

# **Technique, Language and the Divided Brain: Can recent insights from neuropsychology give new life to Jacques Ellul's technology criticism?**

**by Matthew Prior**

Matthew Prior is a minister in the Church of England and graduate student in theology at Trinity College, University of Bristol, UK

## **Introduction: the word humiliated?**

In the aftermath of the well publicised British riots of August 2011, I found myself thinking of Jacques Ellul. In the Clapham Junction area of South London, whilst stores selling high-end technology were being looted, *Waterstones*, the biggest bookseller in the UK, reported that its shop had been completely untouched. This only became a story with a tweeted invitation from a *Waterstones* staff member to the rioters to take some of their books. 'They might actually learn something', he sighed.<sup>1</sup> All over London, in areas well known to me from six years of Christian ministry in the capital, similar events took place, leading to a process of political and social soul-searching and reflection ongoing to this day.<sup>2</sup> And yet, the analyses suggested and the solutions put forward have seemed at least to me to be somewhat trite and hollow, on the one hand narrowly focussed on the analysis of 'twitter traffic' and the role of social media, and on the other trading in political generalities about urban poverty and the failure of urban education.<sup>3</sup> I have wondered, what greater depth might Ellul's work offer to the Christian minister seeking to make sense of this potent mix of issues: urban dysfunction and violence, language and literacy, and the image-based technologies of a consumer society? In particular, what perspectives might emerge from a book I take to be one of Ellul's most enduring and significant contributions, *La parole humiliée* (1981; ET *The Humiliation of the Word*), a remarkable and still pertinent discussion of what happens to language in a technological society?

In *La parole humiliée* Ellul embarks on a sociological exploration of word and image within the framework of his central theological dialectic of truth and reality.<sup>4</sup> Indeed, although this is listed as a sociological work, Ellul states explicitly: we are made in the image of a speaking God, and therefore we listen and we speak in response.<sup>5</sup> In brief summary, the word pertains to what Ellul calls 'the order of truth', whereas the image pertains to 'the order of reality'. Disastrously separated in the 'rupture' from God's purposes, word and image are reunited for a time in the incarnation of the divine Word, Jesus Christ. Yet we still await the fulfilment of the promise when word and image are finally reconciled in a new creation.<sup>6</sup> However, Ellul's concern is with an alternative modern eschatology: the victory of the image over the word, which eclipses the true horizon of future hope, offering either the hope of instant and constant satisfaction, or the despair of apocalypse now.<sup>7</sup>

The French commentator on Ellul, Frédéric Rognon, has referred to Ellul's 'thresholds of radicality'<sup>8</sup>, and I for one confess I do not share the entirety of Ellul's analysis of what he called the 'audiovisual war machine'. However, I still believe *La parole humiliée* has much to offer to a theological

understanding of our image-saturated communication culture today, principally because here a rich dialogue between theology and sociology takes place *within a single text*.<sup>9</sup> In this paper, I make the bold claim that Ellul's best insights can be recollected and weaknesses offset by a dialogue with recent research into communication and the brain in the developing field of neuropsychology. Let me make a brief disclaimer at this point. I come at this dialogue theologically, and not as a neuropsychologist! What I offer is a tentative step forward for theological reflection on language, as well as, I hope, a tribute to Jacques Ellul from a British perspective.

### **A dialogue between Jacques Ellul and neuropsychology**

Over the past thirty years, there has been an increasing *academic and popular* scientific interest in the study of communication, with the two meeting in the bestselling book by Steven Pinker *The Language Instinct*.<sup>10</sup> Over this time, much Christian writing has focussed, perhaps naively, on questions of how to use new communication technologies; few have delved into properly *theological* questions about the nature of language itself. However, one exception to that is a remarkable recent book called *The Master and his Emissary: The Divided Brain and the Making of the Western World* by Dr Iain McGilchrist, a British psychiatrist and literary scholar.<sup>11</sup>

McGilchrist offers a distinctive narrative of the origins of human language, and at times on reading him, one has the impression of reading a scientific mapping of a landscape previously navigated by Ellul. What can account for this apparent overlap? As I have confirmed with McGilchrist, Ellul exercises no direct influence on him. Indeed, at the outset, one is also struck by a key difference between them, particularly in relation to *the status of the scientific method*.

