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The Implications of Neuroscience on *Mens Rea* in the Determination of Criminal Responsibility in Nigeria: The Freewill and Deterministic Perspectives

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Abstract

A key principle of our criminal law jurisprudence and practice, especially as it relates to criminal responsibility is the principle of mens rea. The principle is to the effect that a person will generally not be guilty of any crime if the act in breach of the law occurs independently of his or her will or if it occurs by accident. Our system of criminal justice is based primarily on the ideas of freewill and responsibility for conduct, according to which it is fair and just that offenders should be punished to an extent that is proportionate to their guilt. However recent developments in the area of Neuroscience seem to contradict that notion. The determinists posit that events, including human actions, are ultimately determined by causes external to the will. Some philosophers even take determinism to imply that individual human beings have no will and cannot be held morally responsible for their actions. They contend that individual action is to some extent caused by factors outside of an individual's control. If the above ideology is upheld, it has serious implications for the concept of mens rea in the determination of criminal responsibility. It is against the foregoing background that this work examines the practical implication of this recent development in Neuroscience on the concept of criminal responsibility especially as it relates to the deterministic and freewill perspectives. The work found that if free will is disregarded, it would be nearly impossible to punish anybody for any offence. It is recommended that as further progress are made in the area of neuroscience that our laws will be amended so as to meet up with the exigencies of time.

Keywords: *Neuroscience, Mens Rea, Criminal Responsibility, Freewill, Determinism*

1.0. Introduction

A key principle of our criminal law especially as it relates to criminal responsibility is the principle of *mens rea*. Generally, no person can be convicted of a crime unless the prosecution proves not only a guilty act, but also a guilty mind. For criminal responsibility, the action in breach of the law must be conscious and voluntary except of course if the act or omission constituting the offence is one relating to offences of strict liability or negligence[1]; and there may be additional requirements, such as that there be intention of a particular consequence, or recklessness as to this consequence[2]. In the case of murder, for example, generally the act causing the death of the victim must be done with intention to kill or inflict really serious bodily injury, or with reckless indifference to human life[3]. Because of this requirement of a guilty mind, a person will generally not be guilty of any crime if the act in breach of the law occurs independently of the will or if it

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[1] Criminal Code Act Cap I23 Laws of the Federation of Nigeria 2004, s. 24.

[2] Criminal Code Act s. 316

[3] *Supra*

occurs by accident[4]; or if the person mistakenly believes the facts to be such that the act would not have been in breach of the law[5].

Generally, our system of criminal justice is based on the ideas of freewill and responsibility for conduct, according to which it is fair that offenders should be punished for their offences. However recent developments in the area of Neuroscience seem to contradict this long-held traditional notion. In the area of neuroscience, there are primarily two perspectives to the notion of criminal responsibility - the determinist and freewill perspectives. The determinists posit that events, including human actions, are ultimately determined by causes external to the will while the freewill perspective posit that human actions are product of choices.

Some philosophers even take determinism to imply that individual human beings have no will and cannot be held morally responsible for their actions. If the deterministic ideology is upheld, it has serious implications for the concept of *mens rea* in the determination of criminal responsibility. It is against the foregoing background that this work examines the practical implications of these recent developments in Neuroscience on the concept of criminal responsibility as is established in Nigeria.

2.0. The Doctrine of *Mens Rea*

The nature of the doctrine of *mens rea* has been a subject of controversies which is even worsened by the fact that the extent and scope of its applicability differs from one jurisdiction to another. More so, in Nigeria, for instance, the principle of *mens rea* differs in principle as between the states applying the criminal code and those applying the penal Code. Commenting on the level of controversy associated with the correct understanding and interpretation of the doctrine of *mens rea* Oraegbunam and Onunkwo stated as follows:

