage consolidation which is the conversion of STM into LTM within a defined neuronal ensemble in the timeframe of hours. Synaptic consolidation is the molecular mechanism associated with increase synaptic activity linked to an LTM. Systems consolidation is the maturation of LTM to recruit more heavily cortical/neocortical brain regions. Asok,

[&]quot;Molecular," 15. Y. Dudai, "The Neurobiology of Consolidations, or, How Stable is the Engram?" *ARP* 55 (2004): 51-86. Chen, "The Role," 4.

¹⁷⁴ Dudai, "The Neurobiology," 52.

¹⁷⁵ Neurobiologists distinguish between two types of memory consolidation – fast and slow - and their different kinetic properties reflect qualitatively distinct underlying processes. Y. Dudai, "The Restless Engram: Consolidations Never End," *ARN* 35 (2012): 227-247.

¹⁷⁶ "Knockdown" is the inhibition of gene expression using molecular techniques.

¹⁷⁷ Leung, "Arc," 6.

¹⁷⁸ Ibid., 8.

¹⁷⁹ Ibid.

6.4.4.3.1 Cellular Consolidation

The phrase "cellular consolidation" refers to the initial stabilization of a memory trace in the hours following learning at the molecular level. Cellular consolidation is essential for memory retention; it is the cascade of molecular processes that occur immediately after learning and that stabilize the cellular and synaptic changes produced by learning.¹⁸⁰ It is dependent on *de novo* protein synthesis, which ultimately leads to long-term structural and functional neuronal changes and the stabilization of a memory trace.¹⁸¹ Arc expression constitutes the cell's earliest genomic response to stimulation, and the Arc protein can either directly modify the structure and function of a cell to stabilize a memory or activate late-response genes to facilitate cellular consolidation.¹⁸²

6.4.4.3.2 Memory Traces

The allocation of particular neurons to a memory trace is controlled by molecular mechanisms and structural changes within the neuronal network. This is important to understand as it demonstrates how information is preserved during consolidation. Research has uncovered fundamental rules about neuronal allocation within a LTM trace; ¹⁸³ yet, according to Asok, the molecular mechanisms which drive this neuronal allocation remain elusive.¹⁸⁴ However, some progress has been made. Similar, but nonidentical, aversive memories (i.e., fear conditioning using different tones or contexts) that are acquired closely in time, recruit an overlapping ensemble of neurons in the amygdala and CA1 neurons.¹⁸⁵ Furthermore, these

¹⁸⁰ A. P. Yonelinas et al., "A Contextual Binding Theory of Episodic Memory: Systems Consolidation Reconsidered," *NRN* 20 (2019): 364. Jeong, "Synaptic," 8.

¹⁸¹ Ibid.

¹⁸² Daniel N. Barry, Sean Commins, "Temporal Dynamics of Immediate Early Gene Expression During Cellular Consolidation of Spatial Memory," *Behavioural Brain Research* 327 (2017): 44.

¹⁸³ K. Abdou et al., "Synapse-specific Representation of the Identity of Overlapping Memory Engrams," *Science* 360 (2018): 1227-1231.

¹⁸⁴ Asok, "Molecular," 19.

¹⁸⁵ Asok, "Molecular," 20-21. CA1-3 neurons form a neural circuit operational in memory and located in the hippocampus.

likelihood of overlap diminishes when the acquisition of similar LTMs has greater temporal separation.

Once a memory trace has been consolidated, the memory trace can be stored for later retrieval indefinitely. The storage consolidation of these memory traces requires *de novo* Arc protein synthesis which is tightly regulated by the Arc gene.¹⁸⁶ Arc also enables consolidation of weak memories and plays a role in behavioural tagging in the hippocampus. A role of Arc in cognitive flexibility was suggested based on results showing a strong positive correlation between Arc mRNA levels in the rat hippocampus and behavioural performance during spatial reversal tasks.¹⁸⁷ Altogether, these results suggest a feedback-like relationship; Arc expression may be regulated by large networks linked with learning and memory on the one hand, but on the other, Arc expression may form new and/or modify existing networks.¹⁸⁸

6.4.4.3.3 Degradation of Memory

Memories need to survive the degradation that time brings and continue to exist. The theory that explains the dynamic interaction of preservation and degradation is known as the "persistence of memory."¹⁸⁹ A fluidity must exist between old and new memories; they should not collide and become distorted. It is the dynamic memory ensembles that encapsulate how memories can be both persistent and fluid. Reversal learning, reconsolidation, schema learning, and systems consolidation all describe how previously learnt behaviours can be modified to accommodate new learning.¹⁹⁰ The hippocampus is often thought of as the flexible learner that trains neocortical networks to store memories long term, however, neocortical networks still undergo continual modifications as a person learns over a lifetime.¹⁹¹ The brain has the capacity to store memory long term with persistence of that memory over time. However, it is not the active state of the LTM that persists,

¹⁸⁶ Ee-Lynn Yap, Michael E. Greenberg, "Activity-Regulated Transcription: Bridging the Gap between Neural Activity and Behavior," *Neuron* 100, no. 2 (2018): 330-348.

¹⁸⁷ J. F. Guzowski et al., "Experience-dependent Gene Expression in the Rat Hippocampus after Spatial Learning: a Comparison of the Immediate-early Genes Arc, c-fos, and zif268," *Neuroscience* 21, no.14 (2001): 5089-5098.

¹⁸⁸ Fila, "mRNA," 4.

¹⁸⁹ Mau, "The Brain," 2.

¹⁹⁰ Ibid.

¹⁹¹ Ibid.

rather, what persists is the capacity to reactivate or reconstruct the original or a similar representation by the process of retrieval.¹⁹² This again, is reminiscent of Augustine's teacher who needs to learn and retain the memory of the learnt material over time and then reactivate it as he teaches, or when one "reactivates" the words of a song when it is sung. LTMs are thought to be supported by a 'backbone' of stable neurons that store gross features of memory while some other neurons constantly undergo plasticity to encode more detailed representations. Thus a significant portion of the neural network is dynamic,¹⁹³ supported by an architectonic structure that allows for a fluidity between the formation and degradation of memories.

6.4.4.4 Retrieval of Memory

The last step in forming memories is retrieval,¹⁹⁴ which is the conscious recollection of information that was encoded and stored. Retrieving information from memory depends upon contextual information or cues and how effectively the information was encoded and stored into memory.¹⁹⁵ Thus, if the information was not properly encoded because of a distraction, a person may be less likely to retrieve details of the event or information. Consolidated memories may thus, become generalized or lacking in detail, including the extent to which they elicit visceral or physiological reactions.¹⁹⁶ Emotional, semantic knowledge, olfactory, auditory, and visual factors can act as cues for contextual information to help in the retrieval of episodic memory. For example, when recalling where you parked your car, you may use the colour of a sign you parked near as a reminder.¹⁹⁷ Research also states that episodic retrieval can be associated with a sense of re-experiencing (i.e., "re-collection") the event; to remember where you parked or did not park your car, you

¹⁹² Dudai, "Molecular," 211.

¹⁹³ Mau, "The Brain," 4.

¹⁹⁴ There is a distinction between retrieval and recall or recollection/remembrance of memory. Memory retrieval requires revisiting the nerve pathways formed during the encoding and storage of the memory. Memory recollection is not just pulling things from the storage of memories, rather it is a process of creativity in which the relevant information is gathered from the scattered, puzzle-like information in the brain. "Memory Recall and Retrieval System," *The Human Memory*, accessed March 18, 2023, https://human-memory.net/memory-recall-retrieval/.

¹⁹⁵ B. Straube, "An Overview of the Neuro-cognitive Processes Involved in the Encoding, Consolidation, and Retrieval of True and False Memories," *Behav. Brain Funct.* 8, no. 35 (2012): 5.
¹⁹⁶ Yonelinas, "A Contextual," 364-375.

¹⁹⁷ "Memory," UCSF, Weill Institute for Neuroscience, accessed June 16, 2022, https://memory.ucsf.edu/symptoms/memory

must mentally travel back to the moment or time you parked.¹⁹⁸ During this recollection and retrieval process, Arc protein is observed to be highly dynamic, increasing and rapidly decreasing following neuronal network activity in the recollection and retrieval of memories.¹⁹⁹

The recollection of experiences is contingent on three steps of memory processing: encoding, consolidation/storage and retrieval.²⁰⁰ When retrieving a memory, a person can revisit the state that memory was in. This was demonstrated by Polyn et al. who used multi-voxel pattern analysis (MVPA)²⁰¹ to analyse human memory activity patterns during learning and recollection.²⁰² They provided direct evidence that when people retrieve a specific memory, their brain revisits the state it was in when it encoded that information. More recently Chen and her colleagues found that brain activity across fifty scenes of the opening episode of a Sherlock movie could be clearly distinguished from one another.²⁰³ These patterns were remarkably specific, at times telling apart scenes that did or did not include Sherlock, and those that occurred indoors or outdoors. Near the hippocampus and several highlevel processing centres such as the posterior medial cortex, the researchers saw the same scene-viewing patterns unfold as each person later recounted the episode – even if people described the specific scenes differently. They even observed similar brain activity in people who had never seen the show but had heard others' accounts of it.²⁰⁴ Augustine discussed this aspect of memory, "the ocean (which I believed on the reports of others) I could see inwardly with dimensions just as great as if I were actually looking at them outside of my mind" (Conf. X.8.15). To quote Chen, "it was a surprise that we see that same fingerprint when different people are remembering the same scene, describing it in their own words, remembering it in whatever way they want to remember."²⁰⁵ These results suggest that brains – even in higher-order

¹⁹⁸ Ibid.

¹⁹⁹ Ramirez-Amaya, "Spatial," 1761-1768.

²⁰⁰ Straube, "An Overview," 1-10.

²⁰¹ MVPA is an analytical technique that identifies neural patterns involved in task conditions including spatial patterns of activity.

²⁰² Sean M. Polyn et al., "Category-Specific Cortical Activity Precedes Retrieval During Memory Search," *Science* 310 (2005): 1963-1966.

²⁰³ Janice Chen et al., "Shared Memories Reveal Shared Structure in Neural Activity Across Individuals," *NN* 20, no. 1 (2017): 115-125.

²⁰⁴ Chen, "Shared," 115-125. A. Zadbood et al., "How We Transmit Memories to Other Brains:
Constructing Shared Neural Representations Via Communication," *Cereb. Cortex* 27, no. 10 (2017): 4988-5000.

²⁰⁵ Chen, "Shared," 148.

regions that process memory, concepts, and complex cognition – may be organized more similarly across people than expected.

Memories can become destabilized or fractured during the retrieval process leaving them vulnerable to interference upon reactivation. In order to stabilize the retrieved memory it must be reconsolidated, a process which induces Arc expression.²⁰⁶ Reconsolidating memory is a complex process occurring within distributed networks of neurons throughout the brain. According to Chen memories can be linked not only during initial memory encoding but also during retrieval.²⁰⁷ Chen states that memory integration during retrieval is a further demonstration of the dynamic nature of memory, and retrieval-induced intrinsic excitability increases may play an important role in mediating this process.²⁰⁸ Augustine discusses this process of associative memories and temporal linking of memories in *Conf.* X.11.18. He writes:

By thinking we, as it were, gather together ideas which the memory contains in a dispersed and disordered way, and by concentrating our attention we arrange them in order as if ready to hand, stored in the very memory where they lay hidden, scattered, and neglected.

6.4.5 Recollection/Remembering and Forgetfulness in Memory

"Memories are islands in an ocean of forgetting." 209

Augustine knew from his deliberations on memory that there was a very strong link between recollection or remembrance and forgetting; one could not exist without the other. He found this paradoxical, and I suspect, even frustrating since despite his extensive interrogations of memory, he was unable to find all the answers

²⁰⁶ Jonathan L. C. Lee, Karim Nader, Daniela Schiller, "An Update on Memory Reconsolidation Updating," *Trends Cogn. Sci.* 21, no. 7 (2017): 531. D. Nakyam et al., "Long-delayed Expression of the Immediate Early Gene Arc/Arg3.1 Refines Neuronal Circuits to Perpetuate Fear Memory," *Neurosci.* 35 (2015): 819-830.

²⁰⁷ Chen, "The Role," 6.

²⁰⁸ Ibid.

²⁰⁹ Jorge Luis Borges from *Funes el Memorioso* which first appeared in the Argentinian daily newspaper *La Nación* in June 1942. The story is about a man who after a riding accident could remember everything.

regarding this inter-relatedness between the two. This is clear in *Conf.* X.16.25. when he writes, "Yet in some way, though incomprehensible and inexplicable, I am certain that I can remember forgetfulness itself, and yet forgetfulness destroys what we remember." Augustine continuing with the phenomenon of forgetfulness (*Conf.* X.18.27-19.28) writes about the seriousness of the loss of memory just before his discussion on the *beata vita*. The recollection of experiences is contingent on three steps of memory processing: encoding (formation), consolidation/storage, and retrieval. Any malfunction or alterations of Arc expression in any of these three steps could result in forgetfulness.²¹⁰

Needless to say, recollection (*re*-collection, *re*-call) or remembering a memory and forgetfulness are of tantamount importance to Augustine's theology of *memoria*.

6.4.5.1 Recollection and Remembering

Augustine asserts that all the images held in his memory can be recovered through recollection (*Conf.* X.9.16). According to O'Daly, the "mind's vision is formed by the memory-image and can recall previously perceived objects;" he comments that recollecting is primarily concerned with actualizing memory-traces.²¹¹ He bases this on Augustine's remarks in *Mag.* 39 that it is not the objects of past-perceptions themselves but rather the images derived from them, that we speak of when we talk about past perceptions.

Most neuroscientists now believe that recollection occurs when the neurons involved in memory fire again and replay the activity patterns associated with past images and experience.²¹² This clearly aligns with Augustine's concept, as O'Daly puts it, of actualizing memory-traces. The molecular dynamics behind this Augustinian active will of recollection includes the involvement of Arc in actualizing memory recollection. The Arc gene initiates and regulates the synthesis of *de novo* Arc protein whenever active recollection occurs and neurons 'fire again.' This is true every time a familiarization memory is reactivated, no matter how consolidated it

²¹⁰ Straube, "An Overview," 1-10.

²¹¹ O'Daly, Augustine's," 133. Trin. XI.3.6.

²¹² Shen, "Portrait," 147.

is.²¹³ According to Morin the original memory becomes labile requiring a restabilization process i.e., reconsolidation managed by *de novo* Arc protein synthesis.

The process of memory retrieval alters the composition of neuronal subpopulations that activate Arc transcription in the amygdala located in the middle ventricle where Augustine understood memory to be operationally active.²¹⁴ This activity in the amygdala is also necessary for the stabilization of emotional memory, e.g., reactivated fear memory.²¹⁵ Yamasaki et al. state that subpopulations in the lateral amygdala appear to be involved in individual fear memory throughout the processes of its acquisition, consolidation, retrieval, and reconsolidation.²¹⁶ Further, Arc, as a master regulator of synaptic plasticity, is essential for consolidation of synaptic plasticity and spatial memory, object recognition memory, contextual and auditory fear memory, and taste aversion memory. It is Arc transcription that is involved in the reactivation of retrieval-relevant neural activity, and therefore, both the recollection and retrieval of memory.²¹⁷ Of note, post-retrieval inhibition of neural activity and Arc protein synthesis causes impaired retention of reactivated fear memory.²¹⁸

6.4.5.2 Forgetting

The brain, each and every day, recognizes many details and information as unnecessary and inconsequential and thus does not retain them in memory – in one sense, this could be considered an immediate forgetting. Forgetting can be a spontaneous or gradual process in which old memories are unable to be recalled from memory storage.²¹⁹ It can be a temporary or permanent inability to retrieve a previously acquired memory.²²⁰ Gravitz quotes Oliver Hardt regarding the importance of forgetting; forgetting is not a "glitch" of memory, rather to have proper memory

 ²¹³ Jean-Pascal Morin, Kioko Guzman-Ramos, Federico Bermudez-Rattoni, "New Insights on Retrieval-Induced and Ongoing Memory Consolidation: Lessons from Arc," *NP* vol. 2015 (2015): 8.
 ²¹⁴ Gn. Litt. VII.18.24. Yoshiko Yamasaki, "Off-line Arc Transcription in Active Ensembles During Fear Memory Retrieval," *Eur. Neurosci.* 36, no. 10 (2012): 3454-3455.

²¹⁵ Yamasaki, "Off-line," 3451.

²¹⁶ Ibid., 3456.

²¹⁷ Ibid., 3455.

²¹⁸ Ibid.

²¹⁹ "Forgetting," Wikipedia, accessed June 22, 2022, https://en.wikipedia.org/wiki/Forgetting.

²²⁰ Shen, "Portrait," 147.

function you have to have forgetting.²²¹ Augustine saw this connection between the functions of forgetting and remembering; he writes that both memory and forgetfulness are present in the mind, and "unless we could recall forgetfulness, we could never hear the word and recognize the thing the word signifies. Therefore, memory retained forgetfulness" (*Conf.* X.16.24).

Forgetfulness also involves the actions of remembrance and recollection; Augustine sees this as an active process and necessary in the functioning of memory. Gravtiz makes the point that to understand how we remember, we must also understand how, and why, we forget.²²² This was precisely the point that perplexed Augustine as he explored the paradox of remembering forgetfulness.²²³ Augustine realized that forgetfulness played a role in memory function, but he was perplexed as to how memory recognized forgetfulness even though it might not have remembered what was forgotten.²²⁴

What has become evident from the many studies in this area is that forgetting, or dis-remembering is an active process, as Augustine deduced, and it works in collaboration with consolidation, remembrance/recollection, and retrieval of memory.²²⁵ Forgetting seeks to eliminate memories from the brain via apparent loss or modification of information already encoded and stored in STM and LTM.²²⁶ Forgetfulness is an adaptive process that endows a person with knowledge about the world while continuously updating that knowledge. Forgetting is, therefore, a critical process for selecting and maintaining those memories that will drive advantageous behaviour.²²⁷ Forgetting is also critical for memory generalization – the process that allows memories of specific situations to be used to make predictions about similar, but non-identical situations.²²⁸ In this process, forgetting causes the loss of memory details and allows the memory to be retrieved using broad similarities rather than details present during acquisition. Augustine posited that a memory could be retrieved through the prompting of others, e.g. the recollection of a name could perhaps be

Acquisition, Consolidation, and Forgetting," Neuron 109 (2021): 3218.

²²¹ Lauren Gravitz, "The Importance of Forgetting," *Nature* 571 (2019): S12.

²²² Ibid., S14.

²²³ Conf. X.16.25.

²²⁴ Conf. X.16.24-25.

²²⁵ Gravitz, "The Importance," S12-S14. Shen, "Portrait," 147-148.

²²⁶ Ibid.

²²⁷ Nathaniel C. Noyes, Anna Phan, Ronald L. Davis, "Memory Suppressor Genes: Modulating

²²⁸ Ibid.

recalled via promptings that were unlike the original memory.²²⁹ There is, however, memory that can be totally forgotten and not just temporary or partial forgetfulness; it is "wholly effaced from the mind" as Augustine said in *Conf.* X.19.28.

Shen writes that there have been several proposed pathways responsible for the inability to recall memories.²³⁰ These include natural time-dependent decay of memory traces, change of context between acquisition and retrieval, and interference. Khan, in their studies, observed that there is a critical balance between excitation and inhibition of neuronal function.²³¹ This is a delicate balance as any alterations of Arc's regulation or expression can cause deficits in memory resulting in neurological disorders and severe memory loss as in Alzheimer's disease.²³² Partial forgetting must be differentiated from amnesia; both have memory loss but while forgetting is a natural process, amnesia is a pathological one.²³³

Augustine in *Conf.* X.15.23-X.19.28 discusses forgetting that is partial loss or recoverable memory loss where a memory may return upon prompting.²³⁴ Here too, Augustine is puzzled as he tries to understand the nature of what is being recalled since forgetting (*oblivio*)²³⁵ is the absence of memory (*privatio memoriae*); how can it be present to memory?²³⁶ Augustine's explication was that the memory of an object may be lost to sight, yet the memory itself was still held in memory.²³⁷ He had to accept that recognizing by means of forgetting is as good as remembering it.²³⁸ According to O'Daly, Augustine attempts to solve the problem of remembering what we have forgotten. He writes:

²²⁹ Conf. X.19.28.

²³⁰ Shen, "Portrait," 147.

²³¹ Amber Khan, "The Master Synaptic Regulator: Activity Regulated Cytoskeleton Associated Protein, Arc, in Normal Aging and Diseases with Cognitive Impairment" (PhD diss., The City university of New York, 2019).

²³² Leung, "Arc," 1. Palop, "Vulnerability," 9686-9693.

²³³ Medina, "Neural," 1.

²³⁴ This brings to mind an interesting perspective on forgetting and remembering posited by Locke. He states that forgetting can be temporary and remembered years later. However, the man who forgets the performance of an action for twenty years is not the same person as the one whose action it was. Only when he remembers does the action become his again. Locke regards this kind of forgetting as happening in the real world. John Locke, *An Essay Concerning Human Understanding*, ed. Roger Woolhouse (London: Penguin Books, 1997), II.xxvii.23. Also see Matthew Stuart, *Locke's Metaphysics* (Oxford: OUP, 2013), 363.

²³⁵ O'Daly, "Augustine's," 147. I agree with O'Daly's translation of *oblivio* – he translates *oblivio* as 'forgetting' rather than 'forgetfulness,' since Augustine's argument deals with instances of loss of memory rather than a stable mental condition or tendency, such as is implied by 'forgetfulness.' ²³⁶ Ibid., 146-147.

²³⁷ Conf. X.18.27.

²³⁸ Conf. X.16.24. O'Daly, "Augustine's," 146.

But there can be no doubt that in positing an instance of forgetting that is less than total, and so implies the latent presence of what is forgotten to the mind, Augustine attempts to solve the problem posed by this tenet that, if we recognize the meaning of the term 'forgetting', we remember forgetting.²³⁹

6.4.5.2.1 Fading of Memory Over Time

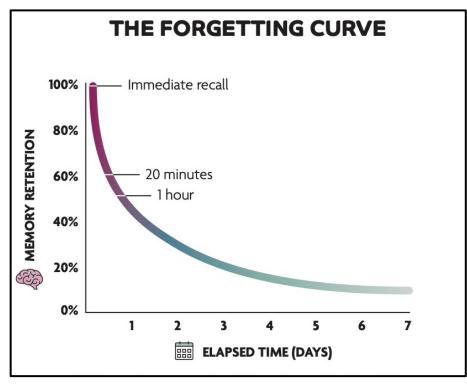
Forgetting is a temporal process during which there is a time-dependent decline of a memory; this is illustrated by Ebbinghaus's forgetting curve. **Figure 6.7** shows the Ebbinghaus forgetting curve illustrating the loss of information over time when there is no attempt to retain it.²⁴⁰ **Figure 6.8** shows how repetition improves memory retention over time. However, it is not clear whether forgetting reverses the learning process to return the brain to the naive state.²⁴¹

²³⁹ O'Daly, "Augustine's" 148.

²⁴⁰ Herman Ebbinghaus, Über das Gedächtnis, trans. Henry A. Ruger, Clara E. Bussenius, Memory, a Contribution to Experimental Psychology (1885: repr., Dover, New York, 1964).

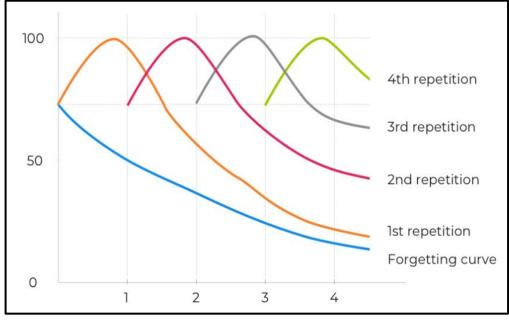
²⁴¹ Liu, using the aversive olfactory learning of pathogenic bacteria in *C. elegans*, was able to demonstrate that forgetting generates a novel state of the nervous system that is distinct from the naive state or the learned state. He confirmed that forgetting is critical for the normal functions of the brain, which has a finite capacity. He Liu et. al., "Forgetting Generates a Novel State that is Reactivatable," *Sci. Adv.* 8, eabi9071 (2022): 1.

Figure 6.7: A representation of the Ebbinghaus forgetting curve showing retained information halving after each day.



 $Taken \ from \ Organising \ Students, ``The \ Forgetting \ Curve, ``https://organising students.com.au/2021/07/the-forgetting-curve/index and the state \ Students.com.au/2021/07/the-forgetting-curve/index and \ Students.$

Figure 6.8: The Ebbinghaus forgetting curve and the improvement in retention with repetition.



Taken from Kasper Spiro, "How to Beat the Forgetting Curve," (2022).

https://www.easygenerator.com/en/blog/e-learning/use-variety-to-beat-forgetting-curve/

Behavioural studies on human subjects and animal models suggest several factors contribute to forgetting.²⁴² These include natural decay where neuronal correlates of memory dissipate over time, and interference whereby previously formed memories are displaced by information acquired after learning. Psychophysics studies also suggest that forgetting could result from failed retrieval of the memories; they suggest the possibility that forgetting does not erase the memory but renders it less accessible as Augustine suspected.²⁴³

6.4.5.2.2 Disorders of Memory Forgetting

Interference of Arc regulation could occur at the formation, consolidation, or even at the moment of retrieving a memory resulting in memory disorders.²⁴⁴ Wixted suggests that the amnesic effect of a new learning on previously encoded material could be related to limitations in the brain structure, the number of synaptic connections, and/or the amount of plasticity-related proteins including Arc protein.²⁴⁵ Additionally, Martinez discusses how limited Arc protein synthesis impacts memory interference.²⁴⁶ Further, Arc availability in memory competition can deeply influence the stabilization of the engrams; any deficits would also impact memory forgetfulness.²⁴⁷ Genetic alterations, mutations, and variants can also alter Arc expression and effect Arc protein synthesis and are implicated in different diseases such as Schizophrenia, Autism, Intellectual Disabilities, and Alzheimer's Disease (AD).²⁴⁸ Moreover Arc dysregulation contributes to various mental disorders such as

²⁴² Liu, "Forgetting," 1.

²⁴³ Ibid.

²⁴⁴ Leung, "Arc," 1. J. J. Palop et al., "Vulnerability of Dentate Granule Cells to Disruption of Arc Expression in Human Amyloid Precursor Protein Transgenic Mice," *Neurosci.* 25 (2005): 9686-9693. J. T. Wixted, "The Psychology and Neuroscience of Forgetting," *ARP* 55 (2004): 235-269.
²⁴⁵ Wixted, "The Psychology," 235-269.

²⁴⁶ M. C. Martinez et al., "Memory Traces Compete Under Regimes of Limited Arc Protein Synthesis: Implications for Memory Interference," *NLM* 98 (2012): 166.

²⁴⁷Ibid., 165.

²⁴⁸ N. Plath et al., "Arc/Arg3.1 is Essential to the Consolidation of Synaptic Plasticity and Memories," *Neuron* 52 (2006): 437-444. Leung, "Arc," 1. Y. A. Chuang et al., "Rare Mutations and Hypermethylation of the ARC Gene Associated with Schizophrenia," *Schizophr Res.* 176, no. 2-3 (2016): 105-106. Zhang, "Structural," 490.

Fragile X syndrome (elevated Arc protein levels) and Angelman's syndrome.²⁴⁹ It is also known that traumatic neuronal injury causes an increase in Arc expression.²⁵⁰

Interestingly, Augustine had described how errors or malfunctions of memory resulted in the concept of "forgetfulness of memory" or permanent loss of memory.²⁵¹ AD involves a permanent loss of memory and would thus, be a condition that conforms to Augustine's definition. AD is a devastating neurodegenerative disorder characterized by the progressive loss of synaptic function and long-term memory formation. A landmark study published in 2011 showed that Arc is involved in permanent memory loss and the formation of amyloid (A β) plaques.²⁵² Arc dependent mechanisms control activity dependent generation of A^β plaques that characterise brain pathology and are relevant in the pathogenesis of AD.²⁵³ Arc controls the expression of susceptibility genes for AD, as well as that of many other genes associated with the pathophysiology of AD.²⁵⁴ Leung et al. demonstrated that the prevention of Arc induction altered the expression profile for over 1900 genes including genes associated with synaptic function, neuronal plasticity, intrinsic excitability, and signalling pathways. Interestingly, about 100 Arc-dependent genes are associated specifically with the pathophysiology of AD. Of note, there is a specific polymorphism in the Arc gene that is involved in AD susceptibility which actually reduces the risk for developing AD.²⁵⁵ There is a precision regulation required of Arc in memory processes and a fine balance that exists between normal and aberrant expression.

²⁵¹ "totally effaced from the mind." Conf. X.19.28.

²⁴⁹ Chuang, "Rare," 106. S. Park et al., "Elongation Factor 2 and Fragile X Mental Retardation Protein Control the Dynamic Translation of Arc/Arg3.1 Essential for mGluR-LTD," *Neuron* 59 (2008): 70-83. Wenchi Zhang et al., "Structural Basis of Arc Binding to Synaptic Proteins: Implications for Cognitive disease," *Neuron* 86 (2015): 490.

²⁵⁰ Tao Chen et al., "Arc Silence Aggravates Traumatic Neuronal Injury via mGluR1-mediated ER Stress and Necroptosis," *Cell Death Dis.* 11, no. 4 (2020): 7.

²⁵² J. Wu et al., "Arc/Arg3.1 Regulates an Endosomal Pathway Essential for Activity-dependent Betaamyloid Generation," *Cell* 147, no. 3 (2011): 615-628.

²⁵³ Wu, "Arc/Arg3.1," 617. T. Hashimoto et al., "Collagenous Alzheimer Amyloid Plaque Component Impacts on the Compaction of Amyloid-β plaques," *Acta Neuropathol. Comm.* 8, no. 212 (2020): 1. ²⁵⁴ Leung, "Arc," 1.

²⁵⁵ S. Landgren et al., "A Novel Arc Gene Polymorphism is Associated Reduced Risk of Alzheimer's Disease," *Neu. Trans.* 119, no. 7 (2012): 838.

6.4.5.2.3 Forgetting and the Future

The temporal dimension of memory is such that it involves the future, but so does the forgetting of memories. The rigors of forgetting and remembering becomes the ongoing and active work of Christian existence, something that Augustine was acutely aware of.²⁵⁶ According to Grove, forgetting is just like remembering, it is a bidirectional activity.²⁵⁷ Forgetting the past is a forgetting into Christ; this results in a deeper union with Christ.²⁵⁸ It is forgetting that enables forward movement in life and in pilgrimage with Christ.²⁵⁹ Throughout this pilgrimage Augustine the *peregrinus* remembers Christ, and thus the reality of eternity. Through Christ, memories merge into the finitude of eternity and the present becomes a remembrance of the beginnings i.e. past and creation, present and the memory of the Incarnation, death, and resurrection, and the future and memory of eschatological expectation. The memory of the eschaton in the future requires the letting go of past memories that hinder progression towards the *beata vita*.²⁶⁰

6.4.6 Arc's Role Regarding Images, Phantasiae, and Phantasmata

"Imagination is the eye of the soul."²⁶¹

Augustine was well aware that memory did not only consist of true images but also false iterations of existing stored memories or even completely new false images in his mind. Corruption in the updating process of memories or formation of new images that are unlike the original or are complete fabrications are a result of dysregulation of Arc. This occurs via mutation or inhibition of Arc expression; molecular mechanisms and Arc regulation of memory processes are thus involved in the formation of *phantasiae* and *phantasmata*. Arc's detailed involvement in this process have been previously described in this chapter.

²⁵⁶ Grove, Augustine, 157.

²⁵⁷ Ibid., 156.

²⁵⁸ Ibid., 156-157.

²⁵⁹ Ibid., 157.

²⁶⁰ See Chapter 7; 204-245.

²⁶¹ Joseph Joubert (1754-1824 A.D.), French moralist and essayist.

6.4.6.1 Imagination

"Imagination is the beginning of creation." George Bernard Shaw

Imagination can conjure up creative, frightening, and false images; it can elaborate on complex, false dreams, and can also occur while awake and throughout the day. According to Burge, the process of imagining differs from memory not necessarily in its content but in its representational function.²⁶² Imagining is non-committal unlike memory or perception. There is no need for imagination to produce accurate images because such images whether accurate or inaccurate do not constitute a representational failure.²⁶³ Imagination produces images that do not need to remember how to do something i.e. the action of speaking, feeling, or touching. Lui and Ramirez suggest that the formation of some *phantasmata* may occur by internally driven retrieval of previous experiences and their association with external pleasant or unpleasant emotive stimuli.²⁶⁴

The brain regions associated with true memory and false memory are very similar.²⁶⁵ Both true and false memories produce activity in the core regions in the brain associated with LTM retrieval e.g., the hippocampus and sensory processing regions.²⁶⁶ Augustine in *Mus* VI.2 suggests that the production of *phantasmata* is analogous to the formation of images of perceived objects.²⁶⁷ He seems to imply that *phantasmata* and true memories are formed in the same region of the brain. However, differences in brain activity do occur between true and false memories; there is greater activity for true memory compared to false memory in the more posterior early visual processing regions.²⁶⁸ Mnemonic errors that occur with the correlation of memory and predictions based on false images change the role of the hippocampus; these errors cause a reversal of the relationship between hippocampal activation and

²⁶² Tyler Burge, Perception, First Form of Mind (Oxford: OUP, 2022), 641.

²⁶³ Ibid., 641.

²⁶⁴ X. Liu, S. Ramirez, S. Tonegawa, "Inception of a False Memory by Optogenetic Manipulation of a Hippocampal Memory Engram," *Phil. Trans. R. Soc. Lond. B Bio.l Sci.* 369 (2013): 20130142. Ramirez, "Creating," 390.

²⁶⁵ Burge, Perception, 642.

²⁶⁶ Liu, "Inception," 369: 20130142. Ramirez, "Creating," 387-391.

²⁶⁷ O'Daly, "Augustine's" 108.

²⁶⁸ Liu, "Inception," 369:20130142. Ramirez, "Creating," 387-391.

memory outcomes.²⁶⁹ Sinclair et al. examined the mechanisms of this shift in neural processing and showed that such errors disrupted the temporal continuity of hippocampal patterns and allow memories to be modified, consistent with an adaptive updating mechanism.²⁷⁰ They were able to demonstrate that hippocampal activation was associated with memory preservation and protection against false memories that destabilized the original memories.