In *La parole humiliée*, Ellul disavows any scientific or technical apparatus and advances instead the primacy of the feeling, listening and looking subject, an experimental method indebted to Søren Kierkegaard. In contrast, for McGilchrist, it is precisely neuro-scientific evidence that suggests that a dialectic of word and image is simplistic. For those who like me are interlopers in this area, let me briefly remind you that the brain is divided into two hemispheres, each exercising motor-sensory control of the opposite side of the body. There has long been evidence also to suggest that a degree of lateralisation of functions exists, for example, with regard to language, although it has become increasingly clear that almost every human activity is served at some level by both hemispheres. It is therefore no longer respectable for a neuroscientist to hypothesise on the key to hemispheric differences, partly because the topic has been hijacked.

At a popular level, there exists the notion of a 'right-brain' or 'left-brain' person. McGilchrist regards this popularised dichotomy as rooted in the ancient Greek association of the right hemisphere with subjective perception (pictures) and the left hemisphere with objective understanding (words).<sup>12</sup> He describes this view as interesting, but deeply flawed, moreover a symptom of the left hemisphere's dominance in Western culture. With a minutely detailed survey of recent research, he suggests that if the brain displays a fundamental asymmetry, it is a question not of *what functions*, as if the brain were a machine, but of how, *or the manner in which*, the hemispheres operate, as if the brain were part of a living person, which it is. Drawing on a parable of Nietzsche, he suggests that the right hemisphere is the Master and the left hemisphere is its Emissary, or interpreter.

But note that for McGilchrist, all neuroscience works, sometimes unawares, from a prior philosophical position. As he puts it, 'Not to be aware is to adopt the default standpoint of scientific materialism'; this again is a symptom of left-hemisphere bias. Indeed, he describes the essential

difference between the hemispheres *in terms of the awareness or attention they bring to bear*. To simplify vastly, the right hemisphere serves whole, sustained attention, concerned with *living in the present*, and living in the body. The left hemisphere serves focussed attention, concerned with *abstracting and re-presenting* a part of the lived world. He aligns his own attention to the world with phenomenology, drawing in particular upon Martin Heidegger. Indeed, McGilchrist regards Heidegger as having anticipated, before neuropsychology, this central importance of attention, particularly in Heidegger's concept of truth as 'unconcealing' over against the mindset of 'enframing'.<sup>13</sup>

Is this not then a familiar story: Heidegger's influence and Ellul's neglect? In part, yes. Of course, given that Ellul and Heidegger share a heritage in Kierkegaard, the influence of Kierkegaard in key passages of *La parole humiliée* leads to statements that resonate with Heidegger, and therefore with McGilchrist.<sup>14</sup> Yet I suggest that Ellul's theology has more to offer than Heidegger's. Indeed, I *have suggested* to McGilchrist that Ellul's understanding of the human word can enrich the tentative theological conclusions he offers in concluding his neuropsychological account of language.<sup>15</sup> I will return to that in closing, but let us first turn to a brief summary of *The Master and his Emissary*.

### Language and the brain: what's right and what's left?

McGilchrist begins with the early consensus that speech production and comprehension was subserved by the left hemisphere, in Broca's area and Wernike's area respectively.<sup>16</sup> From there developed an explanation for the fundamental asymmetry of the human brain known as Yaklovlevian torque (see below)<sup>17</sup>: that the drive to language necessitated an expansion of the posterior left hemisphere, to house such a complex set of skills. Given that the dominant use of the right hand in tool manipulation is also housed in the left hemisphere, indeed in areas very close to those dealing with words, there appeared an evident connection between language and the hand. The idea took hold that the left hemisphere expanded to support both tool-making and also, in the closest possible connection, the development of the master tool, instrumental language.<sup>18</sup> On this account, language is grasp, providing fixity by firming up and clarity by dividing up. It is a means to power, for by it we can manipulate the world, and indeed, other people.

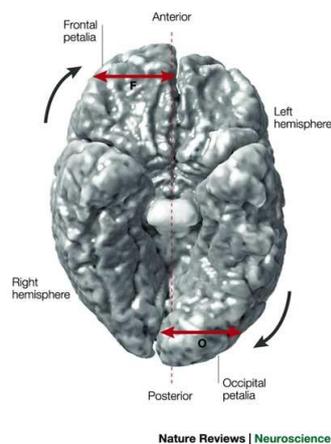


Figure 1: The brain viewed from above

McGilchrist celebrates what he calls ‘referential language’ as a vastly precious gift, yet he contends that this narrative is partial, and again biased towards the left hemisphere.<sup>19</sup> He questions it with three pieces of evidence.