> *The doctrine of mens rea is a central distinguishing feature of criminal justice system in old common law traditions. Yet it is one very controversial principle which suffers from an untold degree of confusion in its meaning. This problem of fluidity in denotation becomes all the more manifest when the courts are faced with the task of determining the guilt or criminal liability of a suspect. Under English criminal law, this hermeneutical problem had been a result of sundry causes. First and foremost, there are two distinct though interconnected levels of meaning attributable to the expression mens rea, namely, the narrow and the broad. While the former signifies the specific mental element that is required to be defined and proved in respect of a particular offence, the latter refers to a general principle of criminal responsibility which demands proof of a guilty mind against the accused.*[6]

It is pertinent to state, at this stage that the expression *mens rea* have been employed in two distinct though interconnected ways which are the narrow way and the broad way. While the former signifies the specific mental element involved in the definition of particular offences which is required to be proved in respect of such offences to secure a conviction, the latter refers to a general principle of criminal responsibility which demands proof of a guilty mind against the accused. In other words, while in the narrow sense, one can talk of the *mens rea* of, for instance, receiving

[4] S. 24
[5] S. 25; s.23
[6] I K Oraegbunam and R O Onunkwo, 'Mens ReaPrinciple and Criminal Jurisprudence in Nigeria' (2011) 2, UNIZIK J.I.L.J. p.249.

stolen property, or of forgery, or of assault; the use of *mens rea* in the broad sense connotes, until the contrary is proved, the general presumption by the courts, of an accused person's criminal intent when considering any offence and this is what is normally called the doctrine or the principle of *mens rea*.[7] It is this latter concept of the doctrine of *mens rea* that Stephen J. was referring to when he stated that 'the full definition of every crime contains expressly or by implication a proposition as to the state of the mind.'[8]

Generally, offences require proof that the accused at the time of committing the *actus reus* has a particular state of mind. For instance, either that the accused intended the *actus reus* or that he knew, ought to know or foresaw that it might result from his conduct. The general principle is that the act or omission which constitute the offence for which an accused is charged and the mental element required by law to constitute an offence must concur simultaneously in point of time i.e. to say that the accused at the time of committing the offence must possess the nature of guilty mind required to commit the offence. Commenting on this principle Obunadike wrote:

> *The general principle under English law is that the actus reus and mens rea of an offence must concur simultaneously in Point of time. If a man forms intention (sic) to kill another then changes his mind and afterwards unintentionally/accidentally kills him. There is actus reus of murder but there is no simultaneous mens rea so he cannot be convicted for murder under the general principle. Similarly, any subsequent mens rea cannot convert an originally justified assault or battery into an offence.*[9]

However, it must be observed that there are instances where the requirement of the concurrence of the *actus reus* and *mens rea* are not insisted upon. One of such instances is where the criminal transaction is continuing and the execution of the criminal plan is not yet complete. Here, any intention necessary to constitute any crime committed as part of the plan may be deemed to be a continuing intention. The implication of this statement is that where the accused person, at the time of starting the acts or omissions which constitute the offence, does not have the intention (guilty mind) to commit the said offence but, however, during the course of the acts or omissions forms such an intention, he will be liable for the offence constituted by his acts or omissions.[10]

It is pertinent, at this stage to note that the exception to this general principle of *mens rea* i.e. instances where the prosecution need not prove any mental element against the accused are offences of strict liability[11]. However, there is a class of cases where the accused is given the opportunity to prove lack of intention, knowledge or negligence on his part.[12] There are also offences where it suffices if the prosecution was negligent or reckless.[13] It has been observed by

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[7]CO Okonkwo, Criminal Law in Nigeria (2nd Edn, Ibadan: Spectrum Books Ltd, 2002) p. 49; I K Oraegbunam and R O Onunkwo, *op. cit.*

[8]*R v Tolson* (1988) 34 Q.D.D 168 at 187

[9] N Obunadike, 'Principle of Mens Rea in Nigeria and Five Other Selected Jurisdictions' a Seminar Paper delivered to the Comparative Criminal Law Lecture class, Faculty of Law, Nnamdi Azikiwe University Awka on 8th May, 2015. p.5.