Arc operates in a flexible, multifunctional, and interactive hub directing Arc expression and Arc protein synthesis; this is required in the modification and restabilization of a memory trace.²⁷¹ Here Arc expression and structural synaptic stability (plasticity) works in conjunction with the hippocampus.²⁷² The functional versatility of Arc recognizes Arc as a highly specialized master organizer of long-term synaptic plasticity, critical for the reconsolidation of images.²⁷³

6.4.7 Arc and the Temporal Dimension of Memory

Augustine proposed that memory not only exists in the past or future but also in the present.²⁷⁴ Time and memory do not, and cannot, exist without each other. This concept has broad ranging and specific implications. Augustine found this topic was so complex and even difficult to explain, yet so important that he devoted a whole book (*Conf.* XI) to try to understand and explain the association between memory and time. Likewise, in his footsteps, I devote a full chapter (Chapter 7) to this topic as it is too important to mention briefly in a few paragraphs.

6.4.8 Memory, Arc, and the Beata Vita

The denouement of Augustine's strategic approach into understanding memory was a result of his search for God and the discovery of *memoria* in his mind.

²⁶⁹ Alyssa H. Sinclair et al., "Prediction Errors Disrupt Hippocampal Representations and Update Episodic Memories," *PNAS* 118, no. 51 (2021): e2117625118, 1.

²⁷⁰ Ibid.," 8.

²⁷¹ Tim P. Castello-Waldow et al., "Hippocampal Neurons with Stable Excitatory Connectivity Become Part of Neuronal Representations," *PLOS Biology* 18, no 11, e3000928 (2020): 1. Nikolaienko, "Arc,"
33.

²⁷² Castello-Waldow, "Hippocampal," 1.

²⁷³ Ibid.

²⁷⁴ Conf. X.8.13-14.

Consequently, he knew that memory was crucial in this journey towards fulfilment of the *beata vita* and, as such, he devoted twice as many chapters in *Conf.* X. to the *beata vita* compared to the operation and function of memory. It is only worthy to give this topic of memory and the *beata vita* a lengthier discussion since it held such a prominent place in Augustine's theology of *memoria*. I will discuss the role of memory in the *beata vita* and the associated physical molecular dynamics including Arc in Chapters 7 and 8.

6.4.9 Molecular Architectonics

The architectonics of memory also applies to the domain of human molecular genetics. Within molecular genetics there is the field of DNA architectonics which exists as a sub-specialism.²⁷⁵ The genomic DNA sequence is not only composed of base-pair building blocks, but it has a 3D spatial setting analogous to Augustine's memory palace with many nooks and crannies. The specific structure of the Arc gene defines and drives its operational and functional roles. Additionally, Arc functions within the confines of time and its 3D structure confers a spatial dynamic. This architectonic structure also bestows upon Arc the ability to have a multi-functional role impacting over 1,900 genes and different aspects of memory including those outlined by Augustine.

6.5 Concluding Remarks

"Our memory is not just pockets and islands of information - we actually build concepts, and we link things together that have common threads between them."²⁷⁶

²⁷⁵ For some key articles, see E. Stulz, "DNA Architectonics: Towards the Next Generation of Bio-inspired Materials," *Chem. Eur.* 18 (2012): 4456-4469. D. Ghosh, L. P. Datta, T. Govindaraju, "Molecular Architectonics of DNA for Functional Nanoarchitectures," *Beilstein Nanotechnol.* 11 (2020): 124-140. Pengfei Wang et al., "The Beauty and Utility of DNA Origami," *Chem.* 2, no. 3 (2017): 359-382.

²⁷⁶ Sheena Josselyn; quote taken from Shen, "Portrait," 148.

This chapter elaborated on Augustine's exploratory use of *scientia* in interrogating memory to gain further knowledge of the Divine and eternal matters (*sapientia*). The "biological wisdom"²⁷⁷ of Arc has been revealed in this chapter.

I adopted a novel approach in my investigation of Augustinian memory. The architectonic examination of Arc's structure and function has shown it has definitive characteristics and features. Memory, Arc expression and regulation, and brain function all follow an architectonic sequence in their operation. Arc's exquisite regulation and management of memory facilitated Augustine and his soul in gaining knowledge via understanding memory formation, retention, storage, and recollection. The rational soul recruits Arc to understand memory much in the same way that the soul uses the body's eye as the "mind's eye to the soul."²⁷⁸ Arc's primary role in this capacity would be to provide the rational soul the "ability to remember," an ability which it does via a physical function of the human body. This unity of the body (physical) and the soul (metaphysical) is compatible with Augustine's understanding of body and soul unity where the soul remains superior to the body with which it collaborates.

The biological wisdom of Arc emerges from its architectonic uniqueness as a single-copy gene with virus-like behaviour that has ancient genomic elements. Arc is perfectly situated to participate in a novel neuronal communication system involved in memory juxtaposing the physical and metaphysical. The role of memory in *memoria* is thus further elucidated.

The examination of Arc's architectonic structure and involvement in memory, had allowed for the proposal of a potential genomic memory mechanism involving Arc. This genomic memory process could help explain various aspects of Augustine's theology of *memoria*. This process assists Augustine in his remembrance of the Divine as he journeys towards eternity and the *beata vita*. Analysis of Augustine's theology of *memoria* via a specific genomic memory process involving Arc is a novel methodology in Augustinian studies.

This chapter has illustrated the complexities behind *memoria* and memory. In spite of all this amazing and intricate genomic and neurological knowledge of

²⁷⁷ Biological wisdom is a term I formulated to describe the sapiential knowledge that is derived and developed from *scientia*. It informs *sapientia* and the rational soul. This aligns with Augustine's belief that *scientia* can be a temporal evolution towards divine wisdom (*sapientia*). See chapter 5 section 5.7. ²⁷⁸ Sol. I.6.12.

memory processes, there is, as Augustine's acknowledged, much that still is unknown about the inner workings of memory.

CHAPTER 7: Enigmatic Arc-hitectonics of Time and Memory

"Time past and time future What might have been and what has been Point to one end, which is always present."

T. S. Eliot, Burnt Norton, Four Quartets¹

"A moving image of eternity...we have been calling time."

Plato, Timaeus, 37d5-7.

7.1 Chapter Aims

The connection between memory and time was important for Augustine to understand because he recognized memory as associated with not just the past but also with the present and future. It can be said that the enigma of time, on the one hand, is that there is no memory without time and there is no time without memory, and on the other, the past, present, and future all exist simultaneously.

This chapter addresses the Augustinian theory of time and memory primarily based on *Conf.* XI. The discussion centres on the two models I have developed -**Figure 7.1 (p. 207)**: the architectonic structure of time and memory. This diagrammatic representation of time and memory recognizes three categories of time – eternity, temporal time, and physical time. Physical time is exemplified in **Figure 7.2 (p. 236)**, as time associated with created matter, in this case, the Arc gene. **Figure 7.2** examines in depth the life cycle of Arc and its movement through the continuum of time (past, present, future) and eternity. All categories in **Figures 7.1** and **7.2** are interrelated to each other and flow seamlessly in temporal time and eternity, physical and metaphysical dimensions, and from memory to memory.

¹ T. S. Eliot, "Burnt Norton," in *Four Quartets* (San Diego, CA: Harvest Book/Harcourt Brace & Company, 1968), 14.

7.2 Introduction

"Only through time time is conquered."

T. S. Eliot, Burnt Norton, *Four Quartets*²

Any conversation about Augustinian memory would not be complete without consideration of time's role in memory. The importance of time was so intricately intertwined with memory that Augustine devoted a whole book (*Conf.* XI) to the subject. A much clearer understanding of Augustine's philosophy of time³ is only apparent when one includes Books XI and XII. Book XI-XIII are often determined to lack unity with the first ten books; this really is not the case. What is different in these three books is that, according to O'Donnell, Augustine's "speaking voice, and that of which it speaks...is now unequivocally in the present."⁴ Understanding the "grammatical present" in the context of time, is key to gaining an insight into Augustine's philosophy of time and how he views the connection between past, present, and future.

Books XI-XIII are a testament to Augustine's extraordinary theology, and the depth and extent of his thoughts. In typical fashion, Augustine does present his theory of time in a meandering and circuitous manner.⁵ Yet, these books produce an Augustinian theology of time that is unparalleled but still with gaps and unanswered questions.⁶ They illustrate how Augustine's theology of time was firmly rooted in his creation theology, incarnational theology, eternity, time, and memory.

² Ibid., 16.

³ In this thesis, the term 'philosophy of time' is used to denote Augustinian thought on time. There is debate regarding whether Augustine had a philosophy of time. Scholars debate the Platonic and/or Plotinian origins of his philosophy of time including similarities to the Stoics but this discourse shall focus on interrogations of time in Books XI-XIII. See O'Daly, *Augustine's*, Ronald Teske, *Paradoxes of Time in Saint Augustine* (WI: Marquette University Press, 1996). Milbank, "The Confession," 5-13. ⁴ O'Donnell, *Augustine*, vol. III, 250.

⁵ Helm refers to this meandering style of Augustine's writings regarding his ideas of time, however, there are many other scholars who have identified this writing style in Augustine. Paul Helm, "Thinking Eternally," in William E. Mann, *Augustine's Confessions: Philosophy in Autobiography* (Oxford Scholarship Online, 2014), 137.

⁶ Augustine did have some gaps but his work on time set the stage for later work involving the A- and B-series of time including the work of McTaggert, Mellor and Perry, and Helm. McTaggart conceived time in two distinct ways called A- and B-series. The former establishes that every moment is either past or present or future, while the latter determines that every moment is earlier or later than each other moment. Helm is the only one of these authors who is aware of how similar the A- and B-series are to Augustinian thought. J. E. McTaggart, "The Unreality of Time," *Mind* 17, no. 68 (1908): 456-

In XI, Augustine attempts to understand the nature of time in the context of creation and memory, and as an entity distinct from, and, at the same time, seamlessly intertwined with eternity. Intrinsic to Augustine's philosophy of time was his theology of time consisting of three cardinal divine moments and memories⁷ - creation, Incarnation, and eternity, as revealed by the physical manifestation of the Divine at the insertion of eternity into temporality. These cardinal manifestations of God's divine action exist in eternity and are pivotal moments in temporal time. Temporal time is the bi-directional flow of memories from past-to-present-to-future and from future-to-present-to-past. Included in Augustine's theory of time is physical time i.e. time that progresses forwards via the functional mechanisms of the physical human body involved in memory processes. Physical bodily structures, in this case Arc, provide functional knowledge (*scientia*) that evolves towards sapiential knowledge as it physically moves towards eternity. Physical time, therefore, references time with physical structures and created order.

Attempting to understand all these aspects of time is difficult – actually, an understatement to say the least, even Augustine could not explain all these dimensions to the degree he would have liked. As he was to discover, time was simply paradoxical, aporetic, and enigmatic.

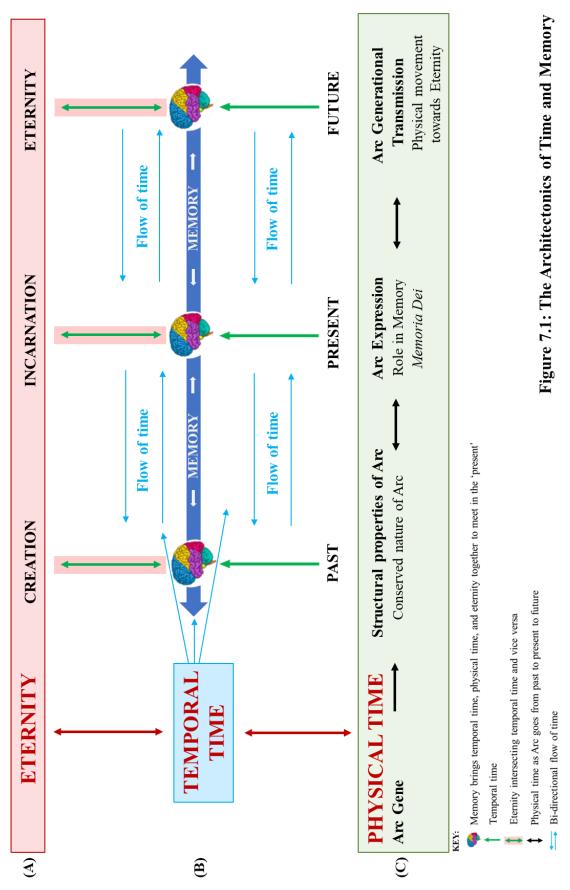
7.3 Architectonics of Time and Memory

Time is a construct. So too is memory. Without one, the other could not exist, and both exist within the larger schema of creation and participate within eternity alongside their temporal manifestations. This was the truth that Augustine appreciated as he interrogated *memoria*. In *Conf.* X, Augustine explicated his theology of *memoria* and there, unfolded an architectonic structure to memory (Chapter 6). Time

^{474.} D. H. Mellor, *Real Time II* (Routledge, 1998), 4. John Perry, "The Problem of the Essential Indexical," *Noûs* 13, no. 1 (1979): 3-21. Helm, "Thinking," 135-154. Manning, "St. Augustine," 236. ⁷ The definition of creation, Incarnation, eternity as three cardinal moments and memories of time is artefactual in the sense that they are temporal divisions as understood by humankind within temporal time. In reality, creation, Incarnation, and eternity are not isolated events within "eternal time." See Cunningham for more details on simultaneity of creation, Incarnation, and redemption. Conor Cunningham, *Darwin's Pious Idea: Why the Ultra-Darwinists and Creationists Both Get It Wrong* (Grand Rapids: Wm. B. Eerdmans Publishing Co., 2010), 383-384.

and memory are integral and intertwined components of Augustinian memory. Augustine discerned three main categories within the architectonic structure of time: eternity, temporal time, and physical time.

An attempt to blend all three dimensions of time – eternity, temporal time, and physical time while explaining their seamless interrelatedness is presented in a visual diagrammatic illustration in **Figure 7.1**. The three cardinal moments of creation, the Incarnation, and eternity, along with memory appear as fixed temporal points in created time – the past, present, and future. They exist also outside of created time in eternity and yet paradoxically moving in a bidirectional flow of time between each temporal memory in the past, present, and future. Temporal time is noted as the bidirectional flow of time from and between the past, present, and future, all of which include memory, the driver of time. Physical time, represented by Arc, is described in more detail in **Figure 7.2**. Arc is an exemplifier of the relationship between the physical manifestation of time and memory in the human body, temporal time, and eternity as it relates to the rational soul and its journey towards eternity. Eternity is intertwined with temporal time and physical time. Each category i.e. eternity, temporal and physical time are illustrated in **Figure 7.1** and discussed in subsequent sections of this chapter.



7.4 Eternity

"Lord, eternity is yours ... "8

Augustine's insights into eternity came from his understanding of the *historia* of time particularly in relation to the *historia sacra* of Christ.⁹ As Augustine grew in faith and understanding of God, he came to expand his cognition and comprehension of the magnitude of *historia sacra* in time and memory.¹⁰ The three categories of time presented in **Figure 7.1** are best understood through *historia sacra* and the lens of creation, the Incarnation, and eternity.

7.4.1 Historia Sacra

*"from the beginning in which you made heaven and earth until the perpetual reign with you in your heavenly city."*¹¹

The *historia* of temporal time, required Augustine to not only conceptualise but experience eternity and temporal time meeting in the same space and present time. According to Carr, Augustine's "temporal configuration" as he lived in the temporal present was a result of his past, and it would lead up to something else in the future.¹² In this movement of time, Augustine came to understand the importance of the temporal dispensation of God's action in time – specifically the *historia sacra* of Christ.¹³ It is through the *historia sacra* that Augustine expanded the notion of the present and provided a long-lasting significance to time.¹⁴ Clemmons argues that

⁸ Conf. XI.1.1.

⁹ Helm, "Thinking," 1. Clemmons, "Time," 16.

¹⁰ *Historia sacra* for Augustine started at the Incarnation and was encapsulated on one side by creation and on the other side by eternity. It went beyond the documentation of these events. Augustine was far more interested in the meaning of these events and how they influenced his own personal *historia*. Secular history to Augustine was "profane history." Johannes van Oort, "The End is Now: Augustine on History and Eschatology," *Her. Theolog. Stud.* 68, no. 1 (2012): 1.

¹¹ Conf. XI.2.3.

¹² David Carr, "Phenomenology and Historical Knowledge," in eds. Dermot Moran, Lester Embree, *Phenomenology, Critical Concepts in Philosophy* vol. III (Oxford: Routledge, 2004), 150.

¹³ Clemmons, "Time," 16.

¹⁴ Ibid.

through *historia sacra*, present time or the 'present now' always includes the *memoria* of God's activity, its continued presence, and the expectation of its culmination.¹⁵

Augustine was thoroughly convinced that God created time "In the Beginning" at creation.¹⁶ This was true to the Scriptural account in Genesis 1 where Augustine believed that there were deeper truths than just mere *historia*. This was similar to Origen who said that the Genesis account of creation "enshrines certain deeper truths than mere historical narrative…and contains a spiritual meaning almost throughout, using 'the letter' as a kind of veil to profound and mystical doctrines."¹⁷ This temporal timeline which travelled through life from creation towards eternity was interrupted by the Incarnation, at least as viewed from a human perspective. As such, the Incarnation is that space and time where the eternal and temporal time meet in the present; it was God's intention from the beginning.¹⁸ As Augustine wrote in *V. Rel.* 43.81, "everlasting Truth, who orders all things, both enters into time and stands motionless in eternity above all times."

Augustine's theory of time included a future time of expectation which was as important as the past time of remembrance; both were instrumental to living in the present. Past time was driven backwards by the future and future time was the consequence of the past and also driven by what occurs in the present (XI.11.13). The description of how time past, present, and future are intertwined and existing together while at the same time existing as their own separate ordinal moments at given or fixed points in 'human' historical time is known as the *historia*¹⁹ of time.

Importantly, central to creation and eternity was the Incarnation. Augustine declared that he was called by God to understand the Word (John 1:1.) for God created heaven and earth "in your Word and in your Son."²⁰ Augustine recognized Christ as the Mediator between God and men.²¹ Christ was the one who would

¹⁵ Ibid.

¹⁶ Conf. XI.13.15-16, XI.14.17.

¹⁷ Origen, On First Principles 3.5.1, p. 237 from Peter C. Bouteneff, Beginnings: Ancient Christian Readings of the Biblical Creation Narratives (Grand Rapids: Baker Academic, 2008), 102.

¹⁸ According to Cunningham, creation should not be isolated from incarnation because if "incarnation and redemption are no less part of God's purpose than creation, then the created order has an eschatological dimension from the very beginning." Incarnation was always God's intention. Cunningham, *Darwin's*, 384. See also Le Blond, *Les Conversions*, 19.

¹⁹ Augustinian *historia* of time describes the events of the historical time of humankind as described in the "timeline" within the Scriptures. The *historia* of temporal events and the *historia sacra* of Christ both meet in temporal time.

²⁰ Conf. XI.7.9, XI.9.11.

²¹ Conf. XI.7.9, X.43.68.

redeem him and save him through mercy and compassion. He knew that the presentness of time foreshadowed eternity and therefore, for fallen creation this "presentness" could only be found by reaching into the "future" and eternity.²² The Incarnation was the point in the *historia sacra* where eternity became "reachable" for Augustine. Hence, it was through the Incarnation *in time* that Augustine hoped he would escape the temporal implications of the "beginning" of Gen 1.1, and consequently, come to know, and look forward to, eternity.²³

In the *historia sacra* of Christ, time, however, is just a *vestigium* or copy (*imitatio*) of eternity.²⁴ The term *vestigium* is one Augustine had already appropriated to describe the *vestigium* (image), or memory, of God within the rational soul.²⁵ Eternity thus, was played out in temporal time. Along this timeline, was also physical time which facilitated the remembrance of these cardinal moments of *historia sacra* and ordinal moments in time. This would suggest that Augustine recognized both memory and time were vehicles to knowing the Divine and eternity even though he could only see them as *vestigia*.

The *historia sacra* precisely encapsulates why Augustine had a circuitous and vacillatory thinking regarding time as he found the nature of time too complex to find or understand all the answers. At times, he had to settle with the knowledge that the best he knew was enough. He writes, "if I have not the strength to discover the answer, at least I know that wherever they are, they are not there as future or past, but as present."²⁶ Importantly to Augustine, in the present, he could live in remembrance of the Incarnation and in anticipation of the fulfilment of the *beata vita* in eternity. Connecting time with the memory of God brought together creation and eternity to a place of meeting in the temporal. In understanding this, Augustine would gain more insight into his journey towards the Divine. Augustine understood that, in a complicated manner, time and memory worked together to connect creation, the Incarnation, and eternity.

²² O'Donnell, *Augustine*, vol III, 250.

²³ Chadwick, Saint, 227, n. 14. Clemmons, "Time," 9.

²⁴ Gn. Litt. Imp. XIII.38. Ps. 9.17. Mus. VI.29. O'Daly, Augustine's, 152.

²⁵ Gn. Litt. XII.24.51. Sweeney, God, 686.

²⁶ Conf. XI.18.23.

7.4.2 Creation of Time

Time was precious to Augustine so much so he believed that too much of his time was consumed by his duties as a bishop.²⁷ He wished that he had more time to spend meditating in God's law; he said, "the drops of time are too precious to me."²⁸ He accepted that the "moments [of time] fly by."²⁹ He developed a desire to understand the nature of time and its context in terms of creation *ex nihilo*.

7.4.2.1 Time Began With...

Augustine believed time began with the creative act in the Beginning, as expounded in Books XI-XIII. Time existed because God made time; He did so prior to the creation of human beings.³⁰ Time had a beginning which was the point when God began to create the universe. Augustine writes:

We should, therefore, say that that time began with creation rather than that creation began with time. But both are from God. ... The statement "time began with creation," should not be taken to mean that time is not a creature.³¹

Augustine also viewed time as a "creature." This has Platonic overtones as Plato in *Timaeus* described how time is eternity (αιώνιον) just like the Living Creature.³² Further, Plato described time as a "moving image of eternity."³³ Ascribing the term *image* to time recalls Genesis 1:26-27 where man is created in the *image* and likeness of God. Plato's interpretation of time, and Augustine's based on Genesis 1, acknowledges time to be a "creature."³⁴ Hernandez also describes how Augustine

²⁷ Conf. XI.2.2.

²⁸ Ibid.

²⁹ Conf. XI.2.3.

³⁰ Conf. XI.13.15.

³¹ *Gn. Litt.* V.5.12.

³² Plato, *Timaeus*, 37d3, 37d7.

³³ Ibid., 37d7.

³⁴ Ibid., 37d3, 37d7.

viewed time as a creature of God.³⁵ He breakdowns Augustine's argument in XI in the following logical manner:

- 1. God created time.
- 2. Time is not eternal.
- 3. Time began when God created the universe *ex nihilo*.
- 4. When God created the universe, humans were still not created; humans were created some "days" after the universe was created.
- 5. Therefore, time is a creature of God that existed prior to human consciousness.
- Thus, time is independent of human consciousness. Time, seen as a creature, began when the universe began.³⁶

Time is, therefore, a precedent of human creation but it is distinctly a creature of creation. With the creation and motion of creatures, Augustine states that "time began to run its course."³⁷ Augustine continues, "if there was no motion of either a spiritual or corporeal creature by which the future moving through the present would succeed the past, there would be no time at all." Gross posits that time is the ontological consequence of creation *ex nihilo*, and it is the distinguishing feature of finite creation.³⁸ She contends that Augustine frequently turned to the physical account of time to distinguish between stable eternity (*semper stans*) and ever-changing temporality (*numquam stans*).³⁹ Augustine did this to deny the possibility of temporality being antecedent to creation.⁴⁰ There is a distinct foundational creation theology to Augustine's theory of time. In **Figure 7.1**, this can be seen in the alignment of both temporal and physical time with creation.

Röck argues for an ontological understanding of time as temporality where temporality is associated with the process of change involving human beings as they "become, change, and perish."⁴¹ Gross and Röck both lend support to Augustine's

 ³⁵ William Alexander Hernandez, "St. Augustine on Time," *Int. Hum. Soc. Sci.* 6, no. 6 (2016): 38.
 ³⁶ Ibid.

³⁷ Gn. Litt. V.5.12.

³⁸ Charlotte Gross, "Augustine's Ambivalence About Temporality: His Two Accounts of Time," *Med. Phil. Theol.* 8 (1999): 136.

³⁹ Ibid., 131, 136.

⁴⁰ Ibid.

⁴¹ Aristotle, *Physics*, 11: 218b20-219a1. Tina Röck, "Time for Ontology? The Role of Ontological Time in Anticipation," *Axioimathes* 29 (2019): 33.

view of ever-changing temporality in which actual time is the process of change. Amongst the ancient philosophers, Aristotle held that the reality of time depended on the occurrence of change(s) in the physical world and, additionally, on the capacity to discern various stages in any change that is observed.⁴² Further, he related time and change to the past and future and defined time as "the number of change in respect of the before and after."⁴³ Temporal time was ever-changing in finitude as it progressed from past-to-present-to-future towards infinity.

7.4.2.2 The WORD and Words in Time

Augustine saw in Gen. 1: 1 that God through his Word and the Words (eternal words: speech) created (*ex nihilo*) the universe and all living things. Augustine wrote regarding the relationship between time and speech, that speech functioned as a mediator between unity and multitude.⁴⁴ Karfíková argues that through speech, in which time is present, human beings connect things of the past (memory) into a whole and they transform past or expected things into present ones, thus performing their task of unifying the passing plurality.⁴⁵ The syllables of a word which are pronounced one by one try to capture a whole that can be grasped simultaneously, and do so in an ordered methodology. Aristotle in *The Categories* defines speech as a quantity since it is measured in short and long syllables, and he associates the syllables with time.⁴⁶ He writes, "there is no common boundary at which the syllables join, but each is separate and distinct from the rest."⁴⁷ None of its parts has an abiding existence: "when once a syllable is pronounced, it is not possible to retain it."⁴⁸ Syllables are associated with time both for Aristotle and Augustine.

⁴² Tiberiu Popa, "On the (In)consistency of Aristotle's Philosophy of Time," *Soc. Ancient Greek Phil. Newsletter* (2007): 379.

⁴³ Aristotle, *Physics*, Ch. 11: 219bl-2.

⁴⁴ Lenka Karfiková, "Memory, Eternity, and Time," in *The Cambridge Companion to Augustine's Confessions*, ed. Tarmo Toom (CUP, 2020), 189.

⁴⁵ Ibid.

⁴⁶ Aristotle, *The Categories*, I.6. Aristotle, *Categories, On Interpretation, Prior Analytics*, trans. H. P. Cooke, Hugh Tredennick, LCL (Cambridge, MA: HUP, 1938), 35-47.

⁴⁷ Ibid.

⁴⁸ Ibid. Aristotle relates time with syllables that form words which join to form sentences. Similarly in *Conf.* XI.27.35-28-38 Augustine links syllables into words as he gives the examples of the *Deus Creator Omnium* and reciting a psalm.

Augustine wrote in Conf. IV.11.17 that the whole of individual syllables pronounced together created a unity that delights; this exemplified the ordo that arises from the cardinal moment of creation.⁴⁹ According to Karfíková, Augustine required memory as a source for narration, and in the same manner, he had to have human speech in order to deal with time.⁵⁰ It is Karfíková's contention that both memory and speech attempt to concentrate time into a kind of unity, which is enabled by the unity of temporal sequences in eternity. They can only imitate this latter unity very remotely. She argues:

Even this fragment, though, will make it possible to put together a story from Augustine's memories and his narration, a story in which he as the narrator finds not only himself, but also his God. Both these achievements, however, are only preliminary and both will continue to escape him, for it cannot be otherwise during our temporal life.⁵¹

However, while the Word is the initiator of creation and thus time, Karfíková's claim that Augustine can only deal with time through human speech is not only limiting but is a diminution of Augustine's theology of time. Augustine's thought regarding the nature of time was far more complex. God's creative Word starts creation and time, but it is not a passing word as would be identified with words in a speech, words which sound and pass away.⁵² On a temporal perspective, Augustine articulated through speech the grammar of eternity and temporality from the standpoint of the creature, and while important, Augustine's speech does not determine time.⁵³ God alone creates time, "time would not elapse before you made time."⁵⁴ In this sense, time becomes a more complex concept since now moments, movements and measurement of time, consideration of the present now, and the relationship between creation and eternity, all come into play.

The Words of God at creation saw the formation of memory, necessary to recollect creation, the Incarnation and eternity as Augustine the peregrinus⁵⁵

⁴⁹ This is consistent with the architectonic principle of parts making up a whole creating a unity.

⁵⁰ Karfíková, "Memory," 190.

⁵¹ Ibid.

⁵² Conf. XI.6.8. ⁵³ Helm, "Thinking," 147.

⁵⁴ Conf. XI.8.15.

⁵⁵ M. A. Claussen, "Peregrinatio' and 'Peregrini' in Augustine's City of God," Traditio 46 (1991): 33-75.

wandered through life. The same Words created time – past, present, and future, all of which are ontologically equal. When God revealed to Moses in Ex. 3: 14 his name, "I AM WHO I AM" (אָהָיֶה אֲשֶׁר אָהָיֶה) He said, "This shall be my name forever. This my appellation for all eternity."⁵⁶ God's spoken Word to Moses establishes that He is the everlastingly God – the I AM of eternity. In terms of temporality, God's spoken Word has now connected creation with eternity, and is a reminder of Divine continuity. To Augustine, "I AM WHO I AM" was a revelation of God in temporal time. God, the I AM is a reassurance that God is "leading us from temporal realities to eternal life."⁵⁷ Glowasky asserts that Augustine would view Ex. 3: 14 as a temporal revelation of God's eternity and writes, "God's temporal name is God's eternal name, and God's eternal name is God's temporal name."58 In En. Ps. 130.13 Augustine said to his audience that God's temporal revelation was the means to knowledge of God in eternity which comes from embracing God's descent into human history.⁵⁹ The Incarnation was a continuation of God's spoken Word as a temporal revelation. In Matt. 3: 17 at the baptism of Jesus, a voice from heaven said, "This is my beloved Son, with whom I am well pleased." Later, post his death, Jesus returned and spoke to the disciples, again divine revelation in temporality. The Incarnation thus allowed time to travel backwards to creation and forwards to eternity. God affirms the continuity of the Word from creation to incarnation to eternity through both eternity and temporality. That is why Augustine saw the Incarnation as that pivotal cardinal moment in time.

7.4.2.2.1 Deus Creator Omnium

In addition to the WORD and eternal words, Augustine wrote about temporal words i.e. human words and speech in many of his works. The difference between the articulation of eternal Words and temporal words in time was for Augustine a striking and stark difference as it emphasised the difference between the immutable,

 ⁵⁶ Hebrew text based on Biblia Hebraica Stuttgartensia; both Hebrew and English translations are taken from *JPS Hebrew English Tanakh*, 2nd Ed. (Philadelphia: The Jewish Publication Society, 2000).
 ⁵⁷ Michael Glowasky, "Naming God: Exodus 3:14-15 in Augustine's *Enarrationes in Psalmos*,"

Scrinium 16 (2020): 182.

⁵⁸ Ibid.

⁵⁹ Ibid., 186.

incorporeal, and eternal God, and mutable, corporeal, and the finitude of temporal humankind.

Augustine was fond of music and used its syllables, words, and metre as an exemplar to understand time, eternity, memory, and duration and measurement of time.⁶⁰ Augustine chose Ambrose's evening hymn, the *Deus Creator Omnium*⁶¹ as an example to clarify time's relation to Eternity (God). Time's relation to eternity actually resides in the meaning of this verse – "God, creator of all."⁶² Here, Augustine relates God to creation, the Word, and eternal Words illustrating the significance of creation theology to Augustine. He used the words of this song to investigate time and memory because as a song, the words are kept in memory, are known in the present, and are to be sung in the future although they are not yet sung in the future; since the words are known they are present in memory as something to be produced.⁶³ While singing, the soul is attentive simultaneously to three times.⁶⁴ Syllables also allow Augustine to investigate the metre and duration of speaking words in time.⁶⁵

Augustine clarifies time's relation to eternity; this clarification is embedded in the meaning of its words and its performative power.⁶⁶ *Deus Creator Omnium* declares the incomparable power of God who created all and only God is the creator of all. Augustine correlates singing with human life. Ayoub writes:

What happens in singing also happens in human life, either in each part (seconds, minutes, hours, days, event) or in its totality (the life of each human being), and even in the totality of human lives (and here there is the absolute universalisation of the consideration of time the human being). Singing, like life, is thought of in terms of durations or times.⁶⁷

⁶⁰ E.g., Mus. VI, Conf. X, XI.

⁶¹ Conf. XI.27.35. Chadwick, Saint, 241, n. 28.

⁶² Cristiane Negreiros Abbud Ayoub, "Time, Mirror of the Soul," in *Augustine and Time*, eds. John Doody, Sean Hannan, Kim Paffenroth (Maryland: Lexington Books, 2021), 81.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Ibid., 82. *Conf.* XI.27.35: it is not necessarily the syllables themselves that are measured but rather something in Augustine's memory.

⁶⁶ Ibid., 83.

⁶⁷ Ibid., 84.

Further, Augustine asserts that the parts of a psalm join to make a whole are "valid in the entire life of a human person, where all actions are parts of a whole, and of the total history of 'the sons of men' (Ps. 30: 20) where all human lives are but parts."⁶⁸

7.4.2.2.2 Augustine's Inner Word

In his examination of human temporal words, Augustine realises the impact such words have on his inner self and his inner word (*verbum interius*). His verbum *interius* in his soul is separate from any natural human language and repetition of linguistic utterances within the silence of his mind.⁶⁹ Oliva argues, "Augustine distinguishes between the spoken outer word, the word recited in the soul in a way that imitates outer speech, and then the inner word itself, which he identifies with the image of God within the soul."⁷⁰ Gadamer thinks otherwise – the inner word is not distinct from thought but the very expression of thought itself, "the inner mental word is just as consubstantial with thought as is God the Son with God the Father."⁷¹ To Gadamer the inner word is not any novel product of thought but the logical result of thought consciously realized by a thinking subject.⁷²

Gadamer's concept of the *verbum interius* as thought and expression diminishes the concept of time duration associated with expression of speech from inner words to language in the mind to speech. However, as Oliva states, a consequence of *verbum interius* is the capacity to produce speech which implies a temporal "processual" character.⁷³ Augustine sees his *verbum interius* in relation to the incarnation of the eternal Word to the "incarnation" of human thought in outer speech.⁷⁴ The *verbum interius* provides the possibility of continuous communication via outer speech between individuals. The inner word never leaves the individual

⁶⁸ Conf. XI.28.38. This is consistent with the architectonic principle of parts making up a whole creating a unity.