*Firstly*, engaging with recent palaeontology, he notes that early fossil records show that primitive humans, *long before it is believed that language developed*, had a similar brain asymmetry to us today, an asymmetry shared moreover by the great apes, *who, he says, clearly have no language*. So whatever caused the expansion of the left hemisphere, it was not the drive to speak, but something more primitive.<sup>20</sup>

*Secondly*, more sophisticated recent accounts of brain functions now show that *language functions are lateralised across both hemispheres*. Yet McGilchrist goes further to assert the fundamental superiority of the right hemisphere, for what he calls the ‘higher linguistic functions’ of understanding meaning in context, tone, emotion, along with any humour, irony or metaphor, now appear to be housed in the right hemisphere. In simple terms, if language can be compared to painting a picture, it is the left that contains the paintbox, but the right hemisphere that paints.<sup>21</sup> With examples from studies of tribal peoples, child development and the experience of patients with aphasia (or the loss of speech), he argues that thought exists prior to and without language.<sup>22</sup> *In an image drawn from Michael Gazzaniga, he suggests that the left hemisphere is the right hemisphere’s interpreter*.

*Thirdly*, he highlights a fascinating recent discovery of handedness, suggesting that *even in left-handers* tool-use is associated with the left hemisphere, not the right hemisphere, which one would expect to be controlling the left hand side of the body. What seems crucial here is not the side of the body involved, but *the nature of the gesture*.<sup>23</sup> That is to say, it is the very concept of grasping that activates in the left hemisphere, not the control of the hand itself. By contrast, there is new evidence to suggest that gestures which are exploratory and empathic in nature originate in the right hemisphere, as indeed do other non-purposive gestures such as dance, a significant point, as we shall see.

### **Which came first: grasp or music?**

This combination of factors leads McGilchrist to a fuller account of language. Clearly, the left hemisphere has specialised in the interpretive powers of syntax and vocabulary. But the left hemisphere’s expansion was not caused by the simple desire to communicate, but by the more primitive desire to manipulate. McGilchrist cites with approval Michael Coballis’ suggestion that *referential language* may indeed have evolved, *not from sounds at all, but from hand gesture, in particular, motions to do with grasping*<sup>24</sup>.

But language is more than grasp. Even our most basic intuitions tell us much human language is connotative, social, without a clear purpose beyond communication itself. What then of this language that McGilchrist calls ‘I-Thou’ language, in contrast to ‘I-it’ language? On the conventional account, the apparently ‘useless’ ‘I-Thou’ language must have evolved from ‘I-It’ language to serve a broader utility, to enable the group to survive and to thrive. But does that fit the evidence? Anthropologists suggest that for long periods *before any evidence of symbol manipulation*, our ancestors clearly managed to live in social groups. Moreover, recent work on the fossil record suggests that the earliest human skeletons possessed the same highly developed vocal apparatus for articulating sounds that we have.<sup>25</sup> What was this apparatus used for, if anything? The answer put forward is likely to be a surprise, McGilchrist suggests, but what else could a non-verbal language of communication be but

music? Drawing on the recent book by the archaeologist Steven Mithen *The Singing Neanderthals*<sup>26</sup> he argues for a common ancestor for both language and music: so-called *musilanguage*. It is predominantly the right hemisphere that mediates our experience of music and dance, and therefore the musical and bodily aspects of language are subserved there also.<sup>27</sup>

Granted that this account may seem implausible, what further evidence can be advanced in its favour? The idea that musilanguage preceded referential language easily fits with the fact of cultural history that poetry clearly precedes prose.<sup>28</sup> More significantly, metaphor precedes literal language, as the well known study by Lackoff and Johnson argues. Metaphor is, according to McGilchrist, closely linked to gesture, subserved by the right hemisphere. He argues that when we bring two things together, it is because they are felt as sharing a live connection in our embodied experience, not because they fit an abstract concept in our minds.<sup>29</sup> The example he gives is of a clash of cymbals and a clash of arguments, which do not depend on a notion of clash, just the uncomfortable experience of it. For McGilchrist, Metaphor therefore ‘carries us over’ the gap or abstraction from bodily life that literal language entails.