[10]*Thabo Meliv R* [1954] 1 W.L.R. 228; *R v Ojambo* (1944) 11 E.A.C.A 97

[11]C O Okonkwo, *opcit.*

[12]*Ibid*. p.60; *Dosunmu v Comptroller of custom and Excise* [1951] L.L.R. 41; *Arabs Transport Ltd v Police* (1952) 20 N.L.R. 65.

[13]C O Okonkwo,*ibid.*

Obunadike[14] that defences such as accident, provocation, insanity, claim of right, mistake of fact, etc are exceptions to the applicability of the doctrine of *mens rea;* a position which with due respect, is not subscribed to by this work. It is the opinion of the researcher that defences such as those mentioned above are in consonance with and furtherance of the underlying principle of *mens rea.* Such defences operate to oust guilty mind and therefore making the accused not criminally responsible for his, otherwise, criminal conduct.

3.0. The Doctrine *Mens Rea* in Nigeria: The Criminal Code and the Penal Code

The immediate thrust of this section of this research work is to critically examine the natures of and the relationship between the Criminal Code and Penal Code doctrines of *mens rea* with a view to ascertaining if they are *in pari material* with each other and the doctrine of *means rea* under the common Law

3.2. *Mens Rea* under the Criminal Code

Section 24 of The Nigerian Criminal Code is a most far reaching provision as far as general principle of law relating to *mens rea* is concerned. Together with section 25 it serves for us the purpose which the doctrine of mens rea serves in English law.[15] Section 24 of the Criminal Code provides as follows:

> *Subject to the express provisions of this code relating to negligent acts and omissions, a person is not criminally responsible for an act or omission, which occurs independently of the exercise of his will or for an act which occurs by accident.*
>
> *Unless the intention to cause a particular result is expressly declared to be an element of the offence constituted, in whole or in part, by an act or omission, the result intended to be caused by an act or omission is immaterial.*
>
> *Unless otherwise expressly declared, the motive by which a person is induced to do or omit to do an act, or to form an intention, is immaterial so far as regarding criminal responsibility*

For the purpose of this work we shall limit the discussion to the first paragraph of this provision. The general import of this provision is that no act or omission which is unintentional can be criminal, unless it is one of those relatively few acts or omissions which are criminal, according to the provision of the code, when committed unintentionally but negligently.[16] This provision is made subject to the express provision of the code relating to negligent act and omission. This means that in any case in which negligent acts and omissions are penalized in the code that the exculpatory provisions of this paragraph will not apply[17].

Section 24 of the criminal code can conveniently be broken down into two parts, viz:

a. An act or omission which occurs independently of the exercise of his will; and
b. An event which occurs by accident

[14] N Obunadike, *op cit.*
[15] C O Okonkwo,' Nigerian Courts and Section 24 of the Code' (Law Monograph Series 1, Onitsha: Meks Publishers, 1998) p.1.
[16] CO Okonkwo, *op cit*, p.81.
[17] CO Okonkwo, note 16,*op cit.* p.2. ; *R v Searth* (1945) St R. Qd. 38.

The first part of this provision is to the effect that a person is not criminally responsible for any act or omission not willed by him.[18] This part will exculpate acts done under automatism; act or omission done under hypnotism or while sleepwalking or unconscious.

The second part of the provision talks about event which for the purpose Section 24 is a result or consequence of a human act[19]. It has been argued severally that a willed, deliberate and intentional act negatives the defence of accident. That is to say that for an event to qualify as an accident that such event must be the result of an unwilled act or that the act leading to the accident must be a lawful act done in a lawful manner.[20]

However, it is the submission of the researcher that the above propositions are wrong. While it is necessary to prove that the act or omission constituting the offence with which an accused is charged in involuntary or unintentional to benefit from the exculpatory provision of the first part of section 24, it is not necessary for pleading the second part. Also the unlawfulness of the act done does not preclude the application of section 24. All a defendant in a criminal proceedings need to prove in order to benefit from the defence provided for in the second part of section 24 is that the result or event resulting from his act is not intended and not forseeable.