⁶⁹ Matthew William Knotts, "The Inner Word and the Outer Word," in *Augustine and Time*, eds. John Doody, Sean Hannan, Kim Paffenroth (Maryland: Lexington Books, 2021), 93-94.

⁷⁰ Mirela Oliva, "Das Innere Verbum in Gadamers Hermeneutik," *Hermeneutische Untersuchungen zur Theologie* 53 (2009): 26.

⁷¹ Hans-Georg Gadamer, *Truth and Method*, 2nd Rev. ed., trans. Joel Weinsheimer, Donald G. Marshall (London: Bloomsbury, 2013), 438.

⁷² Knotts, "The Inner," 96. Gadamer, *Truth*, 441.

⁷³ Oliva, "Das," 27.

⁷⁴ Matthew William Knotts, "Space-time as Gadamerian Prejudice. Augustine on (in)corporeality in *Confessiones* VII," https://www.academia.edu/15030522, 4.

even if the outer words return to the original speaker.⁷⁵ The cyclical nature of temporal words can be observed here: *verbum interius*, *verbum mentis*, *verbum dictum*, *verbum interius*. This infers a passage of time and thus duration where Augustine sees the inner word in the soul as atemporal and related to the temporal word of external utterance; this is also true of the incarnation of the eternal Word in time and space.⁷⁶

7.4.2.3 Creation, Temporal and Physical Time

Figure 7.1 illustrates how at creation both temporal time and physical time start and move forward yet at the same time exist in the simultaneity of eternity. Augustine discusses this fact in Gn. Litt.; "when God created all things simultaneously, man was made in order to come into being in the future - there was the idea or formula of one to be created."⁷⁷ He mentions the Word of God whereby there are differences between those things all created simultaneously to come into the future and those things created in their own time in accordance with its simultaneously created causes.⁷⁸ Augustine compares the work of God in creating grass from the earth, and seed from grass, and man made into a living soul, a work that continues over time, "in all these cases things already made received the characteristic activities of their own proper time.⁷⁹ All these things carry a repetition of their selves in the hidden power of reproduction derived from their primordial causes in which they were inserted into the world that was created.⁸⁰ This is a description of physical time and in the power of reproduction exists exemplifiers of physical time involved in reproductive processes and thus the transmission of physical matter e.g., genes such as Arc (Figure 7.2). Reproduction and repetition are signifiers of temporal time as both move between past and present, present, and future, and future back to past. The repetition of these processes is indicative of the cyclical nature of time and change whereby eternity and creation are both the start and end. Memory participates in this repetitive nature of time and is, in fact, the driver of these

⁷⁵ Knotts, "The Inner," 98.

⁷⁶ Ibid., 99.

⁷⁷ Gn. Litt. VI.9.16.

⁷⁸ *Gn. Litt.* VI.10.17.

⁷⁹ Ibid.

⁸⁰ Ibid.

bidirectional flows of time (**Figure 7.1**). Grove writes that " memory becomes the locus where the past, present, and future are simultaneously coherent."⁸¹ In the beginning there is an end, and in the end there is a beginning, all meet at the Incarnation which remembers the beginning and the end; Christ is the re-enactment of creation. God's divine action of creation is fulfilled in the simultaneity of eternity. Thus, Augustine connects creation with temporal time, physical time, and eternity all of which occur simultaneously yet in the continuum of time (**Figure 7.1**).

7.4.3 Incarnation

"L'Incarnation, insertion de l'éternel dans le temps."⁸²

The Incarnation of the Word revealed God's absolute supernatural and definitive redemption of the human race, not by removing evil and sin through power, but by transforming evil into good through the life, death, and resurrection of Jesus.⁸³ In the Incarnation of the Word, the eternal is incarnate in the temporal and witnessed as present in time. Hence, everlasting Truth, who orders all things, both enters into time and stands motionless in eternity above all times.⁸⁴ This is an important insight for Augustine. Eternity was not competitive with time. Eternity seemed to function in a different modality than time; eternal life, according to Augustine, surpasses temporal life by its vivacity.⁸⁵ The reality of the "insertion of the eternal into temporality" is God descending from eternity and entering temporal time in a physical, corporeal form. Christ the Incarnate is the temporal manifestation of divinity. However, the incarnate act of the Divine did not start in the "present now" rather in time past at creation. This was the point in the *historia sacra* of Christ where Augustine also envisioned creation (past memories) meeting in the mystery of the simultaneity of eternity and the present time of temporality.

⁸¹ Grove, Augustine, 29.

⁸² Le Blond, *Les Conversions*, 19.

 ⁸³ Matthew L. Lamb, "Eternity Creates and Redeems Time: A Key to Augustine's Confessions Within a Theology of History," in *Divine Creation in Ancient, Medieval, and Early Modern Thought: Essays Presented to the Rev'd Dr. Robert D. Crouse* (BRILL, 2007), 129.
 ⁸⁴ V. Rel. 43.81.

⁸⁵ V. Rel. 49.97. Clemmons, "Time," 14.

T. S. Eliot's poem "Burnt Norton" has the line "only through time time is conquered."⁸⁶ Latta reads this line to mean that time is where the eternal can be met.⁸⁷ He writes that this line is an extension of the underlying theology in the poem that privileges the incarnate act.⁸⁸ For Eliot, at the Incarnation, the temporal was breached, inhabited, and forever changed by the eternal; in other words, temporal time was conquered by "time" eternal. Latta, regarding Eliot's "Burnt Norton," discusses the conquering of temporality by eternity via the Incarnation and the conscious act of remembering the past. He writes:

Temporal time can be conquered by eternal time because memory is the conscious act of bringing past time into the present, because the timeless eternality of the present defines the temporality of the present, and because experiencing the present is the way to the Incarnate. The conquering of temporality by eternality is the very nature of the Incarnation.⁸⁹

Time is the conduit for the Incarnation.

Both time (temporal and physical) and the Incarnation are an inherent mark of creation (Figure 7.1). Incarnation is the second cardinal moment in the *historia sacra* where memory resides in the present and physical time is active in its expression in the present. The expression of physical time occurs in an orderly fashion in temporal time in the present. Arc, the exemplifier of physical time, enables remembrance of the Incarnation in the present and works in conjunction with time to recollect the past – creation, and the future – eternity. It does so in a pre-ordained and particular manner.

7.4.4 Eternity

"Lord, eternity is yours, so you cannot be ignorant of what I tell *you*."⁹⁰

⁸⁶ T. S. Eliot, "Burnt Norton" Four Quartets (1943, repr. Harcourt Brace & Company, 1971), 16. ⁸⁷ Corey Latta, When the Eternal Can Be Met: The Bergsonian Theology of Time in the Works of C. S. Lewis, T. S. Eliot, and W. H. Auden (Pickwick Publications, 2014), 130.

⁸⁸ Ibid., 148

⁸⁹ Ibid., 130.

⁹⁰ Conf. XI.1.1.

This declaration is the very first sentence of Book XI. Augustine very rightly declares that eternity is the Lord's. He wishes to make this declaration as he sees eternity with God as the end of his temporal journey and his search for the *beata vita*. However, this statement of Augustine's regarding ignorance can also be considered as somewhat shocking if just taken at face value; one might consider that Augustine is making this statement in a less than humble demeanour that some accuse him of having. However, this is not the case. The deeper meaning to this statement, and a more accurate interpretation, is that Augustine is inferring that although God resides in eternity and in unchangeable eternity (*inconmutabiliter aeternus*)⁹¹ he is still knowledgeable of Augustine's words in the present time. Augustine finds this paradox hard to explain.

Karfíková also finds this paradoxical connection of eternity and temporality in created things very difficult to conceive.⁹² She argues that Augustine addresses the concept of eternity first in his writings because he is confronting a Manichaean issue. He does this by employing the Platonic notion of eternity, which "stands forever," unlike time, which will "never stand still."⁹³ Clemmons goes further and asserts that in Augustine's early writings one can see the link between Plotinus' conception of eternity and the link between *rationes* in the soul and *Ratio* itself.⁹⁴ This link permits the ascent of the *soul* to *Ratio*, perhaps even in this lifetime. Hence, the soul can share in eternity amid the flux of time.⁹⁵

According to Karfíková, Augustine wants to know what makes time different from eternity because eternity gives time its unity.⁹⁶ Augustine's analysis of this is found in *Conf.* XI, however, it leaves the framework of Neoplatonic metaphysics behind and focuses on how time is known to human beings.⁹⁷ In *Conf.* XI.11.13 Augustine writes that "in the eternal, nothing is transient, but the whole is present, but

⁹¹ Conf. XI.31.41.

⁹² Karfíková, "Memory," 182.

⁹³ Taken from Karfíková, "Memory," 182, "While referring to the question of what God did "before [*antequam*]" creating the world (*Conf.* XI.10.12), Augustine probably has Manichaean questioners in mind. However, the same question also appears in the Epicurean polemic against the Stoics; see Cicero, *Nat. Deor.* I.9.21; Lucretius, *Rer. Nat.* 5.168–169."

⁹⁴ Clemmons, "Time," 5.

⁹⁵ Ibid.

⁹⁶ Karfíková, "Memory," 183.

⁹⁷ This is the reason Augustine's analysis of time is often accused of "subjectivism." However, this might be a misunderstanding that neglects the argument in the *Confessions* as a whole. Karfiková, "Memory," 184.

no time is wholly present." Everything is present "simultaneously," while time is never present all at once. Helm writes that eternal simultaneity is not a temporal simultaneity but the simultaneity of God's ineffable, immediate knowledge of all times of creation (*Conf.* XI.31.41), whereas the temporal order is one that is consistent with God's "now" or God's "today" (*Conf.* I.1.10).⁹⁸ Here, Augustine invokes his foundational creation theology. "Before" God created heaven and earth there was no time in which God could be "creating." God does not precede time in a temporal way, but he includes all future and past things into his eternity and thus precedes time by being elevated above it.⁹⁹ What is eternity *is* present eternity *is* Incarnation *is* creation and true in the reverse also resulting in the cyclical nature that defines temporality. Eternity aligns creation, Incarnation, and eternity into God's "now."

Bergson's theory of time explains that "past, present, and future shrink into a single moment, which is eternity."¹⁰⁰ Similarly, according to Latta, God's duration collapses past, present, and future into an existential singularity.¹⁰¹ The conflation of past and present, points to one end, which is "always present."¹⁰² To experience a "single moment" is to experience the eternal, and the place where and when the eternal can be met in the temporal. Eternity brings that moment in time where the clash between the immutable, unchanging, and incorporeal God and the human being who is mutable, changing, and corporeal occurs, and the difference is striking. At this juncture of eternal and temporal homogenization (i.e. the Incarnation), Augustine remembers and recalls; so as he sits at the Eucharistic table where, in the sacrament of memory¹⁰³ and time, he recalls Christ's command to "do this in remembrance of me" (Luke 22: 19). Through the Eucharistic sacrament, he momentarily experiences the meeting of the "presence" and the present in what he only knows as temporal time. Clemmons interestingly contrasts eternity and temporal time by presenting the difference between "presence" and the "present."¹⁰⁴ He writes that eternity is only perceived through understanding because it does not change or possess intervals of time such as past or present future movements.¹⁰⁵ The past ceases, the future is not

⁹⁸ Helm, "Thinking," 152.

⁹⁹ Conf. XI.13.15–16. Karfiková, "Memory," 182.

¹⁰⁰ Henri Bergson, Creative Evolution, trans. Arthur Mitchell (NY: Dover, 1998), 160.

¹⁰¹ Latta, When, 144.

¹⁰² Ibid.

¹⁰³ Chapter 8 discusses the significance of memory as a sacrament as understood by Augustine.

¹⁰⁴ Clemmons, "Time," 15.

¹⁰⁵ Ibid.

yet; eternity simply is eternity and consists of a kind of presence. To be more precise, eternity *is* presence. Clemmons believes Augustine's concept of eternity as 'presence' is derived from his understanding of the "full present" which provides an image of eternity, at least in *V. Rel*.¹⁰⁶ This also explains why Augustine can both argue for the resurrection of the body into eternal life, which suggests "time," and at the same time explain how the resurrected "dwell" unendingly in God's eternity.¹⁰⁷

The Eucharistic sacrament also brings together physical time, temporal time, and eternity. The communion wafer and the wine consist of physical matter; however, they are metaphysically the body and blood of Jesus. In communion there is an experiential conjoining of past, present, and future i.e. creation, Incarnation, death and resurrection of Jesus, and eternity. Through the Incarnation and the Eucharistic sacrament, Augustine can see a glimpse of the eternal. Just as God can enter time, human beings although temporal beings, can be drawn by God to share in eternity. This is an extremely crucial point to understand because this truth is the metaphysical reality and understanding that union of the created being with the Creator God was possible. This is what Augustine so sought after. In the Eucharistic moment of remembrance as God drew Augustine to himself, Augustine attained union with God albeit momentarily. Through the sacrament of memory Augustine moved towards eternity in temporal time.

In *Conf.* XI, Augustine discusses time in terms of Scripture which points to the incarnate Christ as the mediator of time and eternity.¹⁰⁸ Memory in this regard is expectation, and the mediator of a person's experience of time and eternity. Augustine longs for eternity because he comprehends eternity to be that place where he escapes the constraints of temporality and achieves the fulfilment the *beata vita*. Eternity creates and redeems time.¹⁰⁹

Physical time also aligns with both temporal time and eternity. It moves forward towards eternity in the generational (reproductive) transmission of physical matter including genes like Arc. The ordo of generational transmission is such that from creation, physical matter is transmitted through temporal time and makes its way towards eternity by following specific encoded directions and sequences of events.

¹⁰⁶ Ibid., 16.

¹⁰⁷ Ibid.

¹⁰⁸ Grove, *Augustine*, 54.

¹⁰⁹ Lamb, "Eternity," 133.

Further, time brings creation and eternity together in temporality, and it is the anchor of the Incarnation that enables humanity to move forward in time in the present towards eternity.

7.5 Temporal Time

"It is perfectly true, as the philosophers say, that life must be understood backwards. But they forget the other proposition, that it must be lived forwards."

Søren Kierkegaard, Journals IV A 164 (1843)

Straus writes, "time springs from eternity to which it returns."¹¹⁰ Figure 7.1 illustrates this; as time progresses bi-directionally in whichever direction, it originates in eternity and returns to it. Kierkegaard remembered this when he recognized that life must also be lived forward. The continuum of time is related to motion and for Augustine, memory and this movement of time could not be separated. He asserts in XI.28.37, "for the mind expects and attends and remembers, so that what it expects passes through what has its attention to what it remembers." For example, Augustine states that when reciting Psalms, the words pass into memory.¹¹¹ Kukushkin and Carew maintain that they "place time and temporal patterning at the centre of the concept of memory."¹¹² They also state, "the nervous system's extraordinary ability to represent time at multiple timescales is a prerequisite for its unmatched capacity for information storage [memory]."¹¹³ Again, time and memory cannot be separated. It becomes evident to Augustine as he interrogated memory that he could not do so without an analysis of time; neither time nor memory could be understood without an examination of the interplay and connectivity between the two. Indeed, as Kukushkin and Carew argue, the "structure of memory lies in the temporal domain."¹¹⁴ Figure

¹¹⁰ Erwin Straus, "Temporal Horizons," Phenom. Cogn. Sci. 17 (2018): 85.

¹¹¹ Conf. XI.28.38.

¹¹² Kukushkin, "Memory," 260.

¹¹³ Ibid.

¹¹⁴ Ibid., 261.

7.1 illustrates this interplay and demonstrates how the temporal timeline is connected via memory as it slips forwards and backwards through past, present, and future.

The three-dimensionality of the mind i.e. its orientation to the present, the past, and the future, united in the present, provides the basis for speech, which, although it unites passing things, is of a temporal nature.¹¹⁵ Karfíková writes:

In this respect, it is a certain counterpart of God's atemporal speech, which provided grounds for temporality [XIII.29.44]. Speech thus appears as the culmination of the temporal task that the mind carries out by means of its triple structure; at the same time, however, speech is the location of time, and it must be registered by the mind and grasped as a whole. Perhaps it is due to the inseparable link between speech and time that the time riddle cannot be fully solved in speech; even so, speech remains a privileged place where this riddle can be displayed and a place where we are familiar with time (XI.14.17).¹¹⁶

7.5.1 Time and Memory

Book XI associates the creation of memory in context with the creation of time where each cannot exist without the other. This is exceedingly clear to Augustine. In XI.17.22, Augustine writes:

Or do they [past, present, future] exist in the sense that, when the present emerges from the future, time comes out of some secret store, and then recedes into some secret place when the past comes out of the present? Where did those who sang prophecies see these events if they do not yet exist? To see what has no existence is impossible. And those who narrate past history would surely not be telling a true story if they did not discern events by their soul's insight. If the past were non-existent, it could not be discerned at all. Therefore both future and past events exist.

This clearly alludes to the storehouses of memory described in *Conf*. X. and the descriptions of memories of times past and future such as past events (e.g., past history) and future events (e.g., sung prophecies of the future).¹¹⁷ Augustine explains

¹¹⁵ Karfíková, "Memory," 189.

¹¹⁶ Ibid.

¹¹⁷ Cf. Conf. X.8.12-14.

this by comparing the speaking of the narrative of past history to how the actual events have passed away. Past historical narrative becomes images that are recalled in present time which then allow a narrative to be spoken in the present (XI.18.23). Memory recalls into the present what has vanished into the past. Augustine correlates the recitation of a psalm and the passage of its words through time to the passage of time in his life: "it is also valid of the entire life of an individual person, where all actions are parts of a whole, and of the total history of 'the sons of men' where all human lives are but parts."¹¹⁸ He also believes his life is a distension of time pulled in several directions.¹¹⁹ Augustine's struggle with the temporal movement of time is summarized succinctly in XI.29.39:

You are my eternal Father, but I am scattered in times whose order I do not understand. The storms of incoherent events tear to pieces my thoughts, the inmost entrails of my soul, until that day when purified and molten by the fire of your love, I flow together¹²⁰ to merge into you.

Despite this discombobulated sense of time, Augustine still found stability and solidity in God's truth.¹²¹ The flowing together that Augustine mentions in XI.29.39 implies movement of time. Milbank writes:

The past survives in finite memory despite its ontological vanishing because it persists always in God. Memory of the vanished past can occur because memory, also, participates in the divine eternal presence.¹²²

According to Chadwick, the ascent to divine eternity, is a recovery from the disintegrative experience of temporal successiveness.¹²³

¹¹⁸ Conf. XI.28.38.

¹¹⁹ Conf. XI.29.39.

¹²⁰ Chadwick comments: Augustine's image of the historical process is that of a flowing river or rivers with many stormy cataracts. Chadwick, *Saint Augustine*, 244, n. 31.

¹²¹ Conf. XI.30.40.

¹²² Milbank, "The Confession," 44.

¹²³ Chadwick, Saint Augustine, 244, n. 31.

Augustine finds this movement of time to be an extraordinarily complex quandary beyond his ability to reconcile without divine illumination. He believes that God's Word helps him in this endeavour. He writes:

Everything which begins to be and ceases to be begins and ends its existence at that moment when, in the eternal reason where nothing begins or ends, it is known that it is right for it to begin and end. This reason is your Word, which is also the Beginning in that it also speaks to us. Thus, in the gospel the Word speaks through the flesh, and this sounded externally in human ears, so that it could be believed and sought inwardly found in the eternal truth where the Master who alone is good teaches all disciples.¹²⁴

In these few sentences, Augustine connects the Beginning (creation) with the Word speaking through flesh (Incarnation) and eternal reason/truth (eternity). He recognized Christ was the connector between creation and eternity: "And in this way he is the Beginning because, unless he were constant, there would be no fixed point to which we could return."¹²⁵

Attempting to understanding time, how it connected with memory, and his own journey was important to Augustine particularly when he realized that time was not just purely a metaphysical relationship with memory and events. Time, in a metaphysical sense, also helped him understand creation, the Incarnation, and eternity in a much deeper, and even personal manner. His interrogation of time, centred on these truths, and informed his understanding of both temporal time and eternity. However, the *modus operandi* of time still seemed complicated to Augustine.

7.5.1.1 A Paradox of Time: Three Times, One Present

"The distinction between past, present, and future is only a stubbornly persistent illusion."

Albert Einstein¹²⁶

¹²⁴ Conf. XI.8.10.

¹²⁵ Ibid.

¹²⁶ Einstein wrote this in 1955 in a letter to the family of Michele Besso who had recently died. "Time's arrow: Albert Einstein's letters to Michele Besso," accessed May 5th, 2023,

Augustine's inquisitive mind drove him to delve deep into the significance of time, but there he encountered a paradox of time – the three times of the past, present, and future. It was paradoxical because the very existence of time itself was questioned. If the present time faded into the past then it no longer was. If future time came into the present then it also no longer was. In his own way, Augustine was saying the same thing as Einstein, time was an illusion if it did not exist in the present or co-exist with the past and the future.¹²⁷ Or could it be that the illusion is that human beings see themselves as a fixed point in time rather than participants in the flux-like character and temporal directions of time? How are these illusions compatible with the reality of the existence of God created temporal time?

It would be fair to say that, with respect to time existing in the past, present, and future, Augustine did not believe that time existed *except* momentarily in the present since what took place in the past no longer existed and the future did not yet exist. Augustine maintains:

If then, in order to be time at all, the present is made that it passes into the past, how can we say this present also 'is?' The cause of its being is that it will cease to be. So indeed we cannot truly say that time exists except in the sense that it tends towards non-existence.¹²⁸

This is Augustine's "illusion" – he knows time has to exist in the present yet he also knows that it passes into the past and thus becomes non-existent. This Augustine attempted to understand but it remained, in part, a paradox.

¹²⁷ Conf. XI.14.17-22.28. In these chapters Augustine talks about the non-existence of time in the present and the connectors between past, present, and future. Time as non-existence could be likened to Einstein's illusionary concept of past, present, and future. Einstein quote from S. Hawkins, *A* Stubbornly Persistent Illusion: The Essential Scientific Works of Albert Einstein (Running Press, 2009), back cover.

¹²⁸ 'Non-existence' can also be translated 'non-being' (tendit non esse). Conf. XI.14.17.

7.5.1.1.1 Three Times, One Present

Augustine uses three grammatical tenses to describe time – past, present, and future.¹²⁹ However, it is important to consider that there is an ambiguity that exists in Augustine's use of *tempora*.¹³⁰ In the Augustinian corpus, *tempora* can mean both "times" and "tenses."¹³¹ Augustine does, however, argue that strictly speaking there are only three present times when he refers to the past, present, and future of time. In XI.20.26. he says, "it is an inexact (*non proprie*) language to speak of three times – past, present, and future. Perhaps it would be exact to say: there are three times, a *present* of things past, a *present* of things present, a *present* of things to come."¹³² Augustine's emphasis here is on the "one tense of the present."¹³³ Despite the ambiguity conferred by Augustine's use of *tempora*, his use of "one tense of the present" does help one understand the direction of Augustine's thinking regarding the unfolding role of time in his theology of *memoria*.

7.5.1.1.2 The "Present" of the Past, Present, and Future Time

Augustine constantly reminded himself in his deliberations of memory and time, that central to his life was his journey (*in via*) in seeking the *beata vita* and ascending to God. This propelled his forward movement in time. Yet he lived in the "present now" of time within its constraints. Augustine was not however, ignorant of the fact that time moved bi-directionally between the three ordinal moments of temporal time (past, present, future). Time would not exist otherwise. He writes in XI.14.17:

¹²⁹ Augustine's architectonic structure of time as past, present, and future was not entirely original to him although he developed it much further than his predecessors. The concept of time as past, present, and future is also found in Aristotle especially his works *The Categories* where these aspects of time form a continuous whole. In *Physics* time is movement associated with change and motion with a before and after and events embedded in the flow of time. Aristotle, *The Categories* I.6. Aristotle, *Physics*, IV.10-14.

¹³⁰ O'Daly, Augustine's, 157.

¹³¹ Conf. XI.17.22 cf. XI.20.26.

¹³² Italics mine.

¹³³ O'Daly, Augustine's, 155.

But I confidently affirm myself to know that if nothing passed away there would be no past time; and if nothing arrives, there is no future time, and if nothing existed there would be no present time (*non esset praesens tempus*).¹³⁴

The nature of the present is such that it is constantly transformed into the past – if it did not, it would not be time, but eternity.¹³⁵ Karfíková says regarding this paradox of time, "Time, in fact, is the time of things that are about to reach the end of their being: without these things and their passing there would be no time at all."¹³⁶ While this is the case, Augustine recognizes that past and future are present in memory and expectation; as such, one may have access to past or future events as they are objects of intellectual perception and therefore, exist in some way.¹³⁷ Time and memory are recalled and appear from "some secret store;" they both can also recede into that secret place to be stored as memory.¹³⁸

Augustine considers recollection of the past and past memories important in his life journey as he thinks of his own creation and that of the Creator God, and yet, in order to live in the present, he has to leave the past, while not forgetting to live in anticipation of the future. Leaving the past means leaving the memory of living the past to live in the present. Augustine was trying to leave the 'scars' of his past behind him in order to lead a virtuous life. However, memory is not abandoned by Augustine in his attempt to live in present time. Memory is the centre of his thoughts, his theology, and his life in searching for God (on his own he could not live a virtuous life). **Figure 7.1** depicts this as memory progressing along the temporal timeline. Memory is pivotal in the remembrance of what the Creator God has, and is doing, and in the sacrament especially the Eucharist where Christ is remembered (**Figure 7.1**, the Incarnation and eternity). And, in this sense, time and memory become blended into one truth – eternity and temporal time existing in the same space at the same moment of the present but in remembrance of the past and in anticipation of the future.

¹³⁴ Conf. XI.14.17 cf. IV.8.13.

¹³⁵ Karfíková, "Memory," 184.

¹³⁶ Ibid.

¹³⁷ O'Daly, Augustine's, 156.

¹³⁸ Conf. XI.17.22.

Bergsonian time incorporates elements of Augustine's theory of time when it presents the concept of past, present, and future time flowing seamlessly into one another as one durative state (i.e., the present).¹³⁹ This seamless flow of time can also be observed in **Figure 7.1** where it is presented as the bidirectional flow of time moving seamlessly between and through past, present, and future time. They conflate into one existential singularity where the past through memory brings moments outside of present time (i.e., past time) and places them in the present where they are experienced and where they empower the present thereby becoming the future.¹⁴⁰ Unlike Bergson, Augustine places a much stronger emphasis on the present influencing the future, and "touching eternity" through remembrance of the past in the present via the Incarnation and the Eucharist. This can be observed in *Conf.* X.53.68-70 which has such an intense eucharistic exposition; O'Donnell states that it is "a passage of such dense eucharistic imagery that it may be best thought of as perhaps the only place in our literature where a Christian receives the eucharist in the literary text itself."¹⁴¹

7.5.2 The Scientia of Time

Time is an enigma, says Augustine.¹⁴² In attempting to answer how time is measured and to understand the movement of time in terms of past, present, and future, Augustine pleads with God:

My mind is on fire to solve this very intricate enigma. Do not shut the door, Lord my God. Good Father, through Christ I beg you, do not shut the door on my longing to understand these things which are both familiar and obscure. Do not prevent me, Lord, from penetrating them and seeing them illuminated by the light of your mercy.¹⁴³

¹³⁹ Latta writes that Bergsonian time does not go as far as espousing a Christian view of time even though he did believe in an eternity of life that transcended both time and temporal experience. Rather, his theories tend to be the middle ground between non-Christian philosophies (i.e., positivism, scientific mechanism) and Christian theology. He supports a metaphysical understanding of time working in synthesis with an intuitive view of mental states. Latta, *When*, 47-48, 62.

¹⁴⁰ Henri Bergson, *Matter and Memory*, trans. Nancy Margaret Paul, W. Scott Palmer (NY: Zone, 1994), 166. Latta, *When*, 147.

¹⁴¹ O'Donnell, Augustine, vol.1, xxxvii.

¹⁴² Conf. XI.22.28.

¹⁴³ Ibid.

Augustine's sense of urgency in trying to understand the enigma of time was in part driven by his eagerness to gain knowledge (*scientia*) but more importantly to gain sapiential knowledge illuminated by the Father through Christ. He also knew that memory could not entirely overcome the conditions of the temporal.¹⁴⁴ This created a spiritual dilemma. As Hochschild writes:

By memory, the temporal becomes intelligible, and the foundation for a *scientia*. But it also signifies what is for Augustine the tragedy of the temporal: the sense of loss, the frustration of distance, the dramatic unlikeness of the human and the divine perspectives of creation.¹⁴⁵

Despite these enigmas of the temporal and time, Augustine was determined to resolve these paradoxes.

7.5.2.1 Duration of Time

Augustine desired to solve the paradox of how the duration of the flow of time could be measured since the past no longer existed except in memory and the future did not yet exist, only as expectation.¹⁴⁶ Hochschild writes, "Augustine tells us that time is the measurement of a past thing, or else he is not actually measuring the passage of time at all."¹⁴⁷ When the present slips into the past, there duration can be measured.

Augustine's fondness for music led him to draw his explanations of the duration and measurement of time from the syllables of songs and psalms. He is conscious of intervals of time and wonders whether "short" and "long" intervals of time can be measured especially since "perception is the basis of measurement."¹⁴⁸ By comparing the syllables and words of a song Augustine was able to investigate the metre and duration of time since their correct duration was defined by their

¹⁴⁴ Hochschild, *Memory*, 166.

¹⁴⁵ Ibid.

¹⁴⁶ Conf. XI.14.17, 18.23-24, 20.26-22.28, 27.36-29.39.

¹⁴⁷ Hochschild, Memory, 164.

¹⁴⁸ Conf. XI.15.18-16.21.

interrelation.¹⁴⁹ Long syllables should be twice as long as short ones.¹⁵⁰ According to Ayoub this correlation requires some stabilization of the duration of their sounds in one's memory.¹⁵¹ Memory is also intricate to this process because it requires that the syllables themselves be held in memory waiting to be recollected. Further, Ayoub asserts that the chanting of the song requires internalisation of the reality of time which would not be possible if time were just an exterior fleeting reality.¹⁵²

Bergson presents his concept of duration from an interesting metaphysical perspective.¹⁵³ Bergson argues that duration is not measurable in terms of time since there is no separation between past and present conscious states.¹⁵⁴ Remembering past states "does not set them alongside its actual state as one point alongside another but forms both the past and present states into an organic whole, as happens when we recall the notes of a tune, melting, so to speak, into one another."¹⁵⁵ Bergson, also writes that duration "has some kind of trajectory, and…present and future are conditioned by the past such that the past is conserved but, because of all the intervening moments, cannot be repeated identically."¹⁵⁶ Bergsonian time is not Augustinian time, however, it does have some overlap regarding the aforementioned aspects of time and duration that are worth considering.

Time encompasses not just the physical movement of time but also its architectonic structure and physical matter expressed in the movement of time with a duration (e.g., in terms of *scientia*, biological systems moving from beginning to end and thereby towards eternity, human being from birth to death).¹⁵⁷

¹⁴⁹ Ayoub, "Time," 82.

¹⁵⁰ Conf. XI.26.33.

¹⁵¹ Ayoub, "Time," 82.

¹⁵² Ibid.

¹⁵³ Henri Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness*, trans. F. L. Pogson (NY: Harper Torchbooks, 1960).

¹⁵⁴ To Augustine conscious state is the same as the mind. *Conf.* XI.27.36.

¹⁵⁵ Bergson, *Time*, 100. Jennifer Newsome Martin, "Memory Matters: Ressourcement Theology's Debt to Henri Bergson," *Int. Sys. Theol.* 23 no. 2 (2021): 183-185.

¹⁵⁶ Martin, "Memory," 185.

¹⁵⁷ Biological systems would include the generational transmission of genomic data, cellular

proliferation, and the life (birth and death) of a human being, to mention a few. See Conf. XI.18.24.

7.6 Physical Time

"What is time? Who can explain this easily and briefly? Who can comprehend this even in thought so as to articulate the answer in words?"¹⁵⁸

Augustine assumed the challenge to understand the physical aspect of time when he asks the question "what is time?" Ayoub is correct when she asserts that Augustine asked this question for the very same reasons that he wanted to know exactly what memory was.¹⁵⁹ Ayoub writes that the underlying reason for Augustine's inquiry into the nature of time is "in the context of what time means in a life directed toward the fulfilment of the imperative desire for happiness."¹⁶⁰ Discovering what time *is* brings it from a metaphysical dimension to a physical reality thus providing some understanding of temporal time and its interconnectedness to the relationship with God within the confines of temporality. Ayoub contends:

Augustine's text [*Conf.* XI] is attentive to the humanization of time, which cannot be mechanized or dictated by parameters of happiness that do not bring stability. Rather it is a time that operates to bring one into a closer relationship with the Divine. ... only virtuous delight, operating in the terms of another temporality, brings us closer to the experience of eternity-truth-happiness.¹⁶¹

Conf. XI does not resolve all the conundrums of the nature of time, memory, and creation.¹⁶² However, it does pay attention to the bodily senses, the external world, and the finer details of time explicating on its structure, measurement, and function through ordinal moments in past, present, and future.

¹⁵⁸ Conf. XI.14.17.

¹⁵⁹Ayoub, "Time," 84.

¹⁶⁰ Ibid.

¹⁶¹ Ibid., 85.

¹⁶² Gross, "Augustine's," 140.

7.6.1 Arc-hitectonics

Arc via its Arc-hitectonic structure is well positioned to establish a timeline of its role and function from time past through to time future with its expression best illustrated in time present. Physical time, one of Augustine's three classifications of "time" - eternity, temporal time, and physical time (**Figure 7.1**) is exemplified, in this case, by Arc (**Figure 7.2**). Physical time is cyclical in nature as it flows from creation to eternity, and then from eternity to creation (**Figure 7.2**).

The life cycle of Arc included in **Figure 7.2** is the movement from gene to mRNA to capsid formation, translocation of mRNA in synapses to creation of Arc protein which all happens in time and space. The dynamics of this life cycle are dependent of Arc's structure even down to the molecular organization of its genomic sequences; hence, architectonics is a major contributor to the study of the function of Arc through and in time. This is seen in examining the structure of the Arc gene in past time (creation) and its conservation throughout millennia. This genomic sequence of the Arc structure facilitates Arc's expression and action in present time, followed by Arc in future time with its transmission from generation to generation as it moves towards eternity.