In the highly complex fifth chapter on the Master right hemisphere attention to our embodied experience of the world, McGilchrist draws on pioneering research into gesture by David McNeill, arguing that gesture slightly anticipates speech. On this account, gesture reveals utterances in their primitive form, derived from the right hemisphere. Bodily gestures do not therefore reflect thought – they help to constitute thought.<sup>30</sup>

### **Attentive to the body**

The significance of the body for McGilchrist cannot be overstated, and language is rooted in our bodily experience, the domain of the right hemisphere. At a popular level, body language is now recognised as a key component of communication,<sup>31</sup> but the hypothesis of ‘musilanguage’ goes further. If it is correct, then anthropological speaking, language originates not in the competitive technique of the hand, but in the social gesture of the body. It is worth citing him at length to summarise the cumulative effect of his argument.

To the extent that the origins of language lie in music, they lie in a certain sort of gesture, that of dance: social, non-purposive (‘useless’). When language began to shift hemispheres, and separate itself from music, to become the referential, verbal medium that we recognise by the term, it aligned itself with a different kind of gesture, that of grasp, which is, by contrast, individualistic and purposive....<sup>32</sup>

We glimpse here also his concern: what he calls a ‘hijack’ of language from the Master right hemisphere by the usurping left hemisphere. This entire project then, depends on becoming more aware of, attending to the origins of language in the body, served by the right hemisphere. He advances a final key piece of neuroscientific evidence. In the discussions of the dominant left hemisphere, it is often neglected that the human brain exhibits a fundamental asymmetry not only on the left side, *but also on the right frontal side*.<sup>33</sup> Why should this be the case? For McGilchrist, it is the expansion of the right frontal lobes in humans that gives us the capacity for whole attention, a certain distance, enabling us to stand back from our experience and to differentiate ourselves from others. This, uniquely, enables to exercise *empathy towards the other*, whom we can recognise as *somebody like us*. This attentive capacity of the right frontal lobe differentiates us from any other creature. Ultimately, what makes our language human is rooted in this standing back, the distance

from the other that produces the desire to reach out, and indeed to reach beyond to the divine Other. Animals may possess reason and a form of language:

But [he writes] there are many things of which they show no evidence whatsoever: for instance, imagination, creativity, the capacity for religious awe, music, dance, poetry, art, love of nature, a moral sense, a sense of humour and the ability to change their minds.<sup>34</sup>

### ***McGilchrist in dialogue with and defence of Ellul: the Word as Master***

I hope the fruits of this dialogue will already be visible, despite the obvious limits. Of course, there are sparse references to the brain in *La Parole humiliée*<sup>35</sup> and no proto-historical narrative of the origins of language. Yet my overall contention in the paper, to repeat, is that Ellul's work anticipates the developing insights of neuropsychology, and can indeed enrich them. Let me give a few examples in closing.

In a remarkably attentive account of the spoken word, Ellul speaks of the word as a *living presence, requiring two persons in relationship in time*.<sup>36</sup> For Ellul also, it is in *dialogue and distance* that we discover 'le même-autre et... l'autre-même'.<sup>37</sup> Moreover, he argues theologically from the first creation, with reference to Adam's naming of the woman. 'La semblable dissemblable... Le discours recommence toujours parce que la distance subsiste'.<sup>38</sup>

In this distance between speaker and listener, between speech and reception metaphor is born.<sup>39</sup> Almost each time Ellul speaks of *metaphor*, there is a trace of its etymology – 'carrying beyond'.<sup>40</sup> An extended metaphor that serves as a leitmotif for Ellul's account of the word is the musical image of a symphony.<sup>41</sup> Harmony is the achievement of the word as music. By a *polyphony of overtones*, a *symphony of shared echoes* is established, which creates a *concordance*, never static but a movement in time.<sup>42</sup> This richly poetic understanding of the word is clearly concordant with the notion of 'musilanguage' as outlined by McGilchrist. For Ellul, if the word has a power, it is a musical, metaphoric power to reach beyond words, beyond reality, to create another universe, what he calls 'the order of truth'.<sup>43</sup>