3.3. *Mens Rea* under the Penal Code

The doctrine of *mens rea* under the Penal Code is encapsulated in Section 48 of the Penal Code which provides thus:

> *Nothing is an offence which is done by accident or misfortune and without any criminal intention or knowledge in the course of doing a lawful act in a lawful manner by lawful means and with proper care and caution.*

For the defence of accident to avail an accused person under the Penal Code, he must establish the following;

a. The act was done by accident;
b. There was no criminal intention or knowledge; and
c. The act was done in the course of doing a lawful act, in a lawful manner by a lawful means and with proper care and caution[21]

Section 48 of the Penal Code requires that the act leading to the accident must be a lawful act done in a lawful manner by lawful means.[22] The implication of this requirement is that even where the accused did not intend the result or consequences of his act, he will nevertheless be liable if the act is unlawful or even if it is lawful it is done in an unlawful manner.

It has been numerously posited that the provisions of section 24 of the Criminal Code and 48 of the Penal Code are on all fours.[23] However, in the light of this requirement of lawfulness of act under the Penal Code, it will not be correct to say that section 24 of the Criminal code is *im pari materia* with section 48 of the Penal Code. And this discrepancy will further go on to mean that the Nigerian statutory doctrine of *mens rea* is not on all fours with the old English doctrine of *mens*

[18] *Ibid,* p.4
[19] C O Okonkwo,' Nigerian Courts and Section 24 of the *op. cit.* p.6.
[20] A M Adebayo, Criminal Code Act and Other Related Acts Annotated with Cases (Lagos: Princeton Publishers, 2012) p.123.
[21] *Oluawadamilola v state* [2010] All FWLR(pt.527) 599
[22] *Maiyaki v state* [2008]15 NWLR (part 109)173.
[23] N Obunadike *op. cit.* p.9; A M Adebayo *op cit*, p.126.

rea. Therefore it is the submission of the researcher that, in the interest of justice, Nigerian courts should, whenever the issue of mens rea arises, apply the relevant provisions of the code.

4.0. *Mens Rea* and Neuroscience

Our system of criminal justice is based, in various ways, on the ideas of free will and responsibility for conduct, according to which it is fair and therefore just that offenders should be punished to an extent that is in some sense proportionate to their guilt. In the words of Oraegbunam and Chukwukelu;

> *Criminal law relies on the premise that people freely choose their actions and should be punished accordingly. The notion of freewill which is evident in the doctrine of mens rea underpins the redistributive theory of punishment.*[24]

In a recent study, Etudaiye observes that the idea of freewill is not lacking in Nigerian penal statutes. The notion is directly or indirectly portrayed in the terms 'knowingly', 'negligently', 'wilfully', 'intentionally', 'dishonestly', 'voluntarily', and 'fraudulently' amongst a few others[25]. However, these ideas are called into question by ongoing developments in neuroscience.

Neuroscience is the study of the nervous system. It is one of the interdisciplinary scientific fields, and also one of the most rapidly advancing fields. It advances the understanding of humanities by explaining the mechanism of thought, emotion, behavior and everything in between. For the purpose of this work, however, neuroscience would refer generally to the various sciences of the brain and mind these include neurophysiology, cognitive science, artificial intelligence, psychology, psychiatry, and so on; developments which in a general way tend to suggest that criminal conduct is a symptom of a brain disorder or illness that should be treated, rather than a wrongdoing that should be punished.

Attribution of criminal responsibility requires an agent, who is free and therefore can be held responsible; as established in *Woolmington v DPP*[26] in which it was stated that, the Crown must prove the offence as the result of a voluntary act of the accused.The roots of causal determinism are found in Hume's philosophy of causality, which purports that everything is causedand cannot therefore be freely willed[27]. His treatise has been dubbed 'the founding document of cognitive science' by subsequent philosophers and scientists.[28]

Also modern fMRI (Functional Magnetic Resonance Imaging) investigations aim at showing the way in which brain activity may be held responsible for all human action. Perhaps, the most famous

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[24] I K Oraegbunam and J Chukwukelu, 'Mens Rea Jurisprudence: Implication of the Philosophical Problem Of Freewill And Determinism' (2014)*UNIZIK Law Journal* No. 10, p.48.