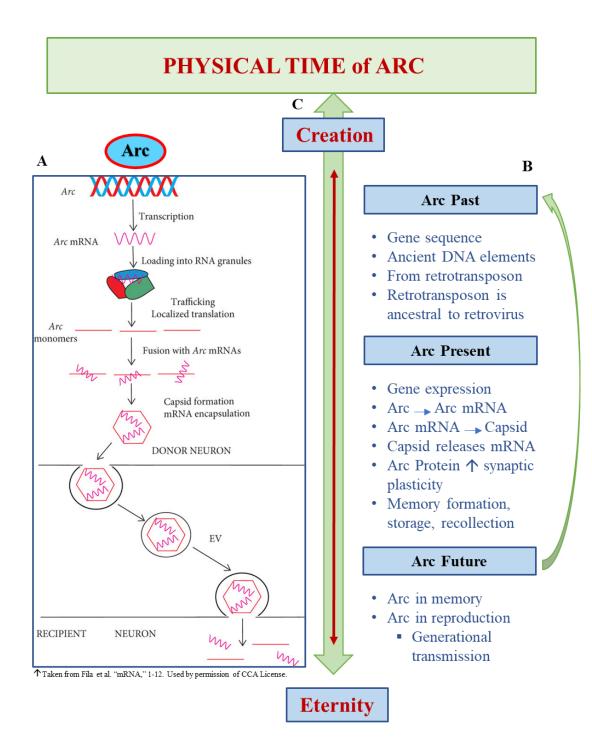


Figure 7.2: Physical time as exemplified by the Arc gene.

Figure 7.2: (A) the life cycle of Arc, facilitated by its Arc-hitectonic structure, flows through time and space, (B) Arc role and function in past, present, and future time, (C) Bi-directional flow from creation to eternity (green arrow); red arrow is the bi-directional flow of Arc through time.

7.6.2 The Life Cycle of Arc and the Flow of Time

In **Figure 7.2** the life cycle of Arc is illustrated on the left-hand side and designated (**A**). Operating within the confines of physical time and temporal time, Arc traverses through time from one neuron to the next. This flow through time is accompanied by structural alterations to Arc and changes that transpire as a result of the "instructions" provided by the Arc gene. Experimental evidence has revealed that memory formation takes time including the involvement of short- and long-term plasticity and modification of protein synthesis; times can last from milliseconds to hours.¹⁶³ In other words, there are temporal intervals between associated events or stages in the life cycle of Arc. Augustine suspected that there were temporal intervals between events, or even knew it, but he did not know how to prove it. He did well in his discussion of the measurement of syllables and words where he was able to explain this concept yet continued to be befuddled by the backward and forward flow of time.¹⁶⁴

7.6.2.1 Impact of Changes in Arc Structure

Changes in Arc structure occur either as part of its expression in a positive manner i.e., the neuronal communication system involving synaptic plasticity, or negatively due to alterations and/or mutations of Arc. The life cycle of Arc exemplifies the positive aspect of how Arc changes in its structure and function as it regulates memory processes. Negative alterations to Arc structure occur when Arc's expression is altered or mutated and cause neurodegenerative disease and memory disorders e.g. Alzheimer's disease.

It should be noted that Leung in 2022 proposed a second mechanism that facilitates the functioning of Arc but occurs through changes in the chromatin¹⁶⁵ structure of Arc-positive neurons.¹⁶⁶ This is different than the changes specific to Arc itself, and the "new" structures (e.g., capsids) elucidated in the life cycle of Arc.

¹⁶³ Kukushkin, "Memory," 259.

¹⁶⁴ Conf. XI.22.28, 25.32-27.36.

¹⁶⁵ Chromatin consist of protein-DNA complexes that condense to form chromosomes found in cells. Chromatin participates in gene regulation. J. Widom, "Structure, dynamics, and function of chromatin in vitro," *Ann. Rev. Biophy. Biomol. Struct.* 27, no. 1 (1998): 285-327.

¹⁶⁶ Leung, "Arc," 1-51.

Remodelling of chromatin does occur with Arc expression; however, a causative relationship has yet to be established.¹⁶⁷ What has been noticed is there are significant differences in the structure of chromatin in Arc-positive neurons versus Arc-negative neurons. Leung posits that it may be that an alteration in chromatin structure is required for Arc expression, alternatively, Arc expression may be the cause of chromatin remodelling.¹⁶⁸ He suggests that the interaction of Arc and chromatin structure may provide a mechanism that seemingly confers epigenetic¹⁶⁹ control of gene transcription by regulating chromatin structure. Leung's article enhances the knowledge base regarding Arc-hitectonics. It does not negate previous findings (e.g., Arc's neuronal communication pathways) but instead demonstrates the great versatility and multiplicity of Arc in its genomic regulation of memory processes.

7.6.3 Arc Past, Present, and Future

Augustine's view of time as "a present of things past, a present of things present, a present of things to come" seems rather apt for Arc.¹⁷⁰ Arc has a past, present, and future participation in time in terms of its structure, expression, and transmission as represented in **Figure 7.2**.¹⁷¹ Generally speaking, "Arc past" is associated with Arc's structure, "Arc present" with Arc gene expression and "Arc future" with Arc transmission. True, also, is the fact that all of Arc's participation in past, present, and future time is manifest in the present. This sounds enigmatic and paradoxical, as in Augustine's own deliberations of this aspect of time,¹⁷² but it can logically be explained much in the same manner that Augustine did regarding syllables and words in *Conf.* XI.

"Arc past" pertains to its architectonic structure and specific elements within that promote the expression of Arc in memory and time. Like time, Arc by extrapolation is a "creature" since it too was created by God. In this way, both time and Arc are connected as Arc operates within the continuum of time and space. Arc

¹⁶⁷ Ibid., 25.

¹⁶⁸ Ibid.

 ¹⁶⁹ Epigenetics is the study of how behaviours and environment cause changes that affect the way a gene works. These changes do not change DNA sequences and are reversible.
 ¹⁷⁰ Conf. XI.20.26.

¹⁷¹ The terms "Arc past," "Arc present," and "Arc future" are used to identify the aspects of Arc that are situated in times past, present, and future.

¹⁷² Conf. XI.20.26-22.28.

and time as creatures formally participate in eternity. However, it is the continuity provided by memory that is essential for making the temporal become intelligible.¹⁷³ Both time and Arc are connected by memory.

Arc is structurally designed so that it has operational functionality directing memory processes that occur in the past, present, and future. Figure 7.2 in (B) lists the architectonic constituents of Arc past. The specific genomic sequence of the Arc gene with its ancient DNA elements derived from retrotransposons gives Arc its functional advantage as a facilitator of memory and physical time. The Arc ancient genomic elements also confer an evolutionary advantage and a highly conserved nature that ensures its efficacious expression and behaviour.¹⁷⁴ The architectonic uniqueness of Arc is that it is a single-copy gene with virus-like behaviour that forms capsid structures designed to protect Arc mRNA.¹⁷⁵ The molecular architectonic structure is specifically designed to ensure operational competency within its life cycle and any perturbations are sufficient to cause deficits in memory.

The architectonic structure of Arc initiates and regulates Arc expression in the "Arc present" of time (Figure 7.2). Arc expression initiates the life cycle with its formation of mRNA and capsids which are transported via extracellular vesicles into recipient neurons where the cycle starts over.¹⁷⁶ In the present, Arc calls upon the temporality of its past and its genomic structure in its function as a neuronal communication system to initiate memory formation, retention, and recollection. This is a flow of time that results in change as memories are formed, recalled, and acted upon.

In the "Arc future" of time, Arc moves towards the future and eternity as the cells which contain the genome including Arc proliferate and divide as new generations of human beings are born. Innate memory, perhaps even the *memoria* Dei, and certainly the ability to remember, is passed on from one generation to the next through the flow of time from past to present to future.¹⁷⁷ Future time is thus

¹⁷³ Hochschild, *Memory*, 163.

¹⁷⁴ Bramham, "The Arc," 131. Zhang, "Structural," 496. Shepherd, "Arc," 74.
¹⁷⁵ Dodonova, "Structure," 10055.

¹⁷⁶ Fila, "mRNA," 1-12.

¹⁷⁷ Studies in C. elegans have demonstrated that they can maintain a gene expression memory for 14 generations. This is hard to test in humans as the typical maximum number of generations at most is five; however, traumatic memories have been proven to be generationally transmitted in three generations in humans. Adam Klosin et al., "Transgenerational transmission of Environmental

dynamically shaped by the humans' past and present in a physically manifested interaction that occurs between the genome, memory, and the environment.¹⁷⁸ Evolution has endowed Arc with the capacity of working within temporal time to perform its role in neuronal communications. The temporality of Arc, in this sense, becomes a function of the genome as Arc, memory, and time blend together in the past, present, and future of time. Arc thus brings to light a biological aspect to the physical time of temporality and memory. Further, Arc's metaphysical ability to remember time and memory persists through generational transmission towards eternity and yet, at the same time, touches eternity in temporal time when the rational soul remembers its God.

The flow of time from past-to-present-to-future [(**B**) in Figure 7.2] is evident, and it also blends with the "flow of time" in eternity from creation to eternity. This movement in time in the physical body of the human being is pertinaciously associated with genes in the genome. The Arc gene was embedded in the genome at creation. Through temporal successiveness, Arc has survived throughout millennia, highly conserved, as has its role in the neuronal communications and operations involving memory which, in itself, requires that re-collection occurs from the past to the present. Arc acts by not only diving, and deep diving, into the past to recollect memory but acts also in the present to activate re-membrance and re-collection of memory. Arc's progression from present to future occurs when Arc is passed on from one generation to the next as it hurtles towards eternity. Creation recurs in the present at conception and in the birth of human beings who now have received the Arc gene transmitted from their parents. Per Röck, at the ontological level, a human being has a becoming, changing, and perishing, which reflects the dynamic aspect of temporality.¹⁷⁹ At this ontological level, Arc participates in a process of change for it has a past, present, and future. Arc links human beings to the past via memory, shapes their present via memory, and allows for possibilities in the future via memory.¹⁸⁰ Temporal time thus moves (flows) from the emergence of life until temporal

Information in *C. elegans,*" *Science* 356, no. 6335 (2017): 320. Jan Ilhan Kizilhan, Michael Noll-Hussong, Thomas Wenzel, "Transgenerational Transmission of Trauma Across Three Generations of Alevi Kurds," *Int. Environ. Res. Pub. Health* 19, no. 1 (2022): 81.

¹⁷⁸ Carolyn Jo Love, "Re-Thinking Anthropomorphism Through a Genetic Philosophy of Time" (PhD diss., Loyola University Chicago, 2014), 55-56.

¹⁷⁹ Röck, "Time," 33.

¹⁸⁰ Love discusses how genes not only characterize and distinguish human beings but also contain information linking past, present, and future. Love, "*Re-thinking*," 40.

extinction where biological creatures move from the past, into the present and constrains the future.¹⁸¹ Arc future also returns to the present via the past (**Figure 7.2**). Arc thus acts in time and temporal succession and, in addition, does so within the context of memory which is the driver of time. The human body and memory are thus temporally timed phenomena since they experience the present time while stepping into both past and future.

Arc acts in the past utilizing its genomic structure that has withstood the evolution of time and retaining its highly conserved nature. Arc, as a gene, has a deep history of the past which is why Arc can work in the present to recollect the *memoria Dei* embedded in the rational soul from the creation of humankind. The ability to facilitate memory recollection in the soul is directly linked to Arc's capability to function as a retrovirus, a capability retained in the genome through the passage of time from the past into the present and into the future as it is transmitted from one generation to the next. Arc represents the physical temporality of time and memory, and it blends seamlessly into the three cardinal moments of eternity - creation, Incarnation, and eternity.

7.6.4 Spatio-temporal Dimensions of Time

Arc, in a sense, operates with time in causing a *distentio* of the mind. Memory recalled in temporal time such as the memory of the death and resurrection of Christ ("do this in memory of me") results in temporal time meeting eternity in that moment of union with Christ during the Eucharist. The memories formed and recalled in the rational soul facilitated by Arc also cause Arc's movement back in time where it recollects and retrieves memory and then forward as memories are remembered in the present and are anticipated in the future. Further, Arc's work occurs in space as synaptic plasticity increases causing Arc capsid formation and transmission from neuron to neuron through space. Time and space are seen to be two aspects of the

¹⁸¹ Love, "*Re-thinking*," 35.

same corporeal reality.¹⁸² They are both distinct in the sense that time passes but space does not.¹⁸³

Einchenbaum authored an article about the integration of time, memory, and space.¹⁸⁴ In this article, he connects the dots between time, memory, and space by demonstrating how time and space are integrated in the representation of memories. He presents data that hippocampal networks are able to map moments in temporally organized experiences.¹⁸⁵ These hippocampal networks map these moments via genomic mechanisms such as the one involving Arc. In summary, Einchenbaum describes how brain pathways for spatial and temporal cognition involve overlapping and interacting systems that converge on the hippocampal region. In his conclusion, Einchenbaum writes:

The evidence presented here suggests that space and time are initially processed by overlapping brain networks and coded in different scales, then spatial and temporal signals are integrated within the hippocampal region to create a framework for the spatial-temporal organization of memory. Although movement through space and time are intrinsically coupled, spatial and temporal coding can be observed differentially in hippocampal regions under some behavioural demands or combined by individual neurons that code both dimensions into the overall population representation.¹⁸⁶

Here Einchenbaum is discussing the neurological and anatomical aspect of spatio-temporal association which are all part of the Arc mechanism mentioned in the previous chapter. Time, memory, and space all blend into one another, as does the role of Arc in spatio-temporal memory formation and recollection which, as has been shown, has a cyclical nature.

¹⁸² In 1905 Einstein published his special theory of relativity. Minkowski (1908) commenting on this in a presentation put it this way three years later, "Henceforth space by itself, and time by itself, are doomed to fade away into mere shadows, and only a kind of union of the two will preserve an independent reality." Hermann Minkowski, "Raum und Zeit," *Jahresbericht der Deutschen Mathematikier-Vereinigung* (1908): 75-88. J. P. C. Mbagwu, Z. L. Abubakar, J. O. Ozuomba, "A Review Article on Einstein Special Theory of Relativity," *Int. Theoret. Math. Phy.* 10, no. 3 (2020): 65-71.

¹⁸³ Knotts, "Space-time," 1.

¹⁸⁴ Howard Einchenbaum, "On the Integration of Space, Time, and Memory," *Neuron* 95 (2017):1007-1018.

¹⁸⁵ Ibid., 1007.

¹⁸⁶ Ibid., 1015.

This movement is also a movement in time, and time taken in moving from one neuron to another can be measured.¹⁸⁷ This physical and spatial movement occurs in "time intervals" within the Arc neuronal communication pathways. Again, there is this blending of an existential temporal reality and the physical mechanical processes of memory storage and recollection that facilitate remembrance, or provides the ability to remember, by the mind and therefore, the soul.

7.7 Concluding remarks

"Time is a companion that goes with us on a journey." Captain Jean-Luc Picard, Star Trek

Captain Jean-Luc Picard, although a fictional character, makes a very apt statement about time which Augustine would agree with. Whatever point a person is in their life, they are accompanied by time. Past memories invade their present time and present time invades their future time, and vice versa. Time lives side by side with a person. The significant moments and memories of time define the journey.

The three categories of "time" – eternity, temporal time, and physical time, each provide insights into the nature of time and memory. **Figure 7.1** is a proposed model for a blended and seamless operation of the three categories of "time" and their correlative moments. **Figure 7.2** expounds on physical time using Arc as an exemplifier of such time. Arc illustrates how physical matter in the form of its molecular architectonic structure operates within the human body in regard to memory and time. Arc is not the sole exemplifier but in the context of this thesis is an important gene in examining the genomic processes involved in memory and time. The cyclical nature of time and memory can be seen in both **Figures 7.1** and **7.2**.

In Augustinian terms, temporal time through Christ the Mediator takes a person to the cardinal moments in eternity of creation, the Incarnation, and eternity. At the Incarnation and the Eucharistic, a person meets eternity. This is exactly what Augustine understood of time – the "eternal present" and the "present now" can meet

¹⁸⁷ Pastuzyn, "Neuronal," e18.

albeit a momentary experience and point in time. This is why Augustine wanted to understand the nature and operation of time and its close interrelation with memory. Augustine in this interrogation of time could only start from the beginning - the creation of time "in the Beginning" (Gen. 1:1, *Conf.* XI.1.1) and end with eternity.

The Arc-hitectonic structure is intrinsic to the expression of Arc and its role in memory and time, and thus is a good exemplifier of physical time. The workings of time and memory are important for Augustine to understand especially since memory in time past, present, and future was sacramental; sacramental because of how crucially important it was to Augustine's endeavours to understand and know God and to stride forward to achieve fulfilment of the *beata vita*.

The following chapter discusses how *Conf.* XIII is a recapitulation of *Conf.* I-XII and does so by examining the architectonic structure of XIII, memory and time.

CHAPTER 8: The Archaeology of Memory by Recalling Creation

"Deus Creator Omnium."¹

8.1 Chapter Aims

The previous six chapters have discussed the development of Augustine's theology of *memoria* by examining the manner in which he came to understand the function and organizational operation of memory. My work has demonstrated an architectonic structure to Augustine's logic regarding *memoria* and memory; it has revealed how Augustine developed his theory and communicated it to his readers. This architectonic structure has unearthed new concepts regarding Augustinian memory that have provided further understanding of *memoria*. This has laid the foundation for this chapter.

Confessiones XIII is often thought to contain very little on memory. This is not the case. Through careful examination I shall demonstrate that XIII consists of an architectonic structure that mirrors Augustine's architectonic structure of memory viewed through the lens of creation. Further, I provide evidence that this structure supports Book XIII as a recapitulation of Books I-XII. Augustine's strong foundational theology of creation *ex nihilo* is apparent as he describes the seven days of creation relating each day to some aspect of memory.

In this chapter, this architectonic structure is laid out, again following the sequence discovered in the architectonic *structure* of *memoria* in Chapter 4. This discovery of an architectonic structure in XIII, is, to the best of my knowledge, not previously presented as a recapitulation and confirmation of the major motifs of memory.

¹ Conf. XI.27.35.

8.2 Introduction

Augustine's commentary on *Confessiones* in *Retractationes* starts by emphasizing "the thirteen books of my confessions."² Augustine clearly thought both, at the time of writing *Confessiones* and later, towards the end of his life, that the thirteen books were one volume, and each book was connected in the larger schema of the whole volume. It is fair to say that the debate regarding the unity of these thirteen books has been extensive, centuries old, and quite varied in its conclusions, as shall be observed in this chapter. My observations of these studies are that most theologians and scholars hinge on only one aspect of Augustine's philosophy, theology, metanarrative, metaphysics, literary, temporal/eternal, etc. They exclude many other facets found in *Confessiones*. Consequently, the unity comes from a cohesiveness pertinent to a particular motif and, therefore, reconciliation of Books I to XIII often becomes tenuous due to this reductionist approach and a lack of a more holistic, multi-dimensional investigation.

It is my contention that the unity of Books I-XIII is found in the fact that Book XIII is a recapitulation of Books I to XII.³ XIII addresses the multi-dimensionality of the previous twelve books and the many motifs within. The allegorical exegesis of Genesis 1 in XIII is clearly intercalated with these motifs, thus cementing the holistic cohesiveness of *Confessiones*. This cohesiveness includes the thematic presence of memory, time, and creation throughout all of *Confessiones*. The ingenuity of XIII is the fact that Augustine chose to recapitulate I-XII through his exposition of creation in Genesis 1. This is not surprising considering that creation and the Creator God were foundational and fundamental to Augustine in his interrogation of and approach to, theological, philosophical, and scientific concepts.

Book I to XIII are clearly thoughtfully written with a common purpose of documenting Augustine's journey from his creation to his desire for achievement and fulfilment of the *beata vita*; it is a trajectory that sees the soul's yearning to return to its origins and which supports the unity of *Confessiones*. The many themes including

² Augustine's original title for *Confessiones* was *Confessiones Libri Tredecim* alluding to the unity of its 13 books. *Retr.* II.6.1. Hammond, "Title," 17.

³ Going forward the Books of *Confessiones* will be written just by the Roman numerals without "Book" in front of them i.e., Book XIII will be written as XIII. The exception will be Book I since I could be mistaken for the pronoun "I."

memory within I-XIII all participate in defining this trajectory. *Confessiones* is about memory since temporal memory starts at creation and continues to and within eternity. The architectonic structure of the constituents of memory (Chapter 4) is not as clearly delineated in XIII. However, the principles of memory and its constituent foundational pillars are present whether explicitly or implicitly in the text of XIII. The architectonic structure of XIII is a buttress to the findings and conclusions of Augustine's intense searching of himself, his soul, his journey (as a viator), and God, but it is also the apotheotic culmination of Augustine's writings in *Confessiones*.

This chapter will present evidence to support my contention that Book XIII is a recapitulation of I-XII. To the best of my knowledge, Book XIII as a recapitulation of Books I-XII and its architectonic structure, as presented here, is a novel theory not found in previous research.⁴

8.3 The Theory of Recapitulation:⁵ Book XIII is a Recapitulation of Books I-XII

The recapitulation motif in *Confessiones* is not considered a theory in itself by scholars, but some do touch upon it, without necessarily highlighting that aspect. McMahon's work discusses a recapitulation motif as he describes the cyclical nature of *Confessiones*. However, he views this 'recapitulation' via a prayer format and a meditative structure anchored to an *exidus-reditus* motif.⁶ A recapitulative viewpoint can be noted but it seems weak as it hangs on to a single thread as the unifying factor.⁷

The premise of my theory of recapitulation in Book XIII of *Confessiones* is a bringing together via Augustine's strong foundational creation theology the multiple

⁴ I have extensively researched this and cannot find any references to my theory that I am presenting of XIII recapitulating I-XII as I describe it in this chapter. This also pertains to my theory regarding the architectonic structure contributing to my theory of recapitulation and the unity of *Confessiones*. This is not to say that there might be an obscure article or references to such.

⁵ The phrase "theory of recapitulation" from here on refers specifically to my theory of recapitulation that I am proposing in this chapter.

⁶ R. McMahon, Understanding the Medieval Meditative Ascent: Augustine, Anselm, Boethius, and Dante (CUAP, 2006), 69.

⁷ E.g., Kotzé, "Structure," 28-45. Le Blond, *Les Conversions*, 17. Paul Louis Landsberg, "La Conversion de Saint Augustin," *La Vie Spirituelle* 48 supplement (1936): 31-56. A. Solignac, "Introduction." *Les Confessions," Bibliothèque Augustinienne* 13 (Paris: Descleé De Brouwer, 1962), 23-24.

motifs that Augustine has written about in I-XII. Augustine, by writing XIII as a recapitulation of I-XII, confirms the cohesive unity of all thirteen books of *Confessiones* and reiterates the importance of God's creative act in his journey towards the Divine and the *beata vita*. For Augustine, *Confessiones* was also written that others might read it, praise God, and understand their own journey towards the *beata vita*.⁸ This theory of recapitulation also rests on the fact that I-XII can be considered the books with *the* memories while XIII is the book of *a* memory. Memory is thus a central concept which lends support to XIII as a recapitulation of I-XII.

The architectonic structure of XIII illustrates the components that form the recapitulation theory. This architectonic structure has six main sections:

- 1. The Consummation and the Prolegomenon
- 2. The Architectonic Structure of Creation
- 3. A Memory and The Memories
- 4. The Beata Vita
- 5. Temporality and Time
- 6. The Confessio of Confessiones

These sections are presented in tabulated form so that the correlation between sections in I-XII can be compared to texts from XIII. The texts presented are not exclusive to the pertinent topic; they are a selection to illustrate my theory of recapitulation. Further, some texts are equivalent/implicit in wording while others are based on the thematic interpretation of the text which thus allows correlation.

8.3.1 The Consummation and the Prolegomenon

The unity and structure of I-XIII is evident from the very first words of XIII for they start in the same manner as Book I as shown in **Table 8.1**. Augustine calls upon God (*invocare*) to come into him. His desire at the consummation and the prolegomenon is the same: Augustine desires to seek and know God. In **Table 8.1** the

⁸ E.g., X.3.3-4, 4.5, XI.1.1, XIII.20.27.

consummation of Book XIII and the prolegomenon of Book I illustrates that in *Confessiones* the end and starting points begin at the same place.

THE CONSUMMATION AND THE PROLEGOMENON		
Book XIII (1.1; 38.53)	Book I (1.1; 2.2)	
XIII.1.1 I call* upon you, my God, my mercy I call you into my soul which you are preparing to receive you through the longing which you have inspired in it * <i>invocare</i> – invoke, petition, plead [#]	I.1.1 I would seek you, calling upon youII.2.2 How shall I call upon my God? Surely when I call on him, I am calling on him to come into me	
XIII.1.1 Before I called you, you were there before meBefore I existed you were, and I had no being to which you could grant existence	I.2.2 I would have no being, I would not have any existence, unless you were in me	
 XIII.1.1 here I am as a result of your goodness, which goes before all that you have made me to be, and all out of which you made me XIII.38.53 As for ourselves, we see the things you have made 	 I.1.1. Man, a little piece of your creationyou have made us for yourself I.2.2 heaven and earth which you have made and in which you have made me 	
XIII.38.53 Only on your door can we knock. Yes indeed, that is how it is received, how it is found, how the door is opened (<i>fulfilment of I.1.12.2.</i>)	I.1.1-2.2 grant me to knowI would seek you calling upon yousurely when I call upon himso why do I request you to come to me (<i>action of</i> <i>petitioning analogous "knocking"</i>)	

Table 8.1 Side-by-side comparison of the texts in Books XIII and I.

Definition of invoke from https://www.merriam-webster.com/dictionary/invoke.

The first thing to note is the ending of XIII which circles back to the start of Book I. Augustine is reminding his readers through his own example of calling out to God. The calling out to God does not change; in other words, it is a continual calling out throughout one's life in order to keep one connected to the Divine. This is a persistent theme in *Confessiones* and critical to Augustine in his own desire to know God. The Latin word for 'call' in both XIII and Book I is *invocare*. This translates better as 'invoke' which has a stronger sense and emphasis of 'to petition for help' or 'make an earnest request for help.' XIII.1.1 uses this verb throughout and as Augustine pleads with God, "do not forsake the one who is pleading (calling) with you now" (*nunc invocantem te ne deseras*).⁹ *Invocare* suggests that there is an urgency to this request for help as Augustine recognizes that on his own he is unable to do anything, he needs God's help.

The cyclical nature from XIII-I-XIII reinforces the importance and necessity of calling out to God in the search for the beata vita. From the few chapters in Table 8.1, the importance of creation theology in Augustine's understanding of both the nature of man and God, and the relational desires of humankind, is clearly illustrated. Without God, humans would not exist, a poignant point to Augustine in understanding the goodness of God and how God has prepared his soul to receive Him and facilitate a relationship. Augustine elaborates further in XIII and in I-XII. Augustine wanted his readers to arouse their minds and emotions towards God,¹⁰ and he encourages this from the beginning to the end, and vice versa. Further, both sections of I-IX and X-XIII require memory to remember creation, God, and the nature of a human's existence. McMahon's view of the cyclical nature of I-XIII based on a meditative and prayer structure fits within this architectonic structure of the consummation and the prolegomenon. Yet, this is but one trope unifying Confessiones. Kotzé also sees a circular connection between XIII and I.1.1-2.2; she focuses on XIII.38.53 with Matt 7: 7 as the unify factor of *Confessiones* where it becomes "a vehicle for expressing Augustine's search to understand God."¹¹ Here XIII.38.53 can therefore, be understood as the answer to Augustine's petitions in I.1.1-2.2. Both McMahon and

⁹ My translation.

¹⁰ Mary T. Clark, *Augustine: Outstanding Christian Thinkers* (MI: Georgetown University Press, 1994), 84.

¹¹ Kotzé, "Structure," 38.

Kotzé identify a cyclical component to I-XIII but they do so by recognizing a singular "strand."

Table 8. 1 demonstrates how in the texts listed multiple themes are present. First, the theme of petitioning (calling) God and Augustine's desire for God to come into him. Second, creation theology whereby Augustine acknowledges that he would not have existed or have a being were it not for God's creative act. Third, the goodness of God in creating human beings for himself. Fourth, it is only by knocking on God's door that human beings can know God. XIII.38.53 becomes the fulfilment of I.1.1-2.2.

This recapitulation in XIII, as it functions to demonstrate the cycle from end to beginning to end, is also dependent on memory; it is the memory of creation that materializes in XIII and which is a realization of the memories of I-XII.

8.3.2 The Architectonics of Creation

It is evident from the beginning of XIII that Augustine considers the creation events to be good - in the same way that God considered his creation to be good. Further, Augustine believed in the goodness of God as Creator. His first exclamation was "You [God] made me...here I am as a result of your goodness."¹² Important to this understanding of creation is the fact that Augustine viewed his conversion as a continuation of God's creative work on himself.¹³ From that perspective, *Confessiones* is an allegory of creation. Vaught argues that the metanarrative of *Confessiones* begins with creation, moves towards the fall, points to salvation, and culminates with fulfilment.¹⁴ He goes on to say that Augustine's interpretation of Genesis 1 correlates with the "metanarrative that makes Augustine's journey toward God possible and reflects the structure of his experience."¹⁵

Augustine's exegetical, allegorical, metanarrative, and metaphysical study of Genesis 1 in XIII illustrates how the architectonic structure of his analysis is already

¹² *Conf.* XIII.1.1.

¹³ Petr B. Fischer, "What's in a Classic? The Unity of Augustine's Confessions," *Cent. Rev. Arts. Sci.* 2 (1958): 76-77.

¹⁴ Carl G. Vaught, *Access to God in Augustine's Confessions Books X-XIII* (NY: State University of NY Press, 2005), 151.

¹⁵ Ibid.

present in I-XII, and tenaciously joins I-XIII as one cohesive volume. **Table 8.2** illustrates how XIII recapitulates the creation statements in I-XII.

CREATION		
Book XIII	Books I -XII	
 XIII.1.1 here I am as a result of your goodness XIII.2.2 your creation has its being from the fullness of your goodness 	 I.1.1 Man, a little piece of your creation VII.5.7 here is God and see what God has created. God is goodand being God, he created good creatures 	
 XIII.2.2 heaven and earth, which you made in the beginning XIII.24.36 in the beginning God made heaven and earth XIII.3.4 among the first acts of creation you said, 'let there be light' XIII.8.9 from the beginning you had said 'let there be light' 	 VII.9.13 In the beginning was the Word and the Word was with God and the Word was Godall things were made by him XI.2.3, 3.5, 9.11 from the beginning in which you made heaven and earth XII.12.15, 13.16, 17.24-25, 19.28, 20.29, 22.31, 24.33, 28.38, 29.40 in the beginning you made heaven and earth 	
 XIII.2.3 Physical matterwould not exist unless you had made itwe are a spiritual creation in our souls XIII.3.4, 18.22 let there be light (first act of creation)I do not think it out of harmony with the sense if we take this to mean the spiritual creation 	 I.7.12 You, Lord my God, are the giver of life III.6.10 for priority goes to your spiritual creation V.3.6 recall many true observationsabout creation itself. I particularly noted the rational, mathematical order of things, the 	

 Table 8.2: Creation in XIII recapitulates creation from I-XII

CREATION	
Book XIII	Books I -XII
Cont.	
XIII.18.22 let there be 'lights in the firmament'it is also your spiritual people established in the same solid firmamentby an eternal design at the appropriate times you gave heavenly blessings to the earth.	order of seasons, the visible evidence of stars. V.10.19 Lord of heaven and earth, maker of all things visible and invisible VII.3.4 God who made not only our souls but also our bodies XII.5.5 it is matter out of which bodies are made
 XIII.5.6 my God - Father, Son, Holy Spirit, Creator of the entire creation XIII.12.13 in his Christ God has made a heaven and earth XIII.27.32 Lord our God, our Creator 	 I.2.2, 10.16 God made heaven and earth. Creator of all things III.8.15 God, the governor of all his creation III.8.16 the one true Creatorof the entire universe IV.10.15 Creator of all V.5.9 Creator of all things V.1.1, 3.5 your entire creation V.10.19 Lord of heaven and earth, maker of all things visible and invisible VII.9.13 all things were made by him, and without him nothing was made

CREATION	
Book XIII	Books I -XII
Cont.	
	nothingout of nothing you made heaven and earth
	 XII.19.28 it is also true that everything mutable implies for us the notion of a kind of formlessness, which allows it to receive its form XII.20.29-22.31 several interpretations offered by Augustine of formless matter, given form, physical creation
XIII.8.9 how great a thing is the rational creature you have made XIII.15.17 there is a testimony to you, 'giving wisdom to infants'	 VII.3.4 the true God who madeall rational beings I.4.15 not, Lord, that there was a deficiency in memory or intelligence. It was your will to endow us sufficiently with the level appropriate to our age.
 XIII.22.32, 26.40 Lord our God, Creatorlet us make man according to our image and likeness. XIII.24.35 our God, who created us in your image XIII.26.40 You are a man renewed in the knowledge of God after the image of 	 I.1.1 Man, a little piece of your creation VI.3.4 you made humanity in your image VII.3.4 God who made not only our souls but also our bodies
him who created youa living soul	IX.8.18 you have created us IX.9.21 you created me

CREATION	
Book XIII	Books I -XII
Cont.	
XIII.20.28 all things are beautiful because you made them	 X.31.45 you have made man XI.2.4 you made all things including myself XI.12.14 you our God, are the Creator of every created being XI.4.6 You, Lord, who are beautiful, made them for they are beautiful XII.2.2 for this physical totalityhas received a beautiful form in its very lowest things
XIII.28.43 You God saw all that you had madeit was very goodin each category of your works, when you said they should be made and they were made, you saw every particular instance is good. Seven times I have counted scripture saying you saw that what you had made is goodbut on the eight occasionsnot merely good but very good	 VII.12.18 it was made clear to me that you made all things goodfor our God has made 'all things very good' X.31.46 all your creation is good XII.7.7 since you, both omnipotent and good, make all things good
XIII.28.43 a body composed of its constituent parts, all of which are	X.6.9 I see in myself a body and a soul, one external and the other internal

CREATION		
Book XIII	Books I -XII	
Cont.		
beautiful, is far more beautiful as a whole than those parts taken separately	XI.5.7 by your creation the craftsman has a body, a mind by which he commands its membersfrom your creation come the bodily senses	

The architectonic structure observed in XIII (**Table 8.2**) correlates to, and recapitulates, the structure within I-XII. The sequence of the structure within I-XII is as follows:

- 1. Creation of Augustine, result of God's goodness
- 2. Creation has its being from the fullness of God's goodness
- 3. Creation "in the beginning"
- 4. Creation of physical matter and spiritual creation
- 5. Creator of the entire creation
- 6. Form given to formlessness
- 7. Creation of rational creature
- 8. Human beings made according to image and likeness of God
- 9. All things of creation beautiful
- 10. God's creation is good, very good
- 11. Body composed of constituent parts, more beautiful as a whole
- 12. Matter made out of nothing, beauty of world from formless matter

As Augustine studies the creation account he first acknowledges that he is a creation, a result of God's goodness. One can see as he works through the creation account in Genesis 1 that there are parallels with God the Creator, creation, and

human beings in I-XII. There are two distinct patterns regarding the architectonic structure that is observed is the above twelve statements. The first pattern consisting of all twelve statements can be divided into two distinct sections. The first section, points 1-8, pertain to creation and who is created. Point 8 illustrates the goodness of creation including human beings created in God's image and likeness. The second section concerns the beauty of the result of creation, points 9-12. What God the Creator creates, is both good and beautiful. This is the beauty that Augustine sees as he examines creation in Genesis 1.