In the second theological chapter, Ellul goes further. Since we are created in the image of God, the human word is ultimately a reflection of and response to the word God speaks. In a discussion of the biblical creation accounts, Ellul suggests that it is only the word, and not technique, that offers the power of new creation.<sup>44</sup> Yet this does not mean that technique has no place when restricted to the order of reality. However, in the fourth chapter from which *La parole humiliée* takes its title, Ellul's presents a sombre picture: whereas the word should give us the power to master technique, now the situation is reversed.<sup>45</sup>

On the conventional narrative of language as manipulation, this opposition of word and technique appears absurd.<sup>46</sup> However, the alternative narrative of 'musilanguage' offers support for Ellul against his critics. Indeed, on my tentative reading, what Ellul means by 'word' maps well onto McGilchrist's account of the right hemisphere, but equally what he means by 'technique' maps well onto McGilchrist's account of the left hemisphere. Both have their role, as McGilchrist states: 'it would [not] be a good thing if the entire population had a left hemisphere stroke'.<sup>47</sup> Yet with a wealth of experimental data, McGilchrist offers the model of Right-Left-Right processing as a kind of

healthy norm.<sup>48</sup> In his terms, the left hemisphere, as Emissary, merely *re-presents* what is first *presented* to the Master right hemisphere. Moreover, it must then submit its representations back to the right hemisphere to be fleshed out in real life, in the musical aspects of communication and meaning. In Ellulian terms, this means a ‘both-and’ embodied, dialectical reasoning, in place of an ‘either-or’ abstract rationality.

Engaging in a similarly sweeping cultural history, McGilchrist considers that the abstract accounts of language in structuralism, universal grammar and in popular neurolinguistics form part of a general trend... ‘in favour of an abstracted, cerebralised, machine-like version of ourselves...’<sup>49</sup> There is hope, however, and McGilchrist writes in part with an apologetic purpose: to re-ground us and our language in the embodied world. With a rising interest in neuroscience, he detects an opportunity to ‘move away from the outworn mode of scientific materialism with its reductive language.’<sup>50</sup> In strikingly Ellulian terms, McGilchrist suggests to the reader the lost ‘mythos’ of the Christian tradition, for here a transcendent, divine Other, meets us as engaged, vulnerable, and incarnate, offering the hope of the flesh and spirit united in resurrection.<sup>51</sup> This is a hope beyond images of apocalyptic despair or images of the latest must-have product, a hope that keeps us waiting in time, for the end of time, attending to the voice of God in the present, rooted in the real world.

But do I have any policy proposals on how to stop riots and save the inner city? Sadly, no. But I do offer a closing thought. Perhaps a Christian perspective on literacy and education in a technological society might focus more on the renewal of whole attention and empathy that disciplined study might enable, and less on the value of one kind of rationality, and its role in fitting us to be economically productive citizens? The current UK government wants to expand the national management and ICT cadres, ostensibly to keep pace with the UK’s global competitors, and yet there are also moves to put resources back into the neglected humanities, with a particular focus on urban schools. And yet perhaps rather than turn to government policy for the funding of empathy, might the church not first seek to discover how to be and to speak God’s embodied word in a technological society? Might we not first be challenged to a renewed listening to God, and listening to others, a renewed attentiveness to the actual physical world around us? After all, as British theologian Sarah Coakley has recently put it, ‘When you are working with people in a situation of grave distress and despair, it is the quality of your attention which is what ministry is about’.<sup>52</sup>

## **Bibliography**

Bourg, D., 1996. *L’homme artificie : le sens de la technique*, Paris: Gallimard.

Brock, B., 2010. *Christian ethics in a technological age*, Grand Rapids Mich.: William B. Eerdmans Pub. Co.

Chastenet, P., 2005. *Jacques Ellul, penseur sans frontières*, Le Bouscat: L’Esprit du temps.

Ellul, J., 2011. *Meaning of the city.*, Trans. Dennis Pardee. Eugene: Wipf & Stock Publishers.

Ellul, J., 1981. *La parole humiliée*, Paris: Seuil.

Ellul, J., 1985. *The humiliation of the word*, Trans. Joyce Hanks. Grand Rapids Mich.: Eerdmans.

Ellul, J., 1948 *Présence au monde moderne: Problèmes de la civilisation post-chrétienne*. Geneva: Roulet

Ellul, J., 1989. *What I believe*, Trans. Geoffrey W. Bromiley. Grand Rapids: Eerdmans

Goddard, A., 2002. *Living the Word, resisting the world : the life and thought of Jacques Ellul*, Carlisle: Paternoster.