[25]MA Etudaiye, 'Free Will: the Farcical Jurisprudence of Criminal Justice in Nigeria' (2009)*Akungba Law Journa,* p. 96 cited in I K Oraegbunam and O Onunkwo *op. cit*.

[26] [1935] AC 462.

[27] J Russell, 'Controlling Core Knowledge: conditions for the ascription of intentional states to self and others by children' (2007) Synthese 159, pp 167-196.

[28]L Houston and A Vierboom 'Neuroscience and Law: Australia' <http://www.google.com/url?q=http://www.springer.com/cda/content/document/cda_downloaddocument/9783642215407-c1.pdf%3FSGWID%3D0-0-45-1212038-p174125466&sa=U&ei=4P2CVb7eDMut7Ab4vYKACQ&ved=0CAsQFjAA&sig2=cKHHZH56lgS6PTjWOFhU1g&usg=AFQjCNFtPo6qqrhyZLuT4orYFL5nDpIdKQ> accessed on 18/04/2023.

of these is Libet's experiments into consciousness,[29]where people were asked to move their hand, while the electrical activity in their brain, known as their 'readiness potential' was monitored. He found that this electrical current preceded the conscious decisions of subjects to move their hands by up to half a second.Although much has been said about the implications of these experiments regarding conscious experience, they have also been used as evidence that acts are determined rather than voluntary. Functional fMRI scanning has also been recognized as a way of observing such determined movement more conclusively. Such evidence might arguably be used to exculpate people, on the basis that they were not truly free and were therefore not acting voluntarily.

The doctrine of compatibilism,which holds that freewill and determinism may be held compatibly as beliefs, has provided determinists with a way of defending legal understanding of agency and attributing responsibility.However, future research of fMRI, if interpreted to show that certain brain activity preceded experience of choosing, might undermine the availability of such a premise.If the experience of voluntariness is shown to be a mental mechanism that gives rise to a sense of conscious will and the agent self in the person then this might provide grounds for a defence, similar to automatism, which could show that although intention and action were present, they were beyond the control of the accused. Brain activity would therefore, be used as the measure of freewill, rather than the behavioural or criterial data pertaining to freewill.

Generally, there are two competing perspective of human action; the deterministic perspective and the freewill perspective.[30]The determinists posit that events, including human actions, are ultimately determined by causes external to the will. Some philosophers even take determinism to imply that individual human beings have no will and cannot be held morally responsible for their actions. They contend that individual action is to some extent caused by factors outside of an individual's control.[31]

Those that hold the freewill view on the other hand posit that human behaviour is the result of real choices between alternative courses of action which are truly open to them. They believe that individuals are unique actors who have an inherent ability to choose or 'choose not' when confronted with specific environmental stimuli.[32] The implication of this therefore is that individuals can be held personally responsible for their choices, and thus should face the consequences of their decisions.

Determinists are increasingly prepared to claim that common sense ideas about responsibility cannot be maintained and that the law should recognize it.[33] Colin Blakemore, a professor of psychology at Oxford University has also stated that 'the human brain is a machine, which alone

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[29] W Libet 'Do We Have Freewill?' (1999) Journal of consciousness studies 6 (8-9) pp.47-57. <http://www.google.com/url?q=http://www.centenary.edu/attachments/philosophy/aizawa/courses/intros2009/libetjcs1999.pdf&sa=U&ei=4wWDVcKSJuq57gblzrD4Dw&ved=0CAsQFjAA&sig2=ZIWuwDVVywqPCvCXATG8vg&usg=AFQjCNHNvQHjdGJdqpk49mGvUTzKNDZGCQ last accessed on 18/04/2023.

[30] IK Oragbunam and J Chukwukelu, *op cit*, 49.

[31]*Ibid*.

[32] H J Berman, *Law and Revolution: The formation of Western Legal Tradition* (Harvard: Harvard University Press, 1983) p. 29 cited in IK Oragbunam and J Chukwukelu,*Ibid*.