The second pattern revealed in the architectonic structure is the cyclical pattern of creation present in XIII. Points 1-6 describes creation which starts with Augustine culminating with God creating the entire universe and giving form to the formless. Points 7-12 start at the creation of rational creatures and human beings, describes the beauty of God's creation, and ends with the beauty of the world that was created from formless matter. This attests to the complex, multi-layered structure to XIII, and again, how complex Augustine's thought process must have been.

The beginning of creation as presented in Genesis 1 from the first day to the seventh is recounted in XIII. The seventh day of creation which has no evening and no ending is a day of rest. This Augustine interprets to be the final achievement of eternal rest:

Then you formed 'the living soul' of the faithful...then you renewed the mind after your image and likeness...you made its rational action."¹⁶...after your 'very good' works...you rested the seventh day (Gen 2: 2-3). This utterance in your book foretells for us that after our works which, because they are your gift to us, are very good, we also may rest in you for the sabbath of eternal life.¹⁷

This is the culmination of Augustine's search and journey from a restless heart to rest (I-XIII). Creation exemplifies Augustine's life and journey from his creation to his eventual return to the Divine in eternity; it is the story of the return of the soul to its origin. Chadwick too, concludes that the story of the entire created order is also the

¹⁶ Conf. XIII.24.49.

¹⁷ Conf. XIII.26.51.

story of the soul wandering away from God and then finding its way home through conversion; he says this is particularly illustrated in X-XIII.¹⁸

The creation of form from formlessness is mentioned several times in XIII and often in relation to spiritual creation. According to Harrison, "form" is an ontological category as it does not just refer to outward shape or appearance, but to existence and being.¹⁹ Accordingly, form is received from God who is eternal and immutable Form. Form is significant in mentioning because, as described by Augustine, formless matter is "far off" from God because it is "unlike" God.²⁰ Further, created form can be deformed (*de-formed*) when human beings fall away from God; but form is regained (*re-gained*) when human beings convert to God (*re-member*) and are reformed (*re-formed*).²¹ Form belongs ultimately and supremely to God, who is Divine Form,²² and therefore, God is able to re-form the original form itself. This point is made by Augustine particularly in XI and XII. Human beings as "form" are consequently, able to point beyond themselves towards the Divine source moving from creation towards eternity. Hochschild writes that the account of creation is:

Not merely a metaphor for the soul's journey from the darkness of sin to the light of heavenly presence, it is actually the conversion of the soul as a coming-into-being, a realization of its nature, of its intended species. Between the darkness of formless matter, and the *ratio* of the Word in creation, there is a unity forged.²³

Harrison posits that "created reality has form, unity, and order 'bestowed' upon it, and in so far as it 'participates' in God."²⁴ Augustine's discussion of the creation of form from formless matter also alludes to creation as created order from chaos and the order of the human soul as it climbs out of the chaos of the dark abyss of sin towards God. Thus, formless matter is a contributory motif in the unity of *Confessiones*.

¹⁸ Chadwick, *Augustine*, xxiv.

¹⁹ Carol Harrison, *Rethinking Augustine's Early Theology: An Argument for Continuity* (Oxford: OUP, 2006), 101.

²⁰ Conf. XII.7.7. Hochschild, Memory, 173.

²¹ De-formed and re-formed are my wording and italicisation. Form is *re-formed* because it is the original form that is restored after it had been de-formed. Form cannot be lost or destroyed; it remains since it is created by God who will not allow its destruction. See Harrison, *Rethinking*, 102 for her phraseology of "deform" and "reform."

²² Harrison, *Rethinking*, 104.

²³ Hochschild, *Memory*, 174.

²⁴ Harrison, *Rethinking*, 104-105.

Augustine emphasizes that human beings, human souls, and indeed creation itself, were created out of nothing, i.e., *ex nihilo* by an immortal God (XIII.2.3).²⁵ In XIII.33.48 Augustine states that matter was formed out of nothing and the beauty of the world created out of formless matter. Nunziato argues that Augustine treats matter as the "mystery by which God articulates divine form as something other than God."²⁶ Further, he asserts that God in order to create, creates matter, and Augustine attributes matter even to spiritual substances.²⁷ Regarding spiritual matter, Augustine distinguished two kinds – the matter of angelic beings and that of the human soul. Angels are conceived as pure spirits limited by the fact that they are composed of essence and existence whereas the human soul is essentially spiritual while at the same time animating matter.²⁸

Armstrong asserts that matter is the key to creation.²⁹ He accords matter the "architectonic centrality" that it actually possesses; he maintains that it is "one of the great recurring themes in Augustine's thought."³⁰ Both Nunziato's and Armstrong's work support the concepts of matter and form as a thread that weaves throughout *Confessiones*. This lends support to XIII as a recapitulation of I-XII with regard to creation, matter, and form.

Creation in sum, is fundamental to Augustine's thought and understanding of the Divine. The architectonic structure of XIII emerges as Augustine examines the creation account in Genesis 1. Augustine works through the six days of creation and the seventh day: I-XII mirrors these six days and also the seventh day of the sabbath. The theory of recapitulation in XIII becomes more evident as one studies its architectonic structure.

²⁵ Imm, An. VIII.14, XI.18. Harrison, Rethinking, 50.

 ²⁶ Joshua Nunziato, "Created to Confess: St. Augustine on Being Material," *Modern Theology* 32, no.3 (2016): 362.

²⁷ Ibid., 364.

²⁸ Christopher J. O'Toole, *The Philosophy of Creation in the Writings of St. Augustine* (Washington D.C.: CUAP, 1944), 103-104.

²⁹ A. Hilary Armstrong, "St. Augustine and Christian Platonism," the Saint Augustine Lecture 1966 (Villanova University, 1967), 6.

³⁰ Armstrong, "St. Augustine," 6.

8.3.3 <u>A</u> Memory and <u>The</u> Memories

Confessiones I-XIII is about memory where XIII can be considered as \underline{a} memory of the creative act of God and I-XII, <u>the</u> memories that arise from \underline{a} memory and which leads to \underline{a} memory of the future.³¹ This is to say that the beginning of creation, temporal time, the Incarnation, the drawing of Augustine toward God in his search for the *beata vita* and eternity, all are remembered via memory; without memory they are impossible to recollect. Further, eternity is actually the sole source of any memory for without eternity there would be nothing to re-member. This is corroborated when reading XIII as it contains a host of references to memory whether implicit or explicit that are a recapitulation of memories in I-XII.

This section is divided into four parts based on four of the constituents of memory previously identified in Chapter 4: teaching and learning, recollection and forgetfulness, images, *phantasiae*, and *phantasmata*, and sense and sense-perception. **Table 8.3** compares memory and its constituents in XIII, X, and I-XII. It is subdivided into four smaller tables – **Tables 8.3a, 8.3b, 8.3c, 8.3d**.

8.3.3.1 Teaching and Learning

Teaching and learning are important constituents of memory. This is borne out in XIII. While the term memory is not mentioned with regard to teaching and learning, memory is implicit in the context of the chapters. Teaching or learning cannot occur without memory as seen in I-XII. **Table 8.3a** parallels statements in XIII with I-XII.

³¹ Burke relates I-IX and X-XIII as turning from a "narrative of memories" to the "principles of Memory." However, his definition of Memory is different from "*a* memory." Burke defines Memory as the storehouse of images. See 8.3.3 for my use of "*a* memory." Kenneth Burke, *The Rhetoric of Religion: Studies in Logology* (Los Angeles, CA: UCP, 1970), 124.

Table 8.3a: Memory/memories regarding teaching and learning as documented inXIII, X, and I-IX, XI-XII.

A Memory and The Memories		
Book XIII	Book X	Books I-IX, XI-XII
Teaching and Learning		
XIII.6.7 Light that teaches truth XIII.7.8 teaching us concerning the things of the Spirit XIII.14.15 his word is a light to your feet XIII.24.36 truth my light XIII.26.41 from you, my God, I have learnt	X.6.10 Truth says to me X.10.17 so they [things learnt] were there even before I had learnt themthe answer must be they were already in memory X.40.65 I listened to you teaching me and giving instruction. X.41.66 You are the truth presiding over all things	 III.6.10 Truth, truth; how in my inmost being the very marrow of my mind sighed for you IV.12.18 look where he is-wherever there is a taste of truth IV.15.25 for I did not know that the soul needs to be enlightened by light from outside itself, so that it can participate in truth V.6.10 but I had already been taught by you, my God, through wonderful and hidden ways, and I believe you have taught me because it is true, and none other than you is the teacher of the truth XI.8.10 Lord I hear your voice speaking to me, for one who

Book XIII	Book X	Books I-IX, XI-XII
Teaching and Learning		1
Cont.		
		teaches us speaks to uswho is our teacher except reliable truth
XIII.6.7 let not my heart tell me vain fantasies (I think Chadwick has mistranslated this <i>tibi admoveo</i> <i>cor meum, ne me vana doceat</i> - I lift up my heart to you, so that it does not teach me in vain – my translation) XIII.18.22 you teach us to distinguish between intelligible and sensible things as between day and night, or between souls dedicated to the intelligible	X.40.65 Truth, when did you ever fail to walk with me, teaching me what to avoid and what to seek after	 IV.11.16 do not be vain my soul. Do not deafen your heart's ear with the tumult of your vanity. Even you have to listen XI.8.10 who is our teacher except the reliable truth?

There are six distinct points highlighted in XIII. These are,

- 1. Light teaches truth
- 2. Teaching things concerning the Spirit

- 3. Truth is my light
- 4. Learn from God, taught by God
- 5. Calling on God so heart does not teach in vain
- 6. God teaches so that the intelligible can be distinguished from the sensible

These six truths from XIII recapitulate texts from I-XII. In XIII, Augustine acknowledges truth is taught by the Divine. The teaching of truth includes the "things of the Spirit," "His word" and the ability to "distinguish between the intelligible and sensible things." There is a play on words too that reflect Scripture and teaching, e.g. "light teaches truth" and "truth is my light." Jesus is the Light of the world and the Truth; Jesus in John 8:12 and 9: 5, "I am the light," and in John 14: 6, "I am the way, and the truth, and the life." The psalmist in Psalm 119: 105 says, "Your word is a lamp to my feet and a light to my path." The light that teaches truth reminds Augustine of God creating light in Genesis 1. Thus light and truth reflect a cyclical pattern within this aspect of memory.

Table 8.3a summarizes what is said in X and in the other books of *Confessiones*. The importance of learning and teaching in discovering truth is exemplified by Augustine when he exclaims in XIII.30.45, "I listened, Lord, my God; I sucked a drop of sweetness from your truth and I understood." Finding truth and the Truth means a further understanding and knowledge of God that leads eventually from restlessness to rest.

8.3.3.2 Recollection and Forgetfulness

"A memory is a re-creation, precious because it is both more and less than the original."

Ken Liu³²

Both recollection and forgetfulness are central to the architectonics of memory. Memory is present at the beginning of Augustine's life i.e., at creation, then

³² Ken Liu, *The Paper Menagerie and Other Stories* (USA: Gallery/Saga Press, 2016), 195.

continues to be formed, remembered, or forgotten, and recollected throughout his life. This recollection includes the remembrance of the Incarnation which in itself enacts creation, the promise of eternity through the sacrament of the Eucharist, and finally culminates in the reality of eternal rest in eternity, allegorically, the seventh day of creation.

Table 8.3b: Memory/memories regarding recollection and forgetfulness as
documented in XIII, X, and I-IX, XI-XII.

A Memory and The Memories		
Book XIII	Book X	Books I-IX, XI-XII
Recollection and Forgetfulness		
XIII.1.1 when I forgot you (mis-remembered), you did not forget me (re-membered).	X.4.5 you never abandon what you have begun	V.7.13 my God, did not forsake my soul IX.4.8 when I called* upon you, you heard me * <i>invocarem</i> (I would invoke) XII.10.10 I remembered you. I heard your voice behind me calling me to return
XIII.7.8 to whom can I expound, and what words can I express, the weight of cupidity pulling us downwards into the precipitous abyss and the lifting up of love given by your SpiritHow can I speak about itfor it is not about literal placesthis symbolic language contains a resemblanceit means our feelings and our love	X.14.22 note also that I am drawing on my memory when I say there four perturbations of the mind – cupidity, gladness, fear, sadness and from memory I produce whatever I say in discussing them I find in memory what I have to say and produce it from that	

A Memory and The Memories		
Book XIII	Book X	Books I-IX, XI-XII
Recollection and Forgetfulness		
Cont.		
XIII.14.15 yet still my soul is sad	source. Yet none of these perturbations disturb me when by act of recollection I remember them.	
XIII.11.12 For I am and I know and I willlet him consider himself and reflect and tell me what is there XIII.22.32 the personwho contemplates and understands your truth	X.5.7 for what I know of myself I know because you grant me light X.8.14 there also I meet myself and recall what I am, what I have done, and when and where and how I was affected when I did it	VII.10.16 I was admonished to return to myselfI entered into my innermost citadelI entered and with my soul's eye, such as it was, saw above that same eye of my soul the immutable light higher than my mindeternal truth and true love IX 1.1 Who am I and what am I? IX.10.24 we ascended further by internal reflectionwe entered into our own mindswhere you feed Israel eternally with truth for food

A Memory and The Memories		
Book XIII	Book X	Books I-IX, XI-XII
Recollection and Forgetfulness		
Cont.		
XIII.12.13 because our soul was 'disturbed' within ourselves, 'we remembered you Lord from the land of Jordan'he forgets the things behind	X.8.14 there [in the vast hall of my memory] also I meet myself and recall (recolo) what I am, what I have done, and when and where and how I was affected when I did it. There is everything I remember X.16.24 It is I who remember, I who am mind	 II.1.1 I make the act of recollection (<i>recordari</i>). The recalling (<i>recolens</i>) of my wicked way is bitter in my memoryyou gathered me together from the state of disintegration IV.6.11 look into my heart, my God, look within. See this, as I remember it, my hope; for you cleanse me from these flawed emotions XII.10.10 I remembered (<i>recordatus</i>) you. I heard your voice behind me calling me
XIII.12.13 forgets the things		to return IX.10.23 forgetting
behind and stretches out to		the past and reaching
those things which lie ahead		forward to what lies ahead

A Memory and The Memories		
Book XIII	Book X	Books I-IX, XI-XII
Recollection and Forgetfulness	·	·
Cont.		
XIII.12.13 in your name we are baptized, Father, Son and Holy Spirit; in your name we baptize, Father, Son and Holy Spirit XIII.20.26 God, your mysteries have crept through the midst of the waters of the world's temptations to imbue the nations with your name through your baptism XIII.20.27 what is one thing for our understanding can be symbolized and expressed in many physical movementsthese physical things have been produced to meet the needs of peoples estranged from your eternal truththrough your word, those signs emerged XIII.20.28 subjection to corporeal sacraments do not make further progress unless in the spiritual realm their soul comes to live on another level and, subsequent to the word of	X.3.4 transform my soul by faith and your sacrament X.43.68 the true Mediator you showed to humanity in your secret mercy. You sent himhe is the Mediator between God and men, the man Christ Jesus	 III.4.8 this name of my Saviour your Sonand at a deep level I retained the memory V.8.15 when I was full of abominable filth, so as to bring me to the water of your grace [baptism]. This water was to wash me clean VII.9.14 but the word was made flesh and dwelt among us VII.17.23 but with me there remained a memory of youI carried with me only a loving memory IX.6.14 when the time came for me to give my name for Baptismwe were baptized

A Memory and The Memories		
Book XIII	Book X	Books I-IX, XI-XII
Recollection and Forgetfulness		
Cont.		
initiation, looks towards their		
perfection		
XIII.24.36 at the bodily level it		
is expressed by many		
sacraments		
XIII.24.37 signs given in		
corporeal expression are the		
creatures generated from the		
waters, necessary because of		
our deep involvement in the		
flesh		
XIII.34.49 we have seen in		
your Word, in your unique Son,		
'heaven and earth,' the head		
and body of the churchyou		
produced from physical matter		
sacramentsall these things we		
see, and they are very good,		
because you see them in us		
XIII.14.15 in the morning I will		VII.14.20 I woke up
stand up and will contemplate		in you and saw you to
youin the morning I will		be infinite in another
stand and I will see the		sense, and this way of
salvation of my face, my God		seeing you did not
		come from the flesh

A Memory and The Memories		
Book XIII	Book X	Books I-IX, XI-XII
Recollection and Forgetfulness		
Cont.		
XIII.34.49 so as to reveal hidden secrets and bring order to our disordered chaos	X.11.18 ideas which the memory contains in dispersed and disordered way, and by concentrating our attention we arrange them in order as if ready to hand, stored in the very memory where previously lay hidden, scattered, and neglectedwere ordered ready to hand-	
	things we are said to have learnt and to know	

Augustine remained unsettled by the concept of forgetfulness where a memory could be forgotten. It was aporetic to Augustine. Indeed, remembering that he had forgotten was a reality that continued to be paradoxically perplexing to Augustine for he never found the answers. He remembers that he forgot God, and yet, in XIII Augustine appears less unsettled regarding this paradox; he has come to a better place of peace, acceptance, and understanding that he does not need to provide or know all the answers, and this comes through in the text. Important to Augustine was to recognize before God that when he forgot (mis-remembered) God, he knew God had not forgotten him. He understood the significance of God's act of remembering. The divine act of remembering was the unembodied, incorporeal God-given form (embodied) in the person of Christ who is both Truth and Mediator. Eternity is thus reflected in Christ.

The architectonic structure in XIII regarding recollection and forgetfulness starting from XIII.1.1 is as follows:

- 1. I forgot you, you did not forget me
- 2. Symbolic language of the allegory of the deep abyss, the lifting up of love, and the resemblance of the language, perturbation of the mind
- 3. Person who contemplates understands truth
- 4. Disturbances within the soul caused Augustine to remember God
- 5. Forgetting past, stretching out to what lies ahead
- 6. Remembrance through the sacraments of Baptism and the Eucharist
- 7. Contemplating God first thing in the morning and "seeing" God
- 8. Recollection of hidden secrets, bringing order to chaos

The above architectonic structure is the summation and sequence of events that occur in recollection and forgetfulness. This sequence may not have been intentionally planned by Augustine in XIII. However, truth naturally unfolds the order and sequence of the events.

8.3.3.3 Sacramental Nature of Memory

The texts pertaining to sacraments in **Table 8.3b** illustrate how significant memory was with regard to sacraments. Memory, itself, for Augustine was sacramental in nature because it allowed the soul to transcend the body and unite with the divine. Memory emanated from eternity; it pointed towards God and eternal rest. O'Gorman defines the function of a sacrament as something that points beyond to something else and further, engages the reality to which they point.³³ Memory allowed truth to be known; memory was, therefore, sapiential and it provided the

³³ Robert T. O'Gorman, "Imagination Embodied: The Sacraments Reappropriated," *Religious Education* 111, no. 4 (2016): 435.

gateway to the Divine and eternal truth. The revelation of temporal knowledge (*scientia*) assisted memory as it recollected truth (sacramental remembering); *scientia* accordingly evolved into *sapientia*, the reality of eternal truth. This is borne out in XIII which portrays a motif of *scientia* approaching *sapientia*.³⁴

The magnitude of the sacramental nature of memory for Augustine was asseverated in the Eucharist when the memory of the death and resurrection of Jesus resulted in a momentary union with the Divine (see XIII in Table 8.3b starting at XIII.20.28). Grove writes how the remembering has a location in the body of Christ.³⁵ It is Christ who "prompts individuals to remember that they are forgetful...in response to their own forgetfulness...[they] can cry out, remembering to eat."³⁶ The sacramental connection with the mysterious becomes apparent in matter - the bread and wine taken in the memory of Jesus, and through which one can glimpse the soul.³⁷ The Eucharistic bread is Christ and the memory of Christ; thus it became for Augustine the intersection between memory and hope. Cavadini states, "the person bound to the Eucharist in faith is bound to a memorial of God's mercy that configures or even defines all of one's own memory...and impels it into hope."³⁸ Cavadini interestingly writes that X emerges out of IX's ascent to the Eucharistic altar and out of Eucharistic remembering; X continues in this vein and deepens this Eucharistic remembering.³⁹ He continues to say that "those who seek the Lord by a Eucharistic act of remembering, of memory, praise the Lord because they find him, in memory."40 In fact, this act of remembering helps to fight off forgetfulness. Grove asserts that the mystery of the memory and the act of remembering means, according to Augustine, becoming Christ in the process.⁴¹ Cavadini views the exegesis of Gen. 1:1-2:3 in XI-XIII as a "Eucharistic exegesis" where XI is the Book of the Father, XII the Book of the Son, XIII the Book of the Holy Spirit.⁴²

³⁴ Cheuk Yin Yam, Anthony Dupont, "A Mind-centered Approach of "*Imago Dei*," A Dynamic Construction in Augustine's *De Trinitate* XIV," *Augustiniana* 62, no. 1/2 (2012), 30.

³⁵ Grove, *Augustine*, 123.

³⁶ Ibid.

³⁷ O'Gorman, "Imagination," 435.

³⁸ John C. Cavadini, *Visioning Augustine: Challenges in Contemporary Theology* (Wiley Blackwell, 2019), 186.

³⁹ Ibid., 191.

⁴⁰ Ibid., 192.

⁴¹ Grove, *Augustine*, 126-127.

⁴² Cavadini, *Visioning*, 196-197.

The language of "beginning" in Genesis 1 is contextualized "in the gratuitous, merciful remembering of God and in our Eucharistic remembering of God's remembering."⁴³ Further, creation is also a "Eucharistic awareness of God's mercy."⁴⁴ Cavadini describes how it is only from the perspective of the Spirit-filled person, whose mind is formed in Eucharistic remembering by the God's love, "that one can truly ascend to 'see' creation."⁴⁵ This recapitulative sequential nature of Eucharistic memory – creation, incarnation, death and resurrection of Jesus, and eternity presented a temporal timeline through which Augustine could glimpse God's timeless eternity. Christ in the flesh (VII.9.14) is a living memory both on earth and in eternity; in the same manner, when Augustine finally reached the eschatologically promised vision, he became a living memory of his death and the mercy of God.⁴⁶ On earth, Augustine was a living memory of God's creation.

Christ the living memory juxtaposed both temporal and eternal memory since the descent of the Divine into temporality was a recapitulation of creation. Hopkins poetically describes this as "God's infinity dwindled into infancy" where infancy metaphorically also speaks to "the Beginning" at creation.⁴⁷ Thus, remembrance of the incarnation is sacramental to Augustine. The remembrance of Christ via the sacraments was also the manner in which, through memory and his soul, he could envision with expectation complete union and participation with the Divine in eternity. Augustine writes in XIII.20.28, "subjection to corporeal sacraments do not make further progress unless in the spiritual realm their soul comes to live on another level and, subsequent to the word of initiation, looks towards their perfection." Thus, a sacrament expresses the connection of the embodied finite human to the unembodied infinite God; it is a communication between the human being and God.⁴⁸ It is a communication initiated by the Divine and which calls and moves Augustine into a deeper consciousness where he becomes aware of his connection to the Divine and the merging of God embodied and God un-embodied.⁴⁹ Further, the physicality of the sacraments centres the awareness of God's will in the body where it can be enacted in

⁴³ Ibid., 197.

⁴⁴ Ibid.

⁴⁵ Ibid., 198.

⁴⁶ Ibid., 206 n.70.

⁴⁷ Gerard Hopkins, "The Blessed Virgin Compared to the Air We Breathe," in *The Poetical Works of Gerard Manley Hopkins*, ed. Norman H. MacKenzie (Oxford: OUP, 1990), 173.

⁴⁸ O'Gorman, "Imagination," 433.

⁴⁹ Ibid.

community.⁵⁰ O'Gorman describes the sacraments as both an encounter with, and a transformation in, Jesus and an energizing contact with the presence of God.⁵¹ Memory in Eucharistic remembering is sacramental in nature.

Baptism, the sacrament of entrance into the Christian life, is another sacrament present in *Confessiones*. According to McMahon, baptism proves a "*figura*" to be fulfilled by entrance into God's eternal life, and which prepares the soul by cleansing it of sin.⁵² Baptism is symbolic with participation in Christ's death and resurrection, and hence, with the resurrection on the last day. Baptism is recurrently and emphatically linked with eternal rest in God and with release from anxiety (*sollicitudo*), " we were baptized and disquiet about our past life vanished from us."⁵³ McMahon argues that this emphasis in IX on baptism, eternal rest and release from anxiety links IX to Augustine's allegory on God's ninth act in Genesis in XIII.⁵⁴ He goes on to say that this is one of the principal ways in which the allegory of XIII proves the paradigm for I-IX; however, McMahon neither includes nor explains how X-XII fits into this paradigm.

The millstones of past life do not hinder the ability to experience the sacraments in life going forward. The sacramental nature of baptism, for Augustine, was found in the freeing from the torments of past life and being able to move forward in his Christian life. The sacrament of baptism, therefore, was a ritual event that permitted the "touching" of the temporal with the eternal i.e., the corporeal, embodied, finite human with the incorporeal, unembodied, infinite God. The baptism of Jesus was a holy exemplar of the temporal touching eternity. Upon his baptism, the heavens were opened and a voice said, "this is my Son, the Beloved, with whom I am well pleased" (Matt 3:16-17). Baptism freed memory to remember the Mediator in creation, the Incarnation, and the Eucharist, and pointed to the future memory of eternal rest. Aquinas described baptism as the door to other sacraments.⁵⁵

⁵⁰ Conf. XIII.20.27. David A. Hogue, *Remembering the Future, Reimagining the Past: Story, Ritual, and the Human Brain* (Cleveland, OH: The Pilgrim Press, 2003).

⁵¹ O'Gorman, "Imagination," 436, art. 4.

⁵² Robert McMahon, Augustine's Prayerful Ascent: An Essay on The Literary Form of the Confessions (University of Georgia Press, 1989), 113.

⁵³ Conf. IX.6.14. McMahon, Augustine's, 113.

⁵⁴ McMahon, *Augustine's*, 113.

⁵⁵ Summa Theologiae IIIa q. 68, art. 6.

In the sacraments, Clark aptly proposes that what Augustine deemed important was not what he remembered from his past, but how he remembers the past.⁵⁶ Augustine believed that the past was not the direction to move in but rather he needed to "reach/stretch" out to the things that lay ahead (IX.10.23, XIII.12.13). It was the mental activity of remembering that paved the way to reflect on his existence in relation to God; such contemplations led to knowing God.⁵⁷ This allowed Augustine to reach forward in expectation of union with the Divine and eternal rest; this solidified the sacramental nature of memory for Augustine. Memory underpins Augustine's understanding and experience of the sacraments including the importance of remembrance and thus, memory.

8.3.4 Images, Phantasiae, and Phantasmata

Images, *Phantasiae*, and *Phantasmata* are all memories whether they contain true or false images. XIII mentions specific instances and type of memories that are also analogous specifically to texts in III-IV, VI-X, and XII. **Table 8.3c** compares these texts.

⁵⁶ Clark, *Augustine*, 46.

⁵⁷ Romanus Cessario, The Godly Image: Christian Satisfaction in Aquinas (CUAP, 2020), 16.

Table 8.3c: Images, *Phantasiae*, and *Phantasmata* as documented in XIII, X, and III,IV, VI, VII, VIII, IX, and XII

A Memory and The Memories		
Book XIII	Book X	Books I-IX, XI-XII
Images, Phantasia, Phantasmata		
 XIII.5.6 here is an enigmatic image (I Cor 13:12)I discern the Trinity, which you are, my Godthere is the Trinity, my God – Father and Son and Holy Spirit, Creator of the entire creation [ecce apparet mihi in aenigmate trinitas quod es, deus meus Behold, it appears to me in the enigma (riddle) of the Trinity that you are, my God (my translation)]. XIII.15.18 your word appears to us in the enigmatic obscurity of clouds and through the 'mirror' of heaven, (I Cor 13:12) not as it really is [verbum autem tuum manet in aeternum quod nunc in aenigmate nubium et per 	X.5.7 without question, we see now through a mirror in an enigma (<i>aenigmate</i>), not yet face to face (I Cor 13:12)	VIII.1.1 of your eternal life I was certain, though I saw it in an enigma (<i>aenigmate</i>) and as if in a mirror (I Cor 13:12) IX.10.25 nor through the sound of thunder, nor through the obscurity of a symbolic utterance [<i>nec per sonitum</i> <i>nubis nec per</i> <i>aenigma similitudinis</i> – not by the sound of thunder, nor by the enigma (riddle) of similitude]* XII.7.7 God one in three and three in one

^{*} Chadwick translates *nec per sonitum nubis nec per aenigma similitudinis* as "nor through the sound of thunder, nor through the obscurity of a symbolic utterance" while Watts translates this as "nor by the sound of thunder, nor in the dark riddle of a resemblance." Watts is closer to the original text and also close to my translation of " nor by the sound of thunder, nor by the enigma (riddle) of a similitude."

Di suite de la Dissuite de la deserver	Book X	Books I-IX, XI-XII
mages, Phantasia, Phantasmat	1	
ont.		
ont. Deculum Caeli, non sicuti est - ut your word remains forever, thich now appears in the nigma (riddle) of the clouds and through the mirror of eaven, not as it is (my anslation)]		XII.13.16 the intellectual, non- physical heaven when the intelligence's knowing is a matter of simultaneity - not in part, not in an enigmat not through a mirror, but complete, in total openness, "face to face" (I Cor. 13:12) [caelum intellectuale, ubi est intellectus nosse simul, non ex parte, non in aenigmate, non per speculum, sed ex toto, in manifestione, facie ad faciem - intellectus

Book XIII	Book X	Books I-IX, XI-XII	
Images, Phantasia, Phantasmata			
Cont.			
Cont. XIII.6.7 let not my heart tell me vain fantasies* * I think Chadwick has mistranslated this <i>tibi admoveo</i> <i>cor meum, ne me vana doceat</i> - I lift up my heart to you, so that it does not teach me in vain – my translation.		III.6.10 the dishesplaced before mecontained splendidhallucinations(phantasmatasplendida)but thosefantasies (similia) hadnot the leastresemblance to you asyou now have told me,because they werephysical images(corporaliaphantasmata)III.7.12 how could Isee this when for me'to see' meant aphysical act of lookingwith the eyes and offorming an image(phantasma) in the	
		mind IV.7.12 when I	
		thought of you, my mental image was not	
		of anything solid and firm; it was not of you	

Book XIII	Book X	Books I-IX, XI-XII
Images, Phantasia, Phantasmata		
Cont.		
		but a vain phantom (phantasmata) VII.1.1 my heart vehemently protested against all the physical images (phantasmata) in my mind IX.4.9 for in the fantasies (phantasmatis) which I had taken for truth, there was vanity and deceit* * (mendacium, a lie) XII.11.14 Only a person whose empty heart makes his mind roll and reel with private fantasies (phantasmatis)
XIII.32.47 we see the beauty ofthe sun sufficing for the day, the moon and stars to cheer the night, and all of these	X.15.23 images of them [sun, stone] are available to me in memoryI mention the numbers by which	

A Memory and The Memories		
Book XIII	Book X	Books I-IX, XI-XII
Images, Phantasia, Phantasmata		
Cont.		
XIII.32.47 we see the beauty	X.15.23 images of	
ofthe sun sufficing for the	them [sun, stone] are	
day, the moon and stars to cheer	available to me in	
the night, and all of these	memoryI mention	
provide an indication and sign	the numbers by which	
of passing time	we count thingsin	
	my memory are present	
	not their images but the	
	numbers themselves	

The discussion of images, *phantasiae* and *phantasmata* in XIII is presented sequentially as follows:

- 1. Enigmatic image
- 2. Trinity: Father, Son, Holy Spirit
- 3. Vain fantasies
- 4. Beauty of sun, moon, and stars

Enigma is defined as "something that is mysterious and seems impossible to understand completely."⁵⁸ Augustine seems to have this understanding in mind. This, and his reading of 1 Cor. 13: 12, reveal there is a sense of obscurity and mystery in

⁵⁸ Definition from *Cambridge Dictionary* accessed November 18, 2022. https://dictionary.cambridge.org/dictionary/english/enigma

fully understanding God's word and the Trinity. There is, too, an inability to see clearly "face to face," for God, indeed, is unimaginable mystery.

There are only two occurrences of the word *aenigmate* in XIII. They occur in reference to the enigma of God's Word and the Trinity, and in both cases, one can identify a dependence on memory. According to Djuth, Augustine's use of "enigmatic image" and the "enigmatic obscurity of the clouds" is because memory images are "opaque in terms of what they reveal about the nature of divine reality."⁵⁹ Enigma, and indeed, the enigmatic image is a memory that is mysterious and incomplete in that the Trinity and eternity are all discerned as through a "mirror," as if an image of the reality, but not reality itself. Augustine in *De Trinitate* referring to 1 Cor. 13: 12 attempts to define what is meant by enigma and mirror.⁶⁰ Enigma, he says, is used in an obscure allegorical sense. He writes:

By the word "mirror" he [Paul] wanted us to understand an image, and by the word "enigma" he was indicating that although it is a likeness, it is an obscure one and difficult to penetrate. Now we can indeed take it that by use of the words "mirror" and "enigma" the apostle meant any likenesses that are useful for understanding God with, as far as possible; but of such likenesses none is more suitable than the one which is not called God's image for nothing.⁶¹

Augustine uses this word *aenigmate* in the same allegorical context in XIII, and VIII, IX, X, and XII. On earth and in temporal time, Augustine cannot see the Divine clearly only opaquely; however, in the Incarnation and Eucharistic remembering, the mirror becomes less cloudy. Augustine understands that it is Christ the Mediator who points the way to see the Divine more clearly; ⁶² this provides Augustine with hope and an eschatological expectation. In XIII he recapitulates the previous books; in one chapter, indeed just two sentences, Augustine recapitulates the obscure enigma that he must contend with in temporality.