McGilchrist, I., 2010. *The master and his emissary : the divided brain and the making of the Western world*, New Haven : Yale University Press.

Porquet, J.-L., 2003. *Jacques Ellul l'homme qui avait (presque) tout prévu*, Paris: le Cherche Midi éditeur.

Rognon, F., 2007. *Jacques Ellul : une pensée en dialogue*, Genève: Labor et fides.

## Endnotes

---

<sup>1</sup> <http://www.guardian.co.uk/books/booksblog/2011/aug/12/reading-riots-waterstones-looted-books>

<sup>2</sup> A little about my background. I am an ordained minister in the Church of England, and know well the areas South London affected by the rioting. My interest in Ellul was first kindled during my training for ministry, for here I found insights lacking in other elements of my training.

<sup>3</sup> For example, <http://www.guardian.co.uk/news/datablog/2011/aug/16/riots-poverty-map-suspects>.

<sup>4</sup> As Rognon notes, the Truth-reality dialectic is a golden thread in Ellul's corpus (Rognon 2007, 83).

<sup>5</sup> 'L'homme créé par Dieu est parlant. Peut-être que c'est un des sens de l'image de Dieu : le répondant, le responsable, le semblable qui va dialoguer....Spécificité humaine comme spécificité de ce Dieu parmi tous les autres'. Ellul 1981, 71

<sup>6</sup> See Ibid, chapter 7, Reconciliation, passim.

<sup>7</sup> 'Ces deux tendances: l'exigence de tout tout de suite, et la terreur de la fin du monde, issues de la multiplication infinie des images, se conjuguent pour provoquer partout des courants apocalyptiques et messianiques'. Ellul, 1981, 231.

<sup>8</sup> On *Parole*, he notes three such thresholds: the absolute separation of sight and faith, the resulting denial that the image can lead to faith, and the claim that the church's current decline can be linked to its capitulation to the 'audiovisual machine' (Rognon: 365-366).

<sup>9</sup> Whilst this narrative about the demise of the word and the rise of the image has precedence in Ellul's early theological work (See for example chapter 4 of *Présence au Monde Moderne*, on 'La communication'), the form of *La parole humiliée* is regarded as a sociological work. In fact, it does not easily fit into the dialectical division of the Ellul corpus: Joyce Main Hanks raises in the preface to her translation the question of Ellul's intention: 'the author has preferred to integrate sociology and theology into a single whole, for reasons he has not yet explained in print' (Hanks' preface in Eng. Tr. Ellul 1985, xii-xiii).

<sup>10</sup> E.g. Steven Pinker's *The Language Instinct* and Michael Corballis' *From Hand to Mouth*.

---

<sup>11</sup> The book has rightly been acknowledged as a valuable and largely irenic contribution to a debate that raged through the first decade of this century in the UK, initiated by a more aggressive form of public atheism in British public life, labelled ‘new atheism’.

<sup>12</sup> See chapter 1, *Asymmetry and the Brain*.

<sup>13</sup> *ibid* 143

<sup>14</sup> In a section drawing on Kierkegaard, Ellul pointedly corrects the priority of *appearances* within phenomenology. ‘La phénoménologie ne doit pas seulement faire apparaître les choses telles qu’elles sont mais les faire sonner comme elles sont! La philosophie classique ne sait pas écouter, entendre la vérité... le philosophe qui refuse d’écouter refuse en meme temps la vérité et la réalité’ (Ellul 1981, 44). This priority of listening is the subject of Ellul’s second chapter on *l’Idole et la Parole*.

<sup>15</sup> This has been confirmed in correspondence with the author. Although McGilchrist does not write as a theologian, his work has been eagerly received in theological circles in the UK.

<sup>16</sup> McGilchrist 2009, 23.

<sup>17</sup> McGilchrist, 2009, 23-24.

<sup>18</sup> See the discussion of Language and the Hand, *ibid*, 111ff.

<sup>19</sup> *Ibid*, 24.

<sup>20</sup> *ibid*, 99.

<sup>21</sup> McGilchrist 2009, 99.

<sup>22</sup> McGilchrist 2009, 105-110. <sup>22</sup> With clear echos of Ellul’s concerns (See Ellul, 1981, 22ff) McGilchrist refutes ‘structuralist’ communication theories, asserting that meaning does indeed exist prior to and outside of the structures of language, in our prior apprehension of the world.