[33]D Hodgson 'Guilty Mind or Guilty Brain?: Criminal Responsibility in the Age of Neuroscience' <http://users.tpg.com.au/raeda/website/guilty.htm> accessed on 18/04/2023.

account for all our actions, our most private thoughts, our belief. It creates the state of consciousness and the sense of self. It makes the mind.'[34]

In addition to the inclinations of the determinist as stated above, they are also calling for abandonment of any idea of retribution in punishment. They have argued that consequentialist or therapeutic approaches should be adopted. In essence, that any crime should be treated as an illness rather than a wrongdoing to be punished.[35] Ted Honderich contends that if a person's action is inevitable…then retribution becomes indistinguishable from primitive vengeance.[36]

The summary of the position adopted by determinists is that criminal offenders are not responsible for their acts but are pushed to commit such acts by factors beyond their control and therefore should not be punished for their acts. It is also their thesis that they should rather be seen as patients that require help. This inclination has influenced the idea of converting most prison facilities around the world to correctional facilities as is obtainable in Nigeria.

5.0. Practical Implication of Accepting Determinism

From the discourse above, it is now obvious that the law as it relates to criminal responsibility for conduct is predicated upon the notion of freewill – that we are not caused to do what we do by matters outside our control, but rather in any situation have real choices between alternative courses of action, in the sense that given the situation and even given our own natures and characters, it is truly possible for us to take any one of these alternatives. The researcher believes that to presume or hold otherwise would make little or no sense of the doctrine of *mens rea*. Indeed, the basis or foundation of criminal law would be eroded if criminal responsibility could be ruled out simply by findings any neural cause of action which is distinct from the usual concept of freewill as we know.[37] The resulting temptation would usually be to proclaim 'I did not do it… my brain made me do it.'[38]

The practical implication this would have on Criminal jurisprudence may be summarized by a syllogism thus:

1. All act are determined
2. If an act is determined, then its agent is not responsible for the act.
3. Therefore, no agent is responsible for any act.

Commenting on the implication of embracing determinism, David Hodgson Wrote:

> *[Determinism] may, indeed, be a true doctrine. But if it is true, and if we begin to take it seriously, then, indeed, the changes in the whole of our language, our moral terminology, our attitudes towards one another, our views of history, of society, and of everything else will be too profound to be even adumbrated. The concepts of praise and blame, innocence and guilt and individual responsibility from which we started are but a small element in the structure, which would collapse or disappear. Our words - our modes of speech and thought - would be transformed in literally unimaginable ways; the notions of choice, of responsibility, of freedom,*

[34] C Blakemore, *The Mind Machine* (London: BBC, 1988) 269-271
[35] D Hodgson, *op cit.*
[36] T Henderish, *How Free Are You?* (Oxford: Oxford University Press, 1993) at 127-8.
[37] For example the defence of insanity, automatism, etc.
[38] E Aharoni *et al*, 'Neuropridiction of Future Rearrest' (2013) *Proceedings of the national Academy of Science* 110(15), pp. 6223-6228.

> *are so deeply embedded in our outlook that our new life, as creatures in a world genuinely lacking in these concepts, can, I should maintain, be conceived by us only with the greatest difficulty.*[39]

It is the opinion of the researcher that not only does determinism go against common sense it is also not feasible do adopt. The fact is that most criminal conducts involves series of conduct which must have been well thought out or planned before execution. Sometimes it involves some of the persons involved having to convince others to join in the scheme. If this really is so one can then not understand the rationale behind the deterministic theory. Though some conduct may be done independent of the exercise of a person's will, these are usually in very few exceptional cases. The idea of freewill is perfectly natural and can always be regarded as being in consonance with the natural cause of event though they may be undermined by factors such as insanity, automatism, etc. The Nigerian Criminal Code taking cognizance of this situation uses terms like 'knowingly', 'negligently', 'wilfully', 'intentionally', 'dishonestly', 'voluntarily', and 'fraudulently' amongst a few others to indicate that criminal conducts are products of choices.[40] The provision of section 24 is a further indication that the act recognizes that the ability to make this choices may be undermined.[41]