Augustine viewed fantasy as dangerous (XIII.6.7); "I lift up my heart to you, so that it does not teach me in vain." *Phantasmata* obscured God's truth thereby creating turmoil between the body and soul.⁶³ They distract *memoria* in the mind by

⁵⁹ Djuth, "Veiled," 89.

⁶⁰ Trin. XV.3.15.

⁶¹ Trin. XV.3.16.

⁶² Conf. VII.19.25, VIII.12.29, IX.13.34-37, X.42.67-43.70.

⁶³ V. Rel. 3.3, 10.18.

restricting memoria's capacity to seek God. Park argues that images - both phantasiae and *phantasmata*, have an important and necessary role in Augustine's conversion.⁶⁴ Even so, Augustine astutely recognizes the detrimental role of *phantasmata* (IV.7.12) when he poignantly expresses, multiple times, regret over his false phantasmata. Augustine knew he required Divine help and illumination to prevent these phantasmata teaching him vain fantasies. He also understood that sin was the cause of "dis-membering" God and his hope of eternity; the "icon" of eternity was forgotten or "dis-membered" and the enigmatic image became more obscure. Augustine, therefore, lifted his heart to God (XIII.6.7). As he grew in knowledge of the truth, and the renewal of the "image" (memory) of God within, his faith led him to understand that the obscurity of looking "through a mirror in an enigma" (X.5.7) was temporary. Augustine was also cognizant that there were many good memories residing in his mind of beautiful images such as the sun and moon which he could also physically observe during the day and night. These sights and true images which were good and beautiful provided proof of God's creative act and the passage of time (day and night).

8.3.5 Senses and Sense-perception

Sense and sense-perception are vital to memory formation as most images in memory – both true and false are a result of sense and sense-perception. The five senses of sight, smell, sound, taste, and touch are all powerful sensations that produce perceptions which are stored in the *memoria* of the mind (X.8.13). **Table 8.3d** documents how the power of the senses impacts the affections of the soul.

⁶⁴ Park, "Imagining," 804.

Table 8.3d: Memory/Memories regarding senses and sense-perception as documentedin XIII, X, and I-IX, XI-XII.

A Memory and The Memories		
Book XIII	Book X	Books I-IX, XI-XII
Senses and Sense-perception		
XIII.23.34 he [the spiritual person] judges the 'living soul' in its affections made gentle by chastity, by fasting, by devout reflection on things perceived by the bodily senses XIII.38.53 we see the things that you have madewe see outwardly that they are, and inwardly that they are good	X.6.8 yet there is a light I lovea light, voice, odour, food, embrace of my inner man, where my soul is floodlit by light which space cannot contain, where there is a sound that time cannot seize, where there is a perfume which no breeze disperses, where there is a taste for food no amount of eating can lessen, and where there is a bond of union that no satiety can part X.8.13 memory preserves in distinct particulars and general categories all the perceptions which have penetrated, each by its own route of entry	

A Memory and The Memories			
Book XIII	Book X	Books I-IX, XI-XII	
Senses and Sense-perception	Senses and Sense-perception		
Cont.			
	 X.14.22 the mind itself perceives them through the experience of its passions and entrusts them to memory X.40.65 starting from myself I gave attention to the life of my own body, and examined my own sensessome things I observed in interrogating the reports of my senses 		
XIII.26.39 those who enjoy these foods are fed by them; but those 'whose God is their belly' derive no pleasure from themPaul, served God, not his bellythe source of his joy was the source of his nourishment	X.14.21 no doubt, then, memory is, as it were, the stomach of the mind	IX.4.10 with starving minds they can only lick the images (<i>imagines</i>) of these things	
XIII.30.45 I listened, Lord, my God; I sucked a drop of sweetness from your truth, and I understood	X.40.65 And sometimes you cause me to enter into an extraordinary depth of	I.15.24 bring to me a sweetness surpassing all the seductive delights which I pursued	

A Memory and The Memories			
Book XIII	Book X	Books I-IX, XI-XII	
Senses and Sense-perception			
Cont.			
	feeling marked by a strange sweetness	 VIII.4.9 come Lord, stir us up and call* us backbe our fire and our sweetness *revoca (re-call) IX.4.7 my memory calls* me back to that period and it becomes sweet for me, Lord, to confess to you by what inward goads you tamed me *revocat (re-calls) X.3.4 the heart is aroused in the love of your mercy and the sweetness of your grace 	

The sequential observations in XIII are:

- 1. The spiritual person judges the living soul in its affections
- 2. Reflection on things perceived by the senses
- 3. Outward sight versus inward

- Prioritization of food "whose God is their belly" versus food from serving God
- 5. Listening to God and "tasting" his truth

Augustine utilizes the senses in his allegorical exegesis in XIII to stress the importance of reflecting (remembering) on those things that are perceived by the senses; reflection implies that senses are stored in memory otherwise reflection would not be possible. According to Karfíková, *imagines* of things perceived by the senses are stored in the "courts" of memory and are arranged according to the senses they belong to as follows:

- "visual perceptions of light, colours, and form,
- auditory perceptions of various sounds,
- olfactory perceptions of odours,
- gustatory and tactile perceptions."65

The sense of sight was considered by Augustine as the "superior" sense since it was through the use of temporal sight that the rational soul was able to "see" the vision of God.⁶⁶ Boersma writes that "seeing God is the theological cipher through which Augustine develops his theology of the Incarnation and his valuation of the sacraments."⁶⁷ The door to eschatological remembrance had its door opened through "sight;" in this way via the sacraments, the mind had access to eternity at the same time it was embedded within the temporal flow of the present.⁶⁸ Thus Augustine reminds his readers to recognize what is observed outwardly and to see the inward reality that they themselves are good, a result of God's creation, and to distinguish between temptations of the body versus that which feeds the soul. Seeing in this manner and the appropriate use of the senses and sense-perceptions facilitates remembrance and allows forward movement. Further, not only is truth seen but Augustine's "listening" to God led to "tasting" the sweetness of truth (XIII.30.45).

⁶⁵ Karfíková, "Memory," 176.

⁶⁶ Ibid.

⁶⁷ Boersma, "Augustine," 16.

⁶⁸ Grove, Augustine, 29.

8.3.6 The Beata Vita

Augustine sought fervently after the *beata vita* as this to him was the final achievement of the Christian life. The *beata vita* could be achieved in Augustine's earthly life only momentarily, but fully achievable in eternal life i.e., the *beata vita* in eternity is not in pure opposition to that achievable in temporality but rather it is a fulfilment thereof. The following section examines the recapitulation of the *beata vita* in XIII. This section is divided into two parts - the *beata vita* and fallenness that inhibits the achievement and experience of the *beata vita*.

8.3.6.1 Part 1: The Beata Vita

Augustine's yearning for the *beata vita* is as strong in XIII as in the rest of *Confessiones*; yet, in XIII it appears Augustine is providing his readers with supportive, encouraging, and affirmatory statements regarding the *beata vita*. Part 1 of the *beata vita* is presented in **Table 8.4a**.

Table 8.4a: Part 1: The beata vita in XIII and I-XII.

THE BEATA VITA		
Book XIII	Books I to XII	
 XIII.3.4 both the fact of its life and the fact of its living in a blessed state is owed only to your graceto you it is not one thing to live, another to live in blessed happiness, because you are your own blessedness XIII.8.9 whatever is less than you can never be sufficient to provide itself with the rest of contentment to itself XIII.9.10 in your gift we find our restthere are you our joy. Our rest is our peaceby your gift we are set on firewe grow red hot and ascendwe climb the ascent of our heart. XIII.10.11 happy is that created realm which has known nothing other than bliss XIII.36.51 we may also rest in you for the sabbath of eternal life 	 I.1.1 our heart is restless until it rests in you II.10.18 my desire is for youthe person who enters into you, enters into the joy of the Lord III.4.8 how I burned, how I burned with longing to leave earthly things and fly back to you IV.12.18 rest in him and you will be at rest IV.12.19 come down so you can ascend, and make your ascent to God VI.11.18 when I began to burn with a zeal for wisdom VI.11.20 I longed for the happy life VII.17.23 and so step by step I ascended from bodies to the soul which perceives through the bodyI ascended to the power of reasoning. VIII.3.8 you are eternal to yourself, you are your own joy X.7.11 through my soul I will ascend to him 	

THE BEATA VITA		
Book XIII	Books I to XII	
Cont.		
	 VII.17.23 and so step by step I ascended from bodies to the soul which perceives through the bodyI ascended to the power of reasoning. VIII.3.8 you are eternal to yourself, you are your own joy X.7.11 through my soul I will ascend to him X.8.12 I will therefore rise above that natural capacity in a step-by-step ascent to him who made me X.27.38 you touched me, and I am on fire to attain the peace which is yours 	
XIII.4.5 to see light in his light and to become perfect, radiant with light and in complete happiness XIII.12.13 his soul thirsts for the living	I.13.22 I confess to you the longing of my soulX.20.29 how then am I to seek for you, Lord? When I seek for you, my God, my	
God, like a hart for the spring waters	quest is for the happy life. I will seek	
when shall I come? He wishes to put	you that 'my soul may live' for my body	
on his habitation from heaven	derives life from my soul and my soul	
XIII.12.13 what a beautiful light that will be when 'we shall see him as he is'	derives life from youmy inquiry is whether this knowing is in the memory because, if it is there, we had happiness	

THE BEATA VITA		
Book XIII	Books I to XII	
Cont.		
XIII.17.21 but souls which 'thirst after you and appear before you'you water with your hidden and sweet spring	oncemy question is whether the happy life is in the memory X.21.30 but the happy life we already have in our knowledge X.21.31 the happy life is found in the memory	
XIII.8.9 my love falls short of that which is enough to make my life run to your embraces, and not to turn away until it lies hidden 'in the secret place of your presence'	 VI.1.1 I was seeking you outside myself, and I failed to find 'the God of my heart' X.34.53 However, you rescue me Lord, you rescue meI am pitifully captured by them [beautiful externals] and in your pity you rescue me 	
 XIII.9.10 in your gift we find our restthere are you our joy. XIII.26.39 the source of his joy was the ground of his nourishment XIII.26.40 what gives you nourishmentjoy XIII.27.42 the mind is fed by the source of joy 	 II.10.18 my desire is for youthe person who enters into you, enters into the joy of the Lord V.4.7 you alone are his source of happiness VIII.3.8 you are eternal to yourself, you are your own joy X.22.32 this is the authentic happy life, to set one's joy on you, grounded in you and caused by you 	

THE BEATA VITA	
Book XIII	Books I to XII
Cont.	
	X.23.33 the happy life is joy based on the truth. This joy is grounded in you, O God, who are the truth, my illumination, the salvation of my face, my God.
XIII.21.29 you are the lifegiving pleasure of a pure heart	 II.10.18 the person who enters into you 'enters into the joy of the Lord' IV.9.14 happy is the person who loves you VIII.5.10 the new will, which was beginning to be within me a will to serve you freely and to enjoy you, God, the only source of my pleasure X.2.2 you are radiant and give delight X.40.65 I can find no safe place for my soul except in you

Reading from the beginning of XIII, one can see that there is an architectonic sequence to Augustine's presentation of the *beata vita* as evidenced in **Table 8.4a**. This sequence is listed below:

- 1. The blessed state is a result of God's own blessedness
- 2. What is less than God cannot result in happiness
- 3. Resting in God in the sabbath of eternal life

- 4. The soul thirsts for God
- 5. Becoming perfected in complete happiness
- 6. Running to God verses running from God
- 7. Joy is found in God, mind fed by source of joy
- 8. God lifegiving pleasure of a pure heart

Augustine's yearning for the *beata vita* is seen yet again in XIII.12.13 "his soul thirsts for the living God, like a hart for the spring waters" and "he wishes to put on his habitation from heaven."⁶⁹ This is a common theme throughout *Confessiones* from I.1.1 to XIII.38.53. In XIII, Augustine wants to encourage his reader with his experience, while his yearning continues, it does result in comforting awareness, peace, joy, even happiness, and temporal experience of the Divine. In XIII.17.21, he writes that God waters his soul with his " hidden and sweet spring." In XIII.9.10, he writes, "In your gift [Holy Spirit] we find our rest. There are you our joy. Our rest is our peace." Finally, in XIII.21.29, Augustine writes, "you are the lifegiving pleasure of a pure heart." The turmoil of yearning is quietened by the knowledge of peace and joy found in the Divine.

Augustine's ability to achieve the *beata vita* is solely due to God's own blessedness and grace; it cannot be obtained elsewhere from earthly attentions. The soul innately knows this and desires to return to its origin. Harrison writes "it [the soul] is also the place where human beings remember God, are conscious of him, and seek to know him."⁷⁰ This fuelled Augustine's compulsion to seek the *beata vita*. Augustine discovers his temporal role in this search and understands that the *beata vita* is worth striving for because as the soul journeys homeward, eternity draws nearer.

8.3.6.2 Part 2: The Place of Rest and Fallenness

Part 2 addresses the issue of fallenness and how this hinders acquisition of the *beata vita*.

⁶⁹ Ps 42: 1-2. 2 Cor 5: 2.

⁷⁰ Harrison, *Rethinking*, 59.

The restlessness of the soul is exemplified by a struggle between misremembering (fallenness) and remembering the Divine. Fallenness (**Table 8.4b**) leads to enjoyment of earthly matters and results in a distraction from, or mis-remembering of, the Divine. Remembering the Divine result in movement of Augustine's soul towards God. The pulling back and forth between these two dimensions of life torment Augustine and cause a restlessness within. The journey to rest is mediated by Christ,⁷¹ and the *beata vita* becomes the focal point of a transitory existence that moves towards the eternally divine and away from earthly things.⁷² Augustine saw the Creator God moved through creation in six days resting on the seventh. He realized that he – Augustine, moved through his creation towards eternal rest. XIII ends the journey towards finding rest in the sabbath of eternal life but it also returns to I.1.1 where the restless heart seeks rest, "Lord, grant us peace" (XIII.35.50) and where Augustine hopes to find rest " we hope to find rest in your great sanctification" (XIII.38.53).

8.3.6.2.1 Fallenness

According to Clark, the autobiographical aspect of *Confessiones* has a particular focus.⁷³ She argues that past life, present lifestyle, and future lifestyle are important only because they explain the spiritual state of the person who is attempting to live a life centred on God and displaying God's mercy. Human beings are made for happiness with God, but their capacity to achieve the *beata vita*, whether inchoatively on earth or consummately in eternal life, is limited by worldly, temporal struggles. God's intervention and help in this struggle is necessary. Augustine found this struggle to be such an obstacle that he committed a large section of X to this issue of fallenness followed by the way to restoration. XIII warns of the dangers of falling away from following God. XIII also emphasizes that human beings are spiritual creations in their souls and thus are drawn to God. **Table 8.4b** addresses the pitfalls encountered because of fallenness.

⁷¹ Conf. VII.19.25, VIII.12.29, IX.13.34-37, X.43.69-70.

⁷² Romano Guardini, *The Conversion of Augustine*, trans. Elenor Briefs (RI: CLUNY, 2020), 61.

⁷³ Clark, Augustine, 46.

THE BEATA VITA	
Book XIII	Books I to XII
XIII.2.3 we are a spiritual creation in our souls and have turned away from you our light XIII.8.9 whatever is less than you can never be sufficient to provide itself with the rest of contentment to itself	 I.7.11 alas for the sins of humanity II.2.4 but I in my misery seethed and followed the driving force of my impulses, abandoning you II.6.14 so the soul fornicates when it is turned away from you III.7.12 in my ignorancewhile travelling away from the truth, I thought I was going towards it IV.12.18 you seek the happy life in the region of death VI.1.1 I was seeking for you outside myself, and I failed to find 'the God of my heart' VII.17.23 I was caught up to you by your beauty and quickly torn away from you by my weight VIII.1.1 but in my temporal life everything was in a state of uncertainty X.37.60 every day, Lord, we are beset by these temptations. We are tempted without respite
XIII.4.5 more and more to live by the fount of life, to see light in his light, and	III.11.19 from this deep darkness you delivered my soul

 Table 8.4b: Part 2: Fallenness that hinders attainment of the beata vita.

THE BEATA VITA

THE BEATA VITA	
Book XIII	Books I to XII
Cont.	
to become perfect, radiant with light,	VIII.4.9 Come Lord, stir us up and call
and in complete happiness	us back, kindle and seize us, be our fire
 and in complete happiness XIII.5.6 it is dark [the dark abyss] because of the disordered flux of spiritual formlessness; but it became converted to him from whom it derived the humble quality of life it had, and from that illumination became a life of beauty XIII.14.15 yet my soul is sad because it slips back and becomes 'a deep,' or rather feels itself to be a deepwhy are you sad soulwe were 'once darkness,'hope in the Lordwe have received assurancewe are saved by hope and are 'sons of light' XIII.16.19 my soul is 'like waterless land before you. Just as it has no power to illuminate itself, so it cannot satisfy itself. For 'with you is the fountain of 	and our sweetness XI.9.11 wisdom, wisdom it is which shines right through me, cutting a path through the cloudiness which returns to cover me as I fall away under the darkness and the load of my punishmentsby hope we are saved
life,' and so also it is 'in your light' that 'we shall see light.'	
XIII.17.20 they pursue the same end of temporal and earthly felicity	
XIII.8.9 the human soul fellmy God, give me yourself, restore yourself to me	I.15.24 deliver me from all temptation to the end

THE BEATA VITA	
Book XIII	Books I to XII
Cont.	
	VI.11.20 I did not postpone the fact that every day I was dying within myself. I longed for the happy life, but was afraid of the place where it had its seat, and fled from it at the same time as I was seeking it
	I.18.28 To be far from you face is to be in darkness of passion
	II.2.2 the recalling of my wicked ways is bitter in my memory
	II.6.14 the soul fornicates when it is turned away from you and seeks outside you the pure and clear intentions which are not to be found except by returning to you
	VIII.4.9 Come Lord, stir us up and call us back, kindle and seize us, be our fire and our sweetness
	X.42.67 who could be found to reconcile me to you
	XI.2.3 Listen to my soul and hear it crying from the depth
	XII.16.23 I beg you, my God, not to stay away from me in silence. Speak truth to my heart

THE BEATA VITA Book XIII Books I to XII Cont. XII.9.24 And come, says the Lord, let I.20.31 an inward instinct told me to us reason together take care of the integrity of my senses...I developed a good memory XIII.19.24 but first, 'wash, be clean, remove malice from your souls and II.1.1 it is from love of your love that I from the sight of my eyes' that dry land make the act of recollection. The recalling of my wicked ways is bitter in might appear my memory, but I do it so that you may XIII.21.30 restrain yourself...by be sweet to me avoiding this world the soul lives, by IV.12.18 you seek the happy life in the seeking it the soul dies region of death; it is not there. How can there be a happy life where there is not even life? XIII.21.30 the haughtiness of pride, the I.10.16, 19.30 In competitive games I pleasure of lust, and the poison of loved the pride of winning... The same curiosity are the passions of a dead curiosity increased my appetite for soul...its death comes about as it departs public shows...I was overcome by a from the font of life, so that it is vain desire to win absorbed by the transitory world and II.6.13 pride imitates what is lofty, but conformed to it you alone are God most high above all XIII.21.30 Restrain yourselves from it. things By avoiding this world the soul lives, by IV.11.16 do not be vain, my soul. Do seeking it the soul dies. Restrain not deafen your heart's ear with the yourselves from the savage cruelty of tumult of your vanity. arrogance, from the indolent pleasure of VII.20.26 worse still, I was puffed up self-indulgence, and from knowledge with knowledge 'falsely so called' (1 Tim. 6:20)

THE BEATA VITA	
Book XIII	Books I to XII
Cont.	
	X.31.45 every day I try to resist these temptations. I invoke the help of your right hand
	X.34.51 there remains the pleasure of the eyes of my flesh which I include in confessionsso we may conclude the account of the temptations of the lust of the flesh which still assail me despite my groans and my 'desire to be clothed with my habitation which is from heaven'
	X.35.54 Besides the lust of the flesh which inheres in the delight given by all pleasures of senses (those who are enslaved to it perish by putting themselves far from you), there exists in the soul, through the medium of the bodily senses, a cupidity whichdelightsin perceptions acquired through the flesh
	X.37.61 I cannot pretend that I am not pleased by praisebut I have to admit not only that admiration increase my pleasure, but that adverse criticism diminishes it

Here, the architectonic structure elucidates the pitfalls of fallenness and God's deliverance from said pitfalls. The structure is as follows:

- 1. We are a spiritual creation in our souls
- 2. God is the fountain of life even when soul slips back
- 3. Insufficiency of that which is not of God
- 4. Plea for restoration
- 5. Let us reason together says the Lord
- 6. Remove malice and restrain yourselves so that soul lives

Augustine in XIII, encourages his readers from the outset to remember that they are spiritual creations in their soul and that God will still be their deliverance when the soul slips back into the "dark abyss." Augustine's profound and torturous struggle between the dark abyss in the temporal and his endeavours to achieve the *beata vita* are recounted both in XIII and I-XII. In XIII.21.30 Augustine summarizes in one sentence and three words the dangers that poison the soul and impede its journey towards its origin - pride, lust, and curiosity. Augustine is striving to live a virtuous life but the road to the *beata vita* requires Augustine's to exhibit restraint towards his multifarious temptations for his rational soul to live and not fall into the deep abyss. Augustine warns his readers in XIII.21.30 to "restrain yourself…by avoiding this world the soul lives, by seeking it the soul dies." XIII is a recapitulation of the things that tempt Augustine in I-XII, and a caution to not let the soul die by continuing in erroneous habits.

Augustine's pleads with God not to be silent. He pleads for restoration and is rewarded by hearing God asking him to come and reason with him. In this, there is a movement from fallenness to restoration that requires God's intervention and grace. According to Lobel, many scholars see in Augustine's thought process, a new move toward thinking about the necessity of grace, a movement guided by reason.⁷⁴

Augustine is providing his readers with definitive instruction and a reminder of his teachings through his own example as recounted throughout the whole of *Confessiones*.

⁷⁴ Diana Lobel, "St. Augustine: The Happy Life of the Soul," in *Philosophies of Happiness* (NY: Columbia University Press, 2017), 146, 151.

8.3.7 Temporality and Time

Book XI is Augustine's precis of his interrogation of time and the paradoxes he encountered in that endeavour. As per usual, Augustine is quick to make a declaration about eternity and God (XI.1.1) forming a link between I.1.1 and XIII.36.51-37.52. XIII recapitulates key aspects of Augustine's conclusions about time. These are documented in **Table 8.5**.

TEMPORALITY AND TIME	
Book XIII	Books I -XII
 XIII.2.2 heaven and earth, which you made in the beginning XIII.3.4 The first acts of creationIn the beginningamong the first acts of creation you said, 'let there be light' XIII.8.9 from the beginning you had said 'let there be light' XIII.24.36 in the beginning God made heaven and earth 	 I.6.9 you are before the beginning of ages, and prior to everything that can be said to be 'before' VII.9.13 In the beginning was the Word and the Word was with God and the Word was Godall things were made by him XI.2.3, 3.5, 9.11 from the beginning in which you made heaven and earth XII.12.15, 13.16, 17.24-25, 19.28, 20.29, 22.31, 24.33, 28.38, 29.40 in the beginning you made heaven and earth
 XIII.10.11 for in us there are distinct moments of time since at one stage we were darkness and then were made light. XIII.18.22 by an eternal design at the appropriate times you give heavenly blessings to the earth 	 I.6.10 but you are the same; and all tomorrow and hereafter, and indeed all yesterday and further back, you will make a Today, you have made a Today VII.15.21 for all periods of time both past and future neither pass away nor come except because you bring that about, and you yourself permanently abide. XI.14.17 there was therefore no time when you had not made something, because you made time itself

Table 8.5: Temporality and time in XIII and its correlatives in I-XII.

TEMPORALITY AND TIME	
Book XIII	Books I -XII
Cont.	
	XI.20.26 perhaps it would be exact to say: there are three times, a present of things past, a present of things present, a present of things to come. In the soul there are these three aspects of time
 XIII.12.13 he forgets the things behind and stretches out to those things which lie ahead XIII.18.22 old things have passed away and new things are created 	IX.10.23 forgetting the past and reaching forward to what lies aheadXI.7.9 A thing dies and comes into being inasmuch as it is not what it was and becomes what it was not
XIII.14.15 in the morning I will stand up and will contemplate youin the morning I will stand and I will see the salvation of my face, my God	VII.14.20 I woke up in you and saw you to be infinite in another sense, and this way of seeing you did not come from the flesh
XIII.15.18 for 'in heaven' Lord, is your mercy and your truth reaches the clouds. The clouds pass but the heaven remains. Preachers of your word pass from life to another life, but your scripture is 'stretched out' over the peoples to the end of the ageheaven and earth will pass away but your words will not pass away	 VII.7.11. that in Christ your Son our Lord, and by your scripturesyou have provided a way of salvation whereby humanity can come to the future life after death XI.6.8 but that mind would compare these words, sounding in time, with your eternal word in silence and say: 'it is very different, and the difference is enormous. The sounds are far inferior to

TEMPORALITY AND TIME	
Book XIII	Books I -XII
Cont.	
XIII.29.44 yet scripture speaks in time- conditioned language, and time does not touch my Word, existing with me in an equal eternityyour vision of them is temporally determined, my seeing is not temporal, just as you speak of these things in temporal terms but I do not speak in the successiveness of time.	me, and have no being, because they are fleeting and transient. But the word of my God is superior to me and abides forever'
 XIII.17.22 but you are the same and in you 'years which never cease' XIII.36.51 the seventh day has no evening and has no ending XIII.37.52 but you Lord are always working and always at rest. Your seeing is not in time, your movement is not in time, and your rest is not in time. 	XI.11.1 Lord, eternity is yours XI.11.13 in the eternal, nothing is transient, but the whole is present XII.15.18 but 'our God is eternal'
XIII.19.24 so that we may discern everything by a wonderful contemplation, even though for the present only by signs and time and days and years XIII.32.47 we see the beauty ofthe sun sufficing for the day, the moon and stars to cheer the night, and all of these provide an indication and sign of passing time	 I.15.19 human soulto you the power is granted to be aware (<i>sentire</i>, to sense) of intervals of time, and to measure them XI.23.29 there are stars and heavenly luminaries to be 'for signs and for times. And for days and for years'

TEMPORALITY AND TIME	
Book XIII	Books I -XII
Cont.	
 XIII.33.48 your worksthey have a beginning and an end in time, a rise and a fall, a start and a finish XIII.34.49 but then you began to carry out your predestined plan in timeto bring order to our disordered chaos XIII.35.50 the entire most beautiful order of very good things will complete its course and then pass away; for in them by creation there is both morning and evening XIII.36.51 the seventh day has no evening and has no ending 	
XIII.21.30 the haughtiness of pride, the pleasure of lust, the poison of curiosity are the passions of a dead soulthe soul's death does not end all movement. Its death comes about as it departs from the font of life, so that it is absorbed by the transitory world and conformed to it.	 I.10.16, 19.30 In competitive games I loved the pride of winningThe same curiosity increased my appetite for public shows IV.11.16 do not be vain, my soul. Do not deafen your heart's ear with the tumult of your vanity X.31.45 every day I try to resist these temptations. I invoke the help of your right hand

TEMPORALITY AND TIME	
Book XIII	Books I -XII
Cont.	
XIII.21.31 but the Word, O God, is the fount of eternal life and does not pass awayand exploring temporal nature only to the extent sufficient to contemplate eternity	 I.11.17 I had heard about eternal life promised to us through the humility of God VII.7.11 that in Christ your Son our Lord, and by your scripturesyou have provided a way of salvation whereby humanity can come to the future life after death
	 VII.8.12 but you, Lord 'abide for eternity and you will not be angry with us forever' VII.15.21 you alone are eternal
	VII.17.23 I found the unchangeable and authentic eternity of truth to transcend my mutable mind
	XI.3.10 your Word, which is also the Beginning in that it also speaks to usIX.10.24 the pleasure of the bodily
	senses, however delightful in the radiant light of this physical world, is seen by comparison with the life of eternity to be not even worth considering. Our minds are lifted up by an ardent affection towards eternal being itself

TEMPORALITY AND TIME	
Book XIII	Books I -XII
Cont.	
	XI.7.9 and so by the Word coeternal with yourself, you say all that you say in simultaneity and eternityXII.15.18 but 'our God is eternal'
XIII.37.52 your seeing is not in time, your movement is not in time, and your rest is not in time. Yet your acting causes us to see things in time, time itself, and the repose which is outside time	I.6.10 in you the present day has no ending, and yet in you it has its end

The linearity of Augustine's thought as he writes about time in XIII is evident as one studies its architectonic structure. His linear thought process is as follows:

Augustine

- 1. reiterates creation "in the beginning"
- 2. emphasizes distinct moments of time
- 3. talks about forgetting the past and expecting the future, new things created
- 4. contemplates (remembers) God in the mornings
- finds (recollects) the words of Scripture to speak "in time conditioned language" and to stretched out to the "end of the age"
- 6. acknowledges God and eternity
- encourages seeing the beauty that God has created for even creation has a beginning and end in time

- 8. warns of the pitfalls of the five senses
- declares that the Word is the fount of eternal life; exploring temporal nature should be in the context of contemplating eternity
- 10. sees "things in time" and the "repose which is outside time"

The above illustrates through I-XIII the pitfalls and struggles Augustine encounters throughout his life and his actions in counteracting these pitfalls. Augustine starts with the journey of his life from infancy to conversion, his struggle with earthly temptations, and his journey towards God. This is presented in a logical manner with a defined pedagogical directive as it proceeds from points 1 to 10. While XIII reiterates these aspects of Augustine's life, it also serves to provide a pathway to remembering significant aspects of one's journey to eternal rest and the return of the soul to its origin. Time for Augustine points away from the temporal towards the eternity in which it participates.⁷⁵ McMahon argues that Augustine sees time to be "a moving image of eternity;" this is a Platonic descriptor of time.⁷⁶ In present time, Augustine contemplates his God first of all at the beginning of the morning in order to remember his God. The start of the day is the beginning and alludes to creation "in the beginning" and as the day goes on, time moves forward to completion – the end of the day, towards eternity and eternal rest. Solignac describes this as "the cycle of time."⁷⁷ He writes, "time is opened for us out of eternity by the fiat of the Creator and it is closed in the eternity of the heavenly rest, without ceasing to be governed by the transcendence of the divine eternity."⁷⁸ Cessario discusses how Solignac's statement emphasizes the scope of Augustine's allegory: it is in the totality of creation, both physically and spiritually, and it also encompasses the sweep and direction of all time, which proceeds from God's eternity and returns to it.⁷⁹

Augustine in XIII has laid out the pathway for his readers and himself to understand how to live in temporal time and move forward towards eternity. There are

⁷⁵ Milbank, "The Confession," 35.

 ⁷⁶ McMahon writes "eternity, to be sure, cannot be defined, but it can be understood by analogy, and the most important understanding in ancient philosophy is articulated in Plato's *Timaeus*: "time is a moving image of eternity" (37d-e). Here the model is cosmological." McMahon, *Understanding*, 148.
 ⁷⁷ Aimé Solignac, "Les Confessions," *Bibliothèque Augustinienne* Series of Oeuvres de Saint Augustin 13 (1962): 23-24.

⁷⁸ Ibid.

⁷⁹Cessario, *The Godly*, 16.

many parallels between texts in XIII and I-XII since temporality and time are so intricately part of creation, memory, and movement in Augustine's journey.

8.3.8 The Confessio of Confessiones

Many scholars have argued that *Confessiones* is a volume about Augustine's confession (*confessio*) as he goes through his life.⁸⁰ Certainly, a survey of *Confessiones* does bear truth to this, and at the very least, it is one of the key themes that runs through *Confessiones* and that contributes to its unity. *Confessio* is certainly very important to Augustine and one of the indispensable keys to understanding *Confessiones*. It is, therefore, understandable how many authors believe *Confessiones* to be purely a book about Augustine's confessions. *Confessio* is one of the motifs that constitutes my multi-faceted theory of recapitulation; when considered on its own, it is reductionist and does not do justice to Augustine's *Confessiones*.

The theme of *confessio* throughout *Confessiones* is best studied by starting in the beginning, Book I. The confessional statements are remarkably similar throughout *Confessiones*. Augustine's desire to confess even to the point of exhaustion is observed in I-XIII with XIII recapitulating I-XII. **Table 8.6** is a list of some of the comparative confessional statements found in each book.