<sup>23</sup> *ibid*, 113.

<sup>24</sup> *ibid* 111.

<sup>25</sup> *Ibid*.101.

<sup>26</sup> He also draws on and the work of the linguist Daniel Everett, who undertook a controversial recent study of the Piraha tribe in the Amazon basin, concluding that they communicate by a form of musi-language (*ibid*. 2009,106).

<sup>27</sup> *Ibid*,102.

<sup>28</sup> *Ibid*, 105

<sup>29</sup> The implicit comparison we make between one thing and another cannot be ‘translated’ into another set of words by the interpreting left hemisphere without losing its power and novelty. McGilchrist argues that we do not first assume there is an abstract concept to which the two things both conform – rather, that our simple *experience* of their similarity, as processed by the master right hemisphere, comes first. In an interesting twist which seems to confirm this, some studies show that clichéd, familiar metaphors are understood by the left hemisphere, suggesting that they have lost their original connection with lived experience. McGilchrist, 2009, 116.

---

<sup>30</sup> Ibid, 119. Whilst he offers support for McGilchrist's project, the prominent British philosopher A.C. Grayling registers his dissent by noting that 'the findings of brain science are nowhere near fine-grained enough yet to support the large psychological and cultural conclusions Iain McGilchrist draws'. In Grayling, A.C. (December 2009). "In Two Minds". *Literary Review*.

<sup>31</sup> McGilchrist agrees that the left hemisphere's ability with words can be an attempt to hide what gesture reveals (Ibid, 81, 195ff).

<sup>32</sup> Ibid, 119. The fact that 'musilanguage' would yield little competitive advantage in evolutionary terms has led some to reject the idea of 'musilanguage' as implausible (ibid 104, citing Pinker). McGilchrist defends his view by arguing *ad hominem* from utility: 'If language began in music, it began in (right-hemisphere) functions which are related to empathy and common life, not competition and division' (123).

<sup>33</sup> Ibid, 126.

<sup>34</sup> Ibid, 127.

<sup>35</sup> Ellul notes the misinterpretation of an early neuropsychology experiment undertaken by British scientists (Ibid, 185 n1). He also takes issue with the work of Michel Thevoz in 'Le Langage de la rupture', a study of the language of the mentally ill (198).

<sup>36</sup> 'La parole est essentiellement présence. Elle est du vivant. Jamais objet'. Ellul 1981, 20. Only when written does it become an object, requiring focussed attention, rather than the 'coup d'oeil global' that spoken language enables. Ellul's treatment alludes, often in disagreement, to the seminal work of Marshall McLuhan (see, e.g. 31 n1).

<sup>37</sup> Ibid, 21.

<sup>38</sup> Ibid, 22.

<sup>39</sup> 'Là prennent naissance le symbole, la métaphore et l'analogie'. Ellul 1981, 24.

<sup>40</sup> See for example 26-27, 37, 77-78 (in brief dialogue with Paul Ricoeur), 119, 181.

<sup>41</sup> 'Connotations et harmoniques. Et la parole se situe au cœur d'une toile d'araignée d'une finesse infinie'. Ibid, 22

<sup>42</sup> Ibid, 24-25

<sup>43</sup> 'La parole n'est pas liée au réel mais à sa capacité de création de cet univers autre, sur-réel si on veut, meta-réel, métaphysique, que par commodité on peut nommer l'ordre du vrai'. Ellul 1981, 27.

<sup>44</sup> Ibid, 76.

<sup>45</sup> Ellul, 1981 :177.

<sup>46</sup> The French critic of Ellul, Dominique Bourg, suggests this in his book, *L'Homme-Artifice*, repeating the common anthropological account of language's origins.

<sup>47</sup> *ibid.* 93.

<sup>48</sup> Ibid. 195-203. In a very brief metaphor, he suggests that the relationship between the hemispheres is a little like the way books relate to life. Life goes into books, and books go into life. But the relationship between them is not equal, and yet books add to life, and transform it.

---

<sup>49</sup> McGilchrist, 2009, 119-120

<sup>50</sup> McGilchrist, 2009, 459

<sup>51</sup> Ibid. 441

<sup>52</sup> Stephen Wilson, ‘ Sarah Coakley discusses waiting on God’, CAM Magazine, Issue 65, Easter 2012, 43.