Conclusion and Recommendation

This work cannot be concluded without quoting the words of David Hodgson on the need to maintain the freewill ideals especially as it relates to responsibility and retribution thus:

> *One very important reason for maintaining notions of responsibility and retribution is that such notions underpin deeply-held principles of justice and human rights, which are regarded as essential pre-requisites for civilised societies, and indeed are being increasingly recognised, and where possible promoted, by international law.*
>
> *These principles give great weight to the autonomy of people and require respect for that autonomy. According to them, a citizen is generally entitled to freedom from interference from the coercive processes of the State unless he or she voluntarily breaches a fair rule of law, publicly promulgated by the State. That is, a citizen should have a choice as to whether to be liable to coercion or not; and in this regard, folk-psychological categories such as belief and intention and voluntariness of action are of central importance.*

In the light of the discussions as contained in this research work, there is a real need for a theory of retributive justice, which gives a rationally defensible account of responsibility and which also can take into account and make use of scientific advances in order to refine the theory, without jeopardising the very idea of responsibility.

It is the recommendation of the researcher that various criminal justice systems should be open to whatever insights that neuroscience offers to provide towards the development and advancement of criminal justice system especially in the area of criminal responsibility; and those with law-making roles should be prepared to use these insights both in moulding the law's general approach to crime, and in refining the particular procedures that the law uses. Most importantly, lawyers

[39] D Hodgso, *op cit.*
[40] I K Oraegbunam and J Chukwukelu,*op cit*. p.51.
[41]*Ibid.*

should when carrying out their duty of interpretation, put into consideration these scientific developments.

However, it is also suggested that we should be sceptical when neuroscientific doctrines appear to conflict with common sense ideas of freewill and responsibility, and should strongly oppose any abandonment or significant watering-down of these ideas.

The merits of principles of responsibility and retribution outweigh that of the purported philosophical and scientific refutations of those notions. And we should seek to uphold the moral underpinning of the law. Moreso, an adoption of the deterministic view will render the concept of criminal responsibility and indeed every other notion of responsibility utopian. In the words of Oraegbunam and Onunkwo;

> *... it seems that the entire concept of responsibility connotes both the will and the intellect. Responsibility is rendered in Latin language as 'rationem reddere' meaning 'to give a rational account of ....' One is only responsible or liable for an act or omission when one knowingly and intentionally performs the act or omission. No doubt, the activity of willing or unwilling is quite pivotal in the construction of section 24 even as the meaning of will and willing belongs to an abstract field of philosophical ethics and metaphysics.*

The implication of this statement is that once the notion of free will is disregarded, it would be nearly impossible to punish anybody for any offence. This is not in any way, however, meant to say that criminals should be punished purely as retribution, because that is what they deserve: on the contrary, the researcher is of the view that the criminal justice system must be justified at least in part by its utility, because of the need to protect the majority of citizens from dangerous and criminal conduct of others. However, given that society needs such a system, the question is how should this system determine criminal responsibility? It is the opinion of the researcher that the system should put facilities in place so as to punish those who are found, through due process of the law, to have voluntarily violated the law.[42]

It follows therefore, from what have been stated earlier[43] that the general approach of our criminal justice system to questions of criminal responsibility is along the right lines. In line with the provisions of the Nigerian Criminal Code, Penal Code and indeed all laws regulating the criminal justice system stringent provisions have been made so as to make sure that coercion only be apply to people who have been proved, by due process of law, to have voluntarily acted in breach of the law; as is 'proportional' to the gravity of the offence. However, it is hoped that as further progress are made in the area of neuroscience that our laws will be amended so as to meet up with the exigencies of time in the interest of justice especially with regards to proof and admissibility of evidence relating thereto.

[42] Provided however, that where the crime is one of those that can be committed negligently or carelessly, the person can still be punished accordingly.

[43] About the general principle of *mens rea* and section 24