⁸⁰ Some scholars who argue that *confessio* is a central doctrine in *Confessiones* are for e.g., Barry David, "Towards Articulating the Unity of Augustine's Confessiones," *Humanities Bulletin* 3, no. 2 (2020) 45-76. J. Ratzinger, "Originalitat und Uberlieferung in Augustins Begriff der *Confessio*," *Revue des Ètudes Augustinienne* 3 (1957): 375-92. Solignac, *Les Confessions*, 25.,

CONFESSION	
Book I	 I.13.22 I confess to you the longing of my soul I.15.24 that my soulmay not suffer exhaustion in confessing to you your mercies
Book II	 II.3.5 nothing is nearer to your ears than a confessing heart II.7.15 I will love you, Lord, and I will give thanks and confession to your name
Book III	III.11.20 I confess to you Lord III.12.21 I am hurrying on to those things which especially urge me to make confession to you
Book IV	 IV.6.11 Now is the time not to be putting questions but to be making confession to you IV.12.19 to him my soul is making confession, and he is healing it
Book V	V.1.1 accept the sacrifice of my confessionslet my soulconfess to your mercies that it may praise you

Table 8.6: A brief survey through *Confessiones* from I-XIII regarding the connecting theme of *Confessio*

CONFESSION	
Cont.	
Book V	V.2.2 in the heart of those who make confession to you
Book VI	VI.6.9 I recall this and confess to you
	VI.7.12 your mercies make confession to you from the marrow of my being
Book VII	VII.4.6 so I confess that whatever you are, you are incorruptible
	VII.6.8 may your mercies, my God, make grateful confession of that to you from the innermost parts of my soul
Book VIII	VIII.1.1 in my thanksgiving I want to recall and confess your mercies over me VIII.2.3 for the story gives occasion for me to confess to you in great praise for your grace
Book IX	 IX.4.7 my memory calls me back to that period and it becomes sweet for me, Lord, to confess to you by what inward goads you tamed me IX.12.32 but I confess this to your mercy, father of orphans
Book X	X.1.1 this I desire to do, in my heart before you in confession

CONFESSION	
Cont.	
Book X	X.2.2 my God, my confession before you is made both in silence and not in silence
	X.3.4 I also, Lord, so make my confession to youmy Lord, every day my conscience makes confession
	X.4.6 when I am confessing not what I was but what I am now
	X.5.7 let me confess what I know of myself. Let me confess what I do not know of myself
	X.37.61 what then, Lord, have I to confess to you in this kind of temptation
	X.37.62 I beseech you, my God, show me myself so that to my brothers who will pray for me I may confess what wound I am discovering in myself
Book XI	XI.2.2 for a long time past I have been burning to meditate in your law and confess to you what I know of it
	XI.2.3 let me confess to you what I find in your books
	XI.18.23 I confess, my God, I do not know
	XI.25.32 I confess to you, Lord

CONFESSION	
Cont.	
Book XI	XI.26.33 my confession to you is surely truthful
Book XII	 XII.2.2 my humble tongue makes confession to your transcendent majesty XII.6.6 For myself, Lord, if I am to confess to you with my mouth and pen XII.23.32 which I confess to you, my God
Book XIII	 XIII.12.13 proceed with your confession, my faith XIII.15.17 which so persuasively move me to confession XIII.24.36 I confess myself to believe, Lord

In each book of *Confessiones*, Augustine's confessional statements are evident and multiple. Some attention should, therefore, be given to this motif. Barry David has authored a good article of his work regarding the notion of *confessio* as the unifying factor in *Confessiones*.⁸¹ David agrees with other authors that Augustine's presentation is essentially progressive, universal, and structured by an *exitus-reditus*

⁸¹ Barry David's article is excellent, portraying an in-depth exposition of his work relating to *confessio* as the primary motif of *Confessiones*. Due to limitations of space, I can only focus on some of his key points. See David, "Towards" for his exposition on *confessio*.

pattern.⁸² However, he argues that *Confessiones*' unity is found in Augustine's articulation and sharing of his profound notion of *confessio* as man's proper disposition towards God/Wisdom/divine goodness.⁸³

Barry David writes that *confessio* is "mutable man's teleological spiritual union with an immutable God (I.1.1-5.6) given through God's mediation in Christ (I.1.1, I.5.5)." David argues that according to Augustine, God's presence to mind is intimate, consisting of God himself united with the mind, "In this respect, we notice that, based on his account of divine presence in *Conf.* 10, Augustine is now paralleling more of God in Himself with mind in itself."⁸⁴ Further, this relationship between God and Augustine constitutes *Confessiones* ' fundamental ground or baseline i.e., this relationship encapsulates *confessio* 's coherence and gauges its development.⁸⁵ David describes *confessio* as an intrinsically dynamic reality centred in enjoying and augmenting man's right relationship with God. He writes:

Upholding and developing this relationship is *confessio*'s origin and goal; it is Augustine's motive for analysing his life (I-X) and the scriptures (XI-XIII); and growing *confessio* is the object Augustine's analysis hopes to achieve. Hence confession, understood as outgoing from and return to origin (in the sense of augmenting spiritual union), underlies *conf*.'s *exitus-reditus* structure, and is responsible for the text's progressive and universal characteristics.⁸⁶

David argues that *Confessiones* progressively recounts the stages whereby Augustine's heart, i.e., understanding and love, comes to embrace *confessio* and what that entails, first on the personal level, but ultimately on eschatological and theological levels.⁸⁷

David writes that *Confessiones*' structure follows Augustine's original account of *confessio* and, therefore, unites *Confessiones*' conclusion with its beginning.⁸⁸ This structure develops the theme of the ascent to God which leads ultimately to the Godhead.⁸⁹ In this regard, David asserts that the practice of *confessio* is encouraged

⁸² David, "Towards," 46.

⁸³ Ibid.

⁸⁴ Ibid., 55.

⁸⁵ Ibid., 47.

⁸⁶ Ibid.

⁸⁷ Ibid., 52.

⁸⁸ Ibid., 62-63.

⁸⁹ Ibid., 60.

by Augustine by transitioning through Christ's mediation (I.1.1). The transition divides the books of *Confessiones* as follows:⁹⁰

- I-IV: transition from the realm of sense first ascending and then descending to
- 2. V-VII: the realm of the mind to
- 3. **VIII-X**: God via the mind's principal powers intellect and will joined together in union with Christ to
- 4. **XI-XIII**: meditating on scripture, divine creating, human selfhood, and God's church, in the context of considering the Godhead that is above all and in all.

David asserts that the symmetry between Augustine's introduction and conclusion demonstrates that the nature of *Confessiones*' progress is more circular than linear. In this regard, the text has an *exitus-reditus* or 'return to origin' structure wherein linear progress is built into circular progress."⁹¹

David's exposition of the *confessio* motif as the unifying aspect of *Confessiones* is detailed and is influential in the examination of the architectonic structure of *Confessiones*. This is true of other authors who uphold this motif.⁹² In my theory of recapitulation, *confessio* participates as one of the motifs that provides evidence for my theory of recapitulation.

8.4 Motifs Regarding the Unity of *Confessiones* that Contribute to its Architectonic Structure and the Theory of Recapitulation

"confessionum mearum libri tredecim"93

⁹⁰ Ibid.

⁹¹ Ibid., 62.

⁹² See footnote 70.

⁹³ *Retr.* II.6.1.

There are a few theories regarding the unity of *Confessiones* that stand out and which have been studied more extensively. This section shall highlight theories that offer insight into the architectonic structure and theory of recapitulation.

Interestingly, Kotzé in 2020 wrote that the unity of Confessiones no longer preoccupies scholarship; she believes that the postmodern reader is more comfortable with the notion of complexity and with the absence of one solution generally accepted by all.⁹⁴ However, it would seem that academic scholarship is not entirely inattentive to this topic given that she herself wrote these comments in her 2020 chapter entitled "Structure and Genre of the Confessions!"⁹⁵ The unity of *Confessiones* continues to be debated in the 21st century and continues to build upon the work of prior centuries resulting in new insights.⁹⁶ These theories have evolved from consideration of individual themes such as *confessio*, praise, *exidus-reditus*, the Trinity, language, narrative, autobiography, assortment of triads, Neoplatonic influenced structure, literary, and even the Prodigal Son. Barry David is correct when he writes that all the varied interpretations provide insight into the unity of Confessiones.⁹⁷ However, some authors assert that *Confessiones* is not written as a planned structured piece of work designed to unite all its books.⁹⁸ O'Meara, for example, claims that *Confessiones* is "a badly composed book" and suggests that scholars who think otherwise "deny the evidence of their senses and forget that Augustine had no expectation of producing what has come to be regarded as a masterpiece."99 Others, like Courcelle, have largely ignored XI-XIII; Courcelle says, "A partir du livre X, le sens même du mot confession va gauchir, ce qui permit à l'auteur d'ajouter des développements sans rapport avec le début: il va confesser sa science et son ignorance de la Loi divine."¹⁰⁰

⁹⁴ Kotzé, "Structure," 30.

⁹⁵ Ibid.

⁹⁶ See the following for a more detailed overview of unity theories of Confessiones. McMahon, Understanding. Kotzé, "Structure." O'Connell, St. Augustine's, 5-12. Crossen, "Structure," 84-97. O'Donnell, "Introduction," xli-li. David, "Towards," (2020). Timothy Rogers, "Beyond Space and Time: Unity and form in Augustine's Confessions," (2014), accessed June 8, 2022, https://www.academia.edu/6047338/.

⁹⁷ David, "Towards," 46.

⁹⁸ Luc Verheijen, "The *Confessions*: Two Grids of Composition and Meaning," a paper presented in 1989 at the Patristics, Medieval, and Renaissance Conference, Villanova University; presented by Frederick Van Fleteren. Frederick Van Fleteren, "*Confessiones*," in *Augustine through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald (Grand Rapids, Michigan: Eerdmans, 1999), 228. ⁹⁹ John J. O'Meara, *The Young Augustine* (Alba House, 2001), 13.

¹⁰⁰ Pierre Courcelle, *Resherches sur les Confessions de Saint Augustin*. 2nd Ed. (Paris: de Boccard, 1968), 18. Teske, *To Know*, 261.

McMahon, as mentioned earlier in this chapter, offers an extensive study on a theory of unity that examines XIII as paradigmatic for I-XII based on a meditative structure and an *exidus-reditus* interpretation.¹⁰¹ McMahon describes XIII as Augustine's ponderings on Genesis 1 and the incorporation of all his thoughts and comments on creation from I-XII but, as McMahon reiterates, from the perspective of a prayerful and meditative structure.¹⁰² This recapitulation in XIII has a cyclical nature because it is the beginning moving towards the end and vice versa. McMahon quotes, "this movement forward in time proves simultaneously a movement backward, towards origins [exidus-reditus]."¹⁰³ It should be noted that McMahon also unifies the exidus-reditus theme and Augustine's autobiography and perplexities in *Confessiones* by distinguishing between Augustine the Speaker and Augustine the Author; this would account for the differences in style.¹⁰⁴ However, distinguishing between Augustine the Speaker and Augustine the Author creates a dualist Augustine rather than a holistic, non-reductionist Augustine thereby, constricting the authentic Augustine. McMahon's work is considered to be a classic in the studies of the unity of Confessiones.¹⁰⁵ However, while comprehensive with important insights, his work is still focused on one central theme.

Other authors who promote an *exitus-reditus* structure include Ortiz, Chadwick, and Harrison.¹⁰⁶ Ortiz believes the overall motif of *Confessiones* is a return to God whereby the structure of *Confessiones* "embodies the dynamic motion of all creation and the dynamic orientation back to the Creator given to human beings in creation and brought to completion in re-creation.¹⁰⁷ He believes that Augustine in writing *Confessiones* recapitulates and participates in God's redeeming action in creation.¹⁰⁸ Ortiz writes, "in the *Confessiones*, God works through Augustine to take up all of creation liturgically and offer it back to God in a kind of Eucharistic offering

¹⁰¹ McMahon, *Understanding*, 65. For a detailed summary of his *exidus-reditus* theory see McMahon, *Understanding*.

¹⁰² Ibid.

¹⁰³ Ibid., 144.

¹⁰⁴ McMahon, *Augustine's*, 41. Augustine the Author's approach is to show God's providential plan for Augustine while the speaker is unaware that there is a God inspired understanding of Genesis and creation. I, like Ortiz, am not convinced of this argument. Ortiz, "Creation," 328-329.

¹⁰⁵ See McMahon, *Augustine's*. McMahon, *Understanding*. McMahon, *Structure*.

¹⁰⁶ Ortiz, "Creation," 328-329. Chadwick, *Augustine*, xxiv. Harrison, *Rethinking*, 59.

¹⁰⁷ Ortiz, "Creation," 328-329.

¹⁰⁸ Ibid., 329.

of praise in thanksgiving."¹⁰⁹ Ortiz argues that this is the deep meaning of the deliberate structure, unity, and purpose of Augustine's *Confessiones*.

Ortiz suggests that there is a unity of *Confessiones* based on a Trinitarian motif that is more evident in XI-XII but also alluded to in I-X.¹¹⁰ Here, Ortiz states that "all of creation is created in a Trinitarian act of creatio, conversio, formatio in which all creatures bear a dynamic orientation toward God in their very being." The Confessiones, he argues also bears this Trinitarian stamp and dynamic orientation toward God. Thus, for Ortiz, Confessiones is an "example of a larger pattern of redemption, and an act of the whole Trinity re-creating what it has created."¹¹¹ Colin Starnes supports a Trinitarian approach as a unifying motif and assigns a person of the Trinity to each section of *Confessiones*.¹¹² He argues that I-IX pertains to the Father as Creator, X to the Son who unites the divine and the human, and XI-XIII to the Holy Spirit who has inspired the Scriptures Augustine is excepting. Ortiz mentions O'Donnell and Crosson who believe there are Trinitarian patterns throughout *Confessiones*.¹¹³ They do not, however, support the Trinity as a predominant motif in the structure of the *Confessiones*. For e.g., O'Donnell believes the last three books have a Trinitarian structure because they deal with creation and eternity, Scripture -God of the Word, and the Church – God who acts through the church, the province of the Father, Son (Word), and Holy Spirit, respectively, although he does not see the Trinity as a predominate motif throughout *Confessiones*.¹¹⁴ Crosson sees Trinitarian vestiges in Augustine's descent into sin in II, III, and IV - the sinful triad of lust, curiosity, and pride. In VI-VIII sins are healed.¹¹⁵ Ortiz writes that the important point "is that the Confessions is marked by Trinitarian vestiges."¹¹⁶

Some scholars like Landsberg and Le Blond propose time as the principle unifying factor in *Confessiones*. Both link the principle of unity to time as past, present, and future. I-IX concerns the past and relies on memory, X the present which requires management of the author's conduct, and XI-XIII the future which requires

¹⁰⁹ Ibid.

¹¹⁰ Ibid., 330-331.

¹¹¹ Ibid.

¹¹² Colin Starnes, "Prolegomena to the Last Three Books" and "The Place and Purpose of the Tenth Book of the Confessions," *Studia Ephemeridis "Augustinianum"* 25 (1987): 95-103.

¹¹³ Ortiz, "Creation," 327. O'Donnell, *Augustine* (1985). Crosson, "Structure and Meaning," 31.

¹¹⁴ O'Donnell, *Augustine*, vol. III, 251, 300, 343.

¹¹⁵ Crosson, "Structure and Meaning," 31.

¹¹⁶ Ortiz, "Creation," 327.

expectatio.¹¹⁷ Le Blond finds, within this context, memory as a unifying theme, claiming that the *Confessiones* are "une oeuvre de mémoire, de mémoire augustinienne: celle-ci comporte évidement l'évocation du passé, mais elle implique aussi le souvenir de soi dans le present, et la tension vers l'avenir."¹¹⁸ Thus, I-IX concerns memory in Augustine's past, X memory in the present, and XI-XIII memory stretching out into the future. McMahon also sees a connection with time as a unifying factor but in the context of *Confessiones* presenting itself as an ongoing prayer – again the meditative and prayer motif.¹¹⁹ His proposition is that the temporal progress of Augustine's life is recounted in I-IX, X is his present state of conscience, and XI-XIII pertains to Augustine performing his present and future duties in expounding Scripture. Since *Confessiones* is a prayer being made in an ongoing present it is composed as originally occurring in that temporal order and acts as a return to the origin.

Interestingly, Heidegger believed Augustine's meditation on time in Book XI unified *Confessiones* I-XIII. According to Heidegger, Book XI is not merely or primarily a treatise on time, or separate from the other books of *Confessiones*, it is what provides the inner jointure [*Fügung*] of the *Confessions* as a whole.¹²⁰ The meditation of time results in a *confessio* at which point *Confessions* reaches its most authentic depth¹²¹ whereby Heidegger even contends that meditation on time is the very ground of confession for Augustine.¹²² Accordingly, in Book XI, *Confessions* reaches its true aim – its own metaphysical ground.¹²³ Heidegger also contends that in *Conf.* XI Augustine's meditation of time actually conveys Augustine back to the eternal Word as the source of created being, allowing him to attune his spiritual ear to

¹¹⁷ Le Blond, Les Conversions, 17. Landsberg, "La Conversion," 31-56.

¹¹⁸ Le Blond, *Les Conversions*, 6. "A work of memory, of Augustinian memory: this obviously includes the evocation of the past, but it also implies the memory of oneself in the present, and the tension towards the future."

¹¹⁹ McMahon, Augustine, 143-244.

¹²⁰ Ryan Coyne, *Heidegger's Confession: The Remains of Saint Augustine in Being and Time & Beyond* (Chicago: The TUCP, 2015), 161.

¹²¹ Ibid., 161, 266 n. 11. Marion thinks similarly to Heidegger in this regard: "precisely because at first glance it does indeed concern time, its definition and its aporiae, it behooves us to keep this essay within the *confessio*, alone capable of securing for it a place, in the sense that Saint Augustine understands it." Jean-Luc Marion, *In the Self's Place: The Approach of Saint Augustine*, trans. Jeffrey Kosky (Stanford: Stanford University Press, 2012), 191.

¹²² Coyne, *Heidegger's*, 161.

¹²³ Ibid.

the silence of the eternal Word.¹²⁴ This, according to Heidegger, is time; thus, *confessio* relates temporality to eternity.¹²⁵

Some other unifying themes presented by other authors warrant a mention. Nunziato and Armstrong see form and formless matter as a unifying and recurring theme.¹²⁶ Harrison and Hochschild argue that creation of form out of formless matter presents a unifying factor since it is out of darkness into light that the soul traverses.¹²⁷ This also dovetails into the theme of time. Crouse posits a unity based on a recurring pattern of *exteriora-interior-superiora* throughout *Confessiones*.¹²⁸ I-IX is the exteriora of Augustine's biography, X the interior of the soul, and XII-XIII the superiora of eternal truth evidenced by the meditation upon the eternal Word as the principium of creation. Fischer believes that Confessiones is not a book about Augustine but a book about God the Creator within which runs the motif of praise as a unifying factor.¹²⁹ Fischer claims that Augustine probes the meaning of his own existence by calling upon and praising the Creator God whose creative act had brought him into being.¹³⁰ Durling proposes an interesting theory.¹³¹ He views the "gathering of the scattered" as of central importance and believes Book VII to be the central book. He works outwards towards XIII and also towards Book I to establish his recapitulation premise. While Durling's view has its merits, it is still centred on one motif. Burke argues that I-IX and X-XIII involve the distinction between "rectilinear" and "circular" terminologies based on the first three chapters of Genesis.¹³² In this transition, there is a turn from a "narrative of memory" to the "principles of Memory;" it is a logological equivalent of a turn from "time" to "eternity."¹³³ Further, his definition of Memory is the storehouse of images unlike mine.¹³⁴ Burke recognizes a circular pattern in X-XIII. Again, while he makes some

¹²⁴ Ibid., 162.

¹²⁵ Ibid.

¹²⁶ Nunziato, "Created," 364. Armstrong, "St. Augustine," 6.

¹²⁷ Harrison, *Rethinking*, 104-105. Hochschild, *Memory*, 173-174.

¹²⁸ Crouse, "*Recurrens*," 391.

¹²⁹ Fischer, "What's," 74-80.

¹³⁰ Ibid., 80.

¹³¹ Robert M. Durling, "Platonism and Poetic Form: Augustine's *Confessions*," Public Lecture delivered at Princeton University, March 1982.

¹³² Burke, *The Rhetoric*, 124.

¹³³ Ibid.

¹³⁴ Ibid., 125.

valuable contributions in his discussion of memories versus Memory, his approach still lacks a cohesiveness.

Other scholars rest on the literary structure of *Confessiones* as the unifying factor. Spengemann, for example, presents *Confessiones* as a narrative where Augustine is described as the "converted narrator" and the "wandering protagonist."¹³⁵ Harrison alludes to *Confessiones* being a literary work of art as do Courcelle and Ferrari.¹³⁶ However, both Courcelle and Ferrari believe that the account of Augustine's conversion is fictional.¹³⁷ They argue that this is the case because the central text of Augustine's confession account in *Conf.* VIII.12.29-30 is not found in his earlier writings. Therefore, if the account is fictional, *Confessiones* is a literary work that incorporates fiction to promote his views on conversion. These are but a few examples of authors who subscribe to a literary view of *Confessiones*. Care must be taken when reading *Confessiones* to not reduce it to purely a literary work. Augustine was not a literary figure; he used literary trope as a form of rhetoric as a vehicle for argument to persuade his readers. The danger of seeing Augustine as a literary figure is that we lose touch of who he was; we seek to control him (his narrative and works) rather than allowing Augustine to inform us.

All these motifs provide solid evidence to a unified architectonic structure, unity, and purpose to the whole of *Confessiones*. All provide corroborative and important contributions to explicate XIII as a recapitulation of I-XII. Such a recapitulation cannot be based on one motif alone, nor can the unity of *Confessiones* be substantiated by one motif alone. Individual motifs standing alone are simply reductionist and miss the overall impact of the book. A multi-faceted approach in which the multiple key motifs are considered together corroborates the unity of *Confessiones* and presents a theory of recapitulation that is far more holistic.

¹³⁵ William C. Spengemann, *The Forms of Autobiography* (New Haven: Yale University Press, 1980), 7, 1-33.

¹³⁶ Harrison, *Rethinking*, 5. Courcelle, *Resherches*, 188-202. L. C. Ferrari, "Saint Augustine on the Road to Damascus," *AugStud.* 13 (1982): 151-170.

¹³⁷ Courcelle, Resherches, 188-202. Ferrari, "Saint," 151-170. Harrison, Rethinking, 5-6.

8.5 The Significance of the Architectonic Structure in the Theory of Recapitulation and Unity of *Confessiones*

Studying the architectonic structure of XIII in the development of my theory of recapitulation allows for the principle motifs of Augustine's *Confessiones* to be viewed in a holistic, multi-faceted, and unified manner. It allows for the identification of a recapitulative format recognized through Augustine's unfolding of his creation theology as he recapitulates the motifs within I-XII. The theological construct in XIII as a recapitulation of I-XII becomes evident through Augustine's journey towards God and an assertion of his yearning and coming to a place of greater understanding of the *beata vita*.

My discovery of an architectonic structure which supports such a recapitulation in XIII of I-XII has provided several insights into Augustine and his writings. These insights fall into the following categories:

- 1. Augustine's cerebration
- 2. Augustine's creation theology
- 3. Augustine's pedagogy
- 4. Augustine's unity of Confessiones
- 5. Augustine's recapitulation

8.5.1 Augustine's Cerebration

The architectonic structure of XIII and memory in X reveals much regarding the inner working of Augustine's mind. The seemingly, at times, jumbled and circuitous writing in his works betray the logic that is actually nestled in his mind – this is manifest in the architectonic structures found within *Confessiones*. Further, within this structure, Augustine becomes exposed as he navigates through the narrative of *Confessiones*. He is passionate with a dogged determination to solve intricate enigmas, and his "mind is on fire."¹³⁸ He pleads with God to resolve his perplexities.¹³⁹

¹³⁸ Conf. XI.22.28.

¹³⁹ E.g., Conf. I.1.1, XI.22.28.

Augustine seems to have a multiple thought stream¹⁴⁰ ability; perhaps a good example of this process is revealed at Cassiciacum where he wrote his four books. Augustine had a habit of asking questions of himself (e.g. as in *Soliloquia*) as he sought to understand himself and God. In *Confessiones* he does this after the death of his friend in Thagaste. In *Soliloquia* Augustine debates with his own reason. These interior dialogues remained a lifelong feature of his writings.¹⁴¹

Augustine was critical of his own thinking. This criticism, according to Chadwick, "marks an epoch in the history of human moral consciousness."¹⁴² Further, as Augustine discovered more of his own mind, he realized that "thinking awareness" i.e. memory in his mind was actually related to the mind of God, and this was where he found the activity of his mind to be manifest.¹⁴³ Augustine's intellectual ability and cerebration was well beyond his time; for example, it took almost 1,600 years for a taxonomy of memory to be develop only for it to be discovered that it was virtually identical to Augustine's taxonomic structure of memory.¹⁴⁴

Augustine's mind had a vast capacity and ingenuity. Brown writes that through his education Augustine had developed "a phenomenal memory, a tenacious attention to detail, an art of opening the heart."¹⁴⁵ Augustine did not limit himself to one particular field of study. He studied and interrogated multiple motifs through the lens of philosophy, theology, medicine, science, and pedagogy, easily blending each discipline with each other and making no explanation or apology for doing so. The metaphysical dimension of Augustine's cerebration in which he understood God as Being and the principle cause of all other beings, was founded against the background, and his understanding, of Scripture¹⁴⁶ and creation. He was able to interrogate the metaphysical with the physical from all the different disciplines. According to O'Donnell, Augustine was in constant "dialogue with the wider world of the non-Christian thought of his time, accepting its excellences, quarrelling

¹⁴⁰ Multiple thought streams are defined as a state of mind in which a person has more than one internal narrative or stream of consciousness simultaneously occurring within their head. PsychonautWiki contributors, "Multiple Thought Streams," *PsychonautWiki, The Open Encyclopedia of Psychonautics*, 2019.

¹⁴¹ Robin Lane Fox, Augustine: Conversions to Confessions (NY: Basic Books, 2015), 332.

¹⁴² Chadwick, Augustine, 93.

¹⁴³ Hankey, "Mind" 564.

¹⁴⁴ Cassel, "From," 21-41.

¹⁴⁵ Brown, Augustine, 26.

¹⁴⁶ Anderson, *St. Augustine*, 10.

selectively with its errors, sharing a common ground of debate and discussion."¹⁴⁷ O'Daly writes that the nature of Augustine's philosophical writings is revelatory regarding Augustine's thought.¹⁴⁸ Further, it is important to be careful in the interpretation of individual texts so as not to take them out of context. Augustine's ideas and thoughts also evolved and matured over time. This is important in understanding Augustine's cerebrations.

Augustine was also an eloquent speaker who used both literary and philosophical allusions and was an exquisite writer who used his mastery of language to teach truth. Such mastery meant Augustine could adapt his language according to his audience.¹⁴⁹ Kirwan writes about the "Augustinian picture of language" that philosophers speak about.¹⁵⁰ This "Augustinian picture of language" does not convey the whole context of Augustinian thinking, nevertheless, it does provide an insight to his use of language to enlighten and educate his readers.

Augustine's cerebrations extended beyond the confines of Christians belief. He understood as he examined creation and his journey towards God that all disciplines were inter-connected, and his mind was able to connect the dots. At the same time, the profundity of his mind encouraged him to go to enormous lengths to examine and try to understand all that he learnt of and about God, and the depth of his experience of God as his temporal journey moved towards achieving the *beata vita*. Further, Augustine's thought process allowed him to come to the realization that moral perfection was not conceived of in cognitive terms but in those of *amor*, *caritas, intentio*, and *voluntas*.¹⁵¹

In XIII, the complexity of the inner workings of Augustine's mind and his constant desire for answers is evident. In the entire works of *Confessiones* he asks over 700 questions!¹⁵² Augustine's mind never stopped thinking. It can be said without doubt that Augustine was a man of high intellect, in fact, quite simply, a genius.

¹⁴⁷ O'Donnell, Augustine, vol I, xxii.

¹⁴⁸ O'Daly, Augustine's, 4.

¹⁴⁹ See *Conf.* V.6.10. People "refuse to accept the truth if it is presented in polished and rich language." He says in the same chapter regarding the acceptance of truth, "whether the words are ornate or not does not decide the issue." Chadwick, *Augustine*, 95.

¹⁵⁰ "Augustinian picture" is a term that Wittgenstein used to describe Augustinian language. Christopher Kirwan, "Philosophy of Language," in *The Cambridge Companion to Augustine*, eds. Eleonore Stump, Norman Kretzmann (CUP, 2001), 186.

¹⁵¹ O'Daly, *Augustine's*, 6.

¹⁵² Jared Ortiz, "Why and how to read Augustine's Confessions," The Catholic World Report (2021): 3.

8.5.2 Augustine's Creation Theology

XIII confirms how important creation theology was to Augustine.¹⁵³ The architectonic structure of XIII aligns creation with the events of Augustine's life, his thought process and awareness, his resolution and non-resolution of the various paradoxes that are the bane of his perplexities, his interrogation of *memoria*, time, the Incarnation, and eternity.

Knuuttila asserts that there was nothing radically new about Augustine's conception of creation as it built upon late second- and early third-century theologians.¹⁵⁴ Perhaps, however, what is new is that Augustine, as he explicated in XIII, saw creation as integral to his own creation, his story, and his journey towards remembering, knowing, and understanding God, the *beata vita*, and eternity. Creation and the Creator God were for Augustine indelibly connected via the rational soul, the *memoria Dei*, and his creation in the image and likeness of God. Even more significant, Christ at the Incarnation was a recapitulation of creation in temporal time where eternity intersected temporality, thereby further establishing the continuity of creation and the relationship between the Creator God and Augustine. The pivotal relationship between creation, the Creator God, Christ the Mediator, and Augustine unfolds as the architectonic structure of XIII and its recapitulation of I-XII is recognized and comprehended.

Vaught writes the relationship between God and Augustine, both its unity and its separation, "expresses itself in creation *ex nihilo*, in the fateful transition from finitude to fallenness, and in the quest for fulfilment that attempts to re-establish peace with God."¹⁵⁵ He argues that all this requires a figurative discourse in order to be adequately expressed. A performative use of language is necessary to reflect the "dynamism of God, the discord of our fragmented spirits, and the vibrant interaction that can develop between the soul and the ground of its existence."¹⁵⁶ He goes on to say that performative discourse is the language of creation, the language of a restless

¹⁵³ Augustine's desire to understand creation as he exegetes Genesis 1 can be seen in the books he wrote regarding Genesis: *Gn. Con. Man., Gn. Litt. Imper. Lib., Gn. Litt. Lib. Duo., Conf.* XI-XIII, *Civ. Dei.* XI-XII.

¹⁵⁴ Simo Knuuttila, "Time and Creation in Augustine," in *The Cambridge Companion to* Augustine, eds. Eleonore Stump, Norman Kretzmann (CUP, 2001), 103.

¹⁵⁵ Vaught, Access, 2.

¹⁵⁶ Ibid.

heart, and the language that permits God and the soul to confront one another in the space that opens up between them. XIII exemplifies this performative discourse as it unravels creation's foundation and purpose in recapitulating I-XII. XIII also reveals how Augustine saw that creation could not be fully explained or understood. God is mysterious, unknowable, and required Augustine to accept that paradoxes still existed in temporality.

The exegesis of Genesis 1 in XIII is systematic and follows a temporal sequence. Its architectonic structure follows the six days of creation and the seventh day of rest. Augustine, in his ingenuity, uses this exegesis of creation to demonstrate how foundational creation is to his thinking and theology, and to recapitulate the most significant and important motifs in I-XII. Incredibly, XIII recounts in sequential order the motifs as they arise in I-XII in a structured pattern; it is difficult to imagine that Augustine had not thought this out. A possible alternative perspective is that Augustine could have intuitively established this structure as the truth unfolded in his writings through divine illumination. Perhaps, it was a combination of both; nevertheless, the architectonic structure is revealing in its parallels and sequences. Augustine uses his understanding, exegesis, and revelation of creation, to find an authentic voice in which to share his life and his knowledge with his reader.

8.5.3 Augustine's Pedagogy

Augustine's method and practice of teaching included various styles as is evident in *Confessiones*. He used narrative, linguistic style, philosophic discourse, theological insights, Scriptural exegesis, medical and scientific knowledge, and historical events. This did not result in a confused and disordered piece of work but a beautiful and exquisite interpretation of his life, his thought, his interrogations and remembrance of God and eternity. His pedagogy drew his reader into his story and his intimacy with God and provided for them a pathway and invitation to journey towards the Divine. It promised the reader an eschatological hope and expectation upon conversion based on Augustine's own life story and the promise of Christ the Mediator. It provided a logical progression through Augustine's interrogations of memory, time, creation, and eternity. XIII architectonic structure elaborates on this pedagogy and illustrates the logic in Augustine's methodology.

8.5.4 Augustine's Unity of Confessiones

Augustine's own words "the thirteen books of my Confessions"¹⁵⁷ imply a unified format. The architectonic structure of XIII in demonstrating the recapitulation of I-XII, fortifies the unity of *Confessiones*. The many motifs described all propose one common objective – the unification of *Confessiones* through a particular motif; however, taken on their own, each motif does *Confessiones* a disservice, not because they are untrue but rather because they are reductionist. The architectonic structure of XIII in recapitulating I-XII, demonstrates how the unity of *Confessiones* is substantiated by adopting a multi-faceted approach which incorporates the main multiple motifs. The architectonic structure of XIII lays out in greater detail this unity through its exegesis of creation and recapitulative interdependence with I-XII. The profound connection between the temporal sequence of creation and the significance of each day in remembering Augustine's own creation and temporal passage through time is incontrovertible. The architectonic structure in XIII assists in understanding Augustine's cerebrations and the many intrigues in his mind.

8.5.5 Augustine's Recapitulation

Confessiones reveals a recapitulative progression where Augustine moves from his creation to his redemption in Christ, and the *beata vita*. Augustine's exegesis of Genesis 1 in XIII reflects this movement but reiterates that the consummation is also the prolegomenon, and vice versa, brought to light by XIII's recapitulation of I-XII. There is a constant temporal movement in time, and a remembrance of the soul's origin, Augustine's journey, and eternity. The recapitulation of I-XII observed in XIII, is a journey of *a* memory as Augustine remembers *the* memories of his life as he endeavours to know and understand God. Memory is what motivates Augustine and drives him forth in his striving to achieve the *beata vita* for without memory he recognizes that none of this would exist; without memory there is no eternity and therefore, by default, no creation.

¹⁵⁷ *Retr.* 32.1.

Augustine believes Christ to be the Mediator who recapitulates the beginning of creation thereby causing Augustine to remember the goodness of God the Creator in creation. Christ is also the fulfilment of the promise, the eschatological hope of eternal rest in eternity. Augustine's eschatological hope propels him forward in time towards consummation in eternity which in turn leads back to the prolegomenon at creation. Augustine's temporal life is a constant recapitulation.

8.6 Concluding Remarks

This chapter has presented an architectonic structure to XIII. According to my research, this has not been previously presented. Further, the theory that XIII is a recapitulation of I-XII, has not been described in the same manner that I have presented in my theory of recapitulation. This theory includes a multiplicity of prominent motifs in *Confessiones* and its unity. The inclusion of multiple motifs prevents a reductionist reading of *Confessiones*. Individual motifs were discussed and the importance of their contributions was acknowledged; however, taken on their own they are but a single strand in the whole schema of *Confessiones*.

The architectonic structure of XIII elucidates within the context of creation the prominent motifs present in I-XII and does so in a logical fashion. This structure reveals a significant insight regarding Augustine's incredible ability to maintain a logic within his exegesis of creation and the multiple motifs in *Confessiones*. It also substantiates a recapitulative movement throughout *Confessiones* thereby supporting my theory of recapitulation. XIII unveils the entirety of I-XII thus providing greater insights to the workings of Augustine's mind, his theology of creation and *memoria*, and a better understanding of *Confessiones*. This architectonic structure and theory of recapitulation is best identified when a multi-faceted, holistic, and integrated approach is adopted thereby, preventing a reductionistic understanding of *Confessiones* but also importantly, of Augustine himself.

The following chapter is a summary of this thesis with my concluding contributions and insights.

CHAPTER 9: Re-thinking Augustine's Theology of Memoria

This thesis has brought to light some novel insights regarding Augustine's theology of *memoria* and evoked a new way of thinking¹ about the same theories and ideas that Augustine developed as he interrogated *memoria*. Augustine never resolved all his questions regarding *memoria*. Neither have I. Augustine came to recognize that there were aspects of *memoria* that would remain mysterious. I too recognize this. Yet, amidst all the questions and paradoxes, Augustine managed to develop a theology of *memoria* that was complex, advanced for his times, and remarkably similar to theories of memory developed in the last 160 years.² Augustine was, without doubt, a man of great ingenuity.

Augustine, several times in *Confessiones*, asked how it was that he remembered God; he commented on the extent of his search, "see how widely I have ranged, Lord, searching for you in my memory."³ Augustine's search was extensive. The result of this search was the development of a comprehensive theology of *memoria*. An attempt to answer Augustine's question compelled my investigation of memory and Augustine's theology of *memoria*. My approach to answering this question was one of an architectonic structural investigation.

Architectonics does not only investigate the structural composition of memory in a purely functionalist manner. It provides information on the relevance and meaning of structure, how parts make a whole (unity), how the whole is made up of individual parts, on relationships, on the organization and functioning of memory, and the mind of Augustine. It is an "archaeological excavation" which forces a new way of thinking about memory. Importantly, it helps one understand, at a deeper level, Augustine as he journeyed through his discovery of *memoria* in his search to know and understand God and achieve the *beata vita*.

My study of Augustine's theology of *memoria* via an architectonic investigation, has resulted in three novel insights. First, the identification of a specific architectonic structure and sequence to memory. This revealed eight foundational

¹ As Sir William Bragg would say it is really just a new way of thinking about, and presenting, the same facts that always existed. Gray, "Braving," 17. Lonsdale, "Sir," 2021.

² Ribot was first to present a theory of memory in 1881 later published in a book. Theodule-Armand Ribot, *Diseases of Memory*, trans. William Hunnington Smith (NY: D. Appleton & Company, 1887). ³ Conf. X.24.35.

pillars of memory found in Conf. X which emerged from his earlier works prior to 396 A.D. Both physical and metaphysical aspects of memory come together to reveal more about the manner in which Augustine interrogated memory, its inner workings, and the role memory played in his journey to know God and the beata vita. Second, the arc-hitectonics of the Arc gene provides a new way of thinking about Augustinian memory. Architectonics so intricately intertwines with Augustine's own physical examination of memory and theology. The investigation of Arc and its role in Augustinian memory has not been previously studied. I present Arc as a master regulator of a genomic memory process that allows further understanding of Augustinian memory. Third, the architectonic analysis of Augustinian memory reveals that the structure to Augustinian memory identified in *Conf.* X is also observed in Conf. XIII. In XIII, memory is viewed through the lens of creation. It is present in the same specific sequence identified in chapters 3, 4, and 8. In this context, XIII is a recapitulation of not just X, but also, I-XII in the study of memory in Confessiones. My theory of recapitulation results from a novel strategy through the utilization of an architectonic methodology that provides a holistic, multi-faceted approach to understanding Augustinian memory and the unity of Confessiones.

9.1 Architectonics of Memory

The architectonic study of *memoria* evolved while investigating Augustine's theory of memory. It became evident that a pattern was emerging in Augustine's structure, thought process, and teaching of memory, not only in *Confessiones* but also in his earlier works.

9.1.1 Interiority

To understand how Augustine embarked on his investigation of memory and what he thought of his relationship with God, it was necessary to briefly examine his practice of interiority, and his interactions in the process. There is also an architectonic sequence to his practice of interiority which provided the pathway to union with God. His *interior examen* of himself discovered the need of an upward turn towards the Divine (*exercitatio animi*) followed by *meditatio* and *contemplatio*. Interiority elucidated to Augustine the significance of memory in his journey. It was the remembrance of God within his rational soul that prompted his interrogation of memory.

9.1.2 Memory

As I read *Confessiones* especially Book X, I began to observe a pattern regarding the manner in which Augustine interrogated, described, and wrote about memory. Additionally, study of his earlier main works from 836-395 A.D. revealed a similar pattern. It is my contention that there is an architectonic structure to memory that unfolds as Augustine's work progresses in his writings. To the best of my knowledge, this specific pattern and sequence has not been identified previously. I present architectonics as an innovative methodology to investigate and decipher Augustinian memory which has led to neoteric insights. As I studied this aspect of Augustinian memory, I began to wonder whether Augustine had deliberately thought out this sequence of the different aspects of memory or whether these foundational pillars of memory naturally unfolded over time. The structure and sequence of the different aspects of memory unveil the following architectonic structure to memory in this particular sequence: location of *memoria*, power of memory, sense-perception, teaching/learning, recollection and forgetfulness, images, phantasiae and phantasmata, transiency of memory, the beata vita. This is not to say that there are no overlaps - there are, but the main motifs of memory follow a pattern in their discussion by Augustine. The pattern observed in Conf. X⁴ has matured compared to his earlier writings including the addition of another pillar of memory, the power of memory. From this sequence, I deduced that Augustine was meticulous in his thought and process of questioning. He followed a logical pattern which might not immediately be observed due to his often-convoluted manner of writing, but it is there, present, behind the scenes.

⁴ Books in *Confessiones* will be written in Roman numerals I-XII, except for Book I.

9.1.2.1 Significance of Architectonic Structure in Memory

Why is it important to recognize and understand the architectonic structure of memory?

When Augustine interrogated memory, he may have recognized a sequence to his own questioning and understanding of memory. Consequently, it is natural that the same pattern follows in his discussion of memory. This may be a presumption; however, I think there is some merit to this observation. This sequence is important since it unfolds how Augustine's thought process built a case for his theology of *memoria*. His theology was reinforced as he taught and discussed memory. As revelations regarding memory arose in his interrogations, his ardour to understand memory in his own life in search of God via *memoria* became more fervent. The architectonic structure of memory is not constrained to the physical as there are definite metaphysical ramifications that are observed.

Architectonics opened the door for Augustine to incorporate his knowledge from different fields such as medicine and science as he tried to decipher how memory worked. Augustine never identified these specialisms as separate entities as he interrogated memory. Anatomy, physiology, neurology, and medical science were just as important and together resulted in a holistic, non-reductionist investigation of memory. This aspect of architectonics and memory allowed for the investigation of mechanisms regulating the formation, consolidation, storage, and recollection of memories. Additionally, the role of Arc's representation of a genomic memory process was recognized within the architectonic structure of memory. Consequently, Augustine was able to investigate memory from both physical and metaphysical dimensions.

The architectonic structure illustrates the manifestation and properties of time that Augustine correlated with memory. Memory and time, so elegantly intertwined, could not exist without each other. There is a structure to eternity, temporal time, and physical time, albeit viewed within temporality and its earthly constraints (**Figures 7.1** and **7.3**). The physical nature of memory also included its spatio-temporal dynamics. Further, XIII illustrates this inseparable relationship between memory, time, and creation. Movement in time is a re-enactment of creation in time, i.e. it is recalling *time* itself. Indeed, Augustine's own history is a re-enactment of time and

creation, the Incarnation and eternity. This is both physical in construct but metaphysically represented by the rational soul's desire to return to its origin. The *historia* of time and memory is the temporal dispensation of God's action in time i.e. the *historia sacra* of Christ. Augustine viewed his life in relation to the *historia sacra*, where structurally creation, the Incarnation, and eternity are inseparable from his birth (creation), temporal life (Incarnation) and fulfilment of the *beata vita* (eternity). Time is associated with *ordo* and thus created physical structure where time is a creature. Time is also an experience of the soul where memory is cardinal to time.

Sense-perception arising from the body's senses is considered to be another physical aspect of memory and time. It is important because sense-perception is seen as a "bodily" function that Augustine desires to rise above in order to know God. Senses and sense-perception function structurally as an architectonic "ladder" enabling Augustine's ascent as he strives to know and understand God and achieve fulfilment of the *beata vita*.

Creation is the physical manifestation of the architectonic structure. In the context of memory, it is nothing other than God's creative act in the creation of human beings which includes the creation of the genome and Arc. Augustine's creation theology is inherent in his theology of *memoria*. For him memory was possible because of creation. The memory of creation was memory of the sacred because it was a remembrance of when God in a sacred act created in creation. Temporal knowledge assisted memory as it recollected truth i.e. sacramental remembering. Memory was, therefore, the sacred gateway to the Divine allowing a return of the rational soul to its origin. This was possible because memory emanated from eternity. Additionally, the resurrection of Christ was an elevation of time into eternity. Accordingly, a sacrament was also a remembrance of time's dependence on God.

Architectonics is more than understanding physical and metaphysical natures of memory – it is also about relationships. It is about the unity of parts to become a whole, e.g. the individual books of *Confessiones* make up the unity of *Confessiones*, or the different pillars of memory form the theory of memory. It unites body and soul in terms of Arc (physical) and *memoria* (metaphysical). It lures the reader and helps them align with Augustine and identify with what he is saying. It allows for a clearer understanding of Augustine's logic in the complexity of his thought processes and

writings. While architectonics revealed much about the physical and metaphysical aspects of memory, memory still remained mysterious in many ways, a realization that Augustine was eventually content to accept.

Many of the above truths regarding memory are known and well researched. It is my contention that architectonics reveals in greater depth, Augustine's logical, profound, and multi-faceted approach in his interrogation of memory. It draws in the reader to experience Augustine's journey both in terms of joining him in the search for answers and finding encouragement by Augustine's life in their own relationship with God.

9.2 Arc-hitectonics (Arc) and Memory

The intricate expression of Arc and its exquisite regulation of memory formation, consolidation, storage, and recollection, all occurring via a novel neuronal communication system, has positioned Arc as a gene that unveils a genomic memory process. This genomic process provides insight into Augustinian memory. Arc has a unique physical structure that facilitates this. I contend that in the same way Augustine used *scientia* to inform *sapienta*, the biological wisdom gained from investigating Arc's role in Augustinian memory, also leads to *sapienta*. In this way, Arc not only functions in a physical dimension but operates metaphysically in assisting the soul in its journey to the Divine. Arc does provide thoughtful insight as to how Augustine might have incorporated 21st century genetic knowledge of medical systems into his interrogations of *memoria* and memory.

Architectonics constrains physical structure to operate within specific dynamics including the past, present, and future times of Arc. Although the Arc gene is multifunctional, it also is operationally defined by its structure and its regulatory properties as a gene. Arc is a physical manifestation of the Creator's creation *ex nihilo*, and therefore, by definition is a creature. It is iconic in its representational image of creation. Through creation, Arc acquired its conserved nature via its ancient retrotransposon elements. The genome remembers how genes, including Arc, work. Transmission of the genome results in the passing on of innate knowledge (remembrance) with respect to how DNA conserves, preserves, and transfers its genes. This includes the transmission of Arc and its innate knowledge. Architectonics unveils a structure that starts at creation of the genome followed by its transmission, remembrance by the genome, structure of Arc, remembrance by Arc of its expression and regulation, operation of memory, and providing the soul with the ability to re-collect memory. All this happens in physical time and space as a consequence of genomic structure and composition. Arc is also an exemplification of physical time involved memory processes.

The physical time of Arc is temporal; however, it has an Augustinian past, present, and future time. The physical structure of Arc itself has a past, present, and future where Arc past relates to the creation of its genomic sequence with ancient DNA elements. Arc present is its expression where there are physical changes in structure that allow operation in the formation, storage, and recollection of memory. Arc future is manifest via generational transmission taking it towards eternity. Also, in Arc future, Arc remembers how it is expressed and how it provides the soul with the ability to remember. Here is a blending of the physical with the metaphysical. The physical operation of Arc blends into the metaphysical manifestations of memory with time, creation with eternity, and Incarnation with temporality. Further, Arc brings ordo from chaos from disordered pouring out of memories into the mind (Conf. X.8.12) to organized memory sequences just like the ordo of creation from chaos. The sequence of time is observed in the cyclical nature of Arc. Akin to creation, the Incarnation, and eternity, Arc is facilitated by its architectonic structure which participates in a cyclical pattern with a beginning and an end (and a middle) that then goes back to the beginning (Figure 7.2). Arc thus, flows through time and space.

Arc is structurally designed so that it has operational functionality while being highly conserved. It is remarkable to see how closely the operation of Arc is to Augustine's description of messengers – the *tenuissimi quidem rivuli* operating within the *tenues fistulae* of the nervous system, and Arc's capsids containing mRNA transported across synapsis in extracellular vesicles. The terminology may be different from that used by Augustine, but they are descriptors of the same thing.

Remarkable too, is the fact that Arc dynamics are such that Arc is involved in all aspects of Augustinian memory including the eight foundational pillars of memory. Arc is presented in this thesis as a memory gene that is intricately involved in the operations and functioning of memory. There are many other memory genes but Arc is specifically and structurally adapted for regulation of memory formation, consolidation, storage, and recollection. It exemplifies a genomic memory process that does explain various physical aspects of memory and some of the metaphysical manifestations of memory. The rational soul was able to "recruit" Arc to understand *memoria* and memory analogous to the mind's eye to the soul.

I propose that Arc, a unique memory gene involved in neuronal communications, identifies a potential genomic memory process that provides knowledge regarding the inner workings of memory. Arc provides an additional "tool" to understand Augustine's interrogation of memory.

9.3 Theory of Recapitulation

My theory of recapitulation is formulated based on the findings of my investigations of *memoria* and its architectonic structure presented in chapters 3, 4, and 8. The sequence of the foundational pillars of memory presented in chapters 3 and 4 form the groundwork for the architectonic structure of XIII. I contend that XIII is a recapitulation of I-XII. It is a recapitulation of memory through the lens of creation, which is also supported by the other motifs present within *Confessiones*. In XIII there is a movement of progressive recapitulation, a temporal sequence, and a morphology of God's creation and memory that emerges.

The theory of recapitulation also confirms the unity of individual parts (different motifs within *Confessiones*) to form a whole (*Confessiones* I-XIII). Additionally, the whole of *Confessiones* (the book) is composed of individual parts – I-XIII. The whole brings to light the parts (Books and motifs) and renders them as parts. This conforms to one of the premises of architectonics that parts unify to form the whole. A few motifs that confer a unity to *Confessiones* were discussed in the previous chapter. However, it is my contention that the unity of *Confessiones* is best understood by studying and integrating all the motifs thus providing a holistic, non-reductionist approach; unity cannot be substantiated by one motif alone. The unity of *Confessiones* is also observed by examining the architectonic structure of memory within the creation account and recognizing that the same exact structure and sequence is found in X.

My theory of recapitulation has identified five distinct motifs in XIII and I-XII. These are: Augustine's cerebration, his creation theology, his pedagogy, the unity of *Confessiones*, and his recapitulation. Within each, Augustine's theology of creation and theory of memory are central to his interrogations, and his journey to know and understand God.

The first, Augustine's cerebration, is the complex, inner workings of his mind as he sought to know and understand God; this is evident in his writings. Augustine was aware of his "cerebration" compared to some people. He unabashedly repeatedly referred to "weaker" minds throughout his works and pertinently in Confessiones. He states, "to give slower minds..." (XII.4.4), "Let him who can, understand this" (XIII.10.11) or "let him who is capable of doing so," (XIII.11.12). Second, Augustine's creation theology was the foundation of his theology and thought process. He understood creation to be central to his own life and journey towards fulfilment of the beata vita. Creation and the Creator were connected via his rational soul, and Christ, at the Incarnation, was a recapitulation of creation in temporal time. Third, Augustine's teaching methodology appeared early in Confessiones but the architectonic structure, logic, and understanding of memory revealed the ability to draw the reader into his story providing them with an invitation to journey with him towards eternity. Fourth, the unity of Confessiones is fortified by the architectonic structure of XIII and the utilization of a multi-faceted, holistic approach in identifying the unity of I-XIII. XIII lays this out in detail through the exegesis of creation and recapitulative dependence on I-XII. Fifth, Augustine's own recapitulation becomes evident in XIII which reflects a movement from end to beginning and vice versa. This cyclical pattern is observed by Augustine who moves from his own creation to redemption in Christ towards the *beata vita*, and then returns to the beginning again.

Recapitulation also gives form to an unembodied God who reflects eternity. Christ the mediator is a recapitulation of creation, the pre-Christ and Christ, the Divine and the human, the earth and humanity, the womb of the universe and the revelation that is trying to become conscious or manifest. Christ as the second person of the Trinity reveals truth and is the Truth. Humans, on the other hand, tend to stop truth by their actions; this is a performative recapitulation. It is performative in that human beings have to recapitulate so that they stop the haemorrhaging of eternity. In XIII, memory becomes *a* memory, whereas I-XII is about *the* memories. *A* memory is analogous of the one door – "your door" in Matt. 7: 7-8 while in XIII, *the* memories are analogous to many doors found in I-XII. These many doors often distract Augustine from God. Thus, the recapitulation of I-XII, also observed in XIII, is the journey of *a* memory as Augustine remembers *the* memories of his life. XIII recapitulates I-XII in this manner – *a* memory of *the* memories. It is a recapitulation of Augustine's journey to God found in *a* memory, for Christ is a fulfilment of God's promise and the eschatological hope of eternal rest.

9.4 Re-thinking Augustine's Theology of Memoria

The approach of this thesis to investigate Augustine's theology of *memoria* via architectonics has resulted in a less enigmatic, and not purely functionalist, blueprint of his theology. The word architectonics might suggest a "dry" interrogation of *memoria* stripped from any Divine action, metaphysics, or even narrative of Augustine's life. In reality, architectonics, as has been observed in this research, expands this notion. This revised blueprint offers Augustine's readers the same ability to create their own architectonic structure regarding their own remembrances and journey to know and understand God. Re-thinking Augustine's theology of *memoria* is possible because of the novel findings in this thesis. My findings fall into four distinct categories: 1) architectonic structure of memory, 2) Arc-hitectonics (Arc) and memory, 3) architectonics, time, and memory, and 4) theory of recapitulation.

9.4.1 Architectonic Structure of Memory

It would seem reasonable that Augustine premeditated his writings about his interrogations of *memoria*. As observed, the presence of a definitive structure brings to light the eight foundational pillars of memory present in the same sequence in X, XIII, and Augustine's early works. It seems dubious that his interrogation of memory was an unplanned pedagogical, epistemological, hermeneutical, ontological, or other "ogical" investigation. Whether consciously aware of this structure or not, the reader is lured into the inner workings of memory to see the creative actions of God, while

envisioning Augustine's journey towards the Divine by trying to understand the role of memory in that journey. The architectonic structure brings out the brokenness in Augustine's life and makes him whole as he journeys through creation, in time, to eternity, and back to creation in a cyclical pattern. This is the pattern of memory through the lens of creation observed in XIII that recapitulates I-XII. The architectonic structure blends the physical with the metaphysical as observed in the physical manifestation of memory and the metaphysical and sacramental nature of memory.

The foundational pillars of memory act metaphorically as the ladder to ascent. As Augustine works through his interrogation of *memoria* he discovers, as it were, each rung on the ladder that needed to be climbed in order to achieve fulfilment of the *beata vita*. It is the same ladder he wishes his readers to climb. The architectonic "ladder" ascribes a spiritual nature to the structure of *memoria* whereby *memoria* is identified as the gateway to the Divine. The foundational pillars reveal a dynamic and fluidic sequence from the discovery of the location of memory through the fulfilment of the *beata vita*.

I propose that the architectonic examination of Augustine's theology of *memoria* provides a blueprint that can be followed in studying Augustinian memory. Architectonic examination has revealed novel insights regarding Augustinian memory thereby, facilitating greater knowledge and understanding of Augustine's theology of *memoria*.

9.4.2 Arc-hitectonics and Memory

The research presented in this thesis of the Arc gene and its architectonic structure, has resulted in prototypical findings in Augustine's theology of *memoria* that have not been previously published. Arc has never been studied in conjunction with Augustinian memory. The insights gained have allowed for the proposal of a genomic memory mechanism that confers the ability to remember along with its involvement in the regulation of memory processes.

Augustine unapologetically used every piece of knowledge that was available to him to interrogate *memoria* and discover the nature of memories. Thus, inclusion of Arc in researching Augustinian memory was so important that I am certain Augustine would have used this information had it been at his disposal. As such, this research revealed remarkable similarity between Augustine's anatomical understanding of the nervous system and contemporary knowledge in terms of neuronal structure and function, and neurotransmission of "messengers." Augustine's anatomical description of the brain ventricles and the different functions of memory and their location is astonishingly and virtually identical to contemporary knowledge. This congruency validated the investigation of Arc in Augustinian memory. The architectonics of Arc was specifically studied in conjunction with the foundational pillars of memory.

The enigma of memory has been made less obscure by Arc. Arc, with its unusual molecular structure, virus-like capabilities, and exquisite regulation of memory processes, has shed light on memory functions involved in Augustinian memory. It is a unique candidate gene for a genomic memory process. Arc has revealed intimate details of how memory is formed, consolidated, remembered, and retrieved via capsid formation and synaptic plasticity. It has illustrated through molecular pathways temporal and spatial dimensions of memory that Augustine could only but speculate. Arc is also a visual representation of physical time working in conjunction and blending in with temporal time and eternity (**Figures 7.1** and **7.2**). Measurement of memory formation, consolidation, and even retrieval is possible via experimental means.

Arc can even address innate memory which has been proven to be passed on up to fourteen generations (*C. elegans*) and three generations in humans.⁵ Augustine was certain of the existence of innate memory though he could not explain it. To Augustine, innate memory included the memory of God within the rational soul. Arc is involved in innate memory. Proof is provided by variant mutations in Arc which demonstrate inhibition of innate memory. Arc through generational transmission provides the ability to remember innate memories; the example of the foal standing up after birth is an innate remembrance (section 6.4.4.2). The soul's ability to remember via a physical function of the body facilitates a unity of body (physical) and the soul (metaphysical). This is compatible with Augustine's understanding of the unity of body and soul with the soul still maintaining its superiority. Arc's involvement in memory traces (vestigial memories) explains how they are stored and remembered;

⁵ Klosin, "Transgenerational," 320. Kizilhan, "Transgenerational," 81.

this would be akin to the "memory trace" of God within the soul where yet again Augustine could not explain how this was the case. Arc explains in more detail how forgetfulness occurs as well as learning, teaching, recollection, remembering, imagination, false and true memories, disorders of memory, and so on.

Interestingly, a side-by-side comparison of Arc and Noah's ark illustrated similarities in architectonics and God's action in temporality. This would have delighted Augustine since this would be a case of *scientia* (scientific truth) standing with the truth of Scripture and not inconsistent with it.⁶ *Scientia* and *sapientia* work in unison – this is a foundational principle within architectonics. *Scientia* cooperates with *sapientia* to provide knowledge that informs Divine wisdom and provides truth to the soul and remembrance of the memory of God. For Augustine, in the *historia sacra* of time, *scientia* and *sapientia* are summed up in Christ – it is the point where the Divine entered temporal time. Here we get a sense of Augustine's hermeneutics and therefore, his metaphysics.

This movement of *scientia* towards *sapientia* is possible because of the biological wisdom that Arc provides in the genomic memory process, a consequence of its structural uniqueness. Biological wisdom informs *sapientia* and provides truth to the soul through memory. Arc's movement from creation to eternity also cycles back to creation and thus is a recapitulation of memory just like that in *Confessiones*. Arc, therefore, just like memory, is a central axiom in Augustine's theology of *memoria*.

9.4.3 Architectonics, Time, and Memory

Three categories of time - eternity, temporal time, and physical time are presented in Chapter 7. A diagrammatic representation of these categories illustrates how all are intricately interwoven (**Figure 7.1**). I have provided a neoteric explication of physical time demonstration via Arc. Arc is an exemplifier of the relationship between the physical manifestation of time and memory in the human body, in temporal time, and eternity. Additionally, Arc illuminates some aspects of time and memory that to Augustine remained paradoxical - time associated with past, present,

⁶ Gn. Litt. II.9.21

and future, and how they all exist simultaneously. **Figure 7.1** illustrates this relationship with the three cardinal "moments" of time – creation, the Incarnation, and eternity, and also temporal time of past, present, and future with memory flowing bidirectionally in time between past-present-future and future-present-past.

The life cycle of Arc (**Figure 7.2**) illustrates Arc's dependence on its structure, its molecular organization of its genomic sequences, and its regulation of memory. The structure of Arc in past time and its conservation through millennia and Arc's expression in the present provide an insight into memory in the past and present. Arc's generational transmission in future time moves memory into the future. This life cycle of Arc is a representation of Arc not previously reported.

The architectonic structure and *historia sacra* of time and memory takes Augustine through creation, the Incarnation, eternity, and temporal time. Memory and time cannot exist without each other, and by extension, neither can Arc and genomic memory processes exist without time and memory. Arc expression and function reveal insights that can fill in some, but not all the, gaps in Augustine's paradox of time and memory. Perhaps knowledge of Arc's function and journey through past, present, and future physical time could have helped Augustine further understand time and memory in his endeavours to know God and the *beata vita*.

9.4.4 Theory of Recapitulation

A comprehensive analysis of XIII, revealed a structure reminiscent of the architectonic structure of X and Augustine's earlier writings. Closer examination of this structure revealed, like X, that it was of memory, only this time, perceived through the lens of creation. Interestingly, this structure followed to a large part, the sequence of memory in X, and confirmed XIII was a recapitulation of I-XII. Within this structure each day of creation related to some form of memory along with other motifs. My theory of recapitulation recognizes a thoughtfully, written volume of thirteen books with a multiplicity of motifs that includes all the major and prominent motifs. The theory of recapitulation has revealed a complex structure that breaks down into sub- and sub-sub-structures each with their own sequences of events and deeper, profound extrapolations and insights of Augustine's theology of *memoria*. This complexity is similar to Geertz's "thick description" where the significance lies

not just in structural analysis but in its ability to provide a greater understanding of what underlies the structures.⁷ It is the investigation of, as Geertz writes:

A multiplicity of complex conceptual structures, many of them superimposed or knotted into one another, which are not at once strange, irregular, and inexplicit, and which he must contrive somehow first to grasp and then to render.

Recapitulation cannot be centred on a single motif or even a couple of motifs as that does Augustine a severe disservice and is reductionist to say the least. My theory of recapitulation brings together Augustine's creation *ex nihilo* theology with the multiple motifs in *Confessiones*. This bringing together also illustrates the importance of architectonic structure and memory as exemplars of recapitulation.

There are six distinct categories that form the theory of recapitulation. These are:

- 1. The Consummation and the Prolegomenon
- 2. The Architectonic Structure of Creation
- 3. A Memory and The Memories
- 4. The Beata Vita
- 5. Temporality and Time
- 6. The Confessio of Confessiones

The consummation and the prolegomenon examine *Confessiones* from back to front i.e. XIII to I. Within this category a side-by-side comparison of texts from XIII and Book I illustrate that the ending of XIII circles back to the beginning in Book I and then Book I to XIII. The structural pattern observed in section 8.3.1 consists of 1) the theme of petitioning God, 2) creation; Augustine acknowledges he would not have existed except for God's creative act, 3) the goodness of God in creation, and 4) knocking on God's door in order to know God. Thus, XIII.38.53 becomes the fulfilment of I.1.1-2.2.

⁷ Geertz adapts "thick description" from Gilbert Ryle. Geertz, *Thick*, 314.

The architectonics of creation documented in **Table 8.2** identifies twelve structural components specific to creation (section 8.3.2). These are listed at the end of the table. In summary, they are divided into points 1-8 and 8-12 where 1-8 pertains to creation with respect to who creates and what is created. Points 8-12 concern the beauty that results from creation, i.e. what God creates is both good and beautiful. This creation structure correlates with Augustine's own journey from creation (day one) to his return to the Divine in eternity (day seven) i.e. creation is the story of the return of the soul to its origin. Augustine sees *ordo* from chaos in creation and the *ordo* of the soul as it climbs out of the dark abyss of sin towards God. This architectonic structure of creation, *ordo*, and God's goodness lends supports to XIII as a recapitulation of I-XII.

Confessiones XIII is a book about *a* memory (the creative act of God) whereas I-XII are books about *the* memories which arise from *a* memory and which leads to *a* memory of the future (section 8.3.3). Everything whether it be creation, the Incarnation, Augustine's search for God, are remembered via memory which emanates from eternity. There are four constituents of memory that were identified in chapter 4 regarding *a* memory and *the* memories, 1) teaching and learning, 2) recollection and forgetfulness, 3) images, *phantasiae* and *phantasmata*, and 4) sense and sense-perception. Each of these sections divide into further sub-sections. The intricate details of Augustine's theology comes to light (Table 8.3a and following). These sub-sections illustrate the complexities of memoria and the enormity of the operational dynamics of memory. Table 8.3b is a comparison of texts from XIII and I-XII regarding recollection and forgetfulness. Eight particular aspects are identified which highlight remembrance of God and the forgetfulness that occurs when succumbing to temptations. With respect to images, *phantasiae*, and *phantasmata*,
Table 8.3c identifies four structural components which discuss the enigmatic aspect
 of memory and divinity. Finally, Table 8.3d illustrates the commonalities between XIII and I-XII with regard to sense and sense-perception. Specific categories are identified within these commonalities which point out the importance of reflection which requires seeing truth and listening to God. All these sections and sub-sections substantiates the complexity of Augustinian memory.

Attainment of the *beata vita* was Augustine's ultimate desire is seen throughout *Confessiones* and documented in the side-by-side comparison of XIII and I-XII in **Table 8.4a** (section 8.3.6). This comparison leads to a deconstruction of the larger architectonic structure regarding the *beata vita* into eight smaller sub-sections. These which led Augustine from his anguished yearning to knowledge and joy found in God. **Table 8.4b** provides a side-by-side comparisons between XIII and I-XII of Augustine's awareness of the pitfalls in his journey towards eternity. There are six sections identified here that document this, the dependence on God for restoration and life.

Temporality and time also corroborate the architectonic structure in the theory of recapitulation. It consists of ten substructures which recapitulate Augustine's conclusions about time (section 8.3.7). It is within this structure that Augustine explains to his reader how they can live in temporal time and move forward towards eternity.

The sixth category contained within the theory of recapitulation is the *confessio* of *Confessiones* (section 8.3.8), which many scholars have identified as the unifying theme of *Confessiones*. This motif is noted within each book of *Conf.*, which does allow for it to be a unifying theme. The significance of *confessio* in relation to memory and time is evident.

These six structural elements in the theory of recapitulation with their specific motifs with a multiplicity of sub-motifs support XIII as a recapitulation of I-XII.

The architectonic structure of XIII, as a recapitulation of I-XII, allows for the blending of different motifs to form a holistic, multi-faceted, and unified theory of recapitulation. This theory of recapitulation has also provided several insights into Augustine himself and the premise, intention, and interpretation, of his writings. There were five insights that were observed - Augustine's cerebration, his creation theology, his pedagogy, his unity of *Confessiones*, and his recapitulation (section 8.5).

The architectonic structure and substructures in XIII and I-XII reveal a theory of recapitulation that prevents a reductionist approach to the reading of *Confessiones*. The neoteric aspect of this theory is not the novelty of particular motifs. It is, first, that architectonics allows for an approach of analysis of the building blocks of the motifs. Second, it recognizes how Augustine thoughtfully and logically wrote about these motifs. Thirdly, Augustine created a work where XIII is a recapitulation of I-XII while all the time allowing the reader an intimate connection with their journey in God's created order and time. Additionally, Augustine's interrogation of *memoria*

illustrated how central memory was to his creation theology and time, and how it affected every aspect of his journey in his search to know and understand God and achieve fulfilment of the *beata vita*. Recapitulation is a mandate of life. Augustine's story goes from creation through the Incarnation towards eternity and then returns back to the beginning. XIII's recapitulation of I-XII is only in keeping with Augustine's story and theology.

9.5 Concluding Remarks

The architectonics approach has provided a new and prototypical way of thinking regarding Augustinian memory. There are four main discoveries in my research of Augustine's theology of *memoria*.

First, results from the utilization of architectonics to investigate memory. Detailed analysis of the structure of memory formed the basis for my discovery of the structure and sequence of the eight foundational pillars of memory. This discovery also supports XIII as a recapitulation of I-XII. The second finding pertains to Arc and its involvement in memory processes. Arc-hitectonic examination demonstrated Arc's role as an exemplar for a genomic memory process involved in Augustinian memory. This approach to investigating Augustinian memory via Arc is a novel approach. The third finding involves the architectonics of time and memory which proposes a model for the simultaneity of the three cardinal "moments" of time - creation, the Incarnation, and eternity, with temporal time - past, present, and future, and physical time illustrated by Arc. The original aspect here is Arc in physical time and how it intercalates with eternity and temporal time. Finally, I propose my theory of recapitulation where XIII recapitulates I-XII. This is based on the architectonics of memory, which is viewed through creation and other motifs present in *Confessiones*. I contend that the above findings elucidated by my research present a novel way of thinking about memory and *Confessiones* – a re-thinking of Augustine's theology of memoria.

In closing, Augustine's theology is revelatory, insightful, beautiful, and wonderfully complex; a complexity which piqued Augustine's inquisitive mind. His theology of *memoria* is profoundly moving. There is a richness to his intense search for knowledge of the Divine and desire for the *beata vita*. Augustine did encounter aporias and paradoxes that perplexed him and left him without answers, however, he recognized their importance as they evoked a dependence on God every second of his day. There is a sense in his writings that he would have like to have resolved the paradoxes. This thesis has provided some insights into these paradoxes and has laid a foundation for future research towards further resolution, assuming God permits these paradoxes to be resolved in the "present now." Lastly, my hope is that all the insights and excavated truths presented in this thesis and my re-thinking of Augustine's theology of *memoria* will provoke and encourage a new way of thinking.

It is only fitting that the lasts words of this thesis belong to Augustine who stimulated and encouraged the inner workings of my mind.

"Truly, you dwell in my memory, since I have remembered you from the time I learned of you, and I find you there when I call you to mind."⁸

⁸ Conf. X.25.36. This translation is from Augustine, *The Confessions of Saint Augustine*, trans. John K. Ryan (1960, repr., Image Books, 1962), 254.